

**Tamaiti/Child Poverty: The Ways in Which Poverty Shapes
Tamariki/Children's Patterns of Participation in Occupations, Their
Potential and Wellbeing**

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Abstract

Tamaiti/child poverty is a pervasive and complex issue. There is substantial evidence showing that poverty harms tamariki/children's development, health, hauora/wellbeing, and educational and vocational prospects. The assumption underlying this study is that because participation in occupation is the foundation of human development, health and wellbeing, understanding the patterns of occupation of tamariki growing up in poverty may shed new light on how and why whānau/families' material circumstances have these life-long impacts. Therefore, the research question addressed in this study is: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential and wellbeing?*

Dewey's pragmatist philosophy underpins the study. Stake's qualitative case study methodology (CSM) was chosen to guide this research, as it has alignment with pragmatism and enabled exploration of the topic through holistic, in-depth inquiry, in the natural context, using multiple methods and perspectives. The cases, two neighbourhoods with high levels of socioeconomic deprivation in a large city in Aotearoa New Zealand during 2022, were viewed from transactional, occupational and life course perspectives.

The participants in the study (n=26) included tamariki, their parent/s, and other adults and community workers who supported their participation in occupations. Multiple data collection methods included focus groups, interviews, observations, and document review. Methods were adapted to be child friendly where appropriate. CSM data analysis strategies used included direct interpretation, categorical aggregation, correspondence, and patterns. Two case reports were written, then cross-case analysis was applied leading to assertions and naturalistic generalisations that answered the research question. Triangulation, member checking, and a reflexive approach were amongst the strategies used to achieve rigour. Key ethical considerations included participant informed consent, or assent for tamariki, participant anonymity, a child friendly research approach, and remaining sensitive to the nature of poverty. Adhering to the articles of te Tiriti o Waitangi was an important consideration, which prompted

efforts to seek and respond to Māori and Pasifika research mentors for cultural advice to ensure cultural safety.

The findings revealed that despite the best efforts of tamariki, their parent/s, whānau and their community, multidimensional poverty severely constrained the patterns of participation in occupations for the tamariki, and thus their opportunities to develop the capacities and healthy activity patterns that would secure their health, wellbeing, and prospects as adults. Concerns included habitual and routinised sedentary occupations, disrupted sleep, mealtime, and school attendance routines, and restricted geographical patterning of occupations, such that occupations seldom occurred beyond their immediate neighbourhood. Restricted participation in childhood occupations meant being excluded from and missing out on opportunities for role development and social networking and was experienced by the tamariki as detrimental to their hauora.

The findings demonstrate that these tamariki do not have the start in life equivalent to those growing up without the constraints of poverty. Thus, poverty is a breach of children's rights, is occupationally unjust, depriving them of the right to participate in occupations, that over their life course will negatively impact their health, hauora and their potential for participation in socially valued occupations.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Simon J. Leadley
Signature

17.12.2023
Date

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Conflicts of Interest

I declare I have no conflicts of interest in relation to this thesis.

Ethics Approval

Auckland University of Technology Ethics Committee (AUTEC) granted ethics approval for the study to commence (AUTEC ethics approval number: 20/210. Date approved: Stage 1 – 25/09/2020 and Stage 2 - 01/07/2021).

Chapter 1 Introduction

Ko te pae tawhiti, whāia kia tata; ko te pae tata, whakamaua kia tīna.

Seek out distant horizons and cherish those you attain.

(Alsop & Kupenga, 2016, p. 144)

1.1 Introduction

Child poverty is a global issue that causes serious harm to the development, health, and wellbeing of millions of children. Poverty breaches children's right to a fair standard of living and to participate fully in the occupations of life such as education; play; and recreational, social, and cultural activities. Aotearoa New Zealand (NZ) is a country with a relatively high level of child poverty, bringing with it adverse implications for many children. Poverty, as a concept, and its cause and solutions, are, however, complex, and require concerted and collaborative efforts from health, education, political, and civil aspects of society if the problem is to be remediated. This chapter provides an overview of the issue of child poverty, its effects both internationally and in Aotearoa NZ, plus related conceptual matters, theories that explain poverty's impact on children and solutions to the problem. The overview highlights gaps in the evidence that can inform an occupational perspective and whakaora ngangahau/occupational therapy's potential in contributing to solutions. The remainder of the chapter outlines the rationale for undertaking the study, underpinning philosophy and theory, and the research design.

The Māori whakataukī or proverb above, is about wawata or aspiration; for me, it relates to the aspirations that all tamariki/children and their whānau/families, including those faced with poverty, have for their lives in order to flourish and realise their dreams. It is my hope that this study and the child poverty work of many others can help to enable all tamariki/children to continue being aspirational and to achieve their fullest potential in life. The use of Te Reo Māori throughout this thesis is an attempt to honour the bilingual roots of Aotearoa NZ. Therefore, key terms presented in the study such as tamariki/children or whānau/family are in Te Reo Māori and English, or reduced to Te Reo only usage, or kept in English for international contextual reasons.

1.2 The Problem of Child Poverty

The issue of child poverty is a complicated and pervasive problem. Poverty has been with society for a very long time, with arguably only relatively recent efforts by international organisations and countries to address the matter on a global scale. For example, the United Nations (UN) Sustainable Development Goal (SDG) to end poverty by 2030 (UN, 2020a, 2020b) highlights the efforts to work globally on the issue. However, ending poverty will not be an easy task due to its complexity, both in terms of the causes and the solutions. Any organised efforts to tackle the problem are impacted by a range of factors. These include a history of colonialism, global pandemics and economic crises, unequal development between countries globally, and competing political demands or polarised perspectives on how best to address the problem (Came et al., 2020; Lister, 2021; UN, 2020c; World Bank, 2020, 2022). Sadly, children are proportionally more likely to be in poverty compared with adults, and are typically more vulnerable when experiencing poverty due to their age, stage of development, and dependency on adults (UN, 2016; World Bank, 2020, 2022).

In today's world child poverty remains a significant problem. In 2017, approximately 355 million children globally were living in extreme poverty; less than US\$1.90/day using the International Poverty Line (IPL) (World Bank, 2020). The numbers are even higher when the poverty measures used take account of relative poverty or use a multidimensional poverty measure that includes access to resources such as food, shelter, and education. For example, in 2017, approximately 15.5% of the global population (compared with 7.9% using the IPL) were estimated to experience multidimensional poverty (World Bank, 2020). While global poverty levels have been steadily decreasing in the last 2 decades, the rate of decline is slowing and the world's progress towards targets such as the UN SDG to end poverty by 2030 are threatened due to large regions of the world facing poverty crises (e.g., Sub-Saharan Africa), the impacts of current armed conflicts, the recent COVID-19 pandemic, and climate change (UN, 2020a; World Bank, 2020, 2022).

Child poverty is, in essence, a breach of tamariki/children's fundamental human rights as outlined in the United Nations Convention on the Rights of Children (UNCRC) (UN, 1989). That is, it restricts their access to an adequate standard of living, a high level of

health and health care, to education, and full participation in society and occupations (i.e., play, school, and whānau/family activities) that are otherwise afforded to their wealthier peers, and to voicing their views on issues important to them (Leadley & Hocking, 2017; Leadley et al., 2020; United Nations International Children's Emergency Fund [UNICEF], 2016). As stated by UNICEF NZ (2019, November 2) these breaches to tamariki/children's rights occur as poverty deprives them of their "material, spiritual and emotional resources needed to survive, develop and thrive...[and] leaves them unable to enjoy their rights, achieve their full potential or participate as full and equal members of society" (para. 2-3). Therefore, it is an ethical imperative for the world to act urgently to eradicate child poverty in order that such breaches of their rights, and the risk these pose to their health and wellbeing, are eliminated.

Poverty is a key social determinant of health for tamariki/children, meaning that those who live in poverty are more likely than their wealthier peers to experience negative developmental, health, and wellbeing outcomes. An accumulated body of evidence demonstrates the negative impacts of poverty on a child's development (e.g., physical and cognitive growth); on their health, such as greater rates of illness and earlier mortality; and to their wellbeing, including high rates of mental health concerns, and stigma, discrimination, and exclusion that negatively affect their schooling, friendships and family relationships (UNICEF Innocenti, 2017, 2020; UNICEF, 2016, 2019, 2021). Consequently, this leads to poorer future outcomes that include long-term health problems (e.g., higher rates of heart disease, cancer, chronic mental illness); lower education and employment prospects; and higher rates of incarceration, with tamariki/children often remaining trapped in a cycle of poverty into adulthood (Berti & Pivetti, 2019; Cooper & Stewart, 2021; Lister, 2021; Schweiger & Graf, 2015; Treanor, 2020; UNICEF, 2021).

In terms of the subjective experience of poverty for a child, this is felt on a daily basis including an awareness of being poor or being seen as different by their peers, and it starts from an early age. Social messages about not being in work, needing to seek support from the state or other institutions, or being blamed for being poor, are felt by both the parent/s and their tamariki/children. Consequently, being identified as poor is often associated with feelings of shame, embarrassment, and stress. It is a stigmatising experience for tamariki/children and rangatahi/young people, with an increased

chance of being bullied by their peers and missing out on, or being excluded from, occupations (Leadley et al., 2020; Lister, 2021; Maholmes, 2014; Schweiger & Graf, 2015; Treanor, 2020).

Tamariki/children in these circumstances often worry about what other tamariki think of them. They can be singled out by their peers for the way they look, such as their clothing, or because they are unable to participate in activities open to other tamariki (e.g., sports teams/clubs or school activities), or for being recipients of specific attention by their school or other community-based organisations (Maholmes, 2014; Ridge, 2009, 2011; Schweiger & Graf, 2015; Treanor, 2020). The deprived neighbourhoods in which poor tamariki live have common features such as degraded and unsafe environments with restricted opportunities to engage in free play and neighbourhood recreations. These lost opportunities can negatively impact a child's developing self-esteem, and their identity, mental health, and wellbeing. In addition, reduced opportunities for participation in a range of occupations can be limiting in terms of their hopes and dreams for a brighter future (Leadley et al., 2020; Lister, 2021; Maholmes, 2014; Schweiger & Graf, 2015; Treanor, 2020).

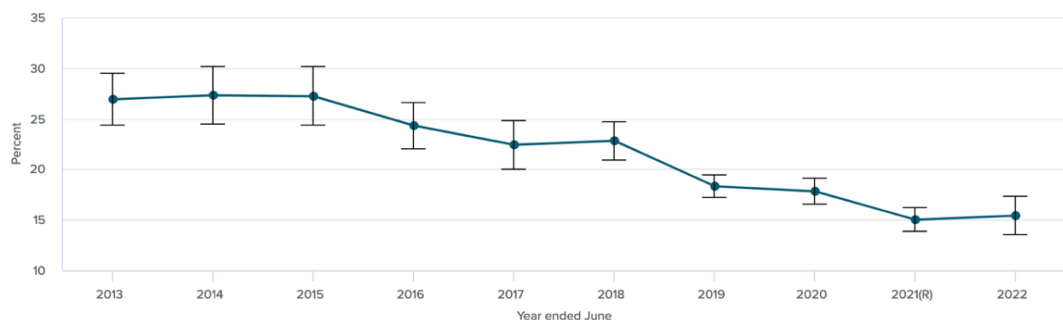
1.2.1 Child Poverty in Aotearoa New Zealand

Child poverty remains a prevalent problem in Aotearoa NZ, despite the declining levels. For example, the latest available data from 2022 show that 15.4% of all Aotearoa tamariki/children, approximately 190,000, live in poverty (at the 50% of median income, after housing costs measure), with minimal change in the last 12-month period (refer to Figure 1.1). The level of tamariki experiencing material hardship (e.g., unable to pay for healthy food, power to keep warm in the home, clothes, or health care etc.) has also been declining and is now at 10.3% (Stats NZ / Tatauranga Aotearoa, 2022a, 2022b). However, the level of child poverty in Aotearoa is unequally spread throughout the population, based on ethnicity (i.e., the Indigenous population, Māori, and for Pasifika/Pacific peoples), both in terms of the numbers and the severity of those in poverty. For example, 16.8% of tamariki Māori live in poverty and 18.8% experience material hardship, with these percentages even higher for tamariki of Pacific ethnicity at 19.4% and 25.6% respectively (Stats NZ, 2022b). In terms of households where a child has a disability, or at least one parent with a disability, while after housing costs (AHC) income poverty levels have been declining (i.e., 25.2% in

2019 to 15.1% in 2022) percentages remain high for material hardship, at 21.5% (Duncanson et al., 2022; Stats NZ / Tatauranga Aotearoa, 2022, March 23b). Although, tamariki from refugee backgrounds are likely to experience high levels of poverty, there is little NZ published data on this group (Duncanson et al., 2022; Expert Advisory Group on Solutions to Child Poverty [EAG], 2012a).

Figure 1.1

Percentage of Children Living in Households With Less Than 50 Percent Median Equivalised Disposable Household Income After Housing Costs are Deducted, Year Ended June 2013–2022



Note. From *Child Poverty Statistics: Year Ended June 2022*, Stats NZ / Tatauranga Aotearoa, 2022b. In the public domain.

This ongoing level of poverty that many tamariki in Aotearoa experience has negative health and wellbeing outcomes for them including higher rates of obesity, lowered physical and mental health, and diminished educational success (e.g., less chance of achieving qualifications at high school). Similar to international evidence, Aotearoa tamariki living in poverty are more likely in later life to face negative outcomes such as chronic ill-health, unemployment, incarceration, and be trapped in a cycle of poverty (Boston & Chapple, 2014; Duncanson et al., 2022; Ministry of Health [Manatū Hauora], 2021c, 2022; UNICEF Innocenti, 2020).

For tamariki living in Aotearoa NZ, poverty creates restricted access to occupations such as recreational and social activities (e.g., not able to join sports teams, arts/music/cultural or other clubs/groups, or play in their neighbourhood); negative experiences at school (e.g., bullying, missing out on school trips, lack of access to a computer/internet at home in order to complete homework); and disruptions to relationships with their peers and whānau such as not being able to have their friends over to play or go on holidays with their whānau. Combined, these factors can have detrimental effects for their health, wellbeing, and their potential to flourish and

succeed in life (Duncanson et al., 2022; Leadley & Hocking, 2017; Leadley et al., 2020; Perry, 2022).

From an economic perspective, child poverty has a significant financial impact for the country. It is estimated that this cost is between NZ\$8-10 billion/year, or 4.5% of NZ's gross domestic product (GDP), in terms of diminished education and employment outcomes (e.g., productivity losses), the impacts of increased crime and poor health later in life, and the need for higher social welfare investments. The financial cost translates into an additional NZ\$35,000/year per child in poverty, or NZ\$600,000 over each child's lifetime (EAG, 2012a, 2012b; Pearce & Poletti, 2011).

For Māori, these health and social disparities and injustices have largely arisen from a history of colonisation by the British Crown and their actions over the past 150 or more years. It includes the illegal confiscation by the Crown of land owned by Māori (the traditional owners of the land/whenua), racist legislation and policy (e.g., 1863 NZ Settlements Act – enabling Crown confiscation of Māori owned land, and the Native Schools Act 1867 – prohibiting use of Te Reo Māori in schools), and marginalisation of Māori (e.g., their autonomy, language, knowledge, and practices) (Human Rights Commission [Te Kāhui Tika Tangata], 2021, November 7; Ministry for Culture and Heritage [Manatū Taonga], 2021, November 1). As a result, the Crown (i.e., effectively the NZ government) has failed to uphold the spirit/principles of te Tiriti o Waitangi 1840, a founding document for the country that was based on a formal agreement between the British Crown and Māori, the Indigenous people of Aotearoa (The Waitangi Tribunal [Te Rōpū Whakamana i Te Tiriti o Waitangi], 2020, May 26; Whitinui, 2011). These articles include: Tino rangatiratanga (sovereignty or absolute authority for Māori); Kawanatanga (governorship, authority for Māori); Ōritetanga, (equitable access, treatment, and outcomes for Māori); and Wairuatanga (honouring Māori spiritual and health beliefs and practices) (Came, Kidd, et al., 2021).

The consequence for Māori of colonisation has been a long history of Māori health and social inequities, and a diminished capacity for Māori participation in all spheres of political, economic, and social affairs in Aotearoa (Came, Baker, et al., 2021; Emery-Whittington, 2021; Moewaka Barnes & McCreanor, 2019). However, as a result of continued Māori political activism, the establishment of the Waitangi Tribunal (a

government body to hear Māori claims against the Crown for breaches under te Tiriti o Waitangi), and an increasing recognition by the Crown of their obligations to address these injustices for Māori, there have been incremental improvements in legislation and outcomes for Māori (Ministry of Health, 2021d; New Zealand Government [Te Kāwanatanga o Aotearoa], 2021, November 20; The Waitangi Tribunal, 2020, May 26). Despite this progress, and in terms of health and social outcomes, the lack of progress by the Crown and their ongoing breaches of their obligations under te Tiriti o Waitangi have been recognised (i.e., WAI 2575 report), outlining the failure of the government to protect equitable health outcomes for Māori (Came, Kidd, et al., 2021). In terms of poverty, colonisation has been a primary driver of the health and social disparities Māori face today (Came et al., 2020; Dale, 2017; Ministry of Health, 2018, August 2a, 2018, August 2b). As one Māori colleague told me, “For many Māori, poverty started when the Crown invaded and confiscated our lands” (P. Collins, personal communication, May, 2022).

In a similar way, for Pasifika peoples in Aotearoa (referring to people from the diverse group of countries in the Pacific region), their pattern of health and social inequities largely mirror those for Māori. These are also likely the result of racially-based and discriminatory legislation, policy, and practices by the NZ government, particularly starting in the 1970s (i.e., the Dawn raids – an attempt by the then Labour-led government to deport Pasifika workers who were labelled as ‘overstayers’) (Came et al., 2019; Fraenkel, 2021, November 7; Matika et al., 2021). As a consequence of these historical injustices, health and social services have unfairly discriminated against Pasifika people and tamariki, and not meet their needs. This has led to higher proportions of negative health and social outcomes for this ethnic group, including being more likely to live in poverty and its associated detrimental outcomes (Dale, 2017; Duncanson et al., 2022; Leadley & Hocking, 2017; Ministry of Health, 2014, January 31).

1.2.2 Conceptualising Poverty

Defining the term poverty is problematic as it is conceptually complex. However, poverty is, in essence, the lack of something that is valued or that society deems is needed for life, such as the basic necessities of food, shelter, safety, clothing, transport, healthcare etc. But there are diverse views about poverty, including a

broader conceptualisation such as the need for full inclusion in society, to have fair and equitable access to resources, and to be able to participate fully in occupations (Lister, 2021; Spicker et al., 2007a). Poverty can be defined subjectively and differently by individuals, groups of people (e.g., those who live in poverty), at a country level, and include different cultural perspectives (Leadley et al., 2020; Lister, 2021; Wisor, 2017). However, in order to address the issue of poverty at both country and global levels, the concept needs to be understood in an agreed way.

While academic debates continue about whether poverty should be conceived of in absolute or relative terms, generally it is agreed that both concepts are important. For example, an absolute level of poverty helps define the extremes of poverty in the world, and relative poverty helps differentiate the levels of poverty in a country in relation to its wealth, distribution of these resources, development, and equity. Furthermore, poverty is no longer only understood as a shortage of income, but also as the level of material resources to which a person/household has access (Leadley et al., 2020; Lister, 2021; Schweiger & Graf, 2015; Wisor, 2017). Conceptualising poverty from a rights-based perspective conceives it as the diminished ability for a person to have their rights met such as a suitable level of safety, health, education, and standard of living (Lister, 2021; Schweiger & Graf, 2015; Spicker et al., 2007a; Wisor, 2017). Poverty can also be conceptualised based on the capability to translate income and resources into desired life outcomes or functionings, such as completing training in a vocation or buying a house. This capability is dependent on conversion factors such as a person's individual circumstances (e.g., made more difficult if living with a disability) and the context in which they live (e.g., governmental support, the impacts of war or natural disasters) (Lister, 2021; Robeyns & Byskov, 2021; Sen, 1999).

People's subjective experience of poverty is another important way poverty can be conceived, and when based on the experience of those who are poor, can help to provide a more democratic and informed understanding of poverty (Bourdillon & Boyden, 2014; Lister, 2021). Tamariki/children's perspectives and experience of poverty has been shown to differ from their parent/s and adults, as highlighted through qualitative research with children (Attree, 2006; Bourdillon & Boyden, 2014; Ridge, 2004, 2009, 2011; Schweiger & Graf, 2015), and has led to poverty measures designed for use with children (Biggeri et al., 2011). Such measures can evaluate the

effect of poverty on their schooling, recreational and social activity with peers, and children's views of the important material aspects in their lives.

A multidimensional concept of poverty takes account of these various understandings of poverty in an integrated manner and is now a widely accepted way to conceptualise poverty (Biggeri & Cuesta, 2020; Lister, 2021; Schweiger & Graf, 2015; Spicker et al., 2007a). For example, multidimensional measures of poverty draw on material needs, children's rights, and capability theory (Biggeri & Cuesta, 2020); and area level constructs use multidimensional factors in measures of neighbourhood level deprivation (Allik et al., 2020; Exeter et al., 2017). The UN SDG goal to end poverty (target 1.2) now includes relative income poverty and material deprivation targets (UN, 2015, 2021). The relative poverty measures for the UN SDG 2030 poverty goal, are to reduce poverty by 50% according to a country's median level of income and based on the 60% before housing costs (BHC) level (i.e., a target of 10% for NZ); and multidimensional poverty as measured against child specific UNICEF indicators such as access to water, sanitation, housing, education, health, leisure and social activities (UNICEF Innocenti, 2017; UN, n.d.). Poverty concepts are discussed in full in Chapter 3. However, for the purposes of this study I take a multidimensional conceptual view of poverty.

1.2.3 Theories Explaining How Poverty Impacts Tamariki/Children's Development, Health and Wellbeing

There are two dominant theories/models that help to explain how poverty impacts detrimentally on a child's development, health, and wellbeing. First, the family investment theory/model suggests that the constrained financial resources available to impoverished households leads to lower expenditure on tamariki/children (e.g., educational or recreational activities) which, in turn, affects their development and health. Second, the family stress theory/model posits that the economic pressures of being poor creates high levels of stress for parent/s, thus affecting parental mental health, and the quality and style of parenting (e.g., more punitive, less nurturing). Consequently, parental stress has a negative impact on their children's development, health, and wellbeing (Cooper & Stewart, 2013, 2021; Hosokawa & Katsura, 2017). Evidence suggests that the theories are not mutually exclusive and that both theories

help to explain the effects of poverty in terms of children's outcomes (Cooper & Stewart, 2013, 2021).

Additional explanations consider the bidirectional relationships between child poverty, health, and participation in occupations. For example, poverty is associated with ill-health and disability, but being disabled or chronically ill and not being able to participate in occupations (e.g., paid work) likewise can lead to poverty (Leadley & Hocking, 2017; Leadley et al., 2020; Schweiger & Graf, 2015). A transactional approach (i.e., accounting for dynamic engagement between a child, their environment, and occupations), that aligns to pragmatist theory, takes a multidimensional and holistic view about child poverty (Leadley et al., 2020). For example, the transactions that occur between the child and their whānau/family, the child's agency and the level of support available, the degree of exposure to poverty and influence of neighbourhood level factors, social attitudes towards the poor, historic events (e.g., impacts of colonialism, conflict or natural disasters), are all complex, dynamic factors that shape the trajectory of a child's development, health, and wellbeing over the course of their life (Biggeri & Cuesta, 2020; Leadley & Hocking, 2017; Leadley et al., 2020; Schmidt et al., 2021).

Despite the negative and multidimensional facets of poverty's influence, some tamariki/children growing up in poverty lead an enriched and fulfilling life (Leadley et al., 2020; Treanor, 2020). This situation arises from the protective and loving care of their parent/s, whānau/family (e.g., providing for necessities, teaching life skills, supporting participation in occupations such as education, recreational, and cultural activities) and the child's agency. For example, tamariki provide emotional support for their parents, engaging in productive occupations that contribute to the household, or take on the role of carer (Egan-Birtan, 2010, 2012; Leadley et al., 2020; Ridge, 2011; Treanor, 2020). Important supports from within the community that help sustain a child's participation in occupations include schools and non-governmental agencies (NGOs) such as community centres, that, along with governmental benefits and interventions, can provide a fabric of positive social capital (Carswell et al., 2017; Leadley, 2019; Leadley et al., 2020; Marmot & Bell, 2013). However, poverty's negative and pervasive effects mean that many tamariki remain at risk and are faced with bleak future outcomes.

1.2.4 Solutions to Child Poverty

Proposed solutions to child poverty are varied and include international and national efforts to raise incomes and standards of living for all of society, while addressing the structural and social issues that underpin poverty and inequity. For example, reducing inequality, improved welfare and tax systems, and honouring the rights of adults, children, and Indigenous peoples (Lister, 2021; Marmot et al., 2012; Schweiger, 2019; Treanor, 2020; Wisor, 2017). The UN SDGs and the global public health aspirations of policy agreements such as the World Health Organization's (WHO) Ottawa Charter for Health Promotion (1986) are aimed at addressing many of these systemic issues (Hocking, 2019; UN, 2020b; Wilcock & Hocking, 2015; WHO, 2017). While these efforts are commendable, resolving poverty is fraught with multiple ethical tensions related to global economic crises, environmental disasters and climate change, pandemics, and changing political commitment (Lister, 2021; Wisor, 2017; World Bank, 2020).

In Aotearoa NZ, a firm commitment to address the issue of child poverty has been made by the government in passing legislation (i.e., the Child Poverty Reduction Bill) and creating an advisory group (i.e., the Child Poverty Unit) to further examine and put in place evidence-based solutions to the problem that are broad-based (e.g., addressing children's wellbeing) (Department of the Prime Minister and Cabinet [DPMC] / Te Tari O Te Pirimia Me Te Komiti Matua, 2019c). Additionally, as a signatory to the UN SDGs since 2015, the NZ government has targeted the reduction of relative material poverty in Aotearoa by at least 50% by 2028 (Ministry of Foreign Affairs and Trade [Manatū Aorere], 2019). If achieved, this target will reduce the 2017/18 level of child poverty (i.e., 50% of median income after housing costs) from approximately 22.8% (258,000) to 10% (113,000), and material hardship rates from 13.3% (151,000) to 6% or 68,000 tamariki/children (DPMC, 2020c, July 2; Duncanson et al., 2022; Duncanson et al., 2021). However, in order to achieve these goals, the government will need to ensure it successfully implements the full range of suggested child poverty actions and effectively manages the impacts of the COVID-19 global pandemic and future effects of climate change (Duncanson et al., 2022; Duncanson et al., 2021; Greer & Morris, 2020). Compared with other Western nations, however, NZ tends to be at the lower to average end of the spectrum (e.g., lower than Denmark, Germany, but

comparable to Australia and United Kingdom [UK]) in terms of progress towards achieving the UN SDGs (Perry, 2019; UNICEF Innocenti, 2017, 2020).

The Labour-led government (2018-2023) had an extensive range of initiatives that focused on reducing child poverty and broadly aimed at improving tamariki/children and rangatahi/young people's health and wellbeing. These included monitoring child poverty (i.e., mandatory tracking and publication of set child poverty indicators) and income-based interventions (e.g., the Families Package that provides extra income support for non/working families, increasing the minimum wage and benefit rates, efforts to achieve fair and equitable pay rates). Other interventions included housing initiatives (e.g., legislation to ensure safe, secure, warm, and dry homes, and access to affordable housing with specific targets for Māori, Pasifika, and for those who are homeless); education strategies (e.g., targets for equitable education outcomes, interventions aimed at healthy nutrition and physical activity in schools, and equitable access to digital technologies); employment initiatives (e.g., addressing the issue for youth of not being in education, employment, or training (NEET) and with a focus on those with disability/health conditions); wellbeing interventions (e.g., improved maternity and early child health care, addressing food insecurity, providing wellbeing and life skills services in schools); and support for community organisations providing services for those in poverty (DPMC, 2019a, 2019b).

1.2.5 Child Poverty and the Role of Occupational Science and Therapy

Historically occupational therapy's role has been to work in the health and disability space in an interdisciplinary manner (i.e., collaboratively with other health professionals) to enable occupational participation and performance for tamariki/children and adults along the socioeconomic spectrum (Leadley & Hocking, 2017; Lysack & Adamo, 2019; Scaffa, 2019). However, there has been a growing call for the profession to conduct research and work from a public health and policy-based approach, particularly with vulnerable groups and populations of people (e.g., those effected by social issues such as poverty, conflict, or refugee status) (Leadley & Hocking, 2017; Lysack & Adamo, 2019; Scaffa, 2019). Specific topics, such as child poverty, have lacked occupational science-based research that is needed to guide how kaiwhakaora ngangahau/occupational therapists practice in this space from interdisciplinary and transdisciplinary (i.e., integrated research and practice across

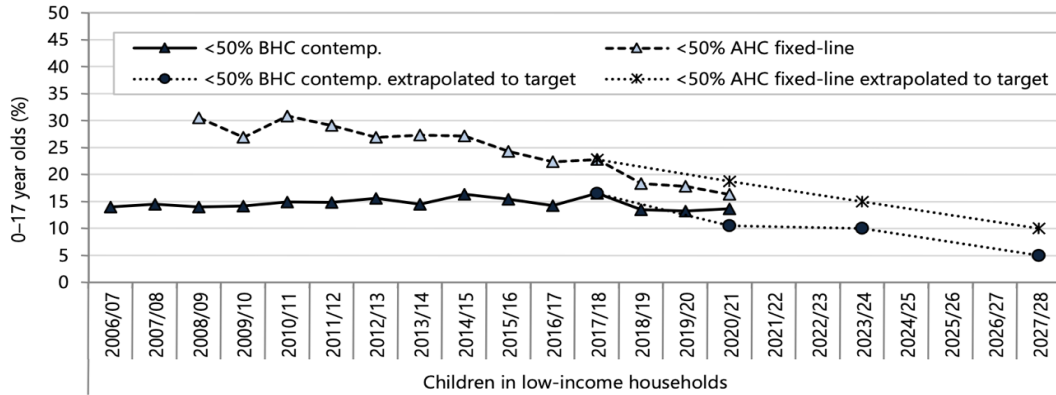
disciplines) approaches (Bintley & George, 2023; Rezaei & Seyedpour, 2022; Vechakul & Alice Agogino, 2021), and to inform public health strategy and policy (Leadley & Hocking, 2017; Leadley et al., 2020). For example, an absence of occupational science or whakaora ngangahau/occupational therapy approaches is evident in the NZ government's child poverty and child, youth, and wellbeing strategies (DPMC, 2019b, 2021b). Increased child poverty research by occupational scientists can bring greater understanding about the effect poverty has on tamariki/children's patterns of and participation in occupations. This can help to highlight the strategies therapists could use when working with a tamaiti/child or group of tamariki/children and their whānau/families to create healthy habits/routines, develop opportunities for role development, and inform advice on policy that aims to reduce barriers to participation in occupations for tamariki living in low socioeconomic neighbourhoods.

1.2.6 Assessing the New Zealand Government's Actions on Child Poverty

Efforts to address child poverty in Aotearoa NZ have arguably been accelerated since the introduction of the Child Poverty Reduction Act 2018, under the then Labour led government. While the COVID-19 pandemic, since 2020, significantly impacted the issue of child poverty (Duncanson et al., 2020; Duncanson et al., 2022; Duncanson et al., 2021), recent evidence of the government's success in addressing this issue includes continued decline in household income and material hardship rates, including for tamariki/children, since 2013, with current trends expected to meet the UN SDG target 1 by 2028 (refer Figure 1.2 below). Other improvements since 2013 include housing quality (e.g., lower levels of dampness, mould), reducing rates of food insecurity (i.e., 24% in 2012/13 to 13% in 2021/22), and continued declines in avoidable hospital admissions for tamariki since 2014 including for those from high deprivation backgrounds, and for Māori and Pasifika groups (DPMC, 2021a, 2023b; Duncanson et al., 2022; Stats NZ, 2022b).

Figure 1.2

Line Graph Showing Progress With Reduction of Children Living in Low-Income Households (Less than 50% of Median Income Before Housing Costs (BHC) and After Housing Costs (AHC) are Deducted, in Aotearoa (from 2006-2021) and Projections Towards the 2027/8 UN SDG 1



Note. From *Child Poverty Monitor 2022 Technical Report* (p. 22), Duncanson et al., 2022. Creative Commons.

However, it can be argued that more progress is needed. For example, the number of tamariki living below the poverty line remains disproportionately higher for those of Māori and Pacific ethnicities, and for tamariki with a disability, compared to those for Pākehā¹ and non-disabled tamariki, and are higher than government targets. NZ child poverty rates remain higher than in other comparable countries such as the Organisation for Economic Co-operation and Development (OECD) and European Union (EU), (i.e., 24% in NZ compared with the EU median of 21%) but are comparable to levels in the UK (Perry, 2019; UNICEF Innocenti, 2017, 2020). A significant health gap persists for tamariki (including for hospital admissions) between those of high and low deprivation backgrounds, and for those of Māori and Pasifika ethnicities. Food insecurity, low housing quality, and housing unaffordability continue to disproportionately effect tamariki in the highest deprivation categories, Māori, Pasifika, and those with disabilities, particularly since the cost-of-living crisis in the last 1-2 years. School attendance rates have decreased amongst those from high deprivation backgrounds (due in part to the impacts of the COVID-19 pandemic) and National Certificate of Educational Achievement² (NCEA) rates remaining disproportionately low for young people from high deprivation backgrounds, for Māori and Pasifika, and those

¹ Pākehā - a Māori term meaning a New Zealander of European or foreign descent.

² NCEA is a NZ high school qualification.

with a disability. While child and youth wellbeing indicators such as quality time with parent/s, material and whānau/family wellbeing, and reported health show improvements nationally, disparities remain for tamariki of lower socio-economic status (SES); Māori, Pasifika, and other ethnic minorities; and for tamariki with a disability or living in a household where someone has a disability, and those with a Rainbow identity (DPMC, 2021a, 2023a, 2023b; Duncanson et al., 2022; Stats NZ, 2022b).

From the perspective of NZ child poverty advocacy groups, the NZ government has not gone far enough to implement strategies (i.e., the 2019 Welfare Expert Advisory Group report) that would help support and lift out of poverty those most affected; for example, for whānau/families living on the lowest incomes such as those in receipt of government benefits (Neuwelt-Kearns et al., 2021). Nor do the current targets aim to lift all Aotearoa NZ tamariki out of poverty, or achieve equity amongst different groups (Wensley, 2023b). In line with this criticism, there is the need to strengthen legislation protecting tamariki/children's rights and align legislation to the UNCRC, and improve consultation with those most affected, better honour te Tiriti o Waitangi (e.g., greater involvement in decision making by Māori), to provide more comprehensive child poverty measurement (e.g., duration in poverty, and qualitative data), and report on the impacts of government actions to address child poverty and wellbeing (Wensley, 2023a, 2023b).

1.2.7 Gaps in Knowledge About the Influence of Poverty on Tamariki/Children's Participation in Occupations, their Development, Health, and Wellbeing

The literature exploring the effects of poverty on tamariki/children's health, development, and wellbeing is vast, and there is a growing body of evidence detailing the experiential aspects of poverty in their lives (Andresen & Meiland, 2019; Bourdillon & Boyden, 2014; Ridge, 2011; Schweiger & Graf, 2015; Treanor, 2020). However, an occupational perspective on the issue remains underdeveloped (Leadley & Hocking, 2017). Poverty clearly impacts upon tamariki/children's occupations such as play, leisure, school, whānau/family and social activities. However, the ways this disruption to childhood occupations occurs, and the habits, routines, roles, and whānau/family rituals that support participation in occupation, and how these intersect with

developmental disruption, health, and wellbeing, and educational, vocational and other outcomes, has only begun to be researched (Leadley et al., 2020). Equally, evidence is only emerging that poverty unjustly breaches tamariki/children's rights (i.e., the right to participate in children's occupations), tamariki/children's participation in occupations is unevenly distributed across populations, and that occupational deprivation or the restrictions caused by poverty constrains a child's patterns of, choice, participation in, and performance of occupations (Leadley et al., 2020; Wilcock & Townsend, 2019).

Also lacking in the published literature is integrated, collated evidence and analysis of the consequences of poverty in terms of tamariki/children's participation in occupations (particularly in Aotearoa), missed opportunities for skill development due to restricted engagement in occupations, and the implications of this on their potential for development, health, and wellbeing. Key to this occupationally focused understanding of child poverty are patterns of occupation. Patterns of occupation can be defined as the habits, routines, roles, and rituals that are integral to the process of participating in occupations (Hocking, 2019; Matuska & Barrett, 2019; Taylor & Kielhofner, 2017). Patterns of occupation are contextually bound, occurring within physical, social, cultural, and temporal environments, and can either promote or hinder health and development (Matuska & Barrett, 2019). For example, a habit of going to bed at a regular time, a routine of eating a healthy meal together as a whānau/family, and the role of being a sports or recreational team member all potentially sustain health, wellbeing, and develop helpful skills. Alternatively, habitual sedentary behaviours, erratic whānau routines, and a lack of time spent in childhood roles (e.g., playmate, student, team member) can have both immediate and long-term negative consequences for a child's health, development, and wellbeing (Leadley et al., 2020; Matuska & Barrett, 2019).

The assertion underpinning this study is that an occupational perspective of poverty is integral to policy design on the topic, both to understand the implications for tamariki/children's patterns of and participation in occupations and poverty's effects on their occupational development, health (potential for future participation), and wellbeing. Further, such insights can inform the development and implementation of effective strategies to reduce the detrimental effects of growing up in poverty. This

may include ways to support tamariki/children's participation in occupations, and critical analysis of systemic interventions—such as school breakfasts/lunches or access to extracurricular activities—to ensure they promote healthy habits and routines. Strategies might also target enabling tamariki to engage in positive roles within the community that help sustain their potential for development; skill formation; education; social connectivity; and long-term health, wellbeing, and future prospects (Leadley & Hocking, 2017; Leadley et al., 2020).

1.3 Stating the Research Question

The research question for this study was developed after completing a master's study about the effect material poverty had on one tamaiti/child's patterns of and participation in occupations. It became apparent through this work that further research was required which could examine not only poverty's impact on tamariki/children's participation in occupations, but also its possible consequences for their potential to become who they wish to be in life, their health, and wellbeing. The justification for the choice of research topic was based on the fact these issues were not fully addressed in the previous research that was conducted and was reached after continuous immersion in the published literature about child poverty. Thus, the initial research question posed was: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?*

1.4 Defining Key Terms in this Study

Key terms in this study include, children, childhood, poverty, participation, potential, and wellbeing. A brief overview of these terms is presented below and is expanded on in Chapter 3.

1.4.1 Tamariki/Children and Childhood

Tamariki/children are typically defined as being below the age of 18 years (UN, 1989), and this stage of development in life is broadly referred to as childhood. During this stage of life, tamariki are particularly vulnerable to harm as they are dependent on adults for their welfare and their early years is a time when important development and growth, along with participation in key occupations such as school, play, and time

with whānau/family and peers takes place. It is understood that their reliance on adults diminishes as their autonomy increases and they transition from adolescence into early adulthood (Cronin, 2016a, 2016b; Mandich, 2016a, 2016b; UNICEF, 2016). The importance of childhood as a life stage that requires particular protection is recognised through international conventions such as the UNCRC (Schweiger, 2019; Willumsen et al., 2014; Zhao, 2011).

1.4.2 Participation

Participation means the act of being part of or involved in occupations and is dependent on both bodily functions (e.g., musculoskeletal, mental functions) and personal context (e.g., health, whānau/family), and the effects of the wider environment such as physical, social, and institutional factors (Mandich & Cronin, 2016; Schell et al., 2019). While the factors that affect a child's participation are complex and transactional, the relationships between a person's participation, and their bodily functions or the environment have been recognised by the *International Classification of Functioning, Disability and Health (ICF)* as bidirectional, which has implications for a child/individual's development, health, and wellbeing (Cutchin & Dickie, 2012; Rodger & Kennedy-Behr, 2017; WHO, 2007).

1.4.3 Potential

Potential can be understood to mean the capacity a person/child has to achieve what they value in their life. In terms of tamariki/children, their potential to become who they can and want to be from childhood and into adulthood is dependent on their development, growth, health, and participation in occupations. Their potential is also influenced by their genetic make-up and the circumstances into which they are born (e.g., parent/s, access to food, shelter, education, and other occupations) (Humphry & Womack, 2019; Mandich & Cronin, 2016; Rodger & Kennedy-Behr, 2017).

1.4.4 Wellbeing

Conceptually, wellbeing is a complex term that can be understood in various ways depending on the ontological perspective, or cultural worldview that frames it (Fletcher, 2016; Sibley & Houkamau, 2013; Wilcock & Hocking, 2015). For example, an objectivist ontology constructs wellbeing related to measurable material living conditions (e.g., forms of capital, income, health, housing), whereas a subjectivist

stance relies on a person's self-rated view of their health and quality of life (OECD, 2011). Other cultural perspectives may include spiritual dimensions, connection to extended family/community or to the land and wider physical environment as important factors in wellbeing (Aselu, 2015; Sibley & Houkamau, 2013). From an occupational perspective, occupational wellbeing means engagement in a balanced array of meaningful occupations in life (Matuska & Barrett, 2019; Townsend & Polatajko, 2013). There is also recognition that children's views on wellbeing differ from adults such as involving a greater emphasis placed on play and peer relationships (Main, 2017; Main & Bradshaw, 2012).

1.5 The Research Design

In this section I provide an overview of the key aspects of the research design in the thesis including theoretical underpinnings, my reasons for choosing the study topic, the chosen methodology, data gathering methods, approach to analysis, rigour, and ethical and cultural considerations.

1.5.1 Why I Chose to Study the Topic and the Background to the Study

My engagement with the topic of child poverty began during my postgraduate studies and after my experience of working as a kaiwhakaora ngangahau/occupational therapist in forensics and community mental health practice. Based on these work experiences, I reflected on the many preventable and inequitable social factors, such as poverty, that were impacting/influencing the lives of the tangata whaiora/clients with whom I worked. Engaging further with relevant literature it was clear that early life exposure to adverse circumstances such as poverty were unfair determinants in tamariki/children's lives. However, what remained less visible was how poverty influenced tamariki/children's patterns of and participation in occupations, and their health and wellbeing.

This led to a master's study using qualitative case study research methodology, with a single case, exploring the ways poverty influenced a tamaiti/child's patterns of occupation (Leadley, 2019). The study revealed that notwithstanding the child's agency, whānau/family, and social supports, poverty influenced all aspects of the child's life including high levels of sedentary habits and routines, disrupted mealtime routines and whānau activities, constraints on play and social activities with peers, and

restricted participation in school trips and choice of recreations (Leadley et al., 2020). However, the case study was based on a single case and did not examine in depth the implications these constraints had for a child's potential and wellbeing. Further engagement with the relevant literature and time spent working with local communities that were grappling with the issue of poverty led me to the focus of the current PhD study.

1.5.2 Key Philosophical and Theoretical Perspectives in the Study

The axiological position I take as a researcher on the topic of child poverty is that poverty is an unethical and unjust state; its causes and perpetuation are primarily due to social factors, and these can be eliminated through changes to society that address the root causes of poverty. The main philosophy underpinning this thesis is that of pragmatism. Pragmatism, and in particular Dewey's approach, essentially espouses that there is no separation between subject and matter, or between mind and body, and that humans are embedded within the world in which we live (Davies & Fisher, 2018; Morgan, 2014). Pragmatism takes an ontological position that straddles both subjectivist/relativist (i.e., socially constructed) and objectivist/realist perspectives on reality, and an epistemological stance that views knowledge as constructed in particular social and historical contexts (Hildebrand, 2023; Pratt, 2016). Pragmatists use a reflexive approach to resolving problems, where social issues in the world are explored with an aim to find practical and real-world solutions that, when implemented, are further reflected upon. This reflective process, in turn, further informs knowledge construction and the diverse perspectives taken about issues (Morgan, 2014; Pratt, 2016). Such a philosophical approach fits well with aims to better understand complex and enduring social phenomena like poverty and its influence on tamariki/children's occupations; the interaction with their development, health, and wellbeing; and with a goal to help inform solutions to the problem.

Aligning to pragmatist philosophy is the theory of transactionalism, that conceives of human action (or occupation) as transacting or engaging in an embedded way with the environment (Morgner, 2020; Pratt, 2016). This theory provides a basis for understanding how complex phenomena interact in our world such as the dynamic interplay that occurs between humans, their occupations, and the environment in which we live, both in the past and present, and with a view towards the future

(Aldrich & Cutchin, 2013; Cutchin & Dickie, 2012). When approaching an issue like child poverty, transactional theory can be applied to help explain the transactions between the poverty experienced by a tamaiti/child and their whānau/family, the context in which they live (e.g., neighbourhood level features, local and governmental policy and practices), and how this shapes their participation in childhood occupations such as in their home as well as their community including school, cultural, social, and recreational activities.

Occupational science and life course theory are two additional theoretical standpoints that underpin this study and fit with a pragmatic ontology and transactional theory. Occupational science is the study of human occupation in all its varied and complex forms and meanings, the transactions between people's contexts, and the way in which occupations are integral to human development, health, and wellbeing (Wilcock & Townsend, 2019; Wright-St Clair & Hocking, 2019). In this study, occupational science theory provided a foundation to help understand the complex forms of engagement that occur between poverty, tamariki/children's choice of and participation in occupations, the ways poverty can modify their patterns of occupation, and what this can mean for their development, health, and wellbeing. The life course theory (LCT) of human development, while being inclusive of traditional western developmental theories, includes the dynamic and contextualised forces and occupations that interact and help to shape a child's life over time, including both nature and nurture-based perspectives (Humphry & Womack, 2019; Mandich & Cronin, 2016). Thus, LCT can provide a basis to conceive of how social factors, such as poverty, can influence a child's access to occupations, along with the ways in which the broader environmental, societal, and historical context in which they live can shape their growth and maturation and, consequently, their future potential to participate in occupations.

1.5.3 The Methodological Approach

The methodology chosen for this PhD aligns well to the ontology, epistemology, and axiology that underpin this research. Qualitative case study research or methodology (CSM) is a methodological approach that views knowledge creation from a social constructivist perspective and employs an interpretivist paradigm to help comprehend phenomenon that are being explored (Harrison et al., 2017). CSM uses a case, or unit

of study within its boundaries, to examine a phenomenon in all its complexity, that also appreciates its unique qualities and how it is situated as part of naturally occurring contexts (Simons, 2009; Stake, 1995, 2006). Qualitative CSM, and in particular that outlined by Stake (1995, 2006), can use either a single case or multiple case study design and a range of data gathering methods such as interviews, observation, and document review to explore a case from multiple perspectives. In this study, a multiple case study design, as described by Stake (1995, 2006) was used, where the context of both cases are based in a large city in Aotearoa NZ and defined by geographical boundaries, its socioeconomic features, and the tamariki/children (aged between 10 and 13 years) and their whānau/families who live there and who experience poverty. Within each case study are embedded units of analysis that comprise discrete but connected perspectives that each help to inform an understanding of the case (Yin, 2018). In this study these consist of the tamariki/children's perspectives, the perspectives of whānau and other adults in the neighbourhood who support tamariki/children's occupations, an educational perspective, and perspectives of key NGOs providing support services to whānau in the neighbourhood.

1.5.4 Recruitment and Sampling Strategy

The sampling strategy for the study was purposive, or recruiting a sample from within the case study neighbourhoods who most usefully inform the study (Simons, 2009; Stake, 1995). Inclusion criteria included tamariki and their whānau from within each case study who experienced material poverty based on their household income being below the NZ poverty line (Perry, 2019a), living in a low SES neighbourhood based on NZ criteria such as New Zealand Index of Deprivation (NZiDep) and the New Zealand Index of Multiple Deprivation (IMD) (Exeter et al., 2017; Salmond & Crampton, 2012a), where the child attended a low decile school (Ministry of Education [Te Tāhuhu o te Mātauranga], 2022, May 19), and where English was the primary language spoken in the home. There were no exclusion criteria on the basis of gender, ethnicity, or health status, but those who do not provide their informed consent and those with a significant disability were excluded (in order to minimise the potential confounding effects on participation of a child's disability).

Recruitment for the study was similar to that utilised in my master's study (Leadley, 2019) and initially occurred through consultation with key organisations in the two

neighbourhoods where the case studies were to be conducted. After providing information about the study, staff from within these organisations were asked to promote recruitment of potential participants which was achieved through placement of recruitment posters located at these organisations and through their social media platforms; and by providing information sheets for staff, tamariki, and their whānau who were interested in participating in the study. Participants who showed interest then discussed the study with the organisational staff and/or the researcher before committing to take part.

1.5.5 Methods

The methods used to gather data were aimed at understanding the tamariki/children's patterns of and participation in occupations, and what supported their potential and wellbeing from multiple perspectives (the tamariki, their parent/s, other adults, and community workers who support their occupations). These methods were varied and initially included a focus group design with tamariki that was child friendly (Krueger & Casey, 2015) and aimed to gain their perspectives on the topic, along with interviews with community workers on their views on the issue and solutions. More in-depth data gathering involved tamariki drawn from the focus group, and who had agreed to a further series of data gathering, consisting of child friendly interviews with the child, interviews with their parent/s and one to two adult/s who supported their occupations (Rossman & Rallis, 2017; Stake, 2010), plus observations in their home of their morning/afternoon and evening routines, and one community event they participated in (Leadley, 2019; Stake, 2010). Additional data gathering methods employed included photoelicitation, or using pictures of occupations taken by the child and explaining why these were important to them (Bunting, 2016; Leadley, 2019), a tamaiti/child's weekly diary (Leadley, 2019; Orban et al., 2012); a family mapping activity that explored with the tamaiti/child and their parent/s the locations, transport, and frequency in which they participated in their occupations (Huot & Laliberte Rudman, 2015; Leadley, 2019); and document review (e.g., relevant websites/documents).

1.5.6 Analysis of Data and Rigour

The data analysis techniques as described by Stake (1995, 2006) for case study research, such as direct and categorical interpretation, were used to analyse the data.

This involved engaging with and immersing myself in the data as the research proceeded. An iterative process was used that explored the data while reflecting on conceptual case study assertions, using both direct description and categorising or coding of data sources including those of a visual form (e.g., photographs and maps) (Stake, 1995, 2006). The analysis was then written in the form of a case study report, that presents the findings of each case study. A further integrated or multiple case study report was compiled that examined the unique and converging features of both cases, and drew on tentative assertions that arose from analysis of the case studies (Stake, 2006).

Research that is rigorously conducted is essential if we are to trust the results and utilise these to effectively implement solutions for social and health problems in the world (Creswell & Poth, 2018; Stanley & Nayar, 2014). The ways that qualitative CSM achieves rigour include triangulation, through using a range of data gathering methods, multiple perspectives and theories, member checking processes (i.e., where participants can review and feedback on the research findings), considering alternate explanations, through reflexivity as a researcher, peer review, and providing a research process that is auditable (Stake, 1995, 2006, 2010). In this study I employed several strategies to support rigour, including multiple methods and participant perspectives; exploration of findings based on different theories; member checking; remaining open to alternate explanations for the findings; reflexivity as a researcher (e.g., reflecting on the research process using a researcher diary, supervision, and cultural advice); producing research available for audit (e.g., careful and systematic storage of data, and a documented research process); and peer review of the thesis and of future publications.

1.5.7 Ethical and Cultural Considerations

Research needs to adhere to ethical principles and guidelines (Merriam & Tisdell, 2016; Stake, 2010) and be sensitive to the culture/s of communities and society where the research is being conducted (National Ethics Advisory Committee [NEAC], 2019; Water & Godbold, 2014). This is in order that participants are not harmed, that they are fully informed about the study (e.g., its aims, what participation involves), and consent to their participation (Merriam & Tisdell, 2016; NEAC, 2019; Stake, 2010). Other important ethical principles for research, particularly for tamariki/children and their

whānau/families, and for sensitive topics, provide for a careful and collaborative research process where tamariki and adults have control over their engagement in the study (Alderson & Morrow, 2011; Graham et al., 2015; NEAC, 2019). For example, as implemented in this study, a process of ongoing assent/consent and the ability to withdraw from the study allowed participants to make choices about which data gathering methods to participate in, the choice of venues and times to complete research activities, and the ability to review and amend data collected about them.

Equally, consultation should occur with communities where the research is conducted and ought to consider the diverse perspectives and needs of participants who may come from a range of cultural backgrounds, particularly where these are different or unfamiliar to the researcher. Doing so, can help ensure culturally safe research is conducted (NEAC, 2019; Wilson, 2014). For this study, as I am Pākehā and conducting the research in the Aotearoa context, I consulted with Māori from within the neighbourhoods where the study was to be conducted, seeking guidance and advice from Māori advisory groups (e.g., a Māori research group at AUT), and through the recruitment of a Māori cultural advisor for the study (Health Research Council of New Zealand [HRC], 2010; Hudson et al., n.d.; Wilson, 2014). Additional cultural advice was sought during the study where other cultural perspectives were required, such as those of Pasifika cultural backgrounds (HRC, 2014).

Before the study commenced, ethical approval was sought from Auckland University of Technology Ethics Committee (AUTEK) and was granted in full on 1 July, 2021.

1.6 Outline of Chapters

Chapter 2 discusses poverty as a concept, the issue both internationally and here in Aotearoa NZ. Chapter 3 explains in detail the key concepts related to the research question, reviews the published literature on the topic, and the theories that help to explain poverty's effect on tamariki/children's development, health, wellbeing and participation in occupations. Chapter 4 details the findings of the mixed methods research synthesis (MMRS) of the published literature pertaining to poverty's influence on tamariki/children's participation in occupations. Chapter 5 reviews the Aotearoa NZ based published and grey literature (government, non-governmental reports, and statistics) relating to the topic and the implications for tamariki/children's present and

future outcomes. Chapter 6 provides details of the key philosophical, axiological, and theoretical underpinnings, and methodology in the study. Chapter 7 overviews the research design and methods. Chapters 8 and 9 outline the findings from the Riverfield case study, with the Fernlee case study findings located in Appendix A (owing to the length of both reports). Chapter 10 discusses an integrated analysis of both case studies along with assertions reached in relation to the research question. Chapter 11 includes a discussion about the consolidated findings from the case studies, integrated with the literature reviewed and underpinning theories, that helped the research reach key assertions about the research topic, and alongside suggestions to address the problem of child poverty in Aotearoa NZ.

1.7 Summary

Child poverty is a complex and pervasive problem that deleteriously effects many tamariki/children both globally and in Aotearoa NZ. While poverty can be understood in different ways, a multidimensional poverty approach is taken in this qualitative case study research in order to understand the issue in a wholistic manner and from the perspectives of the tamariki and their whānau who experience it. It is hoped that their voices and the views of those who support such whānau can provide greater understanding about the ways poverty influences tamariki/children's participation in occupations, their potential and wellbeing. This may then serve as useful evidence informing occupational science and whakaora ngangahau/occupational therapy's approach to the issue, as well as to others who work in this space, and inform governmental policy and practice.

Chapter 2 Conceptualising Child Poverty

2.1 Introduction

Child poverty is a serious problem throughout the world with many tamariki/children experiencing its deleterious effects in their present and future lives. However, as a concept it is complex, given the many ways it can be defined and understood; thus, conducting research about the issue and finding solutions can be challenging.

Therefore, there is a need to define the concept of child poverty and its meaning to inform the current study. This chapter provides an overview of the primary ways child poverty is conceptualised, both globally and in Aotearoa NZ.

2.2 The Complexity in Defining Child Poverty

Conceptually, poverty is a phenomenon that can be perceived in different ways, such as on the basis of money or an ability to purchase goods and services, or the access to resources, or exclusion from aspects of society, or the limits that restricted material resources have on a person's ability to live a good life, or on the right to participate fully and reach one's full potential. Given the divergent perspectives about what constitutes poverty, the differing concepts may not necessarily mean the same thing, and may not necessarily be compatible, but are likely to be interconnected (Hick, 2015; Lister, 2021; Lötter, 2011; Spicker et al., 2007a; Wisor, 2017). For example, different poverty concepts, when constructed as measurements, quantify different aspects of poverty. While these are often related to each other, it is disputed whether they can be used as proxies, such as in the case of income and material measures of poverty.

Other perspectives emphasise the need to recognise the feminisation of poverty, where women are more likely to live in poverty and face worse outcomes than men (Bessell, 2015; Lister, 2021; Wisor, 2017). This perspective also applies to other groups of people such as those with chronic health conditions or disabilities, ethnic minorities, refugees, and Indigenous populations such as Māori in Aotearoa NZ (International Labour Organization [ILO], 2019; Lister, 2021; Perry, 2019a; UN, 2020c). Equally, there is a need to recognise some of the hidden aspects of poverty, such as when viewing it from a household perspective, as this often discounts the circumstances and experiences of women, people with disabilities, and tamariki/children (Lister, 2021).

The concept of poverty comprises both descriptive and normative dimensions or approaches to reality. The descriptive dimension or approach aims to describe, in an empirical manner, this type of human condition. For example, a child or adult lacking access to money or resources and thus experiencing a lower standard of living, with the associated consequences of diminished health and wellbeing. However, this implies a normative evaluative approach, such as being poor or not poor, or having a higher or lower standard of living, or an ethical approach of considering how things should or ought to be (Blackburn, 2016; Schweiger & Graf, 2015). Thus, ethically, poverty is a human condition that is bad or undesirable as it is perceived to be unfair, avoidable, and associated with harm. Furthermore, the causes are structural, economic, and historic (i.e., inequality in incomes/wealth, unfair distribution of resources) impacts of colonisation, and not on the basis of individual behaviour (Lister, 2021; Schweiger & Graf, 2015). From the perspective that child poverty is unethical and a social issue, there is a moral basis to act to make societal level changes that improve or alleviate the plight of those who are poor (Lötter, 2011; Schweiger & Graf, 2015; Spicker et al., 2007a).

Associated with the normative approach to child poverty is the perspective that all children are entitled to a minimum level of rights (as delineated in the UNCRC); that child poverty breaches tamariki/children's rights in a number of ways, has serious deleterious effects on their health and wellbeing, and is, thus, socially unjust and unfair (Nolan, 2020; UNICEF, 2016). From an occupational science perspective, child poverty is an occupational injustice in that tamariki/children's right to participate in meaningful occupations is constrained in ways that have serious, deleterious consequences. For example, rights to participate in play/recreation, social and cultural activities, and education are restricted by poverty, that, in turn, excludes tamariki/children's wider participation in society and increases their risk of negative and life-long consequences (Leadley & Hocking, 2017; Leadley et al., 2020). However, despite this moral imperative to act on the issue, the problem has remained, both historically and globally (Mosley, 2012; UN, 2020c; Wisor, 2017; World Bank, 2020).

An important consideration when addressing child poverty, and poverty in general, concerns who holds power to act on the matter and how the discourse on the topic is framed in society. Key agencies who have power to act on poverty and inequality,

particularly in western democratic countries are the government and their agents, and when little structural action is taken at this level the problem is perpetuated (Brando & Schweiger, 2019; Lister, 2021; UN, 2020c). However, individually and collectively we need to examine our role in perpetuating poverty and inequality, requiring us to challenge unjust social structures and power dynamics, and improve solidarity in our communities (Brando & Schweiger, 2019; Lister, 2021). Furthermore, the discourse about poverty is largely framed by politicians (e.g., notions of welfare dependency), the media (e.g., a bias towards negative stereotyping), and experts on the topic who typically discount the agency and voice of the people who experience poverty. Additionally, language used to talk about those who are poor and the explanations about what causes poverty, and subsequently its solutions, are often misconstrued, harmful to those in poverty, can be misused for political gain, and excludes the poor. A negative and stigmatising discourse can create 'othering' or stigmatise and create further exclusion for those in poverty, leading to harm (Lister, 2021).

The rise of capitalism in our contemporary society, and its accompanying dominant economic approach of neoliberalism, has been associated with rising inequality and poverty (Sullivan & Hickel, 2023), worsening health inequities, and negative outcomes for indigenous peoples (MacNaughton & Ahmed, 2023; Poirier et al., 2022).

Occupational science scholars have highlighted the blind spots that the profession, largely based in the Global North, has had towards political activism and taking a critical stance to capitalism, neoliberalist policies, and a history of colonisation and the negative effects this has resulted in for people's participation in occupations and their wellbeing (Balanta-Cobo et al., 2022; de Melo et al., 2020; Hammell, 2021).

Consequently, if child poverty is to be truly addressed, and occupational science and occupational therapy plays a role in achieving this aim, then challenging the economic and political ideologies, and structures that underpin these oppressive systems is required.

Having laid out some of the complexities in conceptualising poverty, the following section outlines various ways of conceptualising poverty, relating each perspective to tamariki/children and providing a brief critique of each concept. A poverty classification system proposed by Spicker et al. (2007b), which consists of 12 ways of defining poverty aligned to its material, economic, or social aspects, has been

integrated into this discussion. In addition, further relevant concepts, such as the capabilities approach, are included owing to their prevalence in the poverty literature.

2.3 Poverty Concepts

The following section provides an overview of the number of ways in which poverty has been conceptualised, often encapsulating both normative and descriptive approaches. Having an understanding about these different perspectives on poverty and how it is measured was important to this PhD study as they inform the multiple ways child poverty is conceived such as in the topic issues/questions and participant selection criteria for the case studies, and in the sensitive and nuanced way the findings from the study will be interpreted and presented.

2.3.1 Absolute Versus Relative Poverty

Influential poverty researchers in the early 1900s, Booth and Rowntree, developed a definition of poverty that provided the basis for the concept of absolute poverty. Rowntree proposed that poverty entailed a whānau/family that had insufficient income to access basic items such as food, clothing, or shelter (or a descriptive approach) in order to remain healthy (Lötter, 2011). The notion that there is a minimum threshold at which a person is unable to survive or function without a set of essential basic needs, and without comparison to others, persists in the contemporary concept of absolute poverty that has normative implications (Alkire et al., 2015; Lister, 2021; Lötter, 2011; Schweiger & Graf, 2015; Wisor, 2017). For example, a person living without regular access to food, water, clothing, shelter, and basic amenities would struggle to survive or engage in some of the most essential daily activities such as eating, ablutions, rest/sleep. Absolute poverty, as a concept, has informed poverty measures such as The World Bank's International Poverty Line (IPL), and other material deprivation and counting-based measures of extreme poverty (Alkire et al., 2015). This concept of absolute poverty has been widely used in the child poverty discourse and research, but primarily in examining the issue in low to middle income or developing nations. Examples include the work of the UN such as in their 'State of the World's Children' reports, or the World Bank's child poverty statistics (Silwal et al., 2020; UNICEF, 2019).

Conceptualising poverty in relative terms largely arose from the work of Peter Townsend in the 1950s and 1960s, and in response to the concept of absolute poverty. Relative poverty makes comparisons between members of a society in terms of their access to resources, living conditions, and their ability to participate in socially normative activities or customs; thus, implying a normative approach (Lister, 2021; Lötter, 2011; Schweiger & Graf, 2015; Wisor, 2017). A person was deemed relatively poor if they had a level of resources that led to a standard of living below what was acceptable or excluded them from participating in common occupations/activities (Lister, 2021; Lötter, 2011). This concept is the basis for the widely used income-based relative poverty lines that are used throughout more developed or higher income countries such as Aotearoa NZ and those in the OECD.

Absolute and relative poverty income-based measures can be described as indirect ways of measuring poverty in that they do not measure the actual level of resources a person has, but the income needed to access them (Spicker et al., 2007b). In contrast, direct or non-income based absolute or relative approaches measure the level of resources a person has access to or, in other words, a person's or household's living standards; for example, based on access to goods and services such as food, housing, clothing, electricity, transport, healthcare, phone/internet (Hick, 2015; Perry, 2019b; Wisor, 2017). In either measure, sufficient income or resources are required to participate in occupations.

While the concepts of absolute and relative poverty have, in the past, created a division in the poverty debate, in more recent times there has been a move towards an integrated poverty approach or relative-absolute synthesis that is seen as pragmatic. Issues relate to whether there is an absolute level of poverty, or if all definitions are in fact relative based on historical, social, and cultural contexts. For example, any understanding of minimum needs, such as food or shelter, is argued as being relative to the environmental and social conventions of a country. However, with relative approaches it can become more difficult to distinguish between poverty (i.e., not having enough) and inequality (i.e., less affluent), and how these standards are likely to change over time as a society becomes wealthier (Lister, 2021; Perry, 2019a; Ravallion, 2016; Schweiger & Graf, 2015; Wisor, 2017).

An integrated approach to understanding poverty enables the debate to focus on measuring and addressing poverty in all its forms, while still allowing for distinctions to be made where necessary. For example, a core or universal set of basic material needs are recognised, as in the case of Aotearoa NZ, that includes access to clean drinking water, sanitation, waste disposal, hot running water, clean clothes, adequate housing, as well as, in relative terms, access to forms of technology or recreationally and culturally important occupations (Perry, 2019a). This integrated approach was recognised at the 1995 UN World Summit on Social Development in Copenhagen. The consensus statement reached at this summit aimed to develop an integrated approach that recognised both absolute and relative concepts by acknowledging that poverty meant an inadequate level of resources was broad (e.g., included other aspects of life such as social facets) and varied by culture, country, and over time, where poverty was understood as a continuum (from severe to less severe) and as multidimensional (Perry, 2019a; Ravallion, 2016; Schweiger & Graf, 2015; Wisor, 2017).

2.3.2 Material or Basic Needs Based Concept of Poverty

Material poverty can be understood as the material resources or basic needs a person requires to survive or an adequate level of living that is deemed appropriate by a society (or a country) and is also a normative approach. It could be based on income, rates of consumption, or access to basic resources a person or household possesses, thereby including the descriptive component (Spicker et al., 2007a; Wisor, 2017). This conceptualisation encapsulates the idea of both *needs* (i.e., basic goods and services such as food, shelter, or healthcare and non-material needs such as self-esteem, respect etc.) and *limited resources* (i.e., the resources or income to access what they need) (Spicker et al., 2007a). However, temporal and cumulative exposure to material poverty or the *pattern of deprivation* is important, as not all deprivations of needs or resources result in poverty (Spicker et al., 2007a). For example, a person may be exposed to short-term deprivations, such as not having a home due to a natural disaster, but may not be poor in the longer term.

Relative material (income-based) poverty measure is typically defined as a line or threshold based on 60% less than the national median income level (Perry, 2019a; Schweiger & Graf, 2015; Wisor, 2017). However, other poverty lines may include 50% or 40% below the median income in order to reflect more severe levels of

poverty/financial hardship. This level is typically based on the household income with further considerations including adjustments for inflation, considering disposable or net income (i.e., all sources of income and after tax is deducted), accounting for household composition (e.g., number of adults and dependents/children living in the home) or equivalised income, and, in some countries like Aotearoa NZ or the UK, deducting significant household expenses (i.e., usually housing costs such as rent/mortgage). These adjustments provide a more accurate picture of the income/financial hardship a household and, subsequently, tamariki/children in the household experience (Perry, 2019a, 2021).

Relative material (resource-based) poverty/deprivation measures identify the level of important resources that are available to a person or household, where typically the greater the number of resource restrictions the higher the level of hardship (Perry, 2019b; Schweiger & Graf, 2015; Wisor, 2017). For example, reduced access to housing, food, clothing, heating, transport, healthcare, or leisure activities. Some of these measures now take account of tamariki/children's needs more specifically by exploring their access to resources and what is important in their lives (Biggeri & Cuesta, 2020; Perry, 2019b); for example, school uniforms, school trips, access to computers, or having friends to play.

Material poverty concepts have clear limitations and do not always provide an accurate and holistic picture of poverty. These limitations include that low income does not always equate with being poor (i.e., due to under reporting income, or not capturing wealth/assets); those with low levels of resources who may have relatively high incomes (e.g., due to being younger, or high housing costs, or not capturing other supports a family has access to such as from extended family or the community); and does not take account of intrahousehold difference in access to income and resources, (i.e., unequal access to money and resources experienced by other members of the household, such as women and children). In addition, material deprivation measures make judgements or arbitrary decisions about the poverty levels/thresholds and what is included as important material needs. Despite having access to material resources, other factors can impact a person actually converting these resources into positive outcomes in their lives, such as their health/disability, skills/abilities, level of education, social barriers such as racial or gender inequities, or physical constraints like

conflict or natural disasters (Biggeri & Cuesta, 2020; Jefferson, 2018; Lister, 2021; Lötter, 2011; Perry, 2019a; Wisor, 2017).

2.3.3 Economic Position as a Concept of Poverty

While these concepts are linked to material needs and resources, poverty is understood in economic terms and covers concepts such as *economic position*, *standard of living*, and *inequality*. The concept of *economic position* relates to a person's grouping based on social structure or the class of people. For example, the *working class* is typically defined by the nature of their labour intensive work roles (including skilled roles such as trades), lower income, and levels of higher/tertiary education (Scott, 2015; Vitt, 2007). *Standard of living* denotes a level at which the needs of a person are not being met adequately, and has its origins in the work of Rowntree, thus usually implying a minimum level of living but also relative concepts (Spicker et al., 2007a). This is the construct used in the World Bank's IPL to denote the minimal or absolute level of poverty that a person can experience and for much of the world is the threshold set in the 'end poverty' target in the UN SDGs (UN, 2020b). However, the UN SDG of ending poverty is now adjusted for wealthier countries to frame it in relative terms (UN, 2021, January 19).

Inequality is closely related to poverty but concerns the gap or economic distance between people's levels of income and standards of living (Spicker et al., 2007a). Inequality is an important debate in contemporary society, given its unfairness and associated negative consequences. However, despite the best efforts to address it by many nations and organisations globally (i.e., some nations are making progress in reducing inequality), inequality is a worsening problem in many parts of the world (UN, 2020c). This is highlighted in goal 10 of UN SDGs 'to reduce inequalities', evident in the UN World Social report (2020b) and in UNICEF's Innocenti reports that compare levels of inequality in high income countries and their effect on tamariki/children's rights and their wellbeing (UNICEF Innocenti, 2017). In terms of Aotearoa NZ's levels of inequality, these are rising. For example, incomes (after deducting housing costs) of those in the top and lowest percentiles in NZ show the income of those at the top has increased at a greater rate compared with those at the bottom; that is, the top percentile incomes in 2007 were approximately \$55,000 and the lowest were \$10,000, with the gap in incomes rising in 2018 to \$70,000 and \$12,000 respectively (Duncanson

et al., 2020). Trends in income inequality for NZ are particularly marked after accounting for housing costs, with a sharp rise in the late 1980s and fluctuating since (i.e., offset to some extent by social policy such as the Working for Families package) (Perry, 2019a).

2.3.4 Social Circumstance as a Concept of Poverty

Spicker et al. (2007b) discussed a range of poverty concepts that sit under the category of social circumstance including those of *social class*, *dependency*, *lack of basic security*, *poverty as a moral judgement*, *lack of entitlements*, and *exclusion*. The concept of *social class*, which is closely related to economic position, extends to include both economic and social position in society and is the basis of much poverty research. For example, it underpins terms such as SES or position that imply a person's level of income, education, and employment (Porta & Last, 2018b). The *dependency* concept of poverty entails the extent to which a person receives government or social supports/benefits due to their reduced means. This concept is not in wide use in the poverty literature, but is pertinent in contexts such as the USA or Aotearoa NZ where levels of dependency, or being on a social welfare benefit, are often debated in the media and political arenas, and the experience of beneficiaries is one of stigma, punitive, and unfair approaches by agencies they encounter (Creswell, 2021; Lister, 2021; Spicker et al., 2007a; Welfare Expert Advisory Group [WEAG], 2018). A related concept of an *underclass* has been a feature of poverty research and discourse, and categorises those in poverty as a separate class, attributing causation to behavioural and cultural factors rather than structural factors, which has fuelled stigma and 'othering' particularly in western contexts such as the UK and USA (Brando & Schweiger, 2019; Lister, 2021).

A view of poverty as a *moral judgement* considers the hardships of deprivation in its various forms as morally unacceptable, such that action ought to be taken to resolve it (Spicker et al., 2007a). This view of poverty has a particularly clear normative dimension, seen as a social injustice and in terms of the way it breaches tamariki/children's human rights, such as not having access to education, play, social and cultural occupations.

Poverty viewed as a *lack of basic security* concerns the vulnerabilities for those who experience a lack of basic needs, related to material needs/resources concept, such as a constant struggle to have their basic needs or human rights met (Spicker et al., 2007a). A *rights-based approach* fortifies assertions about poverty's negative impact on human rights, emphasises the ethical and moral duty to act, and places the responsibility to act on states/governments that can influence poverty's structural causes. This approach also strengthens the agency of the poor (e.g., as legitimate claimants for breaches in their rights, can help mobilise action by the poor and highlights their voice); can counter dehumanising and 'othering' narratives by emphasising our commonality as humans; supports anti-poverty campaigns; and, through reference to UNCRC, aids analysis and intensifies demands to end child poverty (Lister, 2021; Spicker et al., 2007a; Wisor, 2017).

A related concept, *lack of entitlement*, views poverty as the effect that material deprivation has on a person's entitlements, such as to have sufficient food to eat or a home to live in, and has obvious connection to the material needs/resources concept. The point made with this definition is how the deprivation results from a lack of being provided a resource that people ought to have access to. For example, homelessness arises due to reduced access to a house, not necessarily from a lack of housing (Spicker et al., 2007a). The capability approach to poverty (discussed below) might be considered to fit into this category, and a number of others outlined by Spicker et al. (2007b), but this is not articulated clearly in their poverty classification system.

The concept of *social exclusion* as a way to understand poverty has been prevalent in the literature for a considerable time (e.g., writings of Adam Smith in the 1800s), and is a dominant discourse in the EU's perspective about poverty (Lister, 2021; Spicker et al., 2007a; Wisor, 2017). This concept has multidimensional features that encompass exclusion of persons or groups of people from facets of social life or as a result of stigma and marginalisation. Social exclusion arising from a lack of material needs is the predominant usage (Spicker et al., 2007a). As a concept, it is particularly helpful to frame a relational perspective regarding poverty such as social participation/inclusion/rights, lack of voice, stigma etc. Indeed, this perspective about a fair and inclusive society is a feature of Dewey's pragmatist views about democracy (Festenstein, 2023). However, some have criticised the use of the concept in the poverty debate due to its

ambiguity and lack of analytical clarity, and for its use by some in politics to avoid the term ‘poverty’ (Lister, 2021). While exclusion has negative implications for all people, the exclusionary forces of poverty for tamariki/children are felt by them in unique and profound ways, such as being stigmatised and left out at school or social occupations by their peers/adults (Egan-Birtan, 2010; Lister, 2021; Ridge, 2009).

2.3.5 The Capabilities Approach to Poverty

Philosopher and economist Amartya Sen developed a new theory of economics and distributive justice focused on human development and wellbeing. The theory was a rebuttal/response to existing economic theories and philosophy on the topic and other egalitarian theories of distributive justice such as utilitarianism (Robeyns & Byskov, 2021; Wells, 2022; Yilmaz, 2016). Unique to Sen’s approaches to justice, human development and wellbeing are ideas such as *adaptive attitude* or people’s ability to adapt to their circumstances be they good or bad, that people may have other important competing demands in the context of weighing up personal liberties or rights (e.g., basic survival needs), and takes account of the abilities a person has to convert resources into positive achievements (or *conversion factors*) (Robeyns & Byskov, 2021; Sen, 1999; Wells, 2022; Yilmaz, 2016). Additionally, the resources available to a person are also dependent on their circumstances and context such as their personal attributes (e.g., age, illness, gender etc.), distribution within a family, patterns of behaviour or relational aspects between communities (e.g., customs or traditions), and the physical, social, or institutional environment (e.g., access to public education or healthcare) (Sen, 1999). Together, these factors influence a person’s capabilities or the range of freedoms/choices in terms of what they value doing or being, or the life they wish to lead, and, subsequently, what they are actually able to do and be (functionings), which is ultimately what determines their wellbeing (Lister, 2021; Lötter, 2011; Sen, 1999; Wells, 2022; Wisor, 2017). The capabilities approach (CA) is a shift away from the focus of other egalitarian social justice theories on means (i.e., income, resources) to the ends or what people are able to achieve (capabilities) (Robeyns & Byskov, 2021; Wells, 2022; Yilmaz, 2016).

From a CA, poverty is the deprivation of the capabilities required to live a good life (Lister, 2021; Sen, 1999; Wells, 2022). Being poor means not being able to achieve adequate functionings in life such as nutrition, shelter, health, or education; or the

reduced opportunities to achieve one's capabilities such as being adequately nourished, housed, healthy, educated, and able to participate in meaningful occupations. From this perspective, access to adequate income and resources are seen as only one way to alleviate states of poverty and are contingent on people's context and personal circumstances (Sen, 1999). For example, access to free education and healthcare, and eliminating systemic gender and racial bias in society, can enable many people to gain a sound level of education, employment, participate as full and active members in a society or occupations, and thus escape poverty. The capabilities theory, while often associated with the concept of absolute poverty (Perry, 2019a), can be applied to both relative and absolute perspectives in terms of a child's/person's functionings and capabilities (Schweiger & Graf, 2015; Sen, 1999).

However, the use of capabilities theory specifically as a basis for understanding or researching child poverty has only recently been developed. Schweiger and Graf (2015) developed a social justice framework for tamariki/children that focuses on their wellbeing and well-becoming in the context of poverty in more developed states with welfare systems (Biggeri et al., 2011; Brando & Schweiger, 2019). Importantly, when considering child poverty from a CA, there is a need to gain the perspectives of tamariki/children to understand how CA is applied differently to tamariki compared with adults (e.g., they are rapidly developing, have differing functions and capability requirements to adults), and appraise how poverty affects their health and wellbeing in the immediate sense and over the whole of their life course (Biggeri & Mehrotra, 2011; Schweiger & Graf, 2015).

Criticisms of the CA include confusion about the use of related terms. For example, what the term freedom means and whether capabilities should be termed as a theory or approach/framework. CA has also been criticised for its under theorisation or insufficiency as a theory of social justice, its ambiguity about specific capabilities important for wellbeing, having a non-political characteristic, and lacking distinction between morally and morally irrelevant capability inequalities (e.g., how to determine when a personal heterogeneity, such as metabolism, is a matter of justice). Additional criticism includes that CA has too much focus on individual versus communal values and cultural contexts, is an inadequate way to conceptualise interpersonal factors (e.g., friendships, respect etc.), and is limited in its ability to acknowledge non-western

paradigms such as Indigenous perspectives that view inanimate features of the environment as vital (e.g., animals, land etc.) (Robeyns & Byskov, 2021; Watene, 2016; Wells, 2022; Yilmaz, 2016).

2.3.6 Multidimensional Approach to Poverty

The merging of various concepts about poverty in order to take a broader and more inclusive approach to understanding and measuring it has developed in recent times and has arguably become a more accepted approach to poverty monitoring globally (Alkire et al., 2015; Lister, 2021; Spicker et al., 2007a; Wisor, 2017). Such approaches tend to include material or basic needs, social exclusion, entitlement concepts, and other key approaches such as human rights and capability theory to construct understandings and measures of poverty, and cover a range of life circumstances such as housing, education, health, standard of living, transportation, and social connectedness (Alkire et al., 2015; Spicker et al., 2007a; Wisor, 2017). This approach also aims to address some of the deficiencies inherent in income and deprivation-based measures such as not accurately identifying those who experience poverty, or the interconnectedness of differing deprivations (Alkire et al., 2015; Spicker et al., 2007a; Wisor, 2017).

Multidimensional child poverty (MDCP) measures have become a widely accepted way to investigate the phenomenon, with a recognition in the shortcomings of income and resource-based measures (Abdu & Delamonica, 2018; Biggeri & Cuesta, 2020; Dirksen & Alkire, 2021; Kim, 2019). MDCP conceptually draws from the three key poverty approaches of material or basic needs, child rights (i.e., UNCRC), and the CA (Abdu & Delamonica, 2018; Biggeri & Cuesta, 2020; Pinilla-Roncancio et al., 2021). Measures that focus on tamariki/children's deprivation focus on child specific indicators, and enable intrahousehold measurement of needs (e.g., not just the head of the household or primary income earner). While there are many similarities in MDCP measures, there are also key differences such as no clear consensus on how child poverty is defined or which dimensions and indicators to include, resulting in a range of MDCP measures that are in use (Biggeri & Cuesta, 2020; Pinilla-Roncancio et al., 2021). For example, the child rights that are included in most MDCP are limited in scope and do not include such dimensions as play/recreation, social, or cultural occupations that are essential to a child's development (Abdu & Delamonica, 2018; Biggeri & Cuesta, 2020). From an

occupational science perspective, the multidimensional way in which poverty impedes a child's participation in their occupations can be seen as a form of occupational deprivation, or the way in which external forces beyond a person's control restrict their engagement in occupations (Leadley & Hocking, 2017; Leadley et al., 2020). Aotearoa NZ currently measures child poverty in a multidimensional way through its Material Wellbeing Index and deprivation indices (Dep-17 & EU-13) that include access to daily resources such as food, clothes, shelter, electricity, transport, and aspects of occupational participation (e.g., spending on hobbies, holidays, access to leisure and cultural activities) (Perry, 2019b).

2.3.7 Area Level Deprivation Constructs

Another methodology for measuring poverty based on a multidimensional concept is to construct levels of socioeconomic deprivation/poverty according to geographic locations. This methodology has an established history of use and draws on early poverty theorists and their work, such as Townsend and others (Exeter et al., 2017; Salmond & Crampton, 2012b). The data is typically collected from census and other sources (e.g., government health and social data) to construct small area blocks of socioeconomic deprivation graded numerically (e.g., 1-5, where 5 = most deprived). Indicators of deprivation, such as the NZ Deprivation Index (NZDep), typically include income, receipt of government benefit/employment, single-parent families, housing tenure, housing occupancy levels, and access to essential items such as car, telephone etc., (Exeter et al., 2017; Salmond & Crampton, 2012b). A newer measure, the NZ Index of Multiple Deprivation (IMD), includes additional data aimed at broader deprivation domains such as health and crime, and expands typical domains such as education and employment (Exeter et al., 2017). A further, recent development is the NZ Dynamic Deprivation Index (DDI) that overcomes the time limited nature of NZDep and IMD, by providing regular, monthly updated area deprivation data (Ward et al., 2019). Area-based deprivation measures have proved to be efficient and pragmatic methods of highlighting area level health and social inequalities that are useful in country-based social and public health planning (Allik et al., 2020; Clelland & Hill, 2019; Exeter et al., 2017; Salmond & Crampton, 2012a).

However, limitations with these deprivation indices include that some measures may not accurately capture area-level inequalities, the somewhat arbitrary selection and

weighting of deprivation indicators, not all those experiencing deprivation are included (especially in rural locations), a rigid emphasis on deprivation boundaries, and hidden complexities such as how deprivation changes over time (Allik et al., 2020; Clelland & Hill, 2019). Another limitation of these measures is 'reification' or the assumption that area deprivation is a proxy for levels of household deprivation, as these measures do not account for individual household circumstances (Clelland & Hill, 2019; Salmond & Crampton, 2012a). Furthermore, as with other population-based deprivation indices, area-based measures do not provide an understanding of intrahousehold access to resources (Biggeri & Cuesta, 2020; Lekobane, 2021). Nor do they include tamariki/children's levels of participation in a wide range of occupations such as leisure, social, and cultural activities.

2.3.8 Subjective Approach to Poverty

Subjective poverty can be defined as how a person perceives their level of financial and material hardship and can be described as a direct assessment of poverty, as opposed to indirectly examining levels of income and access to resources (Kuivalainen, 2014; Spicker et al., 2007c). This poverty concept can be understood in two ways. Firstly, it is used to develop a consensus approach to poverty, based on a sample of views from a population. This is then used to construct a subjective poverty line (SPL) that is employed in surveys to determine levels of poverty in a society and is a widely used approach (Crettaz & Suter, 2013; Kuivalainen, 2014; Ravallion, 2016; Spicker et al., 2007c). While research shows SPLs to be valuable in measuring poverty (i.e., provides a democratic approach to poverty, and are comparable to objective poverty lines), they do have limitations such as being inherently based on subjective views and that not everyone understands the issue in the same way. In addition, those who are chronically poor show a tendency towards adaptive preferences or downplay their perceived level of poverty (Crettaz & Suter, 2013; Kuivalainen, 2014; Ravallion, 2016; Spicker et al., 2007c).

Secondly, using qualitative research methodology to understand the phenomenon from the perspectives of those who have a lived experience of poverty can also be understood as a subjective construct on the topic and has been used extensively over the last 20 plus years (Bourdillon & Boyden, 2014; Kanbur, 2001; Lister, 2021; Narayan et al., 2000; Spicker et al., 2007a). Subjective approaches conducted using qualitative

research methodology reveal a multidimensional, diverse, and participatory perspective, with depth of understanding about the issue that is not achieved in quantitative or measurement-based methodologies (Attree, 2006; Bourdillon & Boyden, 2014; Kanbur, 2001; Lister, 2021; Narayan et al., 2000; Spicker et al., 2007a). Such an approach brings to light the difficult and stressful circumstances of people's lives, along with their agency and ways of coping, highlighting issues of relevance to them that show not only diversity but also solidarity and commonalities amongst the poor, and can enable the poor to have a genuine voice that informs pragmatic solutions to the problem. This dimension adds insights about the nature of poverty, its causes, what perpetuates it, the context (i.e., local and community-based issues), and structural and nuanced features such as institutional, racial, health/disability, gendered and age specific issues including the perspectives of women and tamariki/children. Qualitative research conducted specifically with tamariki/children living in poverty highlights their perspectives, the material and occupational needs they see as important in their lives, and provides them with an opportunity to express their views on the topic, including their perception of solutions to the problem (Bourdillon & Boyden, 2014; Ridge, 2011; Schweiger & Graf, 2015). Together with other aggregated (i.e., national survey data) and measurement-based approaches to examining the issue, subjective poverty approaches can help to address the systemic roots of poverty (Bourdillon & Boyden, 2014; Lister, 2021; Narayan et al., 2000; Schweiger & Graf, 2015; Spicker et al., 2007a).

A number of large scale qualitative studies have been conducted about child poverty including, in the UK (Attree, 2006; Ridge, 2011), the Young Lives study exploring the impact of poverty on children's lives in a number of low-middle income countries (Bourdillon & Boyden, 2014), and a growing body of other studies (Pemberton et al., 2013; Quint et al., 2018), including in Aotearoa NZ (Egan-Birtan, 2010; Leadley, 2019). These studies highlight that despite the best efforts of tamariki/children, their whānau/families and the communities who support them, their experiences are primarily negative such as bullying and stigma, reduced participation and exclusion from a range of tamariki/children's occupations, and associated consequences for their health, wellbeing, and future prospects.

Given the diversity and complexity of ways in which poverty can be understood, the stance I take as a researcher is to approach child poverty as caused by structural issues in society, viewing it in a wholistic manner where poverty is conceptualised as a multidimensional concept that includes both quantitative and qualitative ways to examine the issue. I also consider child poverty to be a matter of injustice, that breaches tamariki/children's fundamental human rights by depriving them of their essential needs, restricting their full participation in a range of occupations, having negative impacts on all aspects of their health, wellbeing, and their potential to grow and flourish (capabilities), and as an issue that requires the fullest effort of society to resolve.

2.4 The Issue of Child Poverty Globally

The numbers of tamariki/children (under the age of 18 years) living in absolute poverty globally (based on estimates in 2017), using the IPL, equate to approximately 355 million, with the number of adults totalling approximately 354 million (a total global count of 709 million), or 17.5% and 7.9% respectively (proportional to child and adult global populations) (Silwal et al., 2020; World Bank, 2020). Another measure, the Societal Poverty Line (SPL), or the lack of resources required to live a dignified life based on a country's levels of wealth, records global poverty at 2 billion people or 27.6% of the world's population (World Bank, 2020). In terms of life span, the greatest concentration of the world's poor is comprised of children, with about half of the world's poor being children under the age of 15 years, while this group is only a quarter of the world's population. Levels of poverty are higher amongst women and girls, and are more concentrated in rural areas and in specific geographic regions of the world, namely Sub-Saharan Africa and South Asia (Silwal et al., 2020; World Bank, 2020). However, a more appropriate poverty measure for developed and higher income countries is based on relative income and material deprivation, as used by UNICEF in their Innocenti Report cards to examine the health and wellbeing of children in richer, industrialised countries (Duncanson et al., 2022; Perry, 2022).

Globally, evidence shows there has been a steady decline in poverty levels using the IPL, SPL, and MPI (Multidimensional Poverty Index) with reasons including global economic growth and increasing levels of education amongst the world's poor; thus,

leading to higher employment and associated incomes (World Bank, 2020). For example, levels of adult and child poverty, using the IPL, show a steady decline over the last 25 years, or since the 1990s, from approximately 1.9 billion to currently around 700 million (World Bank, 2020, 2021b). However, the rate of decline has begun to slow over the last few years from approximately 1% decline per year, pre-2013 to 0.5% per year in the 2015-2017 period, and is reducing at a relatively slower rate for children (World Bank, 2020). Furthermore, there are specific threats to global poverty reduction including climate change (e.g., more severe natural disasters), wars, and, more recently, the COVID-19 global pandemic (Mahler et al., June, 24, 2021; World Bank, 2020). Given these threats to global poverty, and if these issues are not addressed, the UN SDG or target to end extreme poverty or reach the level of 3% by 2030, is unlikely to be achieved (UN, 2020b; World Bank, 2020).

2.5 The Issue of Child Poverty in Aotearoa New Zealand

Aotearoa NZ is considered a high income country, with a high level of developed infrastructure, social services, a democratic political system that is largely free from endemic corruption, and a robust taxation system that supports government activities such as free health and education (OECD, 2021, January 20; World Bank, 2021a). Thus, a relative material poverty concept based on a multidimensional approach (i.e., using a combination of income and non-income or material deprivation measures) is most appropriate to measure poverty in this country as it allows for comparisons of income and material deprivation based on the relatively high level of incomes and standards of living (Perry, 2019a; Stats NZ, 2021a).

Since the introduction of the Child Poverty Reduction Act in 2018, there is a requirement for the Government Statistician to report annually on levels of household income and material hardship (Stats NZ, 2021a). Furthermore, under the Act, the government is tasked with the duty to collect data on five child poverty related indicators (CPRI) that include: housing affordability and quality, food insecurity, regular school attendance, and potentially avoidable hospitalisations (Rt Hon Jacinda Ardern, 2020). This requirement, however, omits other important indicators of a child's health and wellbeing such as participation in activities of daily living, leisure, social, cultural and civic occupations. The CPRI data are collected by Stats NZ / Tatauranga Aotearoa,

through their Household Economic Survey (HES), and is reported on in the Ministry of Social Development's (MSD)/ Te Manatū Whakahiato Ora, Household Incomes and Non-Incomes (or material wellbeing) reports. The latter uses a range of data including from the HES, Stats NZ Aotearoa longitudinal Survey of Family, Income and Employment (SoFIE), and their General Social Survey (GSS), and from MSD's Living Standards Survey (LSS). These surveys use a range of material deprivation indices such as the European Union's Material and Social Deprivation Index (EU-13), a NZ based deprivation index (Dep-17), or the Material Wellbeing Index (MWI) and other related data (Perry, 2019b; Stats NZ, 2021a).

The main measure for income related material poverty used in Aotearoa NZ involves a *poverty line* or threshold below which an individual, a whānau/family or household, and by default the tamariki/children living in the household, are deemed to be living in poverty (Perry, 2019a; Stats NZ, 2021a). This poverty line is based on the NZ median income for any given year and adjusted for the household composition or the number of adults and dependent tamariki living in the household. It can be either a fixed line/anchored/constant value (CV) approach (i.e., compared to a set poverty line in a previous year, and adjusted each year based on the consumer price index [CPI]), or the moving line/relative (REL) approach (i.e., relevant to the median income sourced in each NZ income survey). Both approaches have merits and limitations. The fixed CV line can reveal if low incomes are rising or falling in real terms (i.e., how households actually cope with low incomes); whereas the REL line can help show widening gaps in incomes even when low income households are experiencing increases (Perry, 2019a). The poverty line is set at either 60%, 50%, or 40% of the median income, with the lower percentages reflecting a more severe level of income poverty. Further, the poverty line is also based on either BHC or AHC in order to reflect the impact of housing costs on a household, particularly for those on low incomes (Perry, 2019a; Stats NZ, 2021a) which, in NZ, have been relatively high for some time (i.e., due to a worsening housing crisis) (Duncanson et al., 2022; Edwards, 2021; Hong, 2021).

Measuring material deprivation levels in NZ is captured through household surveys including the HES, LSS, GSS, and the SoFIE. These surveys utilise a range of material deprivation indices such as the EU-13, Dep-17, and the MWI. Items covered in these indices include being not able to: access nutritious meals/items (e.g., fruit, vegetables,

meat or vegetarian equivalent), replace worn out clothing, heat the home, no access to a car, afford visits to the doctor, afford regular leisure activities, having to borrow money due to financial hardship etc (Perry, 2019b). Other data sources include geographically constructed indices such as the NZDep, based on census collected deprivation data, and the IMD that uses additional deprivation data collected from government departments (Perry, 2019b).

Other indicators of deprivation or hardship have been introduced into the HES since 2012 and include households with dampness and mould, or that are not adequately heated in winter. Specific child indicators of material deprivation were introduced to the 2016 HES. For example, uniforms required for school, having friends around to play, access to a computer for homework, unable to pay for school trips, not able to engage in tamariki/children's leisure or cultural activities, limited space to study or play etc. These additional household deprivation indicators and age specific indicators help to provide a more child centred picture of hardship and the difficult realities of life for many Aotearoa NZ tamariki (Perry, 2019b, 2021).

2.5.1 Levels of Child Poverty in Aotearoa New Zealand

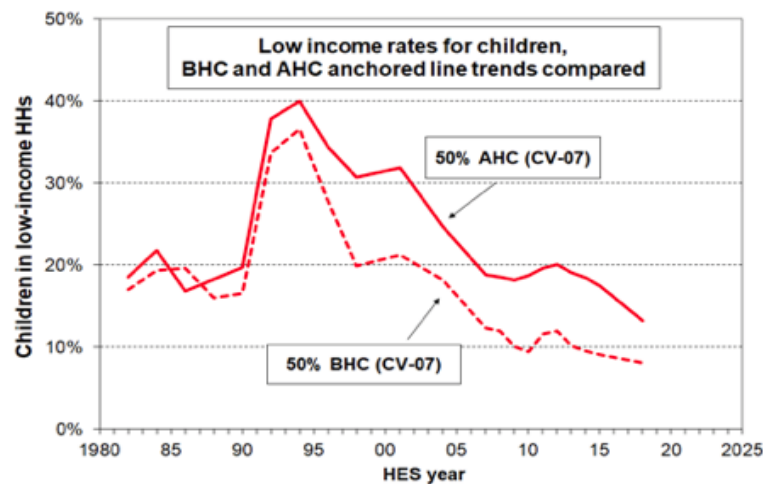
Tracking the longer term trends in income based child poverty in Aotearoa NZ (i.e., from the 1980s) has shown fluctuating levels of household and, consequently, child poverty, with a steady decline over the 5-7 year period/2011-2018 due to a range of national and international factors (Perry, 2019a, 2021; Stats NZ, 2022a). For example, the numbers of low income households (AHC, using the 50% of 2007 median with anchored CV line, in order to best show the trends over time) were relatively low in the 1980s (i.e., approx. 11-13%), rose quite rapidly in the 1990s (i.e., reaching 26%) due to government benefit cuts, rising unemployment, a decreasing average wage, increasing numbers of sole parent families; then again falling in the 2000s (with rising average wage and female employment, and the introduction of the Working for Families income support package); followed by an increase post the global financial crisis (GFC) 2008-2010 (i.e., 14-15%), and declining to 10% in 2018 (Perry, 2019a). Using the same poverty line, for tamariki the rates are higher as there are usually more tamariki per household in NZ relative to the number of parents/adults. The child poverty rate in the 1980s was 17-22%, rising in 1990s to as high as 40%, before dropping in the 2000s to 18-19%, rising post-GFC to 20%, before again declining in

2018 to approximately 13%, with a similar explanation for the causes in these child poverty trends matching the household trends (Perry, 2019a). These child poverty trends are shown in Figure 2.1 below. The most recent Statistics NZ data for June, 2021 (using equivalent measures, or AHC, 50% of 2017/2018 median, fixed, primary measure) show percentages were declining steadily (i.e., 18.3% in 2019 to 15.4% in 2022), then rising slightly in 2021 during the COVID-19 pandemic (Stats NZ, 2022a).

Proportionally, poverty levels for Māori and Pasifika continue to be consistently higher. For example, over the 2013-2015 period, using the AHC REL 50% poverty line, 32% Māori and 34% Pasifika tamariki/children were in poverty compared with 15% European/Pākehā, 25% Asian children, and 22% being the average rate for all tamariki during this period (Perry, 2019a). In 2019, using Stats NZ AHC 50% measure, 1 in 5 Māori (22.4%, 66,200) and Pasifika (21.5%, 30,300) tamariki lived in poverty compared with 18.3% (207,700) for all NZ tamariki (Stats NZ, 2021b). While this rate dropped in 2022 to 16.8% for Māori, and 19.4% for Pasifika tamariki, these rates remained higher than the national average (Stats NZ, 2022a). Explanations provided for these disproportionate levels of child poverty by ethnicity are due to the higher levels of single parent and beneficiary households for Māori and Pasifika (Perry, 2019a), inequitable social and economic investment by NZ governments for these ethnic groups, the historical consequences of colonisation, unfair immigration policy, institutional racism, and intergenerational poverty (Came et al., 2020; Dale, 2017; Ministry of Health, 2014, 2021d).

Figure 2.1

Trends in Household Child Poverty Rates, AHC, since the 1980s



Note. From *Household Incomes in New Zealand: Trends in Indicators of Inequality and Hardship 1982-2018* (p. 139), by Perry, 2019. Copyright 2019 by Ministry of Development. Reprinted with permission.

The trends in material deprivation in NZ for households and for tamariki show a similar pattern to trends in household incomes. For example, in 2007 material deprivation in households was approximately 13%, rising to 16% in 2011 and then decreasing to 8% by 2018. For tamariki, in 2007 the rate was 18% (220,000), increasing to 25% (270,000) in 2011, before reducing to 13% (65,000) in 2018 (Perry, 2019b). Explanations for these trends in deprivation are similar to those based on income measures (Perry, 2019a, 2019b). The latest available statistics (June, 2022) reflect this steady decline in material deprivation/hardship with current levels for all Aotearoa NZ tamariki/children at 10.3%. However, again Māori and Pasifika tamariki are disproportionately affected with their levels in 2022 being 18.8% and 25.6% respectively (Stats NZ, 2022a).

Data from Aotearoa NZ surveys reveal that the living conditions of households experiencing low income and material deprivation comprise sub-standard and restricted housing conditions, with low tenure and high housing costs (i.e., rent) contributing to their poverty and threatening the health and wellbeing of their tamariki/children. For example, for NZ households in the 2012-2015 period, on average 10% were living in houses with dampness and mould, 13% without adequate heating in winter, and 7% with both issues. More recent data from the 2018 Census revealed that 25% of tamariki live in damp houses, 18% live in houses with mould, with those living in poverty and from Māori and Pasifika ethnicities more likely to live in these conditions compared with other ethnicities (DPMC, 2021a; Duncanson et al.,

2020). In 1986 the level of overcrowding in NZ households was 22.8%, dropping to 10% in 2013. However, these figures were a lot higher for Māori (19.3%) and Pasifika (38.5%) compared to European (4.3%) households in 2013. More recent data (2018 census) show that approximately 16% of tamariki live in overcrowded homes (i.e., the family require 1 further bedroom), and 5% in severely overcrowded homes (2 or more bedrooms required), with tamariki from Māori and Pacific ethnicities more likely to live in these conditions than other ethnicities (Duncanson et al., 2020). The 2016 HES, with similar results to those in 2004 and 2008, showed that approximately 9% of tamariki were experiencing restricted space that inhibited their ability to study and play in their home, with the majority living in high material deprivation (Perry, 2019b).

Whānau/families living on low incomes are more likely to experience lower levels of housing tenure (i.e., home ownership) which can, consequently, result in moving house more frequently. For tamariki/children, this results in disruption to schooling and social networks which can have negative implications (Duncanson et al., 2020). Much of the pressure on low-middle income households' budgets is a result of the housing crisis that includes low home ownership due to high house prices, a shortage of affordable housing, and high rental prices (Duncanson et al., 2022; Perry, 2019a; Stats NZ, 2020a). As a consequence, this leaves low-income households, in particular, with very little income after paying for rent; thus, often forgoing other essential items such as food, health care, transport, and other expenses that are required to meet their tamariki/children's needs (DPMC, 2021a; Duncanson et al., 2020). For example, 40% of low income households spend \$40 out of \$100, and 31% are spending \$50 out of \$100 of their income on rent (Duncanson et al., 2020). In the 2015/16 period approximately 43% of households with tamariki were experiencing food insecurity (i.e., do not always have enough food to eat), which typically requires whānau to access government funded hardship grants. In terms of access to primary health care, 19% (189,000) tamariki were not able to access required primary health care (Duncanson et al., 2020) which includes fewer visits to the GP for tamariki living in high deprivation compared to those in low deprivation contexts (Ministry of Health, 2021b). Increasingly, for many whānau this can result in becoming homeless or needing to be housed in government funded emergency accommodation (e.g., living in motels),

bringing with it a raft of associated negative consequences (Cardwell, 2021; Duncanson et al., 2022).

When comparing Aotearoa NZ's levels of child poverty with other comparable countries internationally, data shows NZ is at the median mark on most income and material deprivation indicators of child poverty. For example, based on the OECD 50% BHC line (based on data from 2015) NZ has 14% child poverty, with the OECD median of 12%. Using the EU (Eurostats) line of 60% BHC (in 2015), NZ has 24% child poverty, while the EU median is 21%. NZ is at the median point for levels of child material deprivation or 15% (using 2017 data comparable to the EU-13 measure). Overall, Aotearoa NZ levels are equivalent to those in the UK, which is the only other country that provides available data for AHC levels (i.e., AHC 60% UK=30%, and NZ≈30%) (Perry, 2019a; UNICEF Innocenti, 2020).

2.6 Summary

Child poverty is a complex concept that can be understood in many ways. The approach I take as a researcher is the view that it is multidimensional and rights-based, with the experiences of tamariki/children and their whānau/families helping to inform our understanding of the issue and how it influences their occupations, while acknowledging their agency in coping with and finding solutions to the problem. While child poverty remains a vexing issue globally, with wealthier nations such as Aotearoa NZ continuing to have high levels of relative material poverty, current trends in reduction internationally, and in countries such as NZ, are promising. While these trends show progress towards the UN SDGs goal to end poverty by 2030, a number of factors threaten this progress and concerted efforts by the NZ government; and, globally, need to continue if such aspirational goals are to be achieved.

The next chapter explores the research question broadly, based on a thorough review of the literature pertaining to the topic. The theory that explains associations between poverty and tamariki/children's development, health, wellbeing and participation in occupations is outlined.

Chapter 3 The Ways Poverty Affects Tamariki/Children's Participation in Occupations, their Potential, and Wellbeing

3.1 Introduction

In this chapter I provide an overview, from an occupational perspective, of literature reviewed at the design stage of the study to inform the development of case study issue statements/assumptions, data gathering strategies, and focus group and interview questions. This literature demonstrates the ways poverty has a pervasive effect on tamariki/children's lives, restricting their full participation in a range of childhood occupations and contributing to well-documented detrimental consequences for their health, wellbeing, educational attainment, and future occupational prospects. Countering that, tamariki/children are shown to develop skills through participation in occupation and have hopes and aspirations for a better life when supported by positive parenting and whānau/family structures, their communities, and governmental policy and action that aims to alleviate and eliminate poverty.

This chapter firstly explores the key terms in the research question: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?* The information presented in this chapter was drawn from an initial review of the literature to help inform the relationships between key components of the research question: participation, potential, and wellbeing. In relation to the potential and wellbeing components of the research question, the review drew from library databases (e.g., CINAHL, MEDLINE), with specific inclusion criterion (e.g., quantitative, qualitative, and mixed methods, peer reviewed journal articles/reports, published between 2009-2019, and later updated for 2020-2023 period, in English), and draws on research from western countries akin to the Aotearoa NZ context. (Refer to literature review process in Appendix B: Literature Review – Potential and Child Poverty; and Appendix C: Literature Review – Wellbeing and Child Poverty.) This chapter ends with a discussion about how tamariki/children, their whānau/families and communities help to counter the impacts of poverty. The theories that explain poverty's influence on participation, potential, and wellbeing will also be provided.

A mixed methods research synthesis (MMRS) was completed in relation to the key component of the research question participation, and is presented in Chapter 4, including a peer review process completed by my supervisors. Due to resource and time limits of the PhD, this process was not able to be conducted for the potential and wellbeing components. Also, as no NZ-based evidence met the literature review search criteria, an extensive search of pertinent published and grey literature from NZ, related to the research question, was completed and is presented in Chapter 5.

3.2 Tamariki/Children and Childhood

Tamariki/children are typically defined as being under the age of 18 years (United Nations [UN] General Assembly, 1989). At this age, young tamariki and rangatahi/adolescents are considered to be relatively vulnerable and dependent on adults for their care and wellbeing, although this tends to diminish throughout the adolescent years as autonomy increases (Cronin, 2016a; UNICEF, 2016). This stage of development in life is broadly referred to as childhood. While the construct of childhood is a contested one (i.e., a socially and culturally constructed term), it is internationally agreed that it is a stage that requires particular protection and is recognised under international legislation such as the UNCRC (Willumsen et al., 2014; Zhao, 2011). Furthermore, it is a unique time in life where vital development and participation in important occupations such as school, play, and time spent with whānau/family and peers occurs (Cronin, 2016a, 2016b; UNICEF, 2016).

While adolescence can be conceived of as part of childhood, it is a distinct life stage that connects childhood and adulthood. While defining the age range of this life stage is problematic, it is considered to span the age range from 10-19 years. As with childhood, adolescence is a historically and culturally created concept that is contested. Typically, early to late adolescence tends to be signified by developing physical and cognitive capacities, a growing awareness of self-identity, increasing importance of social contact with peers, an emergence of adult roles (e.g. family/household responsibilities, paid work, cultural and religious), and changing legal rights (Cronin, 2016; Ngwenya et al., 2023; WHO, 2023).

3.3 Participation

The Oxford English Dictionary defined participation as “[t]he action or fact of having or forming part of something; sharing of something” (Participation, 2019, para. 1) and the adjective, participating, involves a person who “participates or takes part in something” (Participating, 2019, para. 1). A broader definition is provided in occupational therapy literature where participation pertains to “engaging in work, play, or activities of daily living that are part of one's socio-cultural context and that are desired and/or necessary to one's wellbeing” (Kielhofner, 2008, pp. 101-102). Taking a health perspective, *The ICF for Children and Youth* and the later ICF Manual define participation as “involvement in a life situation” (WHO, 2013, p. 8). It is clear from the ICF that participation is dependent on bodily functions (e.g., musculoskeletal, mental functions) and personal factors (e.g., health, family), as well as the physical, social, cultural, and institutional aspects of the environment (WHO, 2007). For example, lack of family income to provide regular breakfasts, lunches, and school resources such as textbooks is likely to impact tamariki/children's full participation in education. Thus, the bidirectional relationships between a child's participation and either their bodily functions or the environment has been recognised (Rodger & Kennedy-Behr, 2017; WHO, 2007). However, the factors that affect a child's participation are likely to be complex, multidimensional, and transactional, in that a multitude of dynamics are involved at any one time (Cutchin & Dickie, 2012; Engle, 2012).

3.4 Occupations and Patterns of Occupations

The term occupation has differing meanings, including paid work, but is defined more broadly in the profession of occupational therapy, albeit in various ways. Definitions range from “occupation is the doing of work, play, or activities of daily living within the temporal, physical, and sociocultural context that characterizes much of human life” (Kielhofner, 2008, p. 8) to

groups of activities and tasks of everyday life, named, organized and given value and meaning by individuals and a culture...occupation is everything people do to occupy themselves, including looking after themselves (self-care), enjoying life (leisure), and contributing to the social and economic fabric of

their communities (productivity). (Law et al., 1998 as cited in Johnson & Dickie, 2019, p. 5)

For a child, occupation typically includes activities of daily living (ADL) such as sleep, rest, dressing, eating, and may include household chores, play/leisure including recreational and cultural or artistic activities, and work/productive activities such as school, caregiving/babysitting, or a part-time job (Cronin, 2016a, 2016b; Taylor & Kielhofner, 2017). However, occupations can also be understood not only in the sense of doing, but also the elements of being (i.e., presence, occupational roles), and becoming or our emerging self and potential for future occupational participation (Wilcock, 1999).

Key to understanding occupation is the concept of patterns of occupations. Patterns of occupation can be defined as the habits, routines, roles, and rituals that are integral to the process of participating in occupations (Hocking, 2019; Matuska & Barrett, 2019; Taylor & Kielhofner, 2017). From a pragmatist perspective, habits are shaped by society and environment, and while these predominately operate at an unconscious level, humans have the ability to shape habits through self-reflection and inquiry (Clark, 2000; Morgan, 2014; Pratt, 2016). Habits are tendencies to respond in repeated or patterned ways to the environment, and guide and preserve a learned way of performing occupations. Routines combine habits to provide sequence and process to occupations, in a temporal way (i.e., based on days or weeks) and help provide structure in our lives. The automatic and repetitive nature of habits and routines allow for efficient action and enable conscious effort to be focused on more complex occupations such as creative endeavours, support quality of life, underpin effective coping strategies, and the construction of self-identity. However, habits and routines can also have negative implications such as being boring or limit self-growth (Clark, 2000). In the case of whānau/family, these routines consist of identifiable patterns that help organise family life, define roles, shape family identity, and are particularly important to developing a child's habits and routines. Roles are normative modes of behaviour that influence our occupations (e.g., how we dress or who we include in activities) that are shaped by society and culture, occur in a dynamic way throughout the life course, and provide identity, structure, and purpose (Kielhofner, 2008; Lee & Kielhofner, 2017; Matuska & Barrett, 2019).

Patterns of occupation are contextually bound, occurring within physical, social, cultural, and temporal environments, and can either promote or hinder health and development (Hocking, 2019; Matuska & Barrett, 2019; Ranger et al., 2021).

Tamariki/children's patterns of occupation are initially acquired through parental/guardian support but over their life course are also shaped by social, cultural, institutional, and environmental contexts. Throughout their lives, complex patterns of habits are formed—some stable (e.g., eating patterns) and some specific to stages of development (e.g., student role) (Kielhofner, 2008; Lee & Kielhofner, 2017; Matuska & Barrett, 2019). For example, a habit of going to bed at a regular time sustains health, a routine of eating a healthy meal together as a whānau/family and the role of being a sports or recreational team member all potentially develop helpful skills. Alternatively, habitual sedentary behaviours, erratic family routines, and a lack of time spent in childhood roles (e.g., playmate, student, team member) can have both immediate and long-term negative consequences for a child's health and development. This may constrain their future potential to participate in occupations, to become and achieve what they want in life.

3.5 Potential

Potential is defined as

latent qualities or abilities that may be developed and lead to future success or usefulness... the possibility of... someone doing something in the future [and as an adjective]... having or showing the capacity to develop into something in the future. (Potential, 2019, para. 1)

For a child or young person, potential means their inherent capacity or capability to grow and develop in life in terms of their physical and mental capacities, and their participation in all of life's occupations (Humphry & Womack, 2019; Rodger & Kennedy-Behr, 2017). From this perspective, potential can be understood as a child's development and maturation throughout childhood and adolescent life stages into adulthood. From a CA, potential can mean the freedoms and capabilities a child has to do, be, and to reach their fullest potential in life (Schweiger & Graf, 2015; Sen, 1999). For the purposes of this doctoral study, the view taken is that tamariki/children's opportunities to develop their full potential, including their potential to attain physical

and mental health, is realised through full participation in meaningful occupations and society.

3.6 Wellbeing

Wellbeing is a complex term that can be conceptualised in a number of ways and defined differently based on philosophical and ontological perspectives, or cultural worldviews (Aselu, 2015; OECD, 2011; Sibley & Houkamau, 2013; Wilcock & Hocking, 2015). Examples include Western philosophical traditions of hedonism or eudemonism, or understandings drawn from an objectivist or subjectivist ontology, or from an Indigenous cultural perspective (Aselu, 2015; Fletcher, 2016). The OECD (2011) defined wellbeing based on objective and subjective viewpoints including an individual's quality of life (e.g., health status, civic engagement etc.) and their material living conditions and access to a range of capital (i.e., natural, social, economic, and human). Alternatively, a Māori model of hauora or health and wellbeing, Te Whare Tapa Wha, views wellbeing holistically as also including a connection to the land and collectively including other members of the extended whānau (Ministry of Health, 2017, May 18). Perspectives on wellbeing are also recognised to differ between adults and tamariki/children where, in the latter age group, more importance may be placed on social activity with peers or access to children's play/leisure (Main, 2017; Main & Bradshaw, 2012). Coming from an occupational science perspective, occupational wellbeing considers the importance of engaging in meaningful occupations in a balanced way, "in which people derive feelings of satisfaction and meaning from the ways in which they have orchestrated their occupational lives" (Townsend & Polatajko, 2013, p. 381).

3.7 Poverty and Tamariki/Children's Participation in Occupations

Based on a broad review of the published research about poverty's effect on tamariki/children's participation in occupations, their daily experience is often one of having diminished access to essential daily items. For example, a safe and healthy home that supports daily activities, the kai/food required for participation, and clothing appropriate to occupations. Subsequently this often means exclusion from or missing out on occupational opportunities that are afforded to many other tamariki in society including participating in extracurricular activities such as sports, creative

activities, school trips, retail shopping with whānau/family or their peers, and other recreational and family activities such as having dinner together. Poverty related factors that impede tamariki/children's participation in occupations include lack of income/money to pay for activities or required items such as uniforms or recreational equipment, access to or costs of transport, and the lack of safe and quality resources in their communities (e.g., recreational facilities, or adults to support their participation). Housing conditions such as overcrowding; being damp, cold, or mouldy; moving frequently; and a risky and degraded neighbourhood (e.g., presence of litter, graffiti, damaged public facilities, crime), can also impact on tamariki/children's ability to play around their home and in their neighbourhood, have friends over for social activities, participate in educational activities in their home such as homework, and effects the quality of their sleep. Poverty also impacts whānau/family relationships, and tamariki/children's ability to participate in, develop, and sustain social networks amongst their peers (Andresen & Meiland, 2019; Attree, 2006; Ridge, 2009, 2011; Schweiger & Graf, 2015; Treanor, 2020).

Tamariki/children living in poverty are more likely to attend school in a poor or deprived neighbourhood, where resources are likely to be restricted compared to schools in wealthier neighbourhoods, or where their whānau/families have less income to support them with resources and activities open to other tamariki (e.g., access to books, stationary, uniforms, lunches at schools, computers/IT, school trips, sports teams). Tamariki who are poor can experience bullying, stigma, and exclusion by their peers, and from some adults, at school. Their behaviour and ability to learn may have already been impacted by an early life growing up poor and its associated negative consequences (e.g., impacts on their cognitive and behavioural development). These factors can combine to make schooling a negative experience for tamariki and rangatahi/young people, and often leads to reduced educational success. This can have lifelong implications such as not gaining a tertiary education, un/under-employment, and reduced social mobility (Maholmes, 2014; Ridge, 2009, 2011; Schweiger & Graf, 2015; Treanor, 2020).

What is less evident in the literature about child poverty and tamariki/children's participation in occupations is an integrated analysis of the restricted range of occupations they engage in or the benefits of supports that exist (e.g., how adults or

community agencies enable tamariki/children's participation). Similarly, the effect of poverty on tamariki/children's performance of occupations is not well researched, and the research that is available neglects some aspects of tamariki/children's occupations (e.g., daily activities in the home, hobbies, crafts, cultural, un/paid and civic activities). Additionally, there is an absence of research about the patterning of their participation (e.g., the impacts on their habits, routines, roles, and family rituals) (Leadley et al., 2020). This has implications for the design of policy and actions about child poverty that takes cognisance of the link between occupation and health and how patterning of occupations can have life-long consequences for tamariki. Subsequently, and to help inform this key aspect of the research question, a systematic review or MMRS of the literature pertaining to poverty and tamariki/children's participation in occupations was conducted for the thesis and is detailed in Chapter 4.

3.8 Poverty and Tamariki/Children's Potential

Growing up poor is associated with impacts on tamariki/children's potential, albeit via constraints on their development, and physical and mental health (Maholmes, 2014; Schweiger & Graf, 2015; Treanor, 2020). Poverty impacts on the development of children's cognitive capacity and skills such as literacy and numeracy skills, problem solving, reasoning, and relational skills; and, consequently, is associated with increased school absenteeism and reduced educational attainment (Baker et al., 2018; Choi et al., 2018; Gibson-Davis et al., 2022; Seidler & Ritchie, 2018). These findings are partly explained by studies such as Hanson et al.'s (2013) MRI scans of young USA children's developing brains (i.e., infancy-4 years), which revealed that children from poor families were more likely to have compromised early neural development (i.e., restricted growth of gray matter in the brain) leading to reduced cognitive skills (e.g., sensory integration and visual processing abilities). These deficits have been linked to higher risk of behavioural problems at pre-school (Hanson et al., 2013). Similarly, Hung et al.'s (2015) USA-based longitudinal study showed that children born to parents of low SES have an increased risk of neurological abnormalities at birth or within the first 7 months of life.

Based on a number of studies reviewed (i.e., either systematic reviews, including experimental studies, or large-scale longitudinal studies), children's potential to

develop physically and maintain their health can be compromised by poverty such as stunting and delayed growth, increased likelihood of obesity, a lowered level of general physical health, higher rates of asthma and injuries, and higher use of health resources (Choi et al., 2018; Cooper & Stewart, 2013, 2021; Evans & De France, 2022; Oosterhoff et al., 2019; Reynolds et al., 2017). Poverty is also associated with a higher risk of developing problematic behaviours or externalising symptoms (e.g., aggression and defiant behaviours) and mental health or internalising symptoms (e.g., anxiety, low mood) including hyperactivity, inattention, difficulties with peer relationships, and increased likelihood of alcohol and drug use, violence and criminal behaviour during adolescence, lowered self-esteem, withdrawal, and somatic complaints (Choi et al., 2018; Coley et al., 2013; Cooper & Stewart, 2021; Evans & De France, 2022; Gibson-Davis et al., 2022; Hosokawa & Katsura, 2017; Lee & Zhang, 2022; Noonan et al., 2018).

Not all studies reviewed reached the conclusion that poverty negatively impacted on children's behaviours, or else they found mixed results or varying effect sizes (Alvarado, 2016) due to mediating effects (e.g., stress in the home) (De France et al., 2023), or were in part dependent on the study design (Cooper & Stewart, 2021), or the way in which poverty was conceptualised (i.e., narrowly such as income, or broadly such as SES, or a combination of concepts) (Segretin et al., 2016). However, of the 39 studies reviewed (38 quantitative and 1 qualitative), 34 showed poverty's negative effect, and 5 showed mixed results. (Refer to Appendix D: Overview of Primary Studies Included in the Literature Review – Child Poverty and Potential.)

3.9 Poverty and Tamariki/Children's Wellbeing

Poverty's negative impact on tamariki/children's wellbeing is clear. Based on large-scale studies using survey designs and conducted across countries (i.e., Europe, Africa, Asia), an association exists between socioeconomic deprivation and young people's subjective wellbeing (i.e., satisfaction with their lives, and quality of relationships with their peers) (Bradshaw et al., 2011; Dinisman & Ben-Arieh, 2016). However, one study found strong associations at the macro level (i.e., between countries) but weaker ones at the micro level (i.e., in England) (Bradshaw et al., 2011). Dinisman and Ben-Arieh (2016) also reported differing conclusions based on children's versus adult's definitions

of subjective wellbeing (SWB), and that economic effects were small but had important implications for children's wellbeing.

Studies that examined poverty's impact on wellbeing from a young child or adolescent's perspective have generated similar results. For instance, a large scale survey conducted in the UK (Main, 2014) found associations between poverty and diminished subjective wellbeing in children and young people. Furthermore, a German-based longitudinal study found that adolescents' experience of socioeconomic deprivation was associated with negative consequences for their physical and mental wellbeing (e.g., somatic complaints, self-esteem, mood) (Walper, 2009). Such findings may vary by age, with a longitudinal survey of Taiwanese children and young people from low-income families reporting that children's (7-12 years) wellbeing was higher compared with that of older youth (13-24 years). The authors concluded that the effects of poverty on children's and young persons' wellbeing are cumulative, and are also explained by an increased awareness of disadvantage in youth (Saunders & Chen, 2015). This cumulative effect of poverty was supported by a more recent study by the authors, and included children's subjective poverty as associated with lower life satisfaction, and high deprivation related to both low life satisfaction and low school satisfaction (Chen, 2020). Finally, a qualitative study conducted in Zambia also revealed that growing up in poverty had detrimental effects on children and young people's subjective wellbeing, including their physical and mental health, ability to engage in education, and their social relationships with their family and peers (Phiri & Abebe, 2016).

The perspective taken on wellbeing and how poverty is conceptualised have also been shown to have an important bearing on findings about the association between them. For example, in the UK, material deprivation had a more significant effect on children's wellbeing than low income, when examined separately (Main, 2014); and in a Swedish study adolescent-defined relative deprivation rather than family SES was associated with diminished wellbeing (Plenty & Mood, 2016). Furthermore, the interconnectedness of the varying dimensions of children's lives has a bearing on how poverty affects their wellbeing. Thus, the wellbeing of poor children and youths is affected by their constrained social and educational experiences (Main, 2014), the material deprivation associated with poverty, and contextual factors such as needing

to engage in productive occupations to help their family survive or relationally (i.e., maintaining positive relationships in the home helps with productivity and material advantages) (Phiri & Abebe, 2016). (Refer to Appendix E: Overview of Primary Studies Included in the Literature Review – Child Poverty and Wellbeing.)

While a substantial amount of high-quality research demonstrates the detrimental impacts of child poverty on their development, health, and wellbeing, this evidence does not speak to the ways participation in occupation might mediate the connection between poverty, development, health, wellbeing, and potential. For example, how do the restrictions on participation and patterns of occupation attributable to poverty negatively impact the cognitive and social skills development that are essential for occupational performance? Or do restrictions on participation and occupational patterns impact their health and wellbeing? Generating evidence of the nature of those associations has clear implications for child poverty policy and action, such as the need for community interventions that ensure whānau/families and their communities are adequately resourced to enable tamariki/children's full participation in occupations that support their potential and wellbeing.

3.10 Children's Agency, Whānau/Family and Social Support, and Rising out of Poverty

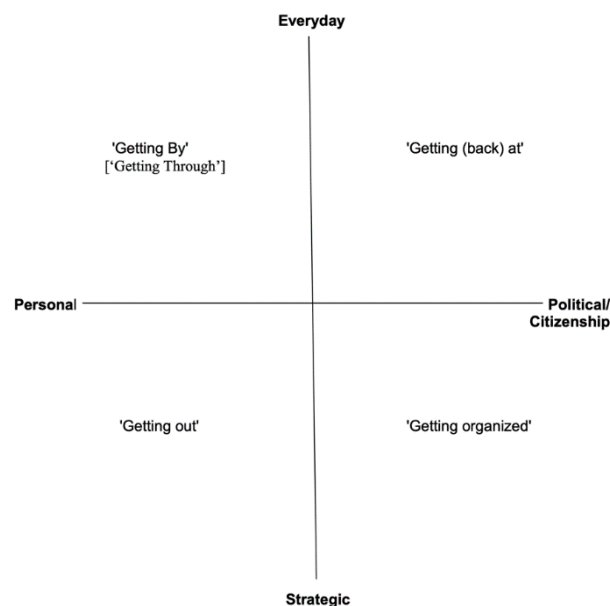
While poverty clearly has a negative effect on tamariki/children's participation, development, health, wellbeing and potential, tamariki and their whānau/families do aspire for a brighter future, and some tamariki fare better than others, moving out of poverty and going on to experience positive life outcomes (Schweiger, 2019; Treanor, 2020). Despite the respective poverty pathways tamariki may experience, they are active participants in helping to shape their lives and can exert agency over their life circumstances and develop skills that enable them to cope. For example, tamariki can learn valuable life skills such as cooking, cleaning, and household maintenance, shopping and budgeting skills, coping with stress, social skills, and empathy. This may start with sustaining hope and motivation, or a desire to overcome their situation, strive for a brighter future, and improve their socioeconomic position. As a result, tamariki and their whānau/families find solutions to aid survival, and enable them to flourish (Egan-Birtan, 2010; Maholmes, 2014; Treanor, 2020).

The types of agency tamariki exert in response to poverty have been conceptualised in terms of a continua of personal to political/citizenship, and from every day to strategic (Lister, 2021; Redmond, 2009). Refer to Figure 3.1 Lister’s (2021) schema for agency that people in poverty exercise. Within the four quadrants of this schema, and in terms of poverty, four forms of agency are defined as:

1. *‘Getting by’*: meaning a child’s actions that help them cope with poverty on a daily basis, such as supporting their family in the home or saving costs through participating in free recreational activities.
2. *‘Getting (back) at’*: meaning adapting to their circumstances, but may also reflect a sense of powerlessness through forms of anti-social behaviour.
3. *‘Getting out’*: meaning to explore and engage in ways to improve their life circumstances.
4. *‘Getting organised’*: meaning to be socially and politically active in the anti-poverty space.

Figure 3.1

Forms of Agency Exercised by People in Poverty



Note. From *Poverty* (2nd ed., p. 129), by R. Lister, 2021, Polity Press. Copyright 2021 by Polity Press. Reprinted with Permission.

Specifically, some of the documented ways that tamariki/children actively engage in coping with their whānau/family’s poverty include their emotional support and empathy for the stress their parent/s experience due to poverty, which can strengthen

the child-parent relationship. Other examples include the actions that tamariki take at times to self-exclude, hide, or reduce their needs and expectations from their whānau and peers (i.e., protecting themselves and their parent/s from the full impact of poverty on their lives such as financial costs or stigma). Tamariki and rangatahi/young people also engage in productive occupations that contribute to the household such as assisting their whānau with household duties, and caring for whānau members who are younger/older, unwell, or have a disability. They also find creative ways to reduce the financial burden to their whānau (e.g., using their pocket money to purchase items for themselves to save their parent/s this expense, or drawing on whānau or peer supports to pay for some activities), engaging in free recreational and social activities (e.g., playing around the home with siblings/alone, or in the neighbourhood with peers) and, dependent on their age, they may engage in paid work roles to contribute to the whānau/family's income (Bagattini & Gutwald, 2019b; Leadley, 2019; Ridge, 2009, 2011; Schweiger, 2019; Treanor, 2020).

There are, however, downsides to some of these coping strategies such as reduced participation in social, leisure, or educational occupations as a result of being a young caregiver or engaging in part-time paid work. Reduced access to essential needs/services, school, social and leisure activities can occur via self-limiting and self-exclusion strategies. Tamariki may also encounter potential hazards in unsupervised time spent socialising in unsafe locations and spaces in their neighbourhoods. Ultimately, the unintended consequences of these strategies may be to the detriment of tamariki in sustaining their health and wellbeing, and may further restrict their participation in occupations (Egan-Birtan, 2010; Redmond, 2009; Ridge, 2009, 2011; Treanor, 2020).

Parent/s, or guardians, can be a vital source of support for tamariki, adding an important layer of protection from the impacts of poverty. Some of the ways that parent/s support and protect their tamariki when living in poverty include limiting their own needs (e.g., sacrificing their own access to food, clothes, or social activities) in order to meet those of their tamariki and engaging in paid work and resource seeking activities (e.g., access to benefits/grants, loans/debts, or finding cheaper goods such as free kai/food). They also act as positive role models, teaching their tamariki important life skills (e.g., budgeting, cultural values, and social skills), helping to ensure their

tamariki can participate in education and other tamariki/children's occupations where possible, and by providing a loving and supportive home environment (Leadley et al., 2020; Maholmes, 2014; Ridge, 2009, 2011; Treanor, 2020). Parents may also hide aspects of their impoverished situation from others such as state authorities, sometimes due to the shame it brings or out of fear of unwanted interventions (Treanor, 2020).

Additionally, supports from within the community such as from extended family/other families, schools, community centres, or NGOs can help create locally-based positive social capital that, along with governmental benefits and interventions for tamariki and whānau who are struggling, is vital to helping them cope with poverty (Carswell et al., 2017; Leadley, 2019; Maholmes, 2014; Marmot & Bell, 2013; Treanor, 2020). Social capital entails the non-economic resources available to an individual and/or their community that can facilitate positive life choices and outcomes (e.g., collective access to resources, social supports and networks, solidarity) (Hashimzade et al., 2017; Porta & Last, 2018a). Finally, it is important to recognise that tamariki, and their whānau and communities who support them, have a key role to play in research that helps better understand their life experiences, and find solutions that can contribute to addressing the issue of poverty (Maholmes, 2014; Ridge, 2009; Schweiger, 2019; Treanor, 2020).

What is missing from the literature about the ways tamariki and their whānau cope with poverty, and the ways communities provide support, include evidence of occupational strategies or initiatives that are utilised by tamariki and their whānau, or that are initiated by communities. Additionally, the implications these occupational forms of coping have for their participation in occupations, development, health, wellbeing and future potential are absent. This knowledge might assist in better informing strategies that focus on participation in occupations for tamariki and their whānau in the communities that are important to them, that are health promoting and help them reach their full potential in life.

3.11 Explaining How Poverty Impacts Tamariki/Children's Participation in Occupations, their Potential, and Wellbeing

In terms of tamariki/children's participation in occupations, their potential, wellbeing and life outcomes, there is an acknowledged interplay between a child's nature

(genetic makeup) and nurture (environmental influences throughout their life) (Humphry & Womack, 2019; Mandich & Cronin, 2016; Shonkoff et al., 2012). However, social determinants of health or structurally and socially created issues, such as poverty, that impact on development, health, participation in occupations and wellbeing play a significant part in shaping a child's future life outcomes (Humphry & Womack, 2019; Marmot et al., 2012; Schmidt et al., 2021; Solar & Irwin, 2010).

There are two dominant theories that help to explain how poverty detrimentally impacts a child's participation, potential, wellbeing and, subsequently, their life outcomes. The family investment theory/model suggests that the constrained financial resources available to impoverished households leads to lower expenditure on tamariki such as housing (i.e., risk of poor housing), food (i.e., hunger and poor nutrition), or educational and recreational activities (e.g., restricted access to books, toys, computers/IT, sports/recreations or clubs) that results in negative consequences for the child. The family stress theory/model posits that the economic pressures of being poor creates high levels of stress for parent/s which, in turn, affects the quality and style of their parenting (e.g., more punitive, more irritable, less patient or nurturing, neglectful) and increases mental health issues for the parent/s that consequently have a negative effect on the child (Cooper & Stewart, 2013; Hosokawa & Katsura, 2017). Evidence suggests that these theories are not mutually exclusive and that they both help to explain the effects of poverty in terms of tamariki/children's outcomes (Cooper & Stewart, 2013, 2021).

While poverty can have direct effects on a child, moderating or mediating factors influence outcomes. Direct effects could include poor nutrition or access to other essential resources, exposure to risky environments (e.g., cold, damp housing, toxins, or risk of injury), and increased stress from unstable and threatening environments. Moderating or mediating factors have an indirect effect, can be modifiable, and may enhance or diminish the association between poverty and negative child outcomes. For example, quality and style of parenting, parental health, family stress, neighbourhood conditions such as violence and crime may have negative moderating effects; whereas parents with higher education who may make more informed decisions in terms of their tamariki/children's health and wellbeing, and have greater financial resources to invest in their education, can have positive moderating effects

(Choi et al., 2018; Engle, 2012; Hyde et al., 2020; Schmidt et al., 2021; Schweiger, 2019). Adding further complexity is the interactive relationship poverty has with other aspects of a person's life such as health and disability. For example, a decline in a person's health (or having a disability) is associated with an increased risk of being poor; likewise, being poor is associated with diminished health (and/or acquiring a disability) (Engle, 2012; Maholmes, 2014; Treanor, 2020). Along with health, this relationship is likely true of other outcomes such as the way in which poverty negatively impacts a child's future educational and employment outcomes which, in turn, reduces their earning capacity and social mobility and perpetuates a cycle of poverty (intergenerational transmission) (Maholmes, 2014; Schweiger & Graf, 2015).

Beyond the immediate environment of the whānau and neighbourhood, broader social factors also play an important role in the outcomes of impoverished tamariki such as exclusionary attitudes towards the poor in society, the level of inequality in a country, or natural disasters and conflict (Engle, 2012). Systems theory, ecological models (i.e., Bronfenbrenner's ecological theory) (Biggeri & Cuesta, 2020; Hyde et al., 2020; Maholmes, 2014; Shonkoff et al., 2012), and transactional theory help to explain the interconnected and multidimensional nature of child poverty that occurs across the life course, and is contextual (Engle, 2012; Hyde et al., 2020). Using a transactional theory and ecological theory, poverty can negatively impact a parent/s' health, the quality of their parenting, and access to material resources, which subsequently has a detrimental influence on their tamariki/children's behaviour and opportunities for support that shapes the child's participation and patterns of occupation in unhelpful ways and, in turn, creates further stress in the whānau (microsystem level). These issues are only exacerbated by the stigma they experience, social attitudes about the poor, the historic lack of investment in their community by government (i.e., macro and meso-system levels), and the accumulation of negative experiences over their lifetime (i.e., chronosystem) (Biggeri & Cuesta, 2020; Engle, 2012; Maholmes, 2014). The ecological model is the theoretical basis of the Aotearoa NZ government's Child and Youth Wellbeing Strategy, that includes child poverty reduction interventions (DPMC, 2019a). Likewise, from a capability perspective, the ability to make use of resources, or conversion factors (e.g., a child's agency or abilities, their patterns of occupation, and a supportive family and community), is essential in determining a

child's functionings or life outcomes or what they can do, be, and become (Biggeri & Cuesta, 2020).

The theory that explains the mechanisms by which poverty creates biopsychosocial effects on a child that carry through into their adult lives (across the life span/life course) is known as biological embedding. This theory posits that environmental factors throughout the life span/course, but particularly early in life, can effect lasting biological changes for a child that create increased risk of developmental and health issues (both physical and mental) in childhood, and chronic diseases in adulthood (Hyde et al., 2020; Schmidt et al., 2021). Epigenetics is one of the key mechanisms that explains this process, or the change in genome expression due to environmental factors. Three key biological systems involved in this embedding process include the hypothalamic pituitary adrenal (HPA) axis, the immunity, and neurological (brain) systems. The HPA axis is primarily involved in stress response processes in the human body and studies have shown both heightened and blunted stress reactivity in children from low SES that can impact on their health (e.g., anxiety) and behaviour (Schmidt et al., 2021). In terms of the immune system, evidence has shown that childhood poverty increases susceptibility to infectious diseases and inflammatory responses in the body and creates higher risk of chronic health conditions such as cardiovascular disease, cancer, and neurological diseases (Schmidt et al., 2021). For the neurological system, poverty has a detrimental effect on the developing brain both structurally and functionally. It can lead to impaired brain development/cognition, impact learning, and create a higher risk of behavioural and mental health problems (Hyde et al., 2020; Schmidt et al., 2021).

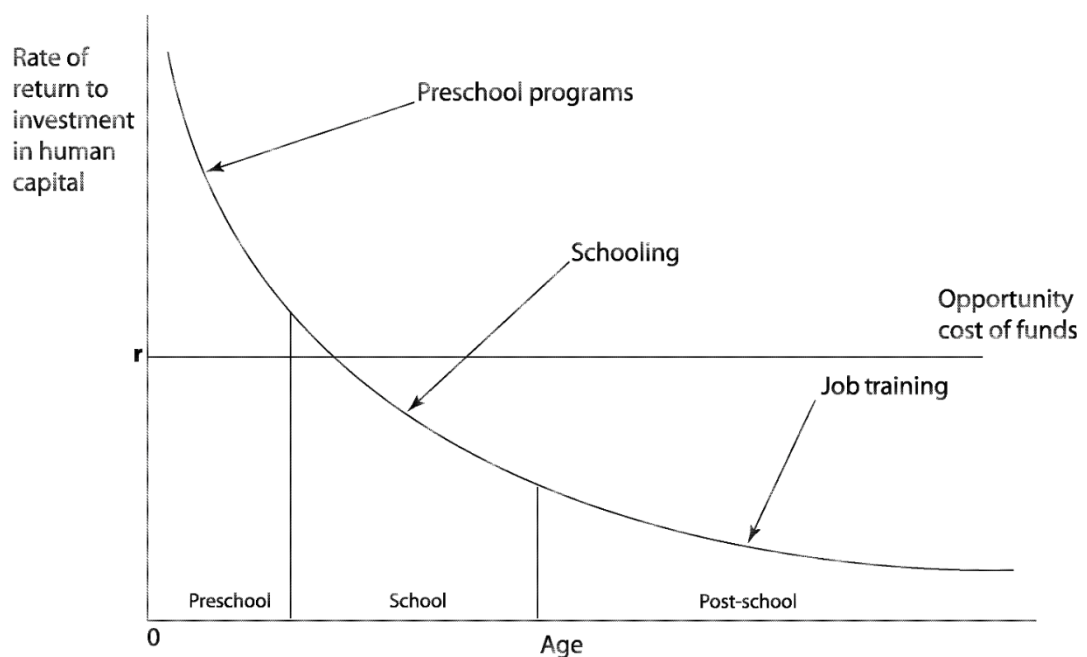
Furthermore, for tamariki and their whānau, poverty is not always static; they can move in or out of poverty, with a child's risks and vulnerabilities to poverty changing through this dynamic process (Schweiger, 2019; Treanor, 2020). Additionally, the degree of exposure such as the duration, severity, and the cumulative impacts of poverty are associated with worse outcomes for tamariki. However, evidence suggests that even short periods of poverty can have long reaching negative effects on a child, such as early adult mortality (Schmidt et al., 2021). While poverty can have a negative impact throughout a child's life and into adulthood, including the perinatal period or before a child is born, evidence points to the most deleterious impacts occurring

during the early stages of life (Marmot & Bell, 2013; Schmidt et al., 2021; Schweiger & Graf, 2015).

While some impacts of poverty may be long lasting and irreversible, or have latent effects (i.e., may not be revealed until later in life), there is evidence that some effects can be reversed through suitable and appropriately timed interventions such as increased family income, education, and support for parents; quality education in childhood; or improved housing and employment conditions (Brando & Schweiger, 2019; Cooper & Stewart, 2021; Maholmes, 2014; Schmidt et al., 2021; Treanor, 2020). However, it is likely that the earlier these interventions occur in a child's life course the better, in terms of mitigating poverty's negative effects and maximising the benefits that accrue (Cunha et al., 2006; EAG, 2012b). The relationship of efforts to mitigate the effects of poverty and the benefits that accrue is illustrated in Figure 3.2 below.

Figure 3.2

Rates of Return to Human Capital Investment Initially Setting Investment to be Equal Across all Ages



Note. From *Interpreting the Evidence on Life Cycle Skill Formation* (p. 710), by Cunha et al., 2006. Copyright 2020 by Elsevier. Reprinted with permission.

3.12 Theory Explaining Poverty's Effect on Tamariki/Children's Occupations

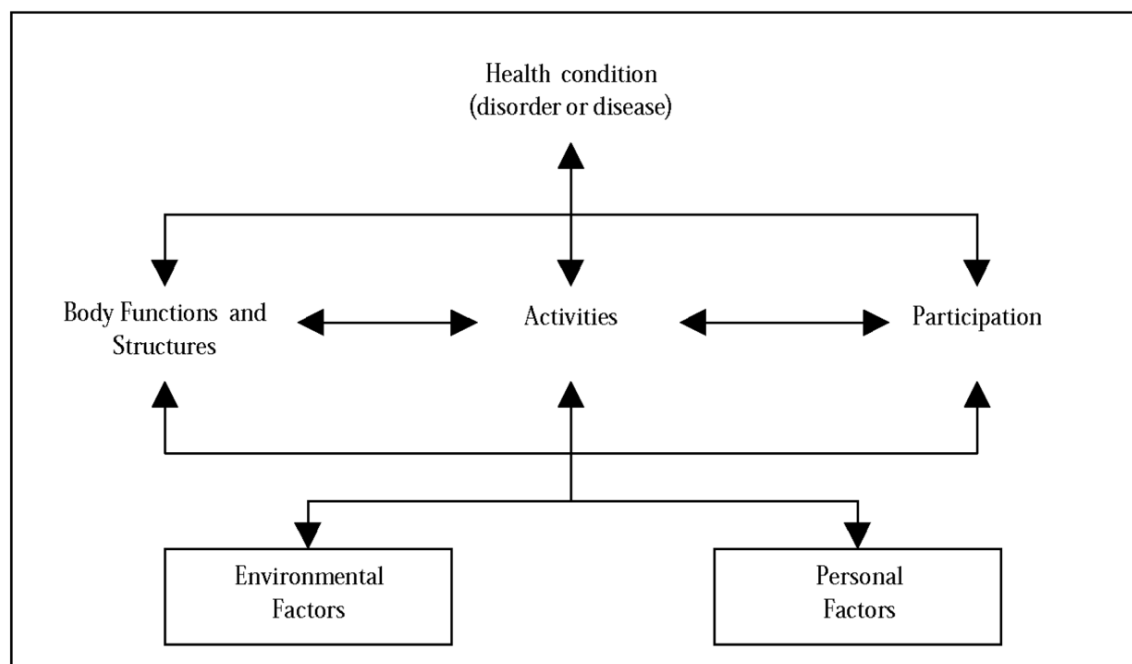
As intimated earlier, the ways in which poverty negatively impacts a child's occupations, their patterns of occupation (e.g., habits, rituals, roles, family rituals), and subsequently their potential and wellbeing are not well understood. Furthermore, the bidirectional and transactional nature of poverty, tamariki/children's occupations, and environmental factors that hinder or facilitate their development, health, and wellbeing is poorly understood (Leadley et al., 2020). However, evidence reviewed for this study suggested that tamariki/children's participation in occupations is constrained by poverty (i.e., family/parental income, education, employment status), parental health and parenting style, and parental/adult availability to support and supervise activities (e.g., due to long work hours in low paid work) (Cooper & Stewart, 2021; Schmidt et al., 2021; Schweiger, 2019). Also influential are neighbourhood factors (e.g., safety or degradation issues, lack of facilities) and broader issues such as historic (i.e., colonisation, war/conflict), institutional and political (e.g., discrimination, government policy), and social factors (e.g., public attitudes towards the poor, stigma or bullying) (Biggeri & Cuesta, 2020; Hyde et al., 2020; Treanor, 2020). As a result of poverty and these related factors, it is possible to surmise that tamariki/children's patterns of occupations are likely modified in ways such that unhelpful/unhealthy habits and routines are formed and sustained (e.g., sedentary behaviour, stress reactivity/impulsivity, self-exclusion, unhealthy lifestyles, chaotic or disrupted daily activities and whānau/family routines). Additionally, that tamariki/children's opportunities for life roles are missed (e.g., sports team member, social and civic roles), or occur with unwanted associated disadvantages and risks such as being a caregiver and missing out on school/social activities.

The ICF model (WHO, 2001) can be used as a basis to explain the interactions between contextual factors such as poverty and its effect on tamariki/children's participation, development, and health (as illustrated in Figure 3.3 below). Based on this model, poverty is considered to be an environmental/contextual factor (i.e., financial and material assets, home, physical and material features of the environment, societal, attitudes, services, structures, policies) that interacts in a dynamic way with a child's personal factors (i.e., health, habits, coping skills, social background), their developing

body systems (e.g., nervous, cardiovascular/respiratory systems), and their participation in occupations. The ICF suggests these complex and dynamic interactions may be bidirectional whereby poverty influences a child's occupations that, in turn, affects their health, and where declining health constrains occupation. In the long-term, constrained participation can further perpetuate poverty through diminished participation in education and reducing capacity for paid employment.

Figure 3.3

Interactions Between the Components of the ICF



Note. From *International Classification of Functioning, Disability and Health (ICF)* (p. 18), by WHO, 2001. Copyright 2001 by WHO. Reprinted with permission.

Taking a strengths-based approach, and continuing to use the ICF as a theoretical basis, any range of positive changes to the contextual factors (e.g., improved housing, neighbourhood environment, social services, policies, attitudes, school and community services, and increased whānau/family income etc.), and/or personal factors (e.g., developing healthy habits and life skills etc.) can have a positive effect, even when a child's whānau/family continues to experience aspects of material poverty. These helpful influences in a child's life may facilitate improved participation in occupations. This would, in turn, have positive influences on a child's developing body structures and function, and consequently sustain their health and wellbeing; thereby, enabling the child through their life course to participate fully in meaningful occupations, and thus be more likely to experience improved socioeconomic circumstances, health, and

upward mobility in adulthood. As in the capabilities approach to poverty, what matters are the life outcomes the child achieves, based on the available resources as well as the life factors and contexts that enable these to be converted into their functionings.

3.13 Summary

Reducing child poverty is a matter of social justice and requires a whole of society approach, such as anti-poverty policy and action that addresses the structural and social factors related to poverty, and that supports tamariki/children's capabilities to do, be, and achieve their dreams in life (Bagattini & Gutwald, 2019b; Schweiger, 2019; Treanor, 2020). This chapter provided an overview of the key concepts pertinent to the research question that informed the design of this doctoral study. Examination of published literature distilled clear and detrimental associations between poverty and tamariki/children's development, health, and wellbeing. While there is theoretical support for the idea that occupation is implicated in that association, evidence to support that assertion is scant, supporting the need for the present study. The next chapter provides the results of a systematic review of the published literature relating to a key part of the research question—poverty and tamariki/children's participation in occupations.

Chapter 4 Literature Review

4.1 Background to Literature Review

Chapter 2 provided an in-depth review of the concept of poverty, as well as discussing the issue of child poverty globally and in Aotearoa NZ. Chapter 3 presented a broad and rigorous examination of the published literature relating to the key concepts in the research question: patterns of participation, potential, and wellbeing. The mixed methods research synthesis (MMRS), described in the present chapter, was conducted during the design phase of the doctoral study to ascertain what was known about poverty's influences on tamariki/children's patterns of participation in occupations, as this is a key part of the research question. The review was undertaken to search for the most up to date evidence about tamariki/children's participation in occupations, at the time of designing the study (2019), and to inform the development of the conceptual structure or issue statements that helped guide the approach to data gathering. More recent and relevant literature related to the participation component of the question, published over the course of conducting the study, is introduced in the discussion chapter to further inform consideration of the findings.

The research question posed in the doctoral study is: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?*

4.2 MMRS Review of the Literature

A review helps to inform researchers, policy makers, and practitioners interested in the examination of a research problem (Heyvaert et al., 2017), and can aid the conceptual structure (issue statements) and data gathering stage of a study. In qualitative case study, the methodology chosen for this study (see Chapter 6, Methodology), issue statements are integral to help expand the primary research question, inform and organise the data gathering in a case study (Stake, 1995, 2006). For example, in this study, the MMRS helped to guide what data to seek, and the preliminary understandings about the relationships between poverty, and tamariki/children's patterns of and participation in occupations. A MMRS approach to reviewing literature, as outlined by Heyvaert et al. (2017) and in the Joanna Briggs Institute [JBI] Manual for

Evidence Synthesis (Aromataris & Munn, 2020), was chosen as a well-evidenced approach that included detailed instructions on conducting a MMRS.

MMRS can be defined as a literature review that combines primary-level quantitative, qualitative, and mixed methods studies. MMRS's "apply a mixed methods approach to synthesize and integrate... studies... to enhance the breadth and depth of understanding about complex phenomena, problems, and topics" (Heyvaert et al., 2017, pp. 4-5). Inherent in this schema is the assumption that all types of study designs can help to answer the research question, do not require separate analysis, and the combined findings can be synthesised into an integrated whole (Heyvaert et al., 2017). This understanding matched my aim to be well informed, and not be limited by epistemological perspectives or methodological designs relating to the topic.

In conducting the MMRS, my ontological perspective can be best described as taking an idealist orientation or one that aims to delve more deeply than the descriptive level, to uncover relationships or patterning between data and concepts (Heyvaert et al., 2017). That orientation was balanced with pragmatist concerns about a purely idealist stance, such as an overreliance on intellectualising subject matter and overlooking experiential and everyday issues (Volbers, 2018). Thus, I grounded the MMRS and the current study in the very practical concerns of child poverty. Consistent with Heyvaert et al. (2017), I acknowledge that research orientations like idealism or realism are best described as a continuum, where researchers position themselves in terms of their ontological perspective and aligned epistemological stance. In this MMRS, I took the pragmatist view that reality is largely socially constructed, while acknowledging a realist perspective (Pratt, 2016). Thus, I included a variety of quantitative and qualitative designs, with the intention of synthesising and interpreting the information and presenting it in a narrative style to inform the study design.

4.2.1 Protocol for MMRS

The MMRS began by developing an understanding about the key concepts or terms in the question (e.g., poverty, children, participation, potential, and wellbeing), as outlined in Chapters 2 and 3. While my initial review of the literature included separate searches on participation, potential/development/health and wellbeing, the literature presented and reviewed here maintains a focus on tamariki/children's participation.

This decision was based on the scope of the study and the focus of the first part of the research question which was aimed at understanding the ways in which poverty shapes tamariki/children's patterns of participation in occupations. While the research design of this doctoral study is qualitative, the topic of poverty is broad and complex. Topics or phenomena that are multifaceted require a mix of research designs to explain possible associations between relevant factors, but additionally detail the lived experience, meaning, and the many contextual factors involved (Heyvaert et al., 2017; Mertens, 2012; Sandelowski et al., 2006). This approach is consistent with Dewey's pragmatic perspective that aims to understand how reality is constructed through people's experiences, social and environmental influences, and their reflections about real world issues (Davies & Fisher, 2018; Pratt, 2016). Thus, supporting the need to include a range of epistemological and methodological perspectives and designs in the review.

There are a number of potential challenges involved in a mixed methods approach to reviewing literature. These include how to combine studies that draw from different research traditions, with some researchers viewing such designs as incompatible. Attempting to synthesise diverse research designs is complex, posing issues such as how to equate quantitative findings to qualitative ones and vice versa, or how to balance competing ontological and epistemological positions (e.g., drawing together research conducted from realist, idealist or relativist ontologies) (Heyvaert et al., 2017; Sandelowski et al., 2006). There are no easy solutions to these conundrums. However, the guidance of experienced MMRS researchers on how best to complete such reviews, and a belief in the benefits of drawing on diverse research approaches (i.e., the utility to practice, helping to answer complex and vexing social issues such as child poverty from a broad and inclusive perspective), provided assurance that such an approach was evidence-based, rigorous, and worthwhile (Heyvaert et al., 2017; Sandelowski et al., 2006). Thus, a MMRS protocol was designed that allowed for methodical and rigorous review of the published literature on the topic, through searches in a number of electronic databases. The protocol included the choice of MMRS design, search criteria, critical appraisal, data extraction, synthesis processes, and reporting style.

4.2.2 MMRS Considerations and Design

When designing an MMRS, reviewers need to consider what best approach should be taken to guide the process for synthesising selected studies. These include whether to give equal or greater weighting to quantitative or qualitative evidence, choosing to review study types concurrently or separately, the level of mixing or integration of quantitative and qualitative studies, and whether to start with a clear research question/s or to use a more iterative logic and allow research questions to arise out of the review process (Heyvaert et al., 2017). These design considerations have been categorised into three types of MMRS designs; segregated, integrated, and contingent (Hannes, 2015; Heyvaert et al., 2017; Sandelowski et al., 2006). The *segregated* design separates quantitative and qualitative studies, viewing them as complementary or having related but different findings. *Integrated* MMRS design assumes that differences between quantitative and qualitative study designs do not warrant separate analysis, and when concerning a common research topic or phenomenon, findings can be combined by either confirming, refuting, or extending the understanding of a topic to produce a synthesised outcome. The *contingent* MMRS design uses an iterative logic and a cycle of reviewing and synthesising evidence against a set of objectives, rather than having a predefined research question, to achieve an integration of study findings (Heyvaert et al., 2017; Sandelowski et al., 2006).

The integrated MMRS design was chosen for this study in order to produce a combined or synthesised set of findings from the literature reviewed. As stated above, from an ontological perspective, I made no distinction between the merits of either quantitative or qualitative designed primary studies in order to inform the research question. Rather I took a pragmatic standpoint and, in the context of the present research question, saw both types of research providing value and as suitable to draw on to inform the design of the proposed qualitative study. However, the research question for this study was pre-selected based upon the prior master's study outcomes, topics that needed addressing following that completed research, and from ongoing immersion in the child poverty related literature, with a focus on informing the participation component of the research question in this study. Thus, the key

question being examined in this MMRS was: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations?*

4.2.3 Key Search Terms

The key terms in the MMRS literature review were children, poverty, and participation. Tamariki/children were defined as being under the age of 18 years and, for this study specifically, between 10 and 15 years, reflecting the middle childhood to early teenage stages of development (Case-Smith, 2015; Cronin, 2016a, 2016b). Poverty was defined broadly as including most relevant and recognised concepts or terms such as low income, material deprivation or disadvantage, and low SES (Leadley et al., 2020). Participation was defined as involving a person who “participates or takes part in something” (Participating, 2019, para. 1) or “involvement in a life situation” (WHO, 2013, p. 8), and “describes our engagement in the broad categories of work (study), play, and the activities of daily living that undergird everyday life” (Kielhofner, 2008, as cited in Heras de Pablo et al., 2017, p. 107). The PICO method (i.e., population, phenomenon of interest, and the context/outcome) was used to create key search terms (Heyvaert et al., 2017). Refer to search strategy below for specific PICO terms used.

4.2.4 Eligibility Criteria

The primary inclusion criterion for articles included in the MMRS was whether a study was ‘fit for purpose’ (Aromataris & Munn, 2020; Heyvaert et al., 2017), meaning it met all requirements of the PICO (i.e., about tamariki/children who live in poverty, and the impact of poverty on their participation). Other inclusion criteria referred to study designs and publication in peer reviewed journals between the years 2009 and 2019, when the review was conducted, and in the English language. Articles were excluded if they did not meet the inclusion criteria, were duplicates, or were books or theses. (Refer to Appendix F: MMRS – Child Poverty and Participation Search Strategy: Inclusion and Exclusion criteria.)

The types of quantitative study design eligible for inclusion were limited to those deemed as producing high-level evidence; that could show casual effects or association/correlations between child poverty and participation in a robust way. Such study designs include meta-analyses, systematic reviews (SR), randomised control

trials (RCTs)/experimental and cohort/longitudinal studies (Bluhm, 2016; Büttner & Muller, 2015; Murad et al., 2016). This selection was supported by the rationale that there is a hierarchy of study designs/levels of evidence, with meta-analyses/systematic reviews at the top, followed by RCTs/experimental studies, cohort/longitudinal studies and other study types (e.g., cross sectional, correlation, and survey designs) (American Association of Occupational Therapy [AOTA], 2020; Bluhm, 2016; Büttner & Muller, 2015; Higgins et al., 2020; Holloway & Peart, 2018). It can be argued that methodological criteria for prospective longitudinal/cohort studies following participants over an extended period of time provide a stronger level of evidence for determining the influence of a factor or situation on an outcome compared with cross-sectional surveys, which were excluded in the current MMRS literature review (Baum, 2016; Webb et al., 2017).

A critique of using such a hierarchy of evidence in a SR or MMRS includes that newer versions of the evidence pyramid have been conceptualised and suggest earlier versions of the hierarchy were too simplistic and reviewers need to view the SR process as a lens through which to examine primary studies. For example, it can be argued that there is a need to focus on the quality of the studies rather than the designs alone, and the review process itself. Also, that some topics cannot easily be investigated using high level study designs such as RCTs (i.e., it may be unethical and impracticable to complete for some topics) (Webb et al., 2017) such as for child poverty and participation in occupations. Additional considerations are that the study design should be 'fit for purpose' or help to answer the research question, and that the hierarchy does not value or may not include qualitative research designs (Büttner & Muller, 2015; Del Mar et al., 2017; Heyvaert et al., 2017; Lester & O' Reilly, 2015; Murad et al., 2016). While limits were placed on quantitative research designs, all qualitative study designs were included. The rationale for this decision was that historically there has been a predominance of quantitative studies about child poverty (Attree, 2006; Bourdillon & Boyden, 2014); thus, being more inclusive of qualitative studies enabled exploration of contextual factors that may be overlooked in quantitative studies.

Although the search terms specified an age range of 10-15 years, studies involving a broader age range from the earlier years in life (i.e., 5 years) to 18 years were included

if the study was longitudinal in nature and spanned the targeted age range. An additional consideration was that because the concept of poverty was kept broad in order to be inclusive of the diverse ways this concept is operationalised in primary studies on the topic, poverty was included in the present review as a single concept. Accordingly, where applicable, the poverty concepts used in individual studies are detailed in the descriptive data table (Refer Appendix G: Overview of Primary Studies Included in the MMRS – Child Poverty and Participation) and throughout the narrative description of the MMRS findings.

4.2.5 Sampling Strategy and Limitations

The sampling strategy in a SR or a MMRS is typically an extensive process that includes a full inclusion of all relevant data sources through an exhaustive search (i.e., all databases, grey literature, contact with experts etc.) and is considered to be the most robust strategy (Heyvaert et al., 2017). However, other sampling strategies include a purposive sampling approach. A purposive approach of limiting the number of databases, date range, language was used in the present review for pragmatic reasons, recognising the time and resource restraints of a PhD (Aromataris & Munn, 2020; Heyvaert et al., 2017). Further, as the potential field of information was vast, it necessitated limiting the scope of the review to current (i.e., in the last 10 years) and robust evidence (i.e., studies of high quality and that were peer reviewed, and adequately powered quantitative studies that were high on the hierarchy of evidence). Limiting to English language was a practical consideration, given it is my primary language. I trialled key words to identify those that were most productive but, in terms of databases, was inevitably limited to those available through Auckland University of Technology (AUT). Despite these limitations, the MMRS did review a range of literature from a broad number of databases and grey literature.

4.2.6 Search Strategy

The search strategy started with the participation component of the research question, and using the PICO literature search technique to organise the key terms from the question, which were then used in the databases and Google Scholar searches (Aromataris & Munn, 2020; Heyvaert et al., 2017). The population (P) constituted children (aged 10-15 years) as the primary participants/focus of the research. Search

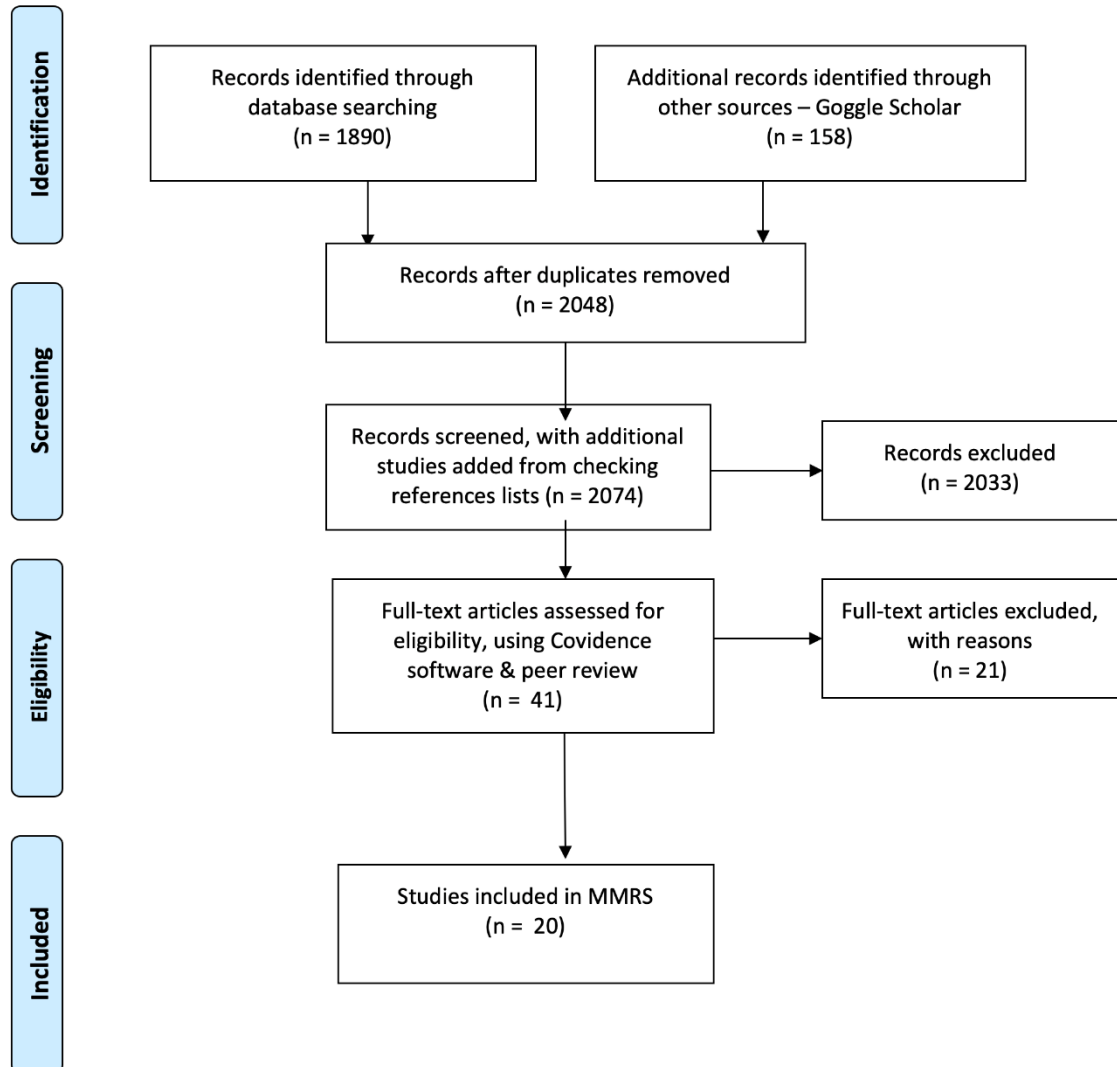
terms included: *children OR adolescents OR youth OR teenager*. The phenomenon of interest (I) constituted poverty. Search terms included: *poverty OR low-income OR low socioeconomic OR disadvantaged*. The context/outcome constituted: participation (as defined above). Search terms included: *participation OR engagement OR involvement*. Boolean operators were used such as 'AND' and 'OR' terms, truncation as necessary (e.g., child*) and double quotes (" ") used for strings of words, as required (Heyvaert et al., 2017). The range of databases searched was extensive to capture studies from a wide variety of disciplines/sources and included: EBSCO - SocIndex, MEDLINE, CINAHL, Scopus, and Google Scholar (AUT library database). A proximity strategy was used to assist with the search process in order to reduce large numbers of unrelated articles in the initial database search by helping to find selected terms/words that were near or within specified distance from each other in the search (e.g., N=5, where terms are 5 spaces/words apart) (EBSCO, 2023; King's College London, 2017).

The search consisted of 3 phases. Phase 1 (undertaken by myself) included a complete search, using the selected terms, through the included databases and AUT Google Scholar. An initial retrieval of studies was undertaken, with a review of article titles and abstracts to make a preliminary decision about the 'fitness for purpose' (i.e., relevance to research question/PICo) of the studies found, and to exclude the large number of irrelevant articles and duplicate studies, resulting in a reduced number of studies. Phase 2 (also undertaken by me) consisted of reviewing the second set of studies by re-reading abstracts and the full texts to ensure the 'fitness for purpose' of the chosen studies, checking the reference lists for other suitable studies, and eliminating any remaining irrelevant articles, which resulted in a further reduction of studies. Phase 3 involved entering this set of selected studies into Covidence software for a final review by myself and peer review by my secondary supervisor (MJ). This peer review process involved a full review of each article, applying MMRS inclusion and exclusion criteria, and discussing the decisions together (e.g., comments entered into Covidence, and verbal conversations). For example, some studies were discovered to not meet the age range or study type criteria, such as study designs that were cross sectional (albeit deriving from a larger longitudinal study). Disagreements were resolved through discussions (e.g., verbally or in email), with further input from my primary supervisor (CH) where required. Decision making was either unanimous or the article was

removed. A final sample of studies was chosen (n=20 studies) for data extraction and synthesis, as outlined in Figure 4.1 below.

Figure 4.1

PRISMA Flow Diagram: Child Participation and Poverty



Note. From *Guidelines for Systematic Reviews*, (p. 11), by AOTA, 2020. Copyright 2020 by AOTA.

4.2.7 Reducing Bias and Ensuring Rigour in the MMRS

Bias can result from unintended exclusion of studies that can lead to less evidence-based or less trustworthy literature reviews (Heyvaert et al., 2017; JBI, 2019). It may take the form of *publication bias* or a “tendency for authors to submit, and for journals to accept, manuscripts for publication based on the direction, magnitude, or significance of the study findings” (Heyvaert et al., 2017, p. 84); or result from *location bias* where studies are “sometimes published in journals that are not indexed in

bibliographic databases and therefore may not be identified by the search” (Heyvaert et al., 2017, p. 85). I aimed to minimise sources of bias by searching grey literature (i.e., Google Scholar) as well as databases and checking through citations and reference lists from chosen articles. *Multiple publication bias* involves the way that “interesting, controversial, or intriguing results are likely to be repeatedly reported in several publications” (Heyvaert et al., 2017, p. 85). This bias was mitigated by manually checking for duplicate studies (e.g., checking study abstracts, authors, location, design, and participants) (Heyveart et al., 2017).

Additional methods of reducing bias and increasing rigour in the MMRS included making explicit the review process (i.e., the MMRS design/protocol), and initiating peer review by my supervisors using Covidence software to share and screen the studies (Cochrane Community, 2019, April 8). Informal peer review via consultation with my supervisors occurred throughout phases 1-2. A formal peer review process was initiated once the screened studies (n=41) were entered into Covidence software. Additionally, my initial findings were peer reviewed under the doctoral admission process at AUT—formally by two senior AUT academic staff and through a presentation to faculty members and members of the public. As discussed above in the MMRS protocol, every attempt was made to reduce potential biases. Quality appraisal of all included studies was completed (described below), and I applied a rigorous and systematic process to the review, with each step being clearly documented.

4.2.8 Quality Appraisal

Quality appraisals were completed for each study (n=20) using Critical Appraisal Skills Programme (CASP) checklists relevant for the study design and with the intention that studies of low quality would be excluded. Peer review by my primary supervisor (CH) of the quality appraisal process was completed for a selection of studies (i.e., 25% of total), with constructive feedback provided and, where necessary, incorporated into all other appraisals. A quality appraisal of primary studies in a SR or MMRS is essential if the results are to be considered trustworthy, neutral, and useful (Aromataris & Munn, 2020; Heyvaert et al., 2017). The CASP critical appraisal screening checklists (CASP, n.d.) were used as a guide for the process, as these have been assessed as reliable quality assessment tools (Heyvaert et al., 2017). (Refer to Appendix H: Examples of Completed CASP Quality Appraisals.) This quality appraisal process involved examining

the studies to ensure they described adequately the purpose of the study, research design (e.g., methodological congruence or confounding factors accounted for in the study design), that ethical and cultural aspects were considered, and the findings were discussed in a coherent manner. This process matches quality appraisal methods described by other researchers conducting MMRS reviews (Heyvaert et al., 2017). Overall, most studies were found to be of high quality with only relatively minor quality issues (e.g., confounding factors not always clearly explained, or the researcher not adequately detailing their cultural/socioeconomic background), which led to the conclusion that all 20 studies should be included in the data extraction/synthesis stage of the MMRS.

4.2.9 Data Extraction, Synthesis and Reporting

Descriptive data extraction (i.e., research design, methods, analysis, outcomes) of all studies into tabular format was then completed (Heyvaert et al., 2017). Studies were divided into quantitative and qualitative to ensure the descriptive data fields used were suited to the format, could provide clear distinctions between studies at this descriptive stage of the MMRS, and could serve as evidence of a careful data extraction process. After full review, there were no mixed methods studies that met the inclusion criteria. (Refer Appendix G: Overview of Primary Studies Included in the MMRS – Child Poverty and Participation.)

The process of data synthesis and reporting findings of the MMRS derived from the choice to use an integrative design in the review protocol. While there are obvious differences between quantitative and qualitative results or findings (e.g., the numerical reporting of quantitative studies versus the richness of description in qualitative studies), an effort was made to merge the findings into an integrated whole. Specifically, the guidance by Heyvaert et al. (2017) on data analysis/synthesis for an integrated MMRS design was followed, with data from all studies combined/synthesised. For example, the process of interpreting the quantitative data in relation to the review question was supported by the descriptions of the findings included in the research articles. This was partly achieved through the use of a thematic mapping process similar conceptually to that suggested by Braun and Clarke (2006) and the hierarchical tree structure for a meta-aggregative synthesis outlined by Heyvaert et al. (2017). The process involved critiquing of studies, comparisons/-

contrasts between studies, and recording emerging themes based on assigned categories. The mapping process was used to help with organising the synthesis of findings, conceptualising the information coming from studies, and understanding the relationships amongst concepts. Essentially, key findings from studies were categorised under topics or headings/key themes such as ADLs, play/leisure, and work/school that related to the key outcome in the research question (i.e., occupations) (Taylor & Kielhofner, 2017). In some cases, occupation sub-categories/sub-themes were derived from language in the study findings (e.g., 'hanging out', categorised under social activities). Data synthesis was further supported through the mixed synthesis approach of a narrative, iterative, and reflexive style that I took to the reporting of the data that further supported reflection and analysis (Heyvaert et al., 2017).

An example of the mapping process is shown in Figure 4.2 Mind Map 1, which focused on tamariki/children, participation, and poverty. It shows the occupational categories that study findings were grouped under, which included ADLs, whānau/family activities, transport, social activities, religious/cultural activities, physical activities (PA), recreation, and school/work. Most categories also involved sub-categories (e.g., Recreation: Organised sport; Play (outdoor & indoor); Online games; Hobbies etc.). A number of these categories represented similar elements of an occupation, such as organised sports and PA, but I interpreted the latter term as being broader and including PA other than sports, so mapped them as separate categories. Studies were listed under each occupational category if the results related to participation in the relevant occupation; for example, occupation category=recreation; sub-category=play (indoor or outdoor). Examples of studies contributing information to this category were: Castonguay and Jutras (2009), Day and Wager (2010), etc.

Subsequent mapping then further divided/refined each major occupational category; for example, ADLs-home, recreational activities (including organised and unorganised activities such as sports, clubs/groups, hobbies, retail shopping etc.); PA (including active transport, out of/at home PA); school/education; productive occupations (including un/paid work, civic engagement, and social and religious/cultural activities). Studies were grouped under each occupational category based on their key findings, along with brief descriptions of the study's findings (e.g., major occupational category

=ADLs-home; sub-category=Meals/Kai: descriptors='youth missing out on breakfast', study=Merten et al. (2009); or 'lack of access to food', study=Andresen and Meiland, (2019)). Refer to Figure 4.3 Mind Map 2, below showing the mapping process for poverty's influence on children's participation in ADLs in the home.

An additional two maps, using a similar coding and thematic process, were completed for the ways tamariki/children and rangatahi/youth living in poverty cope, and the constraints in their participation, using the themes of 'agency/coping' and 'constraints on children's participation'. These two themes and sub-categories came out of the continued immersion in the child poverty literature and from iterative readings of the articles included in the MMRS. For example, under the mind map titled 'Agency & coping' (key theme), sub-categories/sub-themes were='develops own networks' or 'occupy themselves with what is available'. Under the mind map titled 'Constraints on children's occupations due to poverty' (key theme), a sub-category/theme was='money', with descriptors such as='costs of joining clubs/groups, sports (e.g., fees, equipment, travel)'. Studies with relevant findings were grouped under each sub-category/theme using an iterative process that involved modifying or adding further categories as these were identified in additional studies. (Refer Appendix I: Complete Range of Mind Maps used in MMRS.)

The writing up of the integrated/synthesised findings involved a further iterative process of working with the mind mapping information and continuous re-reading of the original studies. For example, for the ADL occupational category, a sub-category was identified on the mind map (i.e., meals/food/kai), with grouping of relevant studies in each category, along with illustrations from relevant study results (e.g., not having access to breakfast and lunch, finding ways to cope). With re-reading of the studies to further understand how the results related to the category and the review question, (*what are the ways in which poverty shapes tamariki/children's patterns of participation in occupations?*), the narrative description about the impact of poverty on this aspect of ADLs was enriched and able to be written in a coherent manner.

Based on this synthesis, a narrative description of the review findings and discussion is detailed below. It starts with a summary about tamariki/children's agency and coping strategies in the context of living in poverty, and the importance of including them in

research and any subsequent decision-making in terms of finding solutions for the challenges they face. Then follows a descriptive overview of the studies included in the review and their findings. The overview includes information about the countries where the studies were conducted, types of research designs and poverty concepts used, the age ranges of children included in the studies, and types and amount of information that the studies provided/did not provide about children's participation in occupations. The remainder of the findings are presented under three broad themes based on occupational categories (i.e., ADLs, leisure/play and productive occupations), with sub-categories/themes of these occupations where relevant (e.g., Leisure: sub-categories/themes of; home-based/indoor play, outdoor/unstructured play, physical versus sedentary activities, and social activities). Finally, an overview of gaps in the literature review, how the review informed the research question, and the implications for the design of the proposed PhD study are discussed.

Figure 4.2

Mind Map 1: Tamariki/Children, Their Participation and Poverty

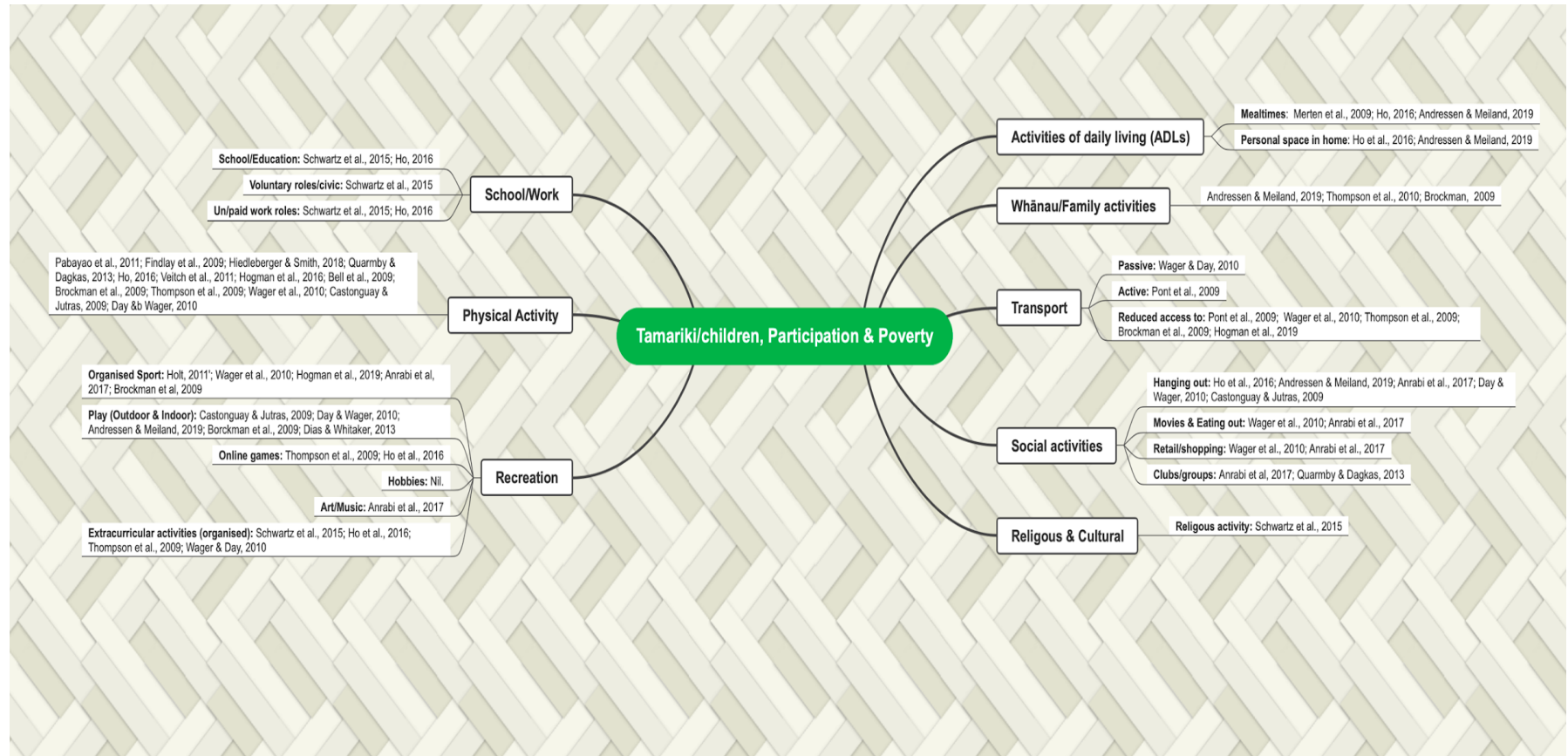
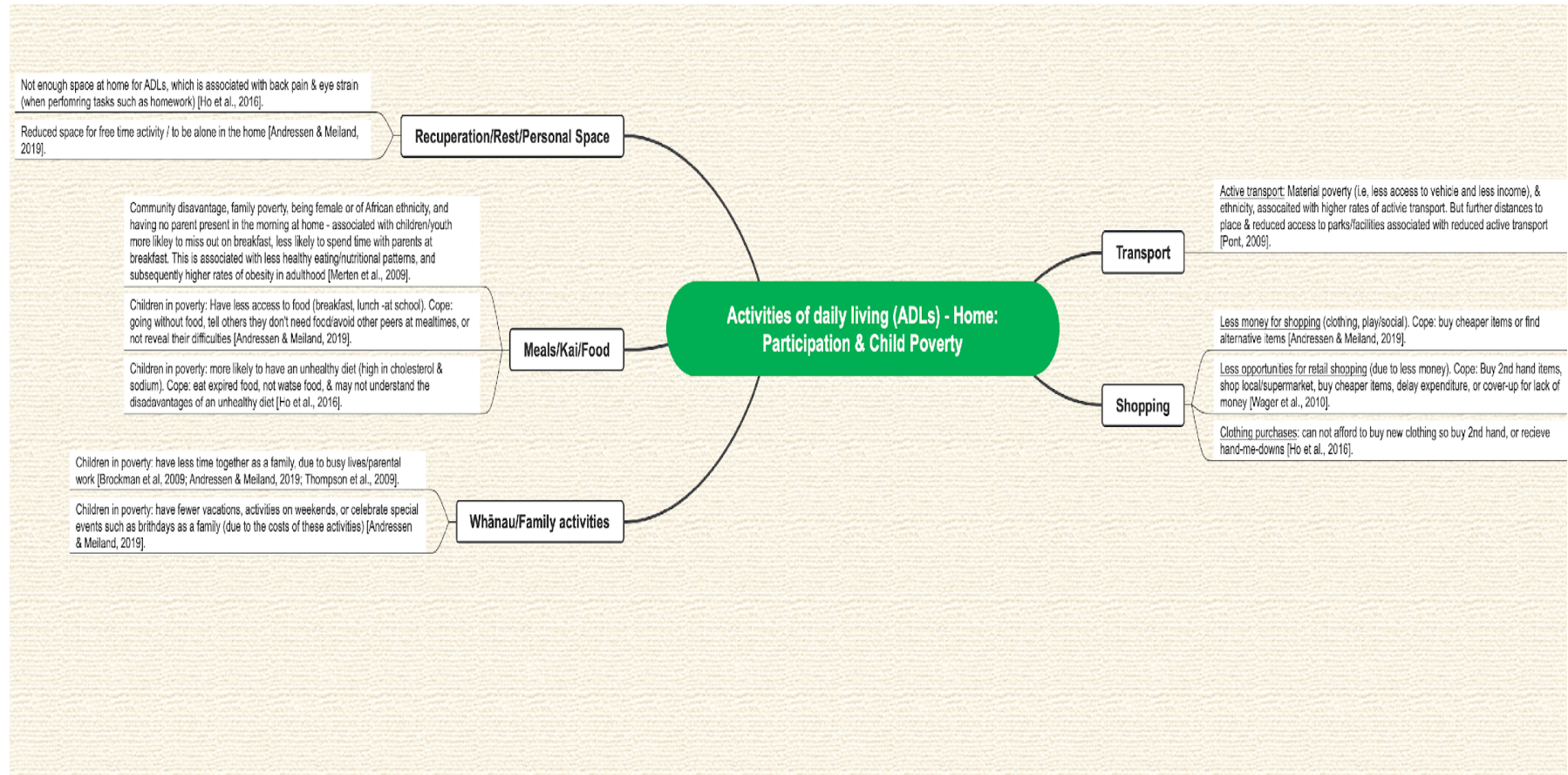


Figure 4.3

Mind Map 2: ADLs at Home for Tamariki/children, Their Participation and Poverty



4.3 Integrated and Transformed findings from the MMRS about Tamariki/Children, Poverty and Participation in Occupations

The majority of studies in this MMRS were published in western countries (19/20) with slightly over half coming from the USA and UK (11/20). There were 13 qualitatively designed and 7 quantitatively designed studies, which was an unexpected result owing to the predominance of quantitative studies on child poverty generally. The majority of the quantitative studies (6/7) were of a cohort/longitudinal design, with only one systematic review of quantitative studies (i.e., about active transport) included. The qualitative studies included ethnography, phenomenology, interpretative descriptive, and general interpretative methodologies. There were no SRs of qualitative literature or mixed methods studies included. All studies were published between 2009-2019. (Refer Appendix G: Overview of Primary Studies Included in the MMRS – Child Poverty and Participation.)

Most studies used broad poverty equivalent indicators such as SES/socioeconomic position (SEP), or deprivation/area-based indices with a range of factors used to define/measure poverty as a concept including income, area level deprivation, parental employment status, receiving government assistance/benefits, single parent households, parental education, receipt of free school meals, and neighbourhood cohesion. A few studies used singular proxies for SES/SEP or poverty, such as parental education or income. Most studies (i.e., 15/20) used more than one measure/indicator of poverty such as income, area level deprivation, and/or parental education/employment status. Overall, this broad and diverse conceptualisation of poverty in a relatively small sample of studies may reflect a growing movement by researchers to conceive of SES or poverty as a multidimensional concept, especially amongst qualitative researchers (Bourdillon & Boyden, 2014; Lister, 2021; Wisor, 2017). However, only one study utilised an experiential/subjective-based poverty concept (Dias & Whitaker, 2013) that included a related concept of ‘mother’s perceptions of neighbourhood safety’ alongside living in a low SES neighbourhood.

The studies included in this MMRS involved tamariki/children and the impacts of poverty on their participation in occupations. Just over half of the studies involved participants in the age range 10-15 years (11/20), three included children in the age

range of 8-15 years, and six studies spanned the age of 4-18 years. The types of occupations explored in the studies varied; however, some occupations received a lot of attention (i.e., PA), while others received minimal attention (e.g., home-based activities/activities of daily living, school-based activities including homework, un/paid work). For example, articles about PA predominated (i.e., 11/20 including active transport [e.g., walking or use of other items like bikes to get to school] & sports), with few in each of the other occupational types such as extracurricular/out-of-school activities (e.g., clubs, community & religious groups, attending movies); family activities; social activities (e.g., hanging out on the streets, playing with friends); engagement in school-based activities including homework; and civic engagement (e.g., voluntary roles, contributing to community wellbeing). This focus on research pertaining to PA for tamariki/children may reflect a current, dominant discourse in society towards addressing the obesity epidemic and is illustrated in the articles by the following researchers: Ball et al. (2009); Brockman et al. (2009); Findlay et al. (2009); Heidelberger & Smith, (2018); Högman et al. (2019); Pababyo et al. (2011); Pont et al. (2009); Quarmby & Dagkas, (2013); Thompson et al. (2009); Veitch et al. (2011).

Several vital areas of tamariki/children's participation in occupations that were not evident or which received minimal attention were tamariki/children's daily activities such as personal cares (e.g., eating, dressing, grooming, cleaning/housework etc.), restorative occupations (e.g., sleep, rest), food preparation, hobbies, indoor play/recreations, school-based occupations including homework, tamariki/children's un/paid work, online activities, shopping, and other survival-based occupations such as resource seeking. The narrative reporting of the results that follows first addresses broad issues of participation before addressing broadly occupational domains of ADLs/self-care, leisure/play and work/productive occupations (Taylor & Kielhofner, 2017; Townsend & Polatajko, 2013).

4.3.1 Participation: Tamariki/Children and Rangatahi/Young People's Agency

Much of the literature on child poverty details the negative aspects of these inequitable social circumstances and presents a deficit perspective. Nonetheless, the literature also revealed the many ways that tamariki/children and rangatahi/young people display agency and find ways to remain engaged in occupations. For example, some strategies included finding alternative or cheaper options to activities with

costs/fees (e.g., refraining from participating, finding cheaper or cost-free options, saving money to help meet costs), creating free occupational opportunities (e.g., home based entertainment, free and unstructured play, hanging out on their local streets as a form of free and accessible leisure), looking after themselves when adults were not available, developing their own support networks through peers/family/neighbours, using active transport options (e.g., walking), and engaging in part-time paid employment (Andresen & Meiland, 2019; Castonguay & Jutras, 2009; Day & Wager, 2010; Ho et al., 2016; Pont et al., 2009; Wager et al., 2010). Consequently, the opinion of several researchers included in this review was that if solutions are to be found for the constraints that poverty has for tamariki/children and rangatahi/young people's participation in healthy, positive, and meaningful occupations, then tamariki/children and rangatahi/young people need to be consulted and actively engaged in the decision-making processes that concern their welfare (Day & Wager, 2010; Wager et al., 2010).

4.3.2 Tamariki/Children's Participation in ADLs (Home-based Occupations)

Seven studies touched on aspects of tamariki/children's participation in home-based activities or ADLs. While these articles were limited in their coverage, the results reveal that those from materially restricted family households or neighbourhoods faced restricted participation in daily activities in the home. For example, some needed to share a bedroom with a sibling, not having space to be alone in the home, performing the majority of their activities on their bed or in the corridor (i.e., due to lack of space in the home), with the latter restriction leading to health implications such as low back pain and eye strain (Andresen & Meiland, 2019; Ho et al., 2016). The ability to safely and routinely engage in ADLs and family occupations in the home are vital for the development of tamariki/children's healthy patterns of occupation, skills, and competence; positive occupational experiences; learning shared values and positive role modelling from parent/s; and for their health and wellbeing (Case-Smith, 2015; Cronin, 2016a, 2016b; Lawlor & Mattingly, 2019).

Three studies identified the unhealthy dietary habits of children who lived with poverty, such as eating foods with a high level of sodium or cholesterol, or expired products (so as not to waste food); and going without food such as missing out on breakfast in the home with their parents, or having no lunch to take to school

(Andresen & Meiland, 2019; Ho et al., 2016; Merten et al., 2009). Such dietary patterns can have negative implications, including associations between a lack of breakfast and increased rates of obesity later in life and subsequent poor health outcomes (e.g., cardiovascular disease) (Merten et al., 2009). Children may experience shame and stigma from peers when they are at school with no lunch (Andresen & Meiland, 2019). In some cases, children find ways to cope with these disadvantages such as avoiding peers at school during lunch, claiming they are not hungry, or receiving support such as free school meals (Andresen & Meiland, 2019; Ho et al., 2016; Merten et al., 2009).

Studies included in the MMRS highlighted that children living in poverty were less likely to have the money to purchase new products such as clothing which had potential to create difficulties for them amongst their peers such as shame or embarrassment. Ways that children adapted to these circumstances included looking for cheaper or alternative options such as second-hand items, delaying purchases, shopping locally to reduce transport costs, or hiding their family's lack of money from their peers (Andresen & Meiland, 2019; Ho et al., 2016; Wager et al., 2010). Activities that involved tasks such as purchasing items at shops can be important for children as they learn about and contribute to household chores or where it has particular relevance to them, such as purchasing clothes, footwear, or other children's items, especially as young people in their early teens pay more attention to what their peers think and consequently about their appearance (Case-Smith, 2015; Cronin, 2016a, 2016b; Vroman, 2015).

Children faced with poverty generally spent less time together as a family compared to their wealthier peers due to a range of factors such as their parent/s' busy lives and paid work commitments, weather restrictions (e.g., colder, wetter winter months), lack of money to spend on activities or equipment, and reduced access to transport or local facilities. Family activities affected by poverty included physically-based activities (e.g., spending time together in sports, un/structured PA such as bike rides, running, ball games, gardening, chores at home), celebrating birthdays, and taking vacations/holidays together (Andresen & Meiland, 2019; Brockman et al., 2009; Quarmby & Dagkas, 2013; Thompson et al., 2009). One study identified the consequence of poverty-related factors for sole/lone parent families and the formation of habituated sedentary activity in the home (e.g., watching television).

However, this activity was considered important to the children as it meant spending time together with the parent and engaging in conversations that strengthened the child-parent relationship (Quarmby & Dagkas, 2013).

Many of the studies highlighted the restricted access to transportation that children living in poverty experienced because a vehicle was not available at home, or due to the costs of transport (i.e., fuel, bus fares), and consequently this contributed to restricted participation in occupations (Brockman et al., 2009; Högman et al., 2019; Pont et al., 2009; Thompson et al., 2009; Wager et al., 2010). However, one study highlighted that children from low-income households, and those from non-white and immigrant backgrounds, were more likely to engage in active transportation such as walking, riding a bicycle, scooter, or skate board etc. (Pont et al., 2009).

4.3.3 Tamariki/Children's Participation in Leisure/Recreations (Out-of-School, Extracurricular, Sports and Physical, Social, Cultural, and Spiritual Activities)

Broadly speaking, the studies in the MMRS showed that tamariki/children living in poverty had less opportunity to participate in play/leisure-based occupations. Opportunities were restricted for structured, extracurricular activities such as sports, clubs, arts and cultural activities, eating out, going to movies, retail shopping, social activities, family vacations, and for a wide variety of unstructured physical or play-based activities. Barriers to their participation included the costs of these activities (e.g., fees, equipment, transportation) or the lack of leisure-based facilities in their neighbourhood, the lack of local green spaces/playgrounds or the degraded state and safety issues at these spaces, and weather restrictions (i.e., restricted ability to play during wetter, colder months of the year due to limited indoor facilities) (Andrabi et al., 2017; Andresen & Meiland, 2019; Brockman et al., 2009; Castonguay & Jutras, 2009; Dias & Whitaker, 2013; Findlay et al., 2009; Ho et al., 2016; Högman et al., 2019; Holt et al., 2011; Quarmby & Dagkas, 2013; Schwartz et al., 2015; Thompson et al., 2009; Wager et al., 2010). However, it was clear that children living in these circumstances adapted and found alternate ways to occupy their free time such as playing around their home; hanging out in the streets in their neighbourhood; having the costs of leisure activities met by peers, family, or other adults, and finding ways to reciprocate these favours; occupying themselves with what was available at home or

in their neighbourhood; or, in some cases, self-excluding from activities or staying at home to avoid the shame of being identified as needing support to take part in leisure activities (Andresen & Meiland, 2019; Castonguay & Jutras, 2009; Day & Wager, 2010; Ho et al., 2016; Quarmby & Dagkas, 2013; Wager et al., 2010). Participation in pro-social extracurricular occupations is recognised as being positive for children's development, health, and wellbeing; skill and role/identity formation; and formation of social networks (Case-Smith, 2015; Cronin, 2016a, 2016b; Schwartz et al., 2015).

4.3.4 Home-based Indoor Leisure/Play

The studies revealed few details of how tamariki/children's play/leisure time spent in the home was impacted by poverty. However, Ho et al. (2016) reported that children from low-income families had less access to toys to play with in the home, and due to limited options for play tended to spend their time watching TV/DVDs and playing computer games. Play or leisure occupations are considered vital for children's occupational development providing opportunities for social interaction, skill, role, and identity formation, and for their health and wellbeing (Case-Smith, 2015; Cronin, 2016a, 2016b; Vroman, 2015).

4.3.5 Unstructured, Free Outdoor Play/Leisure

Few studies discussed outdoor-based free/unstructured play around the home. Thompson et al. (2009) did highlight that restricted access to physically-based occupations as a family around the home/neighbourhood was likely to occur for children of low SES due to the family's low income, parental lack of time and work commitments, and lack of facilities (e.g., activities such as ball games, trampoline, frisbee, play at parks, walking and riding bikes). Other studies discussed the restricted participation in unstructured play-based occupations that children living in impoverished neighbourhoods experienced such as access to green spaces and playgrounds. This was due to a range of factors such as degraded playgrounds or a lack of safe facilities for play, presence of litter, vandalism and dangerous items (e.g., syringes, broken glass), or the presence of negative peer influence or criminal activity that may be dependent on the time of the day (e.g., bullying, violence, use of alcohol or drugs, gang members etc.) (Andresen & Meiland, 2019; Castonguay & Jutras, 2009; Dias & Whitaker, 2013; Thompson et al., 2009). In one study, youth (aged 13-15 years)

from families with low SEP, had less access to pleasurable, substance-free, leisure-based occupations and subsequently were more likely to use alcohol and/or marijuana than their wealthier peers (Andrabi et al., 2017). The experience of children in these circumstances is clearly voiced in the study by Day and Wager (2010) as these young people reported that their park “is all graffiti... people keep smashing bottles... [its] full of glass and needles... drunk people coming out of the pub... men sit around there” (p. 517).

Under these circumstances, some youth reported one of the few leisure-based occupations open to them was hanging out on the streets, due to the restrictive costs of more organised activities. Day and Wager (2010) suggested that this represents a ‘classed leisure space’ as this type of occupation was viewed by more affluent adolescents as not something they engaged in and one they found boring. In other studies, children tended to have to play close to their home (Castonguay & Jutras, 2009) or, in the case of young girls, their mothers kept them at home or travelled long distances to find safer places for outdoor play due to the risks in their neighbourhood (Dias & Whitaker, 2013). One study revealed that children from low SES spent more time participating in unstructured and unsupervised play, but less in structured/organised physical activity, compared with their wealthier peers (Brockman et al., 2009).

4.3.6 Physical Versus Sedentary Activity

There is substantial evidence that highlights the harmful impacts of physical inactivity/sedentary lifestyle for tamariki/children such as a propensity towards obesity and its harmful effects, with this issue being more prevalent in those living in poverty (Côté-Lussier et al., 2015; Oosterhoff et al., 2019). A number of studies reviewed in the MMRS revealed a link between living in poverty and decreased participation in PA, particularly organised PA (e.g., athletics, swimming, team sports, or clubs). Findings showed that similar to participation in unstructured/free play, resource restraints and features of the environment, such as lack of parks and green spaces to play, or fewer community-programmes and school supports, contributed to lower levels of participation in PA (Brockman et al., 2009; Findlay et al., 2009; Heidelberger & Smith, 2018; Ho et al., 2016; Högman et al., 2019; Holt et al., 2011; Pabayo et al., 2011; Quarmby & Dagkas, 2013; Thompson et al., 2009). These restricted horizons for

engagement in a more physically-active lifestyle are echoed in the voices of these children, “Like my Nan pays for any stuff I do...’cos my mum can’t afford to... most of the time I’m like on my X Box... there’s not much else to do... me and my mum, we just sort of sit at home and watch the tele” (Quarmby & Dagkas, 2013, pp. 467-469).

However, one study found that children’s levels of physical activity were not associated with SEP, based on a proxy of maternal education. Instead, the authors suggested evidence points to a risk of decreased participation in PA for older children and young adolescents more generally (Ball et al., 2009). It may also be that for children living in poverty, their levels of physical activity are bolstered, counteracting their more sedentary lifestyle by higher engagement in active transport (Pont et al., 2009) and forms of unstructured and unsupervised activities (Brockman et al., 2009; Day & Wager, 2010).

4.3.7 Social and Cultural Occupations

Participation in social occupations is vital for tamariki/children’s developing sense of identity, social capital, and wellbeing (Case-Smith, 2015; Cronin, 2016a, 2016b; Vroman, 2015). The MMRS revealed that for those living in poverty, socially-based occupations are often constrained by their family’s lack of resources and the deprived areas where they live. For example, having fewer places to play and socialise in their neighbourhood (e.g., parks, playgrounds, cinemas, shopping/retail spaces, swimming complexes, or sports facilities), or degraded spaces and parental concerns for the safety of their children, often time contingent (i.e., more risk in evenings), all limited their participation in social occupations such as youth groups, music, arts, cultural clubs/groups, free-play with peers, and sports clubs (Andresen & Meiland, 2019; Day & Wager, 2010; Dias & Whitaker, 2013; Ho et al., 2016; Schwartz et al., 2015; Wager et al., 2010). This is reflected in the concern of Black American mothers, living in poor neighbourhoods, for the safety of their daughters.

I don’t feel as though she gets enough playtime because I’m scared of her to go outside... somebody randomly shooting off the gun, or just these young kids... just want to beat up on people... you have the gang initiation... out there getting high... the violent kids. (Dias & Whitaker, 2013, pp. 211-212)

Based on two German studies, it was evident that while children in poverty maintain diverse social networks, they develop few close friendships (Andresen & Meiland, 2019). Another study found that while social activity occurs, such as hanging out on streets, it can come with negative consequences such as bullying, intimidation, or violence (Day & Wager, 2010). Furthermore, for some children being identified publicly as being 'poor' may mean they self-exclude from social activities with their peers, as they feel ashamed that they cannot afford the costs involved, do not have the material resources equivalent to their peers (e.g., clothing), or are reluctant to join activities offered by NGOs out of concern for the stigma they might experience from their peers. The limitations poverty imposes for these children constrains the development of friendships, social networks, and the potential benefits of participation in cultural and socially-based occupations (Andresen & Meiland, 2019; Day & Wager, 2010; Ho et al., 2016).

4.3.8 Tamariki/Children's Participation in Productive Occupations (School, Homework, Un/Paid Work, Civic Engagement)

4.3.8.1 School/Education.

Formal schooling is a key part of a child's life course, where the development of knowledge, cultural values, occupational skills, and social interaction occurs that is vital for their wellbeing and future life prospects (Case-Smith, 2015; Cronin, 2016a, 2016b; Vroman, 2015). In terms of participating in school/educational-based occupations, one study showed an association between family SES (i.e., unemployed, receiving welfare) and reduced participation in school-based activities such as music, drama/arts, and school-based voluntary activities and, consequently, reduced academic success (Schwartz et al., 2015). In another study, out of school educational tasks/homework were constrained through limited finances/resources that restricted access to school books, computers, and internet access/online education (Ho et al., 2016). Additionally, children reported feeling stigmatised and shamed at school for being identified as 'poor' due to having to wear older, worn out, or second-hand clothes, or not having the same resources as wealthier children (Ho et al., 2016), and felt excluded/embarrassed when they could not join their peers for lunch as they had no food (Andresen & Meiland, 2019).

Despite these restrictions in participation, schools and other agencies (e.g., NGOs in the community) were identified as important sources of support for children in poverty. This was because they are one of the few places where children are able to get information or access to services such as sports, music, arts or afterschool groups, health services, or participate in community-based opportunities such as visits to art galleries or theme parks (Andresen & Meiland, 2019; Heidelberger & Smith, 2018; Wager et al., 2010). Schools also provided increased engagement in physically-based activities and teachers served as positive role models for children (e.g., in terms of encouragement and access to healthy activities) (Heidelberger & Smith, 2018).

4.3.8.2 Un/Paid Work, Civic Engagement.

Participation in voluntary/civic occupations has been connected with positive youth development such as skill, role and identity formation, social cohesion, solidarity, a sense of community, and positive wellbeing (Godfrey & Cherng, 2016). Equally, engagement in part-time paid work for young people offers similar developmental benefits, as well as instilling a work ethic and provides much needed income (Cronin, 2016a; Wager et al., 2010). The studies reviewed provided little evidence for the ways poverty impacts on children's (i.e., aged from 10-15 years) participation in productive-based occupations. For example, unpaid (voluntary)/paid work, or civic roles (i.e., involvement in all aspects of society aimed at supporting fairness and democracy). The two studies that touched on this area indicated that poverty has implications in this occupational domain. For example, Schwartz et al. (2015) found that children from low-income backgrounds are less likely than their wealthier peers to participate in civic community actions and voluntary or unpaid activities. This limits the potential benefits participation in wider civic occupations can bring to both them and their community. However, Wager et al. (2010) revealed that children/young people living in poverty used a range of strategies to alleviate the financial pressure their parent/s faced. Strategies included engagement in part-time work (i.e., youths aged 13-14 years), or being conscious of the costs of services/activities they wanted to participate in, limiting their requests for money from their parent/s, and looking for other ways to save their family money (e.g., hunting for bargains when shopping).

4.4 Gaps in the Literature

Based on the studies included in the MMRS there are aspects of the research question that are not able to be fully explained. Firstly, the majority of studies were conducted in western, high income (developed) countries, and no studies from Aotearoa NZ were included. This probably reflects the lower number of studies on the topic being published in NZ that met the review criteria. As a result, the contextual and cultural factors pertinent to NZ that relate to the research question are not adequately addressed. For example, the unique historical (i.e., colonial history), political (i.e., neoliberal policies of successive governments over the last 20 years and the eroding of the social welfare system), and ongoing health and social inequities in the country, in particular for Māori and Pacific tamariki and whānau, have created a relatively high level of child poverty and hindered recent attempts to address the problem (Boston & Chapple, 2014; Dale, 2017; Ministry of Health, 2014, 2018a; Rashbrooke, 2013).

Secondly, the studies about tamariki/children's participation did not provide details or tended to have a narrow coverage about their occupations such as restorative activities, personal cares, household-based occupations (e.g., chores, food preparation, shopping), and other important occupations like hobbies, socialising with peers, and resource seeking occupations. There was little evidence revealed about school-based occupations, un/paid work, civic engagement, whānau/family, cultural and spiritually-based activities, and online-based occupations. Minimal evidence was discovered about poverty's impact on tamariki/children's overall patterns of occupation such as their habits, routines, roles, and family rituals. No studies have fully explored the participation part of the research question as a whole (e.g., the consequences of poverty on tamariki/children's patterns of participation across a range of occupations and the implications this may have on their potential and wellbeing); instead, tending to examine each of these issues and different occupations independently (e.g., sports or recreations, school etc.). Consequently, an understanding of the impact of poverty on a child's participation in all their life's occupations (e.g., ADLs, play/leisure, and productive activities), their patterns of occupations (e.g., habits, routines, and roles), how these occur in their everyday context has not been fully established based on this MMRS. As a result, the interplay between a full range of occupations and the role of poverty is not able to be sufficiently understood. Together, this reveals that important

aspects of the research question have not been able to be adequately answered by available literature.

Thus, this doctoral study aims to investigate these gaps in understanding how poverty influences tamariki/children's patterns of and participation in occupations and the implications for their potential and wellbeing. Addressing the gaps will be achieved through a qualitative case study research design that explores their views, and those of their parent/s, other adults, and community organisations that support them in their occupations and help to address the problem.

4.5 Summary

The MMRS revealed the negative influence of poverty for tamariki/children's participation in a range of occupations from restrictions in their home and whānau/family activities, to school/productive and recreational activities. However, the studies included in the review highlighted gaps such as a dearth of research about the influence of poverty on patterning of participation in important areas of tamariki/children's occupations such as habits, routines, roles, and ADLS, online activities, unstructured play at home, un/paid work, or socialising with family and peers. The poverty related barriers to participation broadly include low family income and resources, lack of parental time (often due to work commitments), and features of the neighbourhood such as lack of facilities, degraded environments, or safety concerns. While tamariki and their whānau in these contexts do find ways to cope and adapt to their circumstances, and community supports are helpful, the general theme is that their participation is hindered unfairly, and may be having detrimental consequences for their health, wellbeing, and potential across their lifespan.

Chapter 5 An Aotearoa NZ Context: Evidence of Poverty's Influence on Tamariki/Children's Participation in Occupations, their Potential and Wellbeing

5.1 Introduction

The literature reviewed in Chapters 3 and 4 did not reveal NZ-based evidence about the research topic. Thus, this chapter helps to contextualise the study in Aotearoa NZ, drawing on statistics available from the NZ government, NGOs and sporting bodies, and research conducted in the country; supplemented by international literature, as necessary, to build a picture of what Aotearoa NZ tamariki/children aged 10-13 years affected by poverty do in their daily lives and what is known about how poverty affects their potential and wellbeing. The chapter provides a synthesis of the available NZ based literature and data starting with poverty's impact on tamariki/children's participation in occupations, followed by its impact on their potential and wellbeing. Details of the search strategy used to access this NZ based published and grey literature can be found in Appendix J: Search strategy for NZ published and grey literature.

5.2 Poverty and Aotearoa NZ Tamariki/Children's Participation in Occupations

5.2.1 Participation in Education/School

An important occupation for tamariki/children, and one where a majority of their time is spent outside of the home, is education/formal schooling, particularly at the age range pertinent to this study (i.e., 10-13 years). Schooling is an important institution that can shape and support tamariki in their participation, development, health, wellbeing and future prospects (Boston & Chapple, 2014; Cronin, 2016a, 2016b; Egan-Birtan, 2012; Engle, 2012).

Aotearoa NZ tamariki and their whānau who experience poverty have reported on the stigma and disadvantages tamariki experience at school. This includes not having their stressful situations of poverty understood by their teachers or peers, being bullied or picked on for being 'poor' or appearing different to their peers (e.g., due to clothing or

lack of material goods such as phones/iPads etc.); lacking material items such as books, stationary, uniforms, or technology; and missing out on a range of school-based activities such as sports and school trips due to associated costs (Egan-Birtan, 2010, 2012). Examining more closely the composition and disparities that exist in the NZ education system can help to reveal the context and some of the reasons behind the negative experiences for these tamariki.

Numbers of tamariki and rangatahi/young persons (aged primarily <18 years) enrolled in Aotearoa NZ schools was 826,572 as of 1 July, 2021. The proportion of ākongā/students enrolled by ethnicity was approximately 46.5% European, 24.7% Māori, 9.8% Pasifika, 14.6% Asian, and 4.3% other ethnicities. The number of students in the lowest deciles³ (1-4) (Ministry of Education [Te Tāhuhu o te Mātauranga], 2022c; New Zealand Government [Te Kāwanatanga o Aotearoa], 2022a) was 257,685, with the majority comprising Māori and Pasifika ākongā. For example, only 7% of European students were enrolled in deciles 1-2. The number of ākongā between the ages of 10 and 13 years (or Years 7-9) was 212,287, with the proportions by ethnicity, similar to total enrolments, equalling approximately 47.7% European, 26% Māori, 9.9% Pasifika, 12.7% Asian, and 3.3% other ethnicity (Education Counts, 2023b; Ministry of Education, 2022c; New Zealand Government, 2022a). The disparity based on ethnicity for tamariki and rangatahi who attend low decile schools is highlighted in Figure 5.1 below.

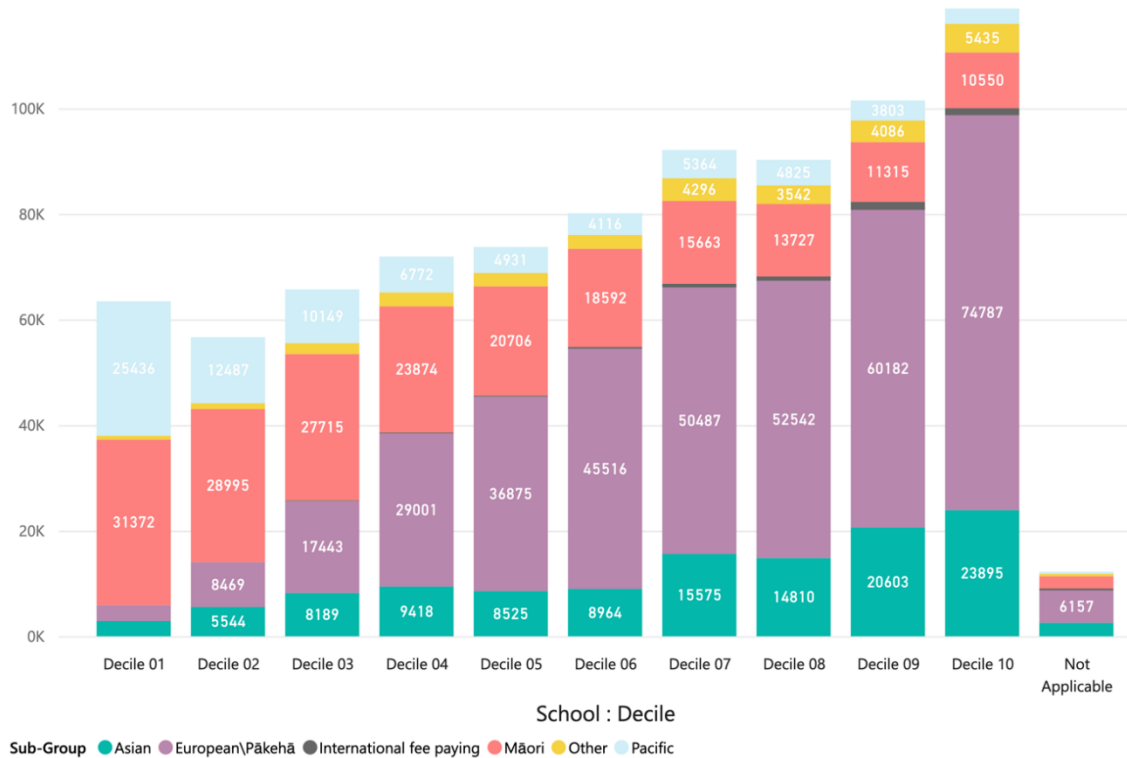
Living in poverty and attending a lower decile school in Aotearoa NZ may relate to poorer achievement and future readiness of ākongā to engage in productive occupations in adulthood, with Māori and Pasifika tamariki overrepresented in these statistics. One method of assessing achievement in education in NZ, and internationally, is through the Programme for International Student Assessment (PISA), focusing on reading, mathematics, and science based literacy, which is an indicator of preparedness for opportunities in life upon leaving school (e.g., tertiary education, employment etc.) (Education Counts, 2021). Based on NZ PISA data, student literacy outcomes assessed at 15 years of age reveal that average literacy scores (reading,

³ The NZ school decile system measures how many students from low socioeconomic (SE) backgrounds attend a school on a scale from deciles 1-10, with 1 equating to schools with the highest number of students from low SE backgrounds. This system was replaced in early 2023 with a new, but equivalent, Equity Index (EQI).

maths, science) for ākongā from the lowest socioeconomic backgrounds, and for Māori and Pasifika, are lower than those of European and Asian students. For example, for reading, the NZ literacy average is 506 points, European = 524, Asian = 517, Māori = 463, and Pacifica = 442 points (Education Counts, 2021).

Figure 5.1

NZ Children Enrolled in School Years 0-13, as of 01/07/2021, by School Decile, and Based on Ethnic Groupings



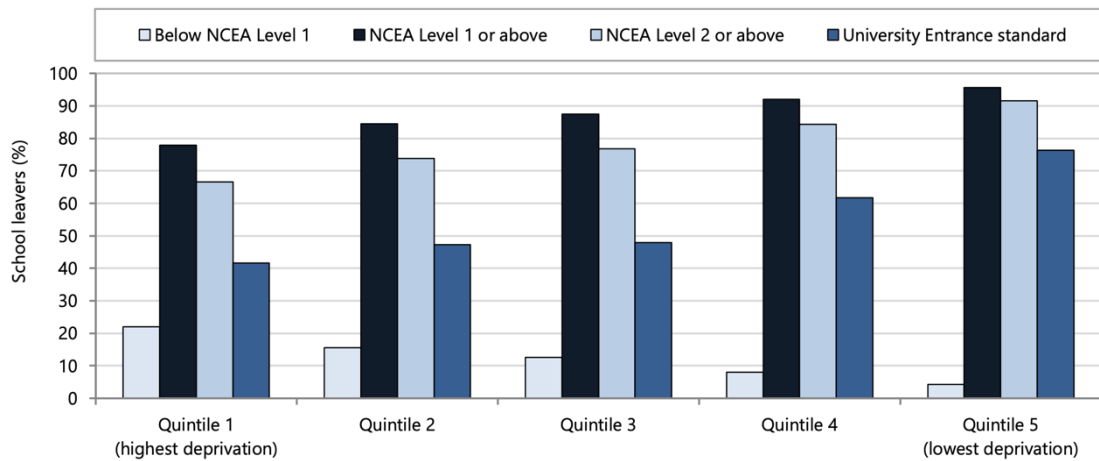
Note. From *School Rolls: Interactive Dashboard*, by Education Counts, 2022. Copyright 2022 by Education Counts. Reprinted with permission.

Another way to understand disparities in education outcomes for Aotearoa NZ tamariki or rangatahi is to compare outcomes in high school qualifications; or NCEA, the main high school qualification in NZ; or an equivalent qualification, shedding further light on poverty-based contextual factors that impact on the future potential of ākongā. Based on NZ Ministry of Education data, most tamariki in NZ leave school with an NCEA qualification (Duncanson et al., 2022). However, in terms of educational outcomes there is a socioeconomic gradient where those from the most deprived backgrounds (based on school decile, such as 1-4) fare the worst. For example, rates of those leaving high school without NCEA are 22.1% (from quintile 1/most deprived backgrounds) and only 4.3% (quintile 5/from least deprived backgrounds). The rates of

achieving university entrance are 42% (quintile 1), compared to 76% (quintile 5)—refer to Figure 5.2. These inequitable educational outcomes are higher for those of Māori and Pacific ethnicities (Duncanson et al., 2020).

Figure 5.1

School Leavers in School Socioeconomic Quintile, by Qualification and by Deprivation Quintile, Aotearoa New Zealand 2021



Note. From *Child Poverty Monitor 2022 Technical Report* (p. 93), by Duncanson et al., 2022. Creative Commons.

There are a range of reasons driving these inequitable education outcomes in Aotearoa NZ, such as tamariki/children’s family backgrounds of poverty and under resourced low decile schools. But one important resource that is missing for many of the tamariki from impoverished backgrounds is access to digital technology, which is a crucial resource in today’s digital world. Data collected on child specific material wellbeing indicators (2020/21) revealed that 4% of NZ tamariki 6-17 years of age (or approximately 32,000) have very restricted access to computers and IT for homework. These data also revealed that 1% have very restricted space in their home to engage in their homework (Perry, 2022). The absence of these important educational resources and the lack of opportunity to participate in the use of technology, for education and social use, only further hampers impoverished tamariki/children’s educational pathways and future outcomes such as employment.

In this respect, a ‘digital divide,’ or less access to digital devices and the internet, especially for tamariki/children’s online learning and recreational activities, has existed for some time for those from low socioeconomic backgrounds and particularly for

those of Māori and Pasifika ethnicities (Duncanson et al., 2020; Egan-Birtan, 2012; Hartnett & Fields, 2019). This digital divide was highlighted, despite government assistance, during the recent COVID-19 pandemic and lock-down period in 2020 in NZ when all tamariki had to be schooled from home. For those in poverty who had limited access to computers and IT, their ability to complete education from home was hindered, with many of these tamariki initially not returning to school following the ending of the initial 2020 lock-down (Duncanson et al., 2020). Restricted IT/computer access and its effect on home-based educational activities was highlighted in the case study conducted by Leadley (2019) where the child/participant (Coco, 13 years of age) had access to only one, shared and older computer in the home, with restricted IT capacity, no other IT devices in the home; consequently, constraining her ability to fully engage in IT-based homework and online social connectivity.

Collectively, such unfair access to school and educational-based occupations is having detrimental effects for Aotearoa NZ tamariki/children, both in the immediate and future sense.

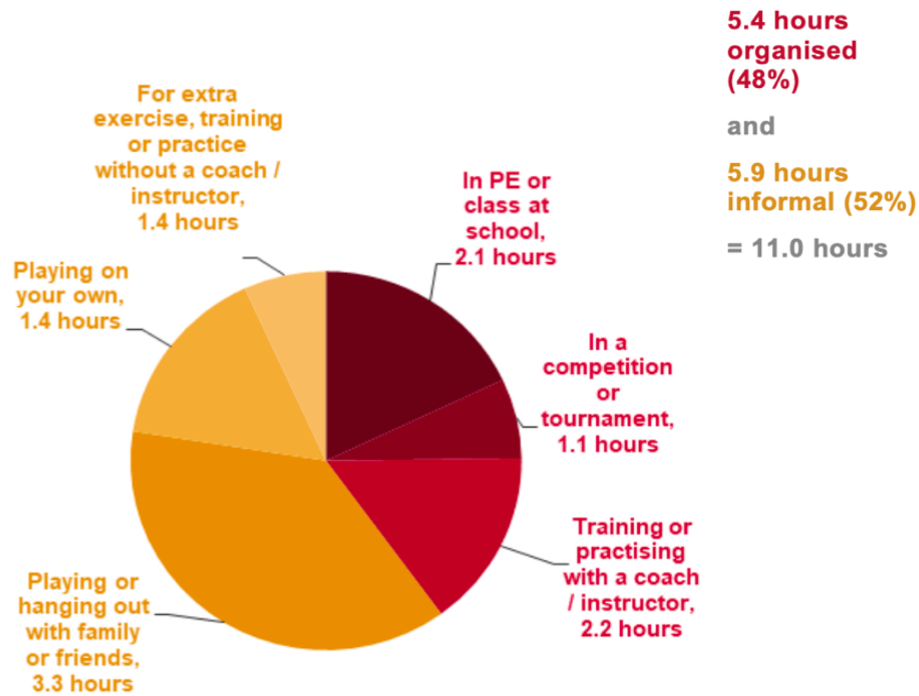
5.2.2 Participation in Recreational, Social, and Cultural Occupations

Another important part of tamariki/children's lives involves their participation in sporting, recreational, social, and cultural activities, with their engagement in these occupations outside of the home typically tending to increase from the middle stage of development to the early teens (Cronin, 2016b). Based on Sports NZ's Active NZ survey 2019, most (i.e., 94%) of Aotearoa NZ's tamariki (i.e., 5-17 years) engage in recreational activities throughout the week (i.e., weekly participation or at least once/week in sport, exercise, active play/recreation) both out of and at school (Sports New Zealand/Ihi Aotearoa, 2020). Figure 5.3 below shows types of and time spent in physically-based occupations for tamariki and rangatahi (aged 12-17 years). Based on the NZ Health Survey 2020/21, 43.5% of NZ tamariki (288,000, aged 5-14 years) are considered to be 'physically active', using AT such as walking, biking, or other physical means of transport to get to school. The data show a higher prevalence of AT for those from the least deprived backgrounds, those of European and Pasifika ethnicities, for boys compared with girls, and with lower levels for Māori and Asian tamariki (Ministry of Health, 2021b). However, the Ministry of Health's 'physical activity' indicator does not include the amount of time spent in, or level of intensity of, physical activity or AT;

the types of physical activity or AT by deprivation/ethnicity; or levels of physical activity not related to AT. Other surveys such as The Health and Lifestyles Survey, show a lower rate of 30% for tamariki (5-16 years) engaged in AT (Smith et al., 2018).

Figure 5.2

Weekly Time in Organised and Informal Participation for Rangatahi



Base: All respondents aged 12 to 17

Note. From *Active NZ 2020: Spotlight on Rangatahi* (p. 10), by Sports New Zealand/Ihi Aotearoa, 2021.

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Evidence, both in Aotearoa NZ and globally, shows a trend of increasing levels of sedentary lifestyles and decreasing levels of physical activity and active transportation, and in NZ this trend is particularly marked for Māori and Pasifika tamariki (Smith et al., 2019; Smith et al., 2018). NZ based research reveals the number of tamariki meeting the recommended level of daily physical activity (i.e., 60 minutes of moderate to vigorous intense activity) is low, at 7% of the population or approximately only 56,700 of those aged 5-17 years (Smith et al., 2018; Sports New Zealand, 2020). Levels of sedentary behaviour (2 hours+ of screen time/day) amongst NZ tamariki remains relatively high. For example, The Active NZ Survey found 79% of tamariki (5-17 years) are spending more than 2 hours+ of screen time/day, with no differences based on SES, but with higher rates for older age groups (10 years and older), males, and Māori (Smith et al., 2018). The single case study conducted by Leadley (2019) highlighted that

while poverty meant increased time spent in the week walking for travel to places for occupations (e.g., school, sports), sedentary habits prevailed in the home such as time spent watching TV, due to the restraints of poverty; and, overall, more time spent by the child/participant throughout their week in sedentary/passive as opposed to active-based occupations.

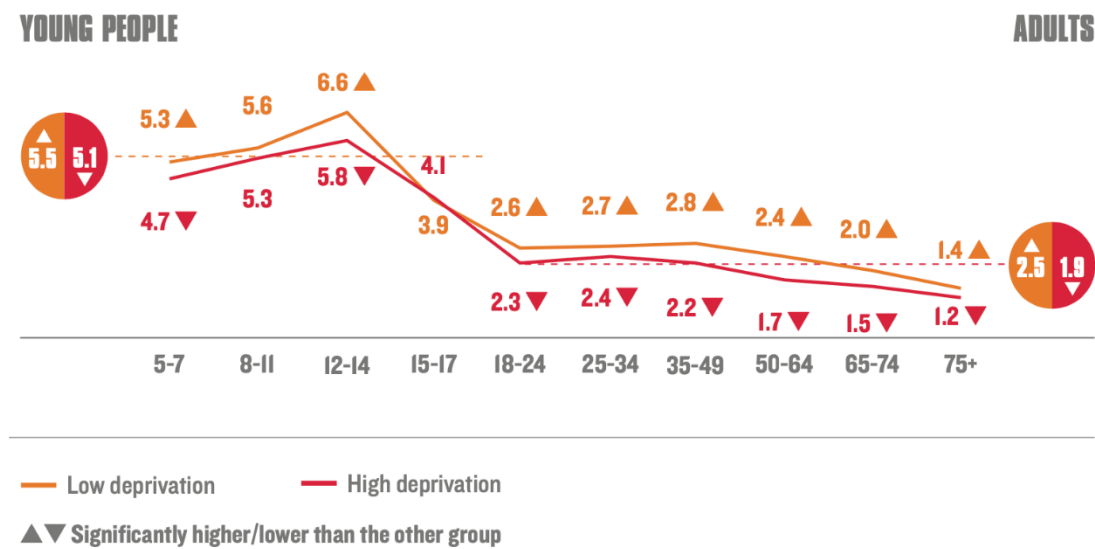
Considering Aotearoa NZ tamariki/children's participation in physically-based sports, play, and recreation, national survey data from 2014-2019 have consistently indicated that tamariki from high deprivation backgrounds were less likely to participate in play, active recreation, and organised sports teams/clubs outside of school; and reported less access to bicycles and sports/recreational equipment in the home or at school. Further, these survey data revealed they had less access to sport/recreational facilities, reduced pedestrian and cycling infrastructure, and there were serious concerns for pedestrian and traffic safety in their neighbourhoods (Maddison et al., 2016; Sports New Zealand, 2019, 2020). Figure 5.4 below of recent Sports NZ surveys show that tamariki (aged 5-11 years) and rangatahi (aged 12-17 years) from high deprivation backgrounds had lower levels of participation each week and spent less time in physical occupations (e.g., play, active recreation and sports) compared with their low deprivation peers (Sports New Zealand, 2021a, 2021b).

A few key physical occupations these tamariki are more likely to miss out on include cycling, swimming, cricket, hockey, and tramping with the cost of activities, transport, less opportunities, and feeling less encouraged to participate being the main barriers to participation. However, tamariki from high deprivation backgrounds are more likely to participate in group exercise, rugby, netball, kapa haka⁴, running, and physical education (PE) classes at school (Sports New Zealand, 2019, 2021b). The Growing Up In NZ study, a longitudinal study (n=6853) involving tamariki/children and their whānau/families from Auckland and Waikato, revealed that by age 8 years tamariki living in high deprivation backgrounds spent less time participating in organised team sports and in a range of tamariki/children's recreations (e.g., art, music, or dance lessons)—refer to Figure 5.5 below. However, there was no sizeable differences in participation in clubs or community groups by deprivation (Morton et al., 2020).

⁴ Kapa haka is a Māori activity involving dancing and chanting that is reflective of Māori cultural identity.

Figure 5.3

The Average Number of Sports and Activities Participated in Each Week for Children and Adults, by Deprivation



Note. From *Active NZ 2018 Spotlight on the Impact of Socioeconomic Deprivation on Participation* (p. 3), by Sports New Zealand/Ihi Aotearoa, 2019. Copyright 2019 by Sports New Zealand/Ihi Aotearoa.

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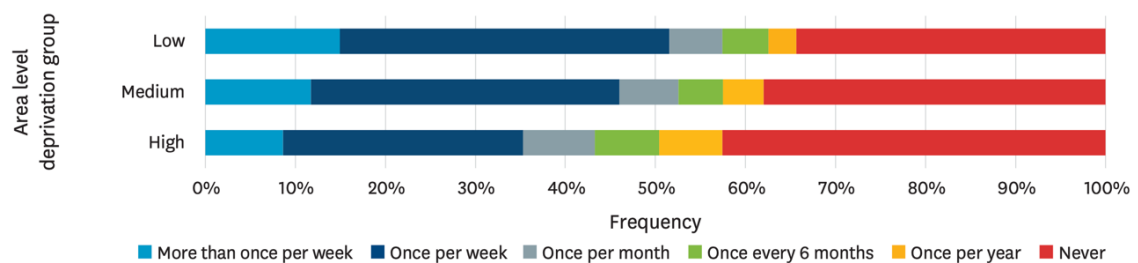
Furthermore, Sports NZ surveys have found that tamariki from high deprivation backgrounds showed a lower level of understanding about the benefits of being physically active compared with their low deprivation peers, but were more likely to want to increase their participation in physical occupations (Sports New Zealand, 2019, 2021b). It is likely the key ways that tamariki from more deprived backgrounds are able to participate in sports/recreational activities is through free opportunities provided at school or by adults in their community (e.g., coaches, parent/s) (Smith et al., 2018; Sports New Zealand, 2020).

In an Aotearoa NZ study using quantitative data and qualitative research methods (i.e., focus groups, photovoice, and interviews) about physical activity and play involving primary school aged tamariki aged between 8 and 12 years (n=9) and their parents (n=21), those from higher deprivation backgrounds were found to be more likely to play in their backyard as opposed to parks/playgrounds, compared to their wealthier peers, due to travel distances to get to recreational locations. Additionally, their parents were less likely to pay for afterschool recreational activities due to costs (Curtis et al., 2012). In the qualitative study (n=96, children and young people living in poverty) by Egan-Birtan (2010), tamariki and rangatahi living in poverty reported fewer

safe and quality spaces to participate in play and recreations in their neighbourhoods, while understanding the value of participating in recreational occupations for their health and wellbeing. The disadvantage in terms of sports and recreational activities that Aotearoa NZ rangatahi experience is clearly expressed in Egan-Birtan’s (2012) qualitative study (n=278, aged 9-24 years living in low socioeconomic communities): “Can’t get involved in sports clubs... Not enough money to pay for basketball fees/sports... parents can’t afford to support young people in sport i.e. soccer boots etc... You can’t go to the pools and learn to swim” (p. 13).

Figure 5.4

Frequency of Participation in Art, Music or Dance Lesson, by Area-Level Deprivation Group



Note. From *Growing Up in New Zealand: A Longitudinal Study of New Zealand Children and Their Families. Now We Are Eight* (p. 130), by Morton et al., 2020. Copyright 2020 by Growing up in New Zealand 2020. Reprinted with permission.

The tamariki and rangatahi in the studies by Egan-Birtan (2010, 2012) also reported reduced opportunities to participate in school trips, hobbies, cultural activities, and social activities with their peers and whānau (e.g., going to the movies, celebrating birthdays, social events), and often felt excluded from social occupations due to stigma and bullying from others. Additionally, survey data collected on child-specific material wellbeing indicators (2020/21) revealed that 9% of Aotearoa NZ tamariki (6-17 years or approximately 72,000 tamariki) have very restricted opportunities to have friends over to play, 12% cannot have friends over for a birthday party at their home, 3% are missing out on school trips and other school events, and 5% are missing out on music, dance, kapa haka, art, swimming, or other special interest activities (Perry, 2022). The reduced participation in sports, trips, camps and social activities was highlighted by tamariki who were interviewed in 2018 by the Office of the Children’s Commissioner to help inform the Child and Youth Wellbeing Strategy, “Not being able to afford things - like sports or activities... Can’t afford experiences – camps and school trips, education” (Duncanson et al., 2021, pp. 3-4). In the qualitative case study by Leadley (2019) these

poverty related restraints on a child's participation in a range of recreational occupations were also highlighted by an adult who supported the child/participant (Coco) and her whānau/family: "I know there are other activities, whether it be sports or trips away that... Coco, would miss out on because of... financial reasons" (p. 127).

There is clear evidence that poverty adversely impacts on Aotearoa NZ tamariki/children's participation in recreational, social, and cultural occupations, and this likely impacts on their potential, (development and health) wellbeing, and future prospects. However, evidence that shows the effect poverty may be having on the quality of experiences that tamariki have in organised sports, clubs, or recreational occupations, (e.g., enjoyment, skill development, or social networking); some types of recreations (i.e., hobbies, social, cultural and non-physically based activities); patterns of occupations (e.g., habits, routines, roles); or how it may impact their ability to progress in their chosen sport or recreation (e.g., access to more competitive or higher performance sports/recreations) is lacking. For example, poverty's influence on a child's patterns of and participation in occupations was revealed in the case study by Leadley (2019).

Furthermore, while these associations between poverty and tamariki/children's reduced participation in recreational occupations in Aotearoa NZ is evident, more research is required that clearly elucidates these links. For example, how does poverty impinge on tamariki/children's participation in this range of occupations that, in turn, disrupts health-promoting patterns of occupation, and consequently leads to adverse health and social outcomes? Or, alternatively, in specific areas such as social occupations, how often and in what ways are poor tamariki/children's social activities restricted, or how is this impacting their health/wellbeing, and development of friendships and social networks? An example from the case study conducted by Leadley (2019) was the potential impact on a child's development of long-term social networks and wellbeing, related to the safety risks to the child/participant in their deprived neighbourhood and the restraints of a small house that constrained her ability to socialise such as through free play in the neighbourhood with friends or having friends visit for sleep-overs.

5.2.3 Participation in ADLs/Home-based Occupations

When reviewing available Aotearoa NZ literature (both published and grey literature) minimal evidence was found that documented the types and levels of participation in ADLs for NZ tamariki or the impacts of poverty on this aspect of their lives. However, NZ qualitative studies described how tamariki and rangatahi in poor households are often required to take on extra household duties such as cooking, cleaning, or caregiving due to their parent/s or guardians' engagement in paid work (Egan-Birtan, 2010, 2012). The Growing Up In NZ study reported on household activities such as active play, quiet/inactive play, reading for pleasure, homework and household chores, with mothers reporting that most tamariki engaged in these activities more than once per week (i.e., range 73-75% across these activities) (Morton et al., 2020). However, time spent in these occupations was not analysed based on SES, income, or deprivation. Data on sleep as an aspect of daily living are collected in The NZ Health Survey and, for tamariki (0-14 years), those from most deprived backgrounds and Māori and Pasifika ethnicities are more likely to report reduced hours of sleep per night (Ministry of Health, 2021b).

Overall, greater clarity about the ways poverty impacts on these home-based occupations for tamariki may reveal how low household income and deprivation effects their participation in a range of occupations such as non-structured or 'free' physically play-based occupations; out-of-school educational occupations; their contribution to productive occupations in the home (e.g., housework, household maintenance, meal preparation, shopping/resource seeking); recuperative occupations (e.g., hobbies, rest, sleep); and home-based skill development. An example from the case study by Leadley (2019) showed the child/participant, Coco, experienced difficulty finding time alone to rest and recuperate in her home due to the number of people in the home (2 adults and 3 tamariki), and the small size of the house with limited spaces to be alone; consequently, impacting her subjective wellbeing.

5.2.4 Whānau/Family Relationships and Occupations

The whānau/family unit is a crucial part of tamariki/children's lives providing protection, support, care, and love for a growing child. The quality of the relationships, the parenting style (e.g., authoritative versus authoritarian), and the quality and

amount of time spent together in activities as a whānau are all vital for the socioemotional development and health of a child (Cronin, 2016a; Davies, 2011; Mandich & Cronin, 2016; Noonan et al., 2018). The types of whānau activities for tamariki typically include time spent together at meal times; domestic duties; recreational activities; school events; and other special whānau, cultural, or religious activities such as birthday celebrations or whānau holidays (Cronin, 2016a; Matuska & Barrett, 2019). For many whānau who are living in poverty, parent/s or guardians provide a loving and caring environment in the home, foster positive relationships, and support their tamariki/children's participation in occupations in whatever ways they can, despite the stressors of poverty they experience (Carswell et al., 2017; Dale, 2017; Houkamau, 2016; Leadley et al., 2020).

In fact, the challenges of poverty can bring tamariki and their parent/s, and whānau closer together through the shared understanding of the hardships they face and the support they provide each other. A young person expressed "If you don't have much money you learn to be more caring... It might bring a family closer in love" (Egan-Birtan, 2012, p. 6). Having a supportive and encouraging whānau, participating in whānau activities, and receiving the extra help from external agencies to enable tamariki to reach their full potential in life were identified as key concerns for Aotearoa NZ tamariki and rangatahi living in poverty (Egan-Birtan, 2012). The loving and supportive nature of tamariki and parents' relationship, despite poverty, was also clearly evident in the case study conducted by Leadley (2019).

[My values and what is most important to me are]... having family time... sleep out in the lounge... going to grandma's and just having a family morning tea. (Coco).

The main one is trying to spend quality [family] time... Together. Cuddling up on the couch watching a movie. (Kim, Coco's mother). (Leadley, 2019, pp. 123-124)

Despite tamariki/children's and their parent/s or guardian's best efforts, the stressors of poverty and other associated adverse issues places strain on whānau relationships and can create a harmful home environment. Living with the stressors of poverty, such as lacking the basic essentials or poor quality and overcrowded housing can place strains on whānau relationships, increasing arguments and unhappiness (Egan-Birtan,

2012). The qualitative study by Egan-Birtan (2010) revealed that many of the tamariki and rangatahi living in poverty, particularly where there was drug/alcohol abuse and whānau violence within the home, reported experiences of abuse, neglect, and violence with serious impacts on their emotional and mental health. Aotearoa NZ data highlight the higher rates of physical punishment by parent/s of their tamariki (0-14 years) for those from most deprived backgrounds, and for Māori and Pasifika whānau; that is, approximately 2 times that of European/other ethnicities (Duncanson et al., 2020; Ministry of Health, 2021b). Hospitalisation rates for abuse and maltreatment of tamariki mirror these punishment trends, and are most likely reflective of the stress and strains on parent/s and their tamariki resulting from poverty (Duncanson et al., 2020; EAG, 2012a).

While collectively this evidence helps provide a context-specific understanding about the impacts of poverty on tamariki and their whānau relationships, there are gaps. For example, how are the strains of poverty affecting tamariki/children's patterns of occupations such as their roles in the home, or whānau/family rituals such as spending time together at meals, or in recreational, social, and cultural activities? And what are the implications for their potential future relationships, their mental health, and wellbeing? For example, in the case study conducted by Leadley (2019), the child/participant Coco (13 years) and her parents spoke about how the father's low paid job, with shift work and long hours, disrupted time together as a whānau and important whānau rituals (e.g., family meal on Christmas day) and missed opportunities for the father to be involved in his daughter's school and sporting activities (e.g., water polo).

5.2.5 Risky or Offending-based Occupations

The study by Egan-Birtan (2010) highlighted the impact poverty had on rangatahi/young people's involvement in criminal activity, such as sex work or gangs, with many reporting that effectively they felt they had no choice but to be part of gangs. While being part of a gang brought with it positive benefits (i.e., being part of a type of whānau/family in the gang), there were negative consequences such as violence, abuse, drugs and that gangs are difficult to leave (Egan-Birtan, 2010). Tamariki and rangatahi have also discussed how living in poverty creates stressors that often leads to unhealthy behaviours such as smoking, drinking, and taking drugs, or

illicit behaviours such as criminal offending (e.g., stealing other's clothes) to escape the pressures of poverty or to feel included (Egan-Birtan, 2010, 2012).

Other evidence indicates that Aotearoa NZ rangatahi experiencing poverty and other adverse issues (e.g., mental ill-health, exposed to family violence, not attending and achieving at school) are at greater risk of committing offences and entering the justice system, with Māori youth having disproportionately higher levels of offending compared with other ethnic groups (DPMC, 2020b; McLeod et al., 2015; Ministry of Justice [Te Tāhū o te Ture], 2020). Based on a NZ longitudinal study, family income was not directly linked to adult psychosocial factors such as criminal offending; instead, was mediated by whānau/family and social factors such as abuse, parental drug use, and offending etc. However, the authors concluded that addressing poverty remains a key approach to reducing the risk of negative adult psychosocial outcomes such as crime (Gibb et al., 2012). More recent research based on the NZ Youth Surveys (age 12-19 years) has highlighted the higher risk of problematic drinking patterns amongst NZ youth from low SES backgrounds and those of Māori and Pasifika ethnicities (Ameratunga et al., 2019; Jackson et al., 2017). What is not clear based on the evidence reviewed are the ways in which poverty appears to be affecting children/young person's patterns of occupations in the direction of greater participation in risky and offending behaviour and activities. For example, shaping of unhealthy and risky habits/routines or development of roles in risky/criminally-based groups.

5.2.6 Productive Occupations

The studies by Egan-Birtan (2010, 2012) and the case study by Leadley (2019) have documented how the paid work roles of parents (i.e., long work hours in low paying work) led to reduced time together as whānau/families, and often resulted in older tamariki having to look after younger tamariki, subsequently impacting their participation in school. "School drop outs to provide for family, unable to further education due to responsibilities, work... Children having to take on higher roles" (Egan-Birtan, 2012, p. 7). There is, however, a lack of Aotearoa NZ data documenting the levels of informal care of whānau members provided by rangatahi (including those under the age of 15 years), referred to as 'young carers', with estimates that between 2 and 8% of children and young persons in western countries are working in unpaid

caregiving roles (Joseph et al., 2020; Kia Piki Ake/Welfare Expert Advisory Group, 2019). While a caregiver role amongst young people is vital for a whānau/family, it can have detrimental effects on the rangatahi/young person's life such as feelings of embarrassment, increased social isolation, poor mental health and wellbeing, increased absence from school, poorer educational outcomes in the longer term, and greater likelihood of experiencing financial hardship (Egan-Birtan, 2012; Joseph et al., 2020; Welfare Expert Advisory Group, 2019).

Aotearoa NZ based evidence, more specifically research based on a longitudinal cohort in the Christchurch Health and Development Study (CHDS), points to the intergenerational transmission of poverty in adulthood for tamariki who have grown up in socioeconomically disadvantaged homes in NZ (e.g., lower educational and employment outcomes) (Boden et al., 2013; Boston & Chapple, 2014; Gibb et al., 2012). One key contributing factor to this outcome is that tamariki growing up in poverty and of Māori or Pacific ethnicity are over-represented in NEET ('not in employment, education or training') statistics (Ministry of Business Innovation and Employment [Hikina Whakatutuki], 2019; Samoilenko & Carter, 2015; Stats NZ, 2021c). NEET is reflective of underutilisation of these young people's potential and inclusion in society (Duncanson et al., 2020). Being a rangatahi in the NEET category places them at more risk of negative long-term consequences such as lower educational attainment, unemployment, poverty in adulthood, and diminished health and social outcomes (Samoilenko & Carter, 2015). When discussing their future prospects, the majority of NZ tamariki and rangatahi living in poverty spoke about being positive and hopeful for their future despite not having much money. However, a number of those interviewed conveyed a foreboding sense of resignation, where they tended to accept their lot in life and expressed reduced hope and aspirations for a brighter future (Egan-Birtan, 2010, 2012); "What's out there for us?... Will tomorrow be better than this?" (Egan-Birtan, 2010, p. 23).

Overall, there is minimal data about the impacts of poverty and tamariki/children's participation in un/paid work activities; particularly in the early teen period (i.e., 10-15 years, or the age range of this study), which is when this age group begins to engage in such work roles (Cronin, 2016a, 2016b). Such information might further reveal the extent to which rangatahi/young teens participate in the workforce and (in/formally)

contribute to their whānau/family's financial state, and the possible impacts on their education, recreational and social occupations, and the consequences for their skill development. For example, in the case study by Leadley (2019), the tamariki supported their mother informally in a casualised, part-time work role in order to help the whānau pay for their participation in an upcoming summer camp, with this activity also likely instilling helpful work skills and a role in a productive occupation.

5.3 Poverty and Aotearoa NZ Tamariki/Children's Potential

The impacts of disrupted development, diminished physical and mental health in childhood can, overtime, have adverse consequences in later life, including implications for their potential to participate fully in occupations (Mandich & Cronin, 2016; Shonkoff et al., 2012). Evidence about the effect of poverty on Aotearoa NZ tamariki and rangatahi/young people's potential for development, health, and future participation in occupations comes from a range of sources including a set of longitudinal studies, the Child Wellbeing and Poverty Reduction group (NZ government), Ministry of Health, the Child Poverty Monitor reports compiled by a group comprising child epidemiologists and the Office for the Children's Commissioner, and a limited number of qualitative studies and unpublished reports. Collectively, this un/published evidence reveals the detrimental nature of poverty across all spectrums of tamariki/children's developmental and health potential, both in the immediate sense and in their future lives.

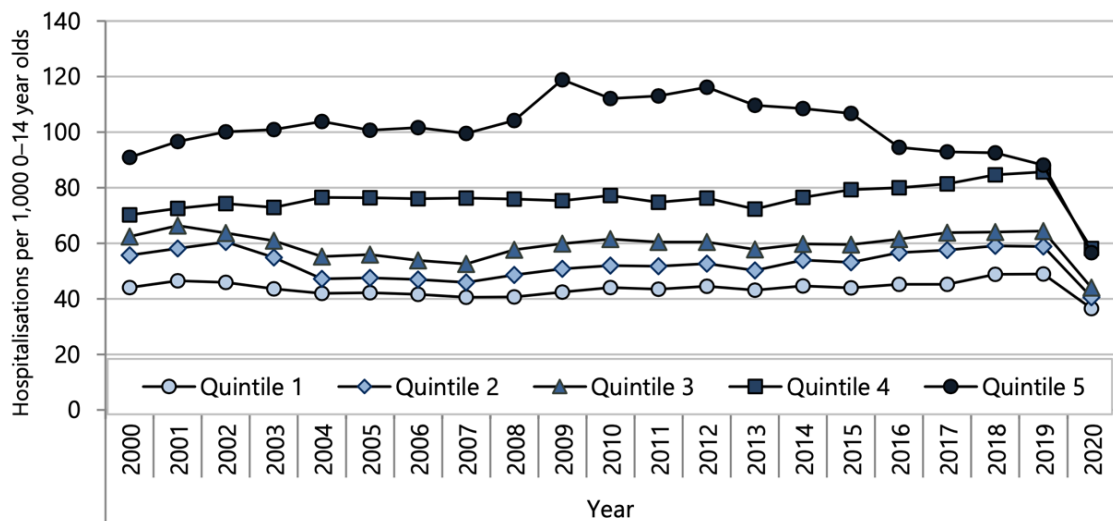
5.3.1 Potential: Effects of Poverty on Tamariki/Children's Physical Health

Aotearoa NZ tamariki and rangatahi living in poverty have reported how the constraints on their ability to access healthcare and medicines due to low whānau income, the impact of food insecurity, restricted and poor-quality housing (i.e., damp, cold, degraded and overcrowded conditions), and not being able to pay for basic essentials (e.g., heating, hot water) have a negative impact on their health (Egan-Birtan, 2012). When reviewing general hospitalisation rates for all medical conditions for NZ tamariki (0-14 years), rates for those from the most deprived backgrounds (highest quintile 5) are 2 times higher than those from the least deprived backgrounds (lowest quintile 1). When compared with European tamariki, the hospitalisation rates were higher for other ethnicities including Māori and Pacific, Asian/Indian, and Middle

Eastern, Latin American and African (MELAA). The most common medical conditions were respiratory related (e.g., acute infections, bronchiolitis, pneumonia, and asthma), much of which is likely related to poor quality housing (Duncanson et al., 2022; Duncanson et al., 2021). This corresponds with data from the Ministry of Health's 2020/21 annual health survey with hospitalisation rates of asthma and eczema statistically significantly higher for those from the most deprived backgrounds, and for Māori and Pasifika tamariki (Ministry of Health, 2021b) (see Figure 5.6).

Figure 5.5

Potentially Avoidable Hospitalisation Rates, 0-14 Year Olds, by Deprivation Quintiles, Aotearoa 2000-2020



Note. The marked drop in 2020 was related to COVID-19 pandemic lock-down during 2020 in NZ.

Quintile 1 = least deprived and quintile 5 = most deprived. From *Child Poverty Monitor 2021 Technical Report*. (p. 89), by Duncanson et al., 2021. Creative Commons.

In terms of the rates of infant deaths, generally these have declined for all infants since the 1990s but remain higher than the OECD average and higher than in the UK and Australia. The rates for infants from quintile 5 (most deprived), are more than 2 times that of quintile 1 (least deprived). For Māori, the rate is 1.5; and for Pasifika infants it is 2 times that of European/other infants (Duncanson et al., 2020; Duncanson et al., 2021). Early mortality rates (i.e., all deaths for those 0-14 years, excluding neonates) have declined since the 1990s. However, for tamariki from quintile 5, these are 3 times that of quintile 1, and for Māori and Pasifika tamariki the rate is significantly higher than those from European/other ethnicities (Duncanson et al., 2020; Duncanson et al., 2021). The rates of hospitalisation from neglect, abuse, and maltreatment for tamariki

(0-14 years) from the most deprived backgrounds was 9 times that of those from the least deprived backgrounds, with rates for Māori approximately 3 times, and for Pasifika more than 2 times that of European/other tamariki (Duncanson et al., 2020). A systematic review of unintentional injuries in tamariki aged under 15 years in NZ revealed a higher risk for those from lower SES and for those of Māori and Pasifika ethnicities (Ghebreab et al., 2021).

Being overweight/obese as a child is an indicator for the risk of future serious health conditions (e.g., diabetes, cardiac disease, stroke, cancer) (Ministry of Health, 2015; Morton et al., 2020). Based on NZ Health Survey 2020/21 data, 249,000 tamariki (aged 2-14 years) or 29.6% of all NZ tamariki were rated as being overweight/obese (BMI of 25 or greater). Rates for overweight/obesity in tamariki were statistically significantly higher for those from the most deprived backgrounds (approximately 1.8 times that of the least deprived), and for Māori and Pasifika tamariki (Ministry of Health, 2021a, 2021b). A longitudinal study (CHDS) found an association between childhood low socioeconomic background and a higher risk of becoming overweight/obese in adulthood (McLeod et al., 2018), suggesting the implications of health concerns for tamariki/children's potential as they mature. Such findings have also been observed based on data from the 2021 NZ Youth Survey (Denny et al., 2016), and the Growing Up In NZ longitudinal study (Morton et al., 2020).

5.3.2 Potential: Effects of Poverty on Tamariki/Children's Mental Health

While a number of factors will contribute to child/youth mental health (e.g., abuse, neglect, violence), an important factor is the increased risk from living in severe and persistent poverty (Collings et al., 2005; New Zealand Government, 2018; UNICEF Innocenti, 2020). Based on the data from the NZ Health Survey 2020/21, for tamariki (aged 2-14 years) diagnosed with a mental health and development disorders, the rates of depression, anxiety, Attention Deficit Hyperactivity Disorder (ADHD), and autism spectrum disorders were higher for those from the most deprived backgrounds, with the latter two diagnoses higher for Māori (Ministry of Health, 2021b). The Growing Up In NZ study found that by age 8 years, tamariki from high deprivation backgrounds and those from Māori and Pasifika ethnicities are at higher risk of depression, anxiety, and impulsivity (or self-control behaviours) (Morton et al., 2020). Findings from another study, using data drawn from the longitudinal Pacific Island

Families (PIF) study (n= 1376, at age 14 years), showed bullying, gang affiliations, and lower maternal education to be risks, but not socioeconomic deprivation (SED); and with positive parenting being a protective factor (Paterson et al., 2018). However, the percentage of severe SED in this cohort was relatively low and may not have captured those living in more severe SED (i.e., based on SED scale of 1 to 9, with 9= most deprived, and with the minority (18%) of participants in the 6-9 category).

Suicide is associated with severe mental health concerns and in Aotearoa NZ higher suicide rates, across all ages, are linked with poverty (Ministry of Health, 2013, 2016). For Māori rangatahi/youth (15-24 years) there is even greater disparity, with their rates 2.1 times that other ethnicities for this age group (Ministry of Health, 2021d). Compared internationally, NZ's youth suicide rates remain one of the worst in the OECD (2017), likely related to relatively high child poverty and ethnic disparities. In the 2009-2013 period NZ had the highest youth suicide rate in the group of EU/OECD countries surveyed for the Innocenti report series (approximately 16/100,000) (UNICEF Innocenti, 2017). This trend has not improved much in recent years, with the latest UNICEF (2020) report that used suicide as a proxy for child/youth mental health, revealing NZ's rate still remains very high, or the second highest in the OECD (14.9/100,000 for the 2013-15 period), compared with 9.7/100,000 in Australia and 3.7/100,000 in the UK.

The CHDS longitudinal study showed associations between low family SES in childhood and later adult substance abuse disorders, mental health, and risk of suicide (Fergusson et al., 2015; Newton - Howes & Boden, 2016), suggesting an effect by poverty exerted on tamariki/children's potential as a result of mental health concerns. Qualitative evidence has detailed how tamariki and rangatahi/young people's experience of living in poverty includes a range of negative emotions (e.g., a lack of love, sadness, neglect, anger and stress) and experiences (e.g., abuse, violence, neglect, stigma, bullying, exclusion) that negatively impacted on their mental health (Egan-Birtan, 2010, 2012). Overall, Aotearoa NZ studies and reports indicate that growing up in persistent and severe poverty is associated with a greater likelihood of mental health and substance misuse issues for tamariki that can persist into their adult life (Craig et al., 2017; Danese et al., 2009; Gibson et al., 2017; Gillies et al., 2017;

McKenzie et al., 2011; Melchior et al., 2007; Newton - Howes & Boden, 2016; Poulton et al., 2002).

5.3.3 Disability

Evidence that details the ways that poverty relates to the potential for Aotearoa NZ tamariki with disabilities is lacking. However, what is evident is that tamariki with disabilities are more likely to grow up in homes where poverty exists (i.e., low income, lower material wellbeing, and poor housing quality) and are more likely to remain in poverty into their adult lives (DPMC, 2021a; Duncanson et al., 2021; Murray, 2019). While more data on this topic are required, given the likelihood that tamariki with disabilities and tamariki with parent/s with a disability are poor, it is probable that trends in their health and social outcomes will be similar, or worse, to those from the most deprived backgrounds (DPMC, 2021a; Gibson et al., 2017; Murray, 2019; Wynd, 2015).

In summary, while the causal factors are complex and there are gaps in the published research and grey literature pertaining to poverty's impact on Aotearoa NZ tamariki/children's potential, and its long-term effects through to adulthood, quantitative evidence paints a picture of a context that includes associations between poverty early in life and long-term negative health outcomes for tamariki (e.g., poor general and oral health, obesity, cardiovascular disease, and mental illness) (Danese et al., 2009; EAG, 2012a; Gibson et al., 2017; McKenzie et al., 2011; Melchior et al., 2007; Ministry of Health, 2021c; Ministry of Social Development [Te Manatū Whakahiato Ora], 2018; Poulton et al., 2002). Concerns for longer-term outcomes are consistent with qualitative evidence (Egan-Birtan, 2010, 2012). Based on the reviewed literature, evidence that specifically examines the context-specific links between poverty and tamariki/children's potential, and their participation in occupations is lacking. Such increased knowledge could help understand where poverty and health have the highest impact on tamariki/children's participation, and that help target resources and interventions that best mitigate the longer-term risks to them. For example, how poor mental health in tamariki may lead to self-exclusion from social occupations, and thus the need to focus support in this area of their lives.

5.4 Poverty and Aotearoa NZ Tamariki/Children's Wellbeing

Poverty has been identified as detrimental to Aotearoa NZ tamariki/children's wellbeing when defined more broadly such as related to material wellbeing, housing, health, education, a sense of safety, cultural identity, and social connectedness or their opportunities to reach their fullest potential in life (DPMC, 2019a; EAG, 2012a). Internationally, NZ's record of child wellbeing is ranked low amongst EU/OECD countries—35th out of 38 countries—using measures such as child mental wellbeing (life satisfaction and suicide rates); physical health (overweight, obesity, and child mortality rates); and academic and social skills (numeracy, literacy, and social skills). The indicators on which NZ measured particularly poorly include: rates of youth suicide, obesity, and child poverty (with NZ data missing for some of the indicators) (UNICEF Innocenti, 2020). The UNICEF Innocenti (2020) report described NZ as a country that has suitable policy and context for positive child wellbeing, (i.e., economic, social, and environmental) but has poor outcomes. The explanation for this mismatch is likely related to a set of complex social and political factors (UNICEF Innocenti, 2020).

Based on qualitative and survey-based evidence, Aotearoa NZ tamariki and rangatahi/young people's experience of growing up in poverty is one of negative impacts to their wellbeing due to its deleterious effects on their health; the impoverished conditions in which they live; and experiences of exclusion, bullying, stigma, abuse, and neglect. As well as missing out on participating in a range of occupations that provide opportunities for development of skills, attributes, and social networks they can draw on in adulthood (e.g., school trips or recreational activities in their neighbourhood) (Egan-Birtan, 2010, 2012; Perry, 2022). The Sports NZ surveys showed tamariki from high deprivation areas who participate in physical occupations (i.e., play, recreation and sports) score higher on wellbeing indicators such as emotional wellbeing, spend less time using TV/screens, show healthier eating habits, and have improved sleep patterns (Sports New Zealand, 2019).

However, NZ studies also revealed that some tamariki and their whānau show great resiliency in the face of the adversity that poverty brings by viewing their lives through a positive lens, maintaining strong whānau relationships and support for each other,

appropriate role modelling, relying on their skills/talents, and helpful input from their community (Egan-Birtan, 2012; Houkamau, 2016). This helps buffer against poverty's effects by enabling tamariki/children's participation in occupations where able, sustaining hope, happiness, and a sense of hauora/wellbeing.

A recent report by the NZ Government (DPMC, 2020a) assessing progress on the Child and Youth Wellbeing Strategy, which used a range of indicators to measure wellbeing, revealed that while most Aotearoa NZ tamariki rated their wellbeing as relatively high, a number are not faring well. For example, Māori and Pasifika tamariki and those with disabilities (aged 0-17 years) experienced lower levels of material wellbeing, and Māori and Pasifika tamariki had lower levels of self-rated health and mental wellbeing when compared with other NZ tamariki (DPMC, 2020a). These findings are echoed in the results from the 2012 NZ Youth Survey, which showed inequity for Māori youths' wellbeing compared with other ethnicities (Clark et al., 2016) and, based on other data, for those with disabilities (Murray, 2019). These disparities are likely associated with higher poverty rates for these groups of tamariki.

Based on the evidence reviewed, there is a lack of Aotearoa NZ based published literature relating to poverty and tamariki/children's wellbeing. While further data are currently being collected by the NZ government on a range of child/young people's wellbeing indicators (e.g., social skills and support, community involvement), no broad data are being collected about poverty's effect on tamariki/children's occupations (e.g., activities around the home, rest/recuperative or recreational, social and cultural activities) and how this relates to their wellbeing. For example, based on a single case study, and acknowledging the finding's limitations, constrained participation in recreational, social and family occupations, restricted time and space for recuperative activities in the home all appeared to have a negative effect on a child's wellbeing (Leadley et al., 2020).

5.5 Summary

This review of relevant Aotearoa NZ based published and grey literature revealed a context where poverty is negatively impacting tamariki/children's participation in occupations, their potential, and wellbeing, with these effects lasting into adulthood. Furthermore, the level of published qualitative evidence is lower than quantitative or

mixed methods studies. This mirrors the international evidence reviewed, such as similar impacts from poverty on tamariki/children's participation, potential, and wellbeing, lower levels of qualitative evidence, and the gaps in the literature relating to the research question. Experiential information is lacking about poverty's effect on tamariki/children's participation in certain types of occupations, including home-based, recuperative, un/paid and social-cultural occupations. There is also a dearth of evidence related to their patterns of occupation. Evidence about the ways tamariki cope and the supports that are effective in enabling their participation is scant. Evidence that explores the transactional nature of child poverty, participation, potential, and wellbeing is also largely absent. The next chapter details the axiological, philosophical, and theoretical underpinnings of this doctoral study, and discusses the chosen methodology.

Chapter 6 Philosophical, Theoretical Underpinnings and Methodology

6.1 Introduction

The aim of the research was to gain a better understanding of how poverty affects tamariki/children's patterns of participation in occupations and shapes their potential and wellbeing. Based on published literature reviewed, there is a lack of evidence to adequately inform this issue. The project thus asked the question: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?*

Robust research projects require careful consideration about the assumptions, philosophy, and theory that underpin them, which helps guide the design of the research. While the previous chapters have reviewed the published evidence related to the research question, the current chapter discusses the axiological assumptions, and philosophical and theoretical underpinnings of this doctoral study. A detailed discussion of the methodology used in the study is also provided.

6.2 Axiological Assumptions

It can be claimed that no research is free from biases or from the values that guide the research. These biases and values may affect the choice of topic in a study and impact the researcher's approach to investigating the topic. While some philosophical positions, such as post-positivism, place axiology as subordinate to other considerations that shape the design of research (e.g., ontology or epistemology) (Shan, 2021), the concept of axiology (or values) is understood by many researchers to be an integral part of what informs research design and can align a study with attempts to address inequity and injustices in society (Morgan, 2014; Shan, 2021). The process by which axiology affects the design of a research study can be understood as the way a researcher positions themselves in terms of their personal and epistemological perspectives. Axiology also influences the study design through reflexivity, which supports cognisance of how one's positioning shapes (and is shaped by) the research (Stanley & Nayar, 2015).

My interest in the research topic began a number of years ago when completing my master's study, which had aimed to improve understandings about poverty and its influences on tamariki/children's patterns of occupation to inform whakaora ngangahau/occupational therapy's contribution to addressing the problems caused by poverty. Both in that study, and in this doctoral study, my underpinning values include a belief in the right of tamariki/children to be able to participate fully in meaningful occupations, and that participation in occupations is integral to their potential, development, health and hauora/wellbeing. Additionally, I believe that poverty is an injustice, inherently unethical, occurs in an inequitable way in Aotearoa NZ for specific ethnic groups (e.g., tamariki Māori), is a breach of the rights of tamariki, and that ending poverty is most definitely achievable. Furthermore, I believe that qualitative research is a suitable approach to enable the voices of tamariki, their whānau/families who live with poverty, and those who support them in their communities, to be heard, and that solutions to the problem can be informed by their experiences and perspectives.

6.3 Philosophical and Theoretical Perspectives

6.3.1 Pragmatism

The philosophy that underpins this research is pragmatism and, in particular, John Dewey's pragmatist philosophy. Dewey's (1929) philosophy holds that reality is "a union of experience and nature" (Dewey, 1929, p. 2a) and is a naturalist ontology where these two aspects of the world (i.e., subject-matter) are not separate (Neubert, 2009). Dewey (1929) referred to this continuity between people and their experiences with the world as an 'integrated unity', where there is "no division between act and material, subject and object" (p. 8) or where, in other words, there is no separation between "what is experienced from how it is experienced" (p. 32). Thus, within Dewey's version of pragmatism there is no dualism or separation of subject and matter as both are inseparable aspects of our world (Morgan, 2014).

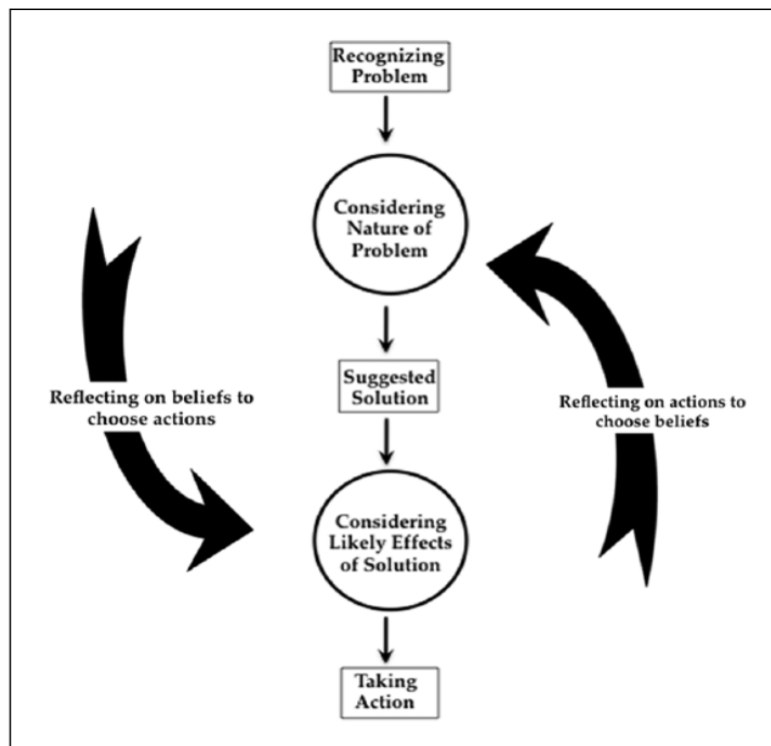
Dewey's pragmatist philosophy embodies a reflexive approach to ontological and epistemological distinctions with a problem-solving attitude to real world issues (Davies & Fisher, 2018). For Dewey, truth is neither absolute nor arbitrary; instead, is constructed through a process of ongoing inquiry concerned with solving real world

problems. Reality and truth are dependent on Dewey's ideas of habit and context, and are open to a process of inquiry. While he accepted that there were certain laws or principles that were so well tested that these required minimal revision, termed regulative principles, he argued that all truths need to be open to ongoing inquiry (Hickman, 2009).

Based on the pragmatist philosophy of Dewey, the way we learn about our world or reality (i.e., epistemology) is through our experience of the world around us. We are not disconnected from the natural world or the environment but an integrated part of it (Morgan, 2014). Furthermore, our experiences are not entirely personal, but are constructed out of a social milieu, or "by social factors... [in which we are] habituated through the weight of authority, by imitation, prestige, instruction, the unconscious effect of language etc" (Dewey, 1929, p. 14). This idea of a socially constructed world has alignment with a social constructivist ontology where people's understandings of the world are formed via social forces (Morgan, 2014; Pratt, 2016).

Two key terms in Dewey's pragmatist philosophy that are relevant to my study are habit and inquiry. Habit⁵ is "the source of the human mind [and is] an acquired predisposition to ways or modes of response" (Dewey, 1983, as cited in, Pratt, 2016, p. 513). While we are shaped by social factors and many of our habits are relatively unconscious, humans have the capacity to create change and stimulate social transformation through reflection and self-awareness as part of a process that Dewey termed inquiry (Morgan, 2014; Pratt, 2016). Inquiry is a continuing process that responds to situations in the changing environment that are problematic or unsettled, and which involve uncertainty. Dewey referred to such situations as 'indeterminate' (Dewey, 1938; Hildebrand, 2023; Morgan, 2014). Through examining the nature of the problem, including our experiences and beliefs about the world and our actions, we are led to new knowledge and potential solutions to problems, providing a subsequent basis for testing ideas and formulation of 'warranted assertions'. An ongoing process of reflection helps further inform our beliefs and future action (Morgan, 2014). Figure 6.1 shows this process of inquiry as a basis for research and action.

⁵ Habit, as defined by Dewey, differs from how the concept is understood in occupational therapy literature. From an occupational perspective, habits are tendencies to respond in repeated or patterned ways to the environment, and guide and preserve a learned way of performing occupations (Matuska & Barret, 2019).

Figure 6.1*Dewey's Model of Inquiry*

Note. From "Pragmatism as a Paradigm for Social Research", by D. L. Morgan, 2014, *Qualitative Inquiry*, 20, p. 1048. Copyright 2014 by SAGE. Reprinted with permission.

For Dewey, this process was the basis of the empirical method, where experiences are conceptualised but then need to be verified or tested with reference to "the affairs of every-day primary experience" (Dewey, 1929, p. 32). Such inquiry occurs in a social and historical context where the ever-changing nature of our circumstances over time makes it an ongoing process (Morgan, 2014). It is through this reflexive process, that is embedded in our everyday lives, that we can shed light on real world issues and help find practical solutions to them (Morgan, 2014; Pratt, 2016). A study, such as the one I am conducting, enquires about the social problem of child poverty and how it relates to tamariki/children's participation in occupations. It aims to provide a basis for conceiving potential, practical solutions such as environmental change, and supports that can enable tamariki/children's fullest participation.

6.3.2 Transactionalism

The process of human reflection is the basis for a pragmatic theory of action, in which people (individually and socially) and the environment interact in a transactional process whereby reflexive change in habit can lead to individual and social change

(Cutchin & Dickie, 2012; Pratt, 2016). Transactionalism is a relational theory that draws from Deweyan pragmatism (Dewey & Bentley, 1949; Morgner, 2020; Pratt, 2016). Transactionalism focuses on the interconnected relationships between phenomena and the contexts in which people engage and experience the phenomena (Cutchin & Dickie, 2012; Nyman et al., 2014). Occupation viewed through a transactional lens takes a wholistic view of occupation as a process of embodiment where people, their habits, and their occupations are embedded with and shaped by the environment (i.e., social and natural) and historical contexts in which they live in a dynamic way (i.e., involving constant change), but which equally shape the environment and events going forward (Aldrich & Cutchin, 2013; Cutchin & Dickie, 2012). It is also true to say that as part of this transactional process occupations help a person grow and reach their potential and influence the environment (Aldrich & Cutchin, 2013; Cutchin et al., 2008; Cutchin & Dickie, 2012).

Utilising transactional theory in research can enable the emergent (changing), contextual, and complex nature of a problem to be examined (Rosenberg & Johansson, 2013). This makes pragmatism and transactional theory particularly important for social research where the focus is on real world problems. For example, pragmatism and transactional theory are relevant to research into social injustices like child poverty, where there is an attempt to better understand these issues with an agenda for a practical or solution-focused approach (Morgan, 2014) that can lead to greater participation in occupations and enhanced wellbeing (Cutchin & Dickie, 2012). A pragmatic approach to this research, that examines poverty's effect on tamariki/children's participation in occupations, and their potential and wellbeing, conceives these elements as being part of a transactional process, and can help understand the problem in a multifaceted and contextualised way. For example, the way in which poverty has an effect on a child's patterns of participation in occupations can be seen to be shaped by a dynamic interaction involving their personal abilities and their whānau/family, and community. More broadly, too, their patterns of participation are dynamically shaped by, but also have potential to transact with, their culture and society (e.g., government actions to end poverty, social/cultural norms), physical environment, and historical factors such as the effects of colonisation.

Historically, occupational therapy has many of its roots in pragmatist philosophy and theory, particularly that of John Dewey. There is recognition of the strong influence Deweyan pragmatism had on early pioneers of the occupational therapy profession such as Meyer, Slagle, and Tracy (Cutchin & Dickie, 2012, 2013; Morrison, 2016). Dewey's philosophy also influenced early occupational therapists through the work of Jane Addams, a social worker and contemporary of Dewey. Addams, arguably one of the most important female philosophers of her time, was concerned with equality and social rights (Morrison, 2016) and had connections with some of the early occupational therapy practitioners and founders of the profession. Key tenets of pragmatism, such as holistic and constructed perspectives of reality (i.e., integration of subject and matter, the shaping of our lives through social forces), habits, reflexive inquiry, transactionalism, and an action-orientated approach to social issues, have had a continuing influence on occupational science and occupational therapy theory and values (Bunting, 2016; Cutchin & Dickie, 2012, 2013; Morrison, 2016). Informed by this pragmatist approach, occupational therapy as a profession values the need to address, in practical ways, socially unjust issues in the world such as enabling occupational participation with those with illness, disability, or experiencing exclusion and inequity such as through child poverty (Cutchin & Dickie, 2012, 2013; Morrison, 2016).

However, pragmatism and transactionalism are not without their limits and critique. Criticism includes that the structure and dynamics of power in society are not clearly evident in pragmatist theory (Bunting, 2016; Kirby, 2015; Pratt, 2016). Other pragmatist theorists claim the philosophical approach does explore elements of power structures in society such as in the application of non-dualism to politics, or in Dewey and other contemporary pragmatists' attention to issues of democracy, morals, and justice. For example, drawing attention to the resources society makes available for human freedoms, or critique of liberalism's focus on individual rights and proposed reforms to democracy (Aldrich & Cutchin, 2013; Bacon, 2012; Bunting, 2016; Hickman, 2009; Kirby, 2015; Morgan, 2014; Pratt, 2016). Further criticism levelled at pragmatism includes its focus on specific problems in society while not allowing for the imaginative, transcendental, and idealist perspectives relevant to humanity (Bacon, 2012). Additionally, pragmatism may be better described as a set of doctrines rather than having a single tradition, with debates that include whether pragmatism places

greater emphasis on objectivism versus relativism, or whether to use other approaches that try to bridge this dichotomy (Bacon, 2012).

Critique about transactional theory as applied to occupational science includes the developing nature of this theory, a need for the discipline to clarify and simplify concepts (e.g., habit, context, ends-in-view), to develop a greater understanding about human occupations and domains of the environment other than social ones (e.g., the natural environment), and that further occupational science research using transactional theory is required (Bunting, 2016). Furthermore, there are challenges to delineating the transactional process, and attempts to create graphical representations of the theory have been problematic (Aldrich, 2008; Cutchin & Dickie, 2012; Sellar, 2009). Additionally, the placement of occupation in the transactional perspective requires clarification and acknowledgement of the situated nature of occupation (Bunting, 2016; Cutchin & Dickie, 2012; Madsen & Josephsson, 2017). Also, it has been argued that there has been minimal inclusion of other relevant theorists' contribution to ideas about transaction and occupation (e.g., Bourdieu, Foucault) and that the theory is mainly informed by Dewey's form of pragmatism (Bunting, 2016; Cutchin et al., 2008; Cutchin & Dickie, 2013; Laliberte Rudman & Huot, 2013). However, while transactional theory is based on western philosophy and science, its social and relational features may make it compatible with non-western and Indigenous worldviews (Aldrich, 2008; Bunting, 2016; Cutchin & Dickie, 2012), although further research in this space is required.

6.3.3 Occupational Science

A key theoretical approach to this research is that of occupational science, a discipline and an epistemic community consisting of rigorous academic knowledge creation and axiology, that continuously changes in response to new ideas and changing societal values (Kinsella, 2012). The discipline continues to be informed through a range of philosophical and theoretical approaches including post-positivism, phenomenology (Cutchin & Dickie, 2012; Wright-St Clair & Hocking, 2019), pragmatism, social constructivism, post-modernism (Cutchin & Dickie, 2012), Indigenous ontologies (Bunting, 2016; Smith, 2017; Wright-St Clair & Hocking, 2014), critical theory (Huff et al., 2018), complexity theory (Aldrich, 2008; Fogelberg & Frauwirth, 2010), and transactional theory (Bunting, 2016; Cutchin & Dickie, 2013) to name a few. Arguably,

occupational science benefits from such a pluralist approach to philosophy, ontology, epistemology, and methodology, along with an epistemic reflexivity or a critical reflection on the conditions in which knowledge is created (Kinsella, 2012; Wright-St Clair, 2012).

Occupational science is the field of study concerned with developing knowledge about the underlying components of people's occupations, such as their form, function, and meaning, and views humans as occupational beings (Wright-St Clair & Hocking, 2019). Based on this theoretical perspective, participating in meaningful occupation is essential for health and wellbeing; thus, is a fundamental human right and determinant of health (Hocking, 2019; Wilcock & Townsend, 2019). For tamariki/children, it highlights the importance of being able to participate in essential and meaningful occupations such as self-care, household activities, play/leisure, education, and social and cultural activities (Case-Smith, 2015; Cronin, 2016a, 2016b). Occupational science provides a framework from which to consider how poverty shapes tamariki/children's participation in occupations, their potential and wellbeing.

Whilst occupations are vital to people's development, health, and wellbeing, and the ability to reach one's fullest potential in life, the relationships that link occupation and health or wellbeing are complex (Hocking, 2019). Additionally, occupations, the shape, form, the how, and why they occur, and the places and spaces in which they are enacted are inseparable from social, cultural, and other environmental factors (Hocking, 2019; Lieb, 2022; Wilcock & Hocking, 2015; Wright-St Clair & Hocking, 2019). For instance, non-western and Indigenous perspectives on tamariki/children's occupations are likely different from a western perspective, irrespective of the effects of colonisation and differences in occupational repertoires (Gerlach et al., 2014; Pontes et al., 2018; Shute & Slee, 2015; Smith, 2013). Examples that differ to western perspectives of tamariki/children's occupations may include understandings that view extended family and community as integral to the occupational wellbeing of tamariki, or that place greater emphasis on certain occupations as vital for a child such as religious activities, formal education outside of school hours, or time together as a whānau/family in the home.

Being restricted from participation in occupations; adverse influences on one's patterns of occupation; or experiencing sustained occupational performance issues due to illness, disability, or due to contextual factors such as poverty, can have negative consequences for people (Hocking, 2019), and especially so for tamariki/children's health and development, and their potential and wellbeing (Leadley et al., 2020). Furthermore, occupations may in themselves be somewhere on a continuum from health and wellbeing-enhancing, to inducing harm and ill-health and detracting from wellbeing, such as high levels of online, sedentary activity (Bunting, 2016; Hocking, 2019). In some cases occupations are associated with non/sanctioned views about types of occupations, or carry with them legal and moral implications (Hocking, 2021). For example, with tamariki/children this might involve illegal drug use, vaping/cigarette smoking, or other forms of anti-social behaviour.

6.3.4 Childhood and Life Course Theory of Human Development

Traditionally, western developmental theory has been based on metatheories such as mechanism, evolutionary theory, and organicism, and holds to a realist ontology, where growth is seen to occur in a linear or pyramidal (i.e., based on a basic foundation for skills) progression, to have an individual focus, and to involve universal and predictable changes that occur in stages, as posited in Freud's, Erickson's, or Piaget's stages of development (Howe et al., 2020; Humphry & Womack, 2019; Rodger & Kennedy-Behr, 2017; Shute & Slee, 2015). Broadly speaking, these stages of child development include infancy, toddler, early, middle to late childhood, and adolescence (Davis & Polatajko, 2014; Shute & Slee, 2015). In contrast, an example of a developmental perspective indigenous to Aotearoa is the Māori view of childhood that places emphasis on collectivism and interconnectedness (e.g., whakapapa or genealogy and embeddedness in place and whānau) and principles such as empowerment (whakamana or being a valued member of society) and holism (kotahitanga). From this Indigenous perspective, such principles are key to identity, development, and hauora/health for a tamaiti/child (Drewery & Bird, 2004; Smith, 2013) and support the future potential of a tamaiti/child to participate in occupations.

Broadly, the main criticisms of traditional child development theories include the assumptions of a linear progression, an individual focus, and a normalising of the developmental process, with theory primarily based on male, adult-centred, and

western perspectives. Additionally, these theoretical approaches tend not to take account of the dynamic and interactive processes that occur between the child, their occupations, and their environment, and where the child/person is seen as inseparable from the environment/context (Howe et al., 2020; Humphry & Womack, 2019; Rodger & Kennedy-Behr, 2017; Shute & Slee, 2015; Smith, 2013). Furthermore, such theory has tended to view tamariki/children as passive recipients of knowledge and development, while contemporary childhood theories emphasise tamariki/children's agency where they are considered to have a unique perspective and an ability to act and make a difference in their worlds (Shute & Slee, 2015; Smith, 2013). In the context of child poverty, tamariki/children are seen to have an understanding of their socioeconomic position in relation to others, are active in developing strategies and skills to help them find adaptive ways to participate in occupations and cope, to participate in efforts to support their whānau/parent(s), and to have views on resolving poverty (Bagattini & Gutwald, 2019a; EAG, 2012a; Ridge, 2011; Schweiger & Graf, 2015; Wager et al., 2010).

Dewey's pragmatism has had an influence on contemporary human development perspectives. For instance, pragmatism is reflected in the understanding that childhood is a socially constructed concept, in viewing a child's development as a transactional process contingent upon contextual influences where the child is embedded in their context, and seeing change as varying throughout the life span/course (Shute & Slee, 2015). The life course theory (LCT) and life course perspective on occupational development (Humphry & Womack, 2019; Mandich & Cronin, 2016) was selected as a theoretical basis for this study, given its suitable fit to the pragmatist philosophy and transactional theory underpinning this study.

Key assumptions in LCT include recognising the interplay between a person's genetic make-up (nature) and their environment (nurture), and that human/occupational development occurs over the entire course of life. LCT asserts that life transitions are pivotal points in development (e.g., starting school or work). It also recognises that the time and place a person is born into serve as a pathway for development and that development is affected by common life changes (e.g., moving home), unexpected events, factors at a societal level (e.g., an economic recession, pandemic), and socioeconomic circumstances. From an occupational perspective, the

interconnectedness of our lives shapes our occupations and occupational choices, where future potential to participate in occupations are contingent upon opportunities at any given time in life (Humphry & Womack, 2019; Mandich & Cronin, 2016). For example, parental engagement in a child's occupations can help to strengthen ongoing participation and the development of social networks; or, alternatively, a lack of opportunities for meaningful occupations may lead to adaptive strategies by a child, such as engagement in sedentary or anti-social activities. Limitations of the LCT include that research has tended to focus on the individual versus population level concerns, and that due to its broad scope, research informed by LCT needs to be drawn from a diverse range of epistemologies, methodologies, and interdisciplinary approaches (Heikkinen, 2011; Jones et al., 2019). A further limitation is that it draws primarily on western theory (Shute & Slee, 2015).

Informed by LCT, and given this study concerns tamariki/children aged between 10 and 13 years, a brief overview of the common occupations in which tamariki/children engage at this stage of life, based on literature produced from a western perspective, is provided in Table 6.1 (Cronin, 2016b; Davis & Polatajko, 2014; Smith, 2013).

Table 6.1

Examples of Expected Occupations for Tamariki/Children Aged Between 10 and 13 Years, or in Late Childhood/Early Adolescence Stage.

Types of Occupations	Examples of Occupations
ADL occupations	<p>Able to complete personal self-care activities such as eating, dressing, grooming, basic hygiene tasks (e.g., brushing teeth, cleaning body)</p> <p>Use appropriate manners, can use telephone, TV, internet devices based on personal interest, and able to handle money/e-cards.</p>
Leisure occupations	<p>Engages in structured team sports or recreational activities outside of the home and with peers, with adult supervision</p> <p>Communicates on topics of interest to others, may have a hobby/special interest/s. Socially, peer groups are increasingly more influential, primarily with same sex peers (interest in the opposite sex emerges with the onset of puberty), but whānau/family relationships remain important.</p>
Productive occupations	<p>Engaged in school-based activities and homework tasks with adult supervision</p> <p>Can complete household chores such as tidying a room, vacuuming, cleaning, and making the bed. Able to assist with basic tasks involved in cooking and has ability to use household tools and cleaning products, with adult supervision.</p>

6.4 Methodology

A methodology needs to fit with the epistemological perspective taken by researchers if they are to claim consistency between their construction of reality and how they come to understand it (Crotty, 1998; Harrison et al., 2017). Adhering to a pragmatic philosophy prompted me to approach the research problem in a way that could help me to understand it and which supported a problem-solving approach (Morgan, 2014). It required a methodology that examined the problem in its entirety or holistically, and which supported an examination of the real-life complexities fully connected with the context in which they were naturally occurring (Abma & Stake, 2014; Morgan, 2014; Rosenberg & Johansson, 2013). Furthermore, the methodology needed to allow for a pragmatic approach to the research, where it would be recognised that I am part of the inquiry, in transaction with it, not apart from it, while also being reflective about my own perspectives and experiences (Morgan, 2014). These requirements fitted with Stake's (1995) constructivist and interpretative approach to qualitative case study

methodology where researchers are cognisant of the context and multiple perspectives of those who experience the phenomenon being examined.

Case study methodology (CSM) has a long history, particularly in the social sciences, but has been criticised for being difficult to define given its pluralistic approaches. This pluralism stems from the different philosophical orientations of leading CSM researchers, and a lack of clarity, consistency, and agreement about whether case study is a methodology, method, or a research approach (Harrison et al., 2017; McQuaid et al., 2023; Mills et al., 2010). For example, case study scholars such as Gerring, George, Bennett, and Yin approach case study from a realist and post-positivist stance with a focus on objectivity, cause and effect, and on testing and developing theory. In contrast, Merriam, Simmons, and Stake take a pragmatic, relativist, and constructivist and interpretivist approach, using holistic description, inductive reasoning and interpretation, and can include a mix of qualitative and quantitative methods (Harrison et al., 2017; Leadley et al., 2024). In Stake's version of case study, there is a primary aim to understand meaning based on multiple perspectives and the situational context, and the researcher has a key role in knowledge creation (Abma & Stake, 2014; Harrison et al., 2017; Simons, 2009; Stake, 1995). Given the overarching approach to research and common features of case study, such as using multiple methods and data sources to illuminate an experiential understanding of complex phenomena in real life contexts and in an in-depth way, many agree with viewing case study as a methodology (Creswell & Poth, 2018; Harrison et al., 2017; Jónasdóttir et al., 2018; Leadley et al., 2024; McQuaid et al., 2023).

There is additional critique of CSM, and it is not without its limitations. Critique of CSM includes its diverse philosophical orientations and research designs, its lack of generalisability, a concern that it confirms researcher bias and lacks rigour, and that it cannot generate theory (Creswell & Poth, 2018; Schwandt & Gates, 2018). However, others have argued that CSM's pluralistic philosophical and research design is an advantage (e.g., allowing for differing epistemological perspectives), that it provides for analytical generalisations or inferences rather than statistical generalisations, that it is rigorous and has no more bias than other methodologies, and that it can develop

and test theory and provide insights into how and why processes or interventions occur (Leadley et al., 2024; Stake, 2006; Yin, 2018).

The academic field of occupational science and the profession of occupational therapy have utilised CSM for several decades. CSM has helped to elucidate the real-world, nuanced, complex, and contextualised nature of the transactional processes that occur for people, their occupations, and their environments (Leadley et al., 2024). CSM has been used to showcase interventions and outcomes used with clients, develop and test new theory, and to help understand the complex processes and contexts involved in a range of occupational therapy interventions, practice settings, and clinical processes (e.g., the therapeutic relationship, clinical reasoning process) (Leadley et al., 2024; McQuaid et al., 2023). While CSM continues to prove itself as an important research methodology for both occupational science and occupational therapy, there is a need for researchers to ensure they clearly state their ontological and epistemological position, describe the study design and the case/s and its/their boundaries, and use common language so as to clearly distinguish the use of this methodology as a rigorous and important form of academic research (Leadley et al., 2024; McQuaid et al., 2023).

Central to CSM is the case or the object of inquiry that can be a programme, event, person, group of people, or phenomenon (Leadley et al., 2024; McQuaid et al., 2023). The case or cases are studied within their context or natural settings including the geographic locations; historical, social, economic, or political factors; and are bounded by time, space, and the nature of the occupations involved (Harrison et al., 2017). Thus a case can be understood as a “single unit of analysis” (Simons, 2009, p. 39), a cohesive system that “is a specific... complex, functioning thing” (Stake, 1995, p. 2) and entails “the individual unit of study and... its boundaries” (Flyvbjerg, 2011, p. 301). In qualitative CSM, the case is examined by appreciating “the uniqueness and complexity of [the case], its embeddedness and interaction with its contexts” (Stake, 1995, p. 16). Given the complexity of the topic of this study about poverty and its effect on tamariki/children’s participation in occupations, qualitative CSM enabled this phenomenon to be explored in-depth, in its real-world context, and delineated and contained in a manner that is transparent.

Within CSM there are different types of case study designs that can be broadly described as being single or multiple cases, illustrative, or evaluative in their intent (Harrison et al., 2017). Case study designs as described by Yin are either descriptive (i.e., describing a phenomenon), explorative (i.e., exploring a phenomenon of interest), or explanatory (i.e., to help explain causal relationships) (McQuaid et al., 2023; Yin, 2018). Merriam's designs differ by being particularistic (i.e., exploring a specific situation, event, programme, or phenomenon), heuristic (i.e., helps to illuminate a phenomenon), and inductive (i.e., a focus on inductive reasoning) (Harrison et al., 2017; Merriam, 1988). The case study designs described by Stake include intrinsic, to understand the uniqueness of a case; or instrumental, when the case is studied to facilitate the understanding of a phenomenon. Case studies that are instrumental may involve a multiple case design where a number of cases are studied (Harrison et al., 2017; Leadley et al., 2024; McQuaid et al., 2023; Stake, 1995, 2006).

The choice of case study design relates to the research question/s asked and, thus, to the objectives of the research. In this case study I aimed to better understand the phenomenon of child poverty so as to help answer the research question posed about its influences on children's participation in occupations, their potential and wellbeing. My intent was to arrive at a better understanding of the phenomenon, examining it in its real-world context, from experiential and multiple perspectives, and discover new realisations about it with the hope that this may lead to practical, occupation focused solutions to the problem of child poverty. Therefore, my intent fitted with Stake's (1995) instrumental type of case study design, but where I utilised two cases. The choice of an instrumental case design, with two cases, was seen as enabling an in-depth examination of the research question through the case studies, across different locations and from diverse perspectives. Although cases were seen as likely to share some similar features (e.g., facets of poverty), two or multiple cases allowed for comparisons and aggregation of data, while studying the uniqueness of each case still remained important in order to provide contextualised and in-depth analysis to fully inform the research question (Jones & Hocking, 2015; Leadley et al., 2024; Stake, 2006). For example, there is only limited knowledge about the effects of poverty on tamariki/children's patterns of participation. Whilst wanting to understand the phenomenon of poverty's influences on tamariki/children's participation, examining a

case in detail allowed for a deeper understanding of this phenomenon within its everyday context.

6.5 Summary

My axiological position, the underpinning philosophy of pragmatism, and the key theories of transactionalism, occupational science, and LCT that inform this study have been discussed. The rationale for the use of qualitative CSM has also been discussed. The following, Chapter 7, provides an overview of the conceptual structure and research design for the case study including methods used, analysis processes, strategies that helped to ensure rigour, along with important ethical and cultural considerations.

Chapter 7 Conceptual Structure and Research Design

7.1 Introduction

Following on from Chapter 6, this chapter provides a detailed discussion about the conceptual structure and research design employed for the case study. It includes outlining how the cases were conceptualised, the community consultation process that occurred prior to the study commencing, sampling strategy, data sources and recruitment plan, and the inclusion criteria. It is preceded by an outline of the recruitment process, data gathering plan, data collection methods used, data analysis processes, and the rigour/trustworthiness strategies employed. The discussion is accompanied by a close examination of the cultural and ethical considerations pertinent to the study.

7.2 Explanation of The Case Study Design and Conceptual Structure

This section explains the design of the instrumental case study that was undertaken, including information about the case and its conceptual structure. The rationale underlying decisions about the design is given.

7.2.1 Defining and Bounding the Case

In CSM, the case requires definition and delineation of clear boundaries that are based on its characteristics, and that are dependent on place and time. For example, in this study the case focused on tamariki/children and their whānau/families who experience poverty in the context of their everyday lives (e.g., home, school, neighbourhood, city). However, it did not include other unrelated neighbourhoods, people, groups, or services that they were not directly involved with or that did not relate to the focus of the study. Bounding the case in this way allowed for the case to be the focus of study and to be distinguished from other phenomena (Stake, 1995). In this case study, each case was characterised as having the following features:

- A neighbourhood in a city in Aotearoa NZ in 2021-2022 with high levels of SED where tamariki/children aged 10-13 years were living and experiencing material poverty (Exeter et al., 2017; Perry, 2019a; Salmond & Crampton, 2012b).

- The whānau/families of the tamariki/children and other important adults who supported their participation.
- The organisations and institutions in the neighbourhood/community that provided interventions that aimed to alleviate the tamariki/children's material disadvantages in ways that impact their participation.

Based on the literature reviewed for the study, in particular that related to the Aotearoa NZ context, poverty was conceptualised broadly in a multidimensional sense allowing for definitions such as material, rights-based, and capability constructs (Exeter et al., 2017; Perry, 2019a; Salmond & Crampton, 2012b).

The age range of the tamariki/children (10-13 years) was chosen for the case as this is a stage of life when tamariki are increasingly involved in occupations outside of the home and school (Case-Smith, 2015; Cronin, 2016a, 2016b). This stage of childhood also involves developing cognitive capacities that were expected to enable the child participants to fully engage with the study by providing their in-depth insights about the issue (Case-Smith, 2015; Cronin, 2016a, 2016b). In Aotearoa NZ, a child at this stage of life is at the intermediate to early high school stage in their schooling (NZ school years 7-9), where attendance at school is compulsory until the age of 16 years (Ministry of Education, 2022), where children must be under the supervision of adults until the age of 14 years (New Zealand Government, 2022), can be held criminally accountable for breaches of law from the age of 10 years (New Zealand Government, n.d.), and begin to enter part-time paid work (Shi, 2024).

7.2.1.1 Number of Cases.

For this research, two cases were employed, each involving a different urban neighbourhood in the same city and which met the case study definition above. The two case studies, while providing for the unique and particular insights gained from each case, also enabled an instrumental design to be used that could explore the phenomenon in an in-depth way, with breadth and diversity of experiences, and provide for cross case analysis.

7.2.2 Conceptual Structure of the Case Study

The conceptual structure in a qualitative case study is developed prior to undertaking the research. It "sharpens the focus" of the study, and lays out the researcher's

existing understandings, providing “conceptual bridges” (Stake, 1995, p. 15) that show how these understandings relate to well-thought-through decisions about the research methods to be used. The conceptual structure is based on the research question. It uses issue statements or issue questions that focus on understandings surrounding the research question, and that are informed by previous knowledge and experiences (Stake, 1995). In addition to bringing focus and clarity, the conceptual structure provides further boundaries to and organisation for the research, an important function given the complexities often present in a case (Leadley et al., 2024).

The conceptual structure for my case study research was key to guiding the research methods and was informed by the findings of the systematic review reported in Chapter 4. Issue statements relating to the research question were developed from the recent review of the literature conducted for the study, from my personal experiences of working in the poverty space, continued immersion in the pertinent literature, all of which subsequently drew attention to the key concerns to be addressed by the study (Stake, 1995). Topical information questions were then derived from the issue statements, reflecting the specific information that would help to describe the cases and help to inform the issue statements. Topical information questions subsequently informed the choice of data sources and data collection methods (Stake, 1995). The conceptual structure, including the research question, issue statements, topical information questions, data sources, and data collection methods is outlined in Table 7.1 below.

7.3 Research Methods

This section describes and justifies the methods employed within the case study. It explains consultation, the selection of cases, sampling (or selection of informants and data sources) and recruitment, informed consent, and data collection methods. The data analysis process is also explained. Strategies that supported rigour are discussed, and ethical considerations described.

7.3.1 Relationship-based Community Consultation

Following the initial design of the case study, consultation was conducted with a number of organisations with whom I had relationships that work with communities experiencing high deprivation and who support whānau/families living in poverty.

These relationships had been established through my time spent conducting a previous master's study in one of these communities/neighbourhood, my roles in a governance capacity with a local neighbourhood community centre, and through my role as an educator supervising whakaora ngangahau/occupational therapy student projects with these neighbourhood organisations. The relationships enabled the study to be conducted in these neighbourhoods, supporting buy-in from the key organisations in the neighbourhoods that helped facilitate recruitment of participants and hosted data collection hui (meetings). Consultation for this study consisted of seeking feedback on the aim and design of the study from people within the neighbourhoods, and including Māori academic health professionals and staff from Māori and Pasifika organisations. Consultation helped to refine the study design by bringing further attention to the need for sensitivity on the topic (e.g., avoid whakamā⁶/shame for participants, ensuring non-judgemental views preparatory to conducting the study), and supported me to address cultural considerations (e.g., use of tikanga⁷ Māori) and taking a strengths-based approach (e.g., affirming the efforts to cope by tamariki and whānau/families).

7.3.2 Case Selection and Access

The primary consideration when selecting a case is to gain an understanding of the case and its unique qualities, or to learn from the case more about the phenomenon of inquiry (Stake, 1995, 2006). Additionally, access to people, places, and spaces in each case requires specific permission from those involved, with special attention paid to those faced with vulnerability or for tamariki/children. Accessing participants within a case should also ensure participants' anonymity and privacy and requires reflexivity and sound ethical conduct on the part of the researcher throughout the study (Stake, 1995).

The cases were selected, in the first instance, on the basis of a fit with the case definition (i.e., neighbourhoods with high levels of socioeconomic deprivation located in the city where the study occurred). This fit meant participants within the cases were likely to have lived experience of the issue and that they would be well placed to

⁶ Whakamā is a Māori term meaning shame or embarrassment (Moorfield, n.d.).

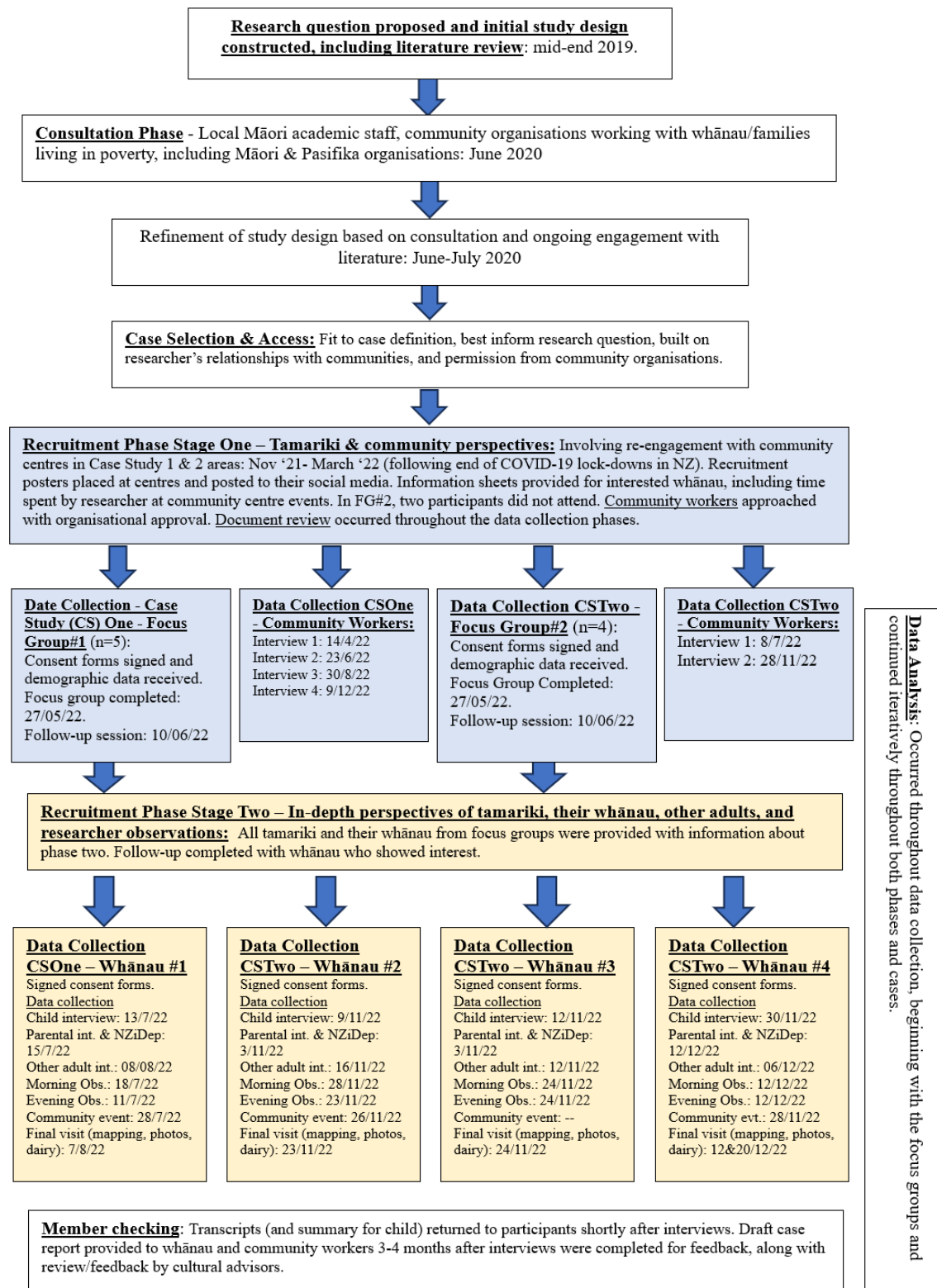
⁷ Tikanga is a Māori concept that involves the correct procedure, rules, processes, protocols required in social encounters, and that are often customary to a Māori community (Moorfield, n.d.).

inform the research question, given the case study was instrumental in design. Initially, three cases were planned for the study, but feedback from the ethics committee was that the scope was too large for a PhD project (e.g., too many participants involved), so the number of cases was reduced to two. Subsequently, I identified two neighbourhoods in the city that matched the case criteria.

A complete summary of the study process and the timeline (that helps show the boundedness of the case), are provided in the flow chart in Figure 7.1 below.

Figure 7.1

Research Methods Flowchart



Note. The blue colour denotes Stage One and yellow denotes Stage Two recruitment and data collection.

7.3.3 Sampling Strategy: Data Sources and Recruitment Plan

The sampling strategy and identification of data sources was guided by the topical information questions in the conceptual structure. The conceptual structure supported consideration of the informants and data sources that could best provide the specific information sought. Participant sampling was purposive, in that tamariki/children and whānau/families and community workers were chosen on the basis that they met the inclusion criteria and were best able to shed light on the phenomenon being studied (Simons, 2009; Stake, 2006). Table 7.1 below overviews the data sources identified as relevant to informing the topical information questions.

The recruitment of participants (and data collection) took place in two stages. Stage One aimed to gain an overview of tamariki perspectives, along with the perspectives of people within the neighbourhood organisations. These individuals were identified based on my extensive networks with and knowledge of the government and organisations active in the neighbourhoods studied (e.g., suggestions by leaders in community organisations). Stage One supported recruitment for Stage Two, which aimed to gain in-depth perspectives about tamariki participation from the perspectives of tamariki, their whānau, other adults who played a key role in supporting the participation of those tamariki, and from my observations of their participation. Refer to Figure 7.1 Research Methods Flowchart above for details of how participants were approached and recruited within each of these stages. The inclusion/exclusion criteria, recruitment process and informed consent processes are explained in more detail below.

Table 7.1

Conceptual Structure: Relationships Between Issue Statements, Topical Information Questions, and Data Sources.

Research Question: What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
1. Tamariki/children's patterns of participation in occupations, their potential and wellbeing/hauora are shaped by their parent/s and whānau/family they live with (e.g., their cultural understandings, values, habits, own participation experiences).	I. What are the demographics of the tamaiti/child's parent/s? (e.g., age, gender, employment status, educational background, whānau/family income, health status, number of and age of persons living in the house). Also access to transport, parental ethnicity, and parents' interests/leisure occupations/activities outside of work.	I. Parent/s (Focus group, Stage 1), & Individual parental interviews - Stage 2).
2. Tamariki/children participate in occupations according to their age, gender and culture. These types of occupations include ADLs, productivity (school/work), and play/leisure.	<p>I. Demographics: What is the tamaiti/child's age, gender? Do they have any health problems/developmental delays or learning difficulties? What is their ethnicity/culture?</p> <p>II. What specific occupations (school/work activities of daily living, leisure/play) does the tamaiti/child-participant engage in?</p> <p>III. How does this tamaiti/child engage in occupations? (e.g., where, with whom, when, how often, quality of engagement).</p>	<p>I. Parents. Focus group demographics. Interviews.</p> <p>II. Tamariki and tamaiti/child, parent/s. Focus groups. Interviews. Photos.</p> <p>III. Tamariki and tamaiti/child, parent/s, other adults. Focus groups. Interviews. Maps.</p>

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
3. Tamariki/children's potential is relevant to their age, gender, culture, and occurs dynamically across the lifespan.	<ul style="list-style-type: none"> I. Does the tamaiti/child view their occupations as age appropriate? II. Do they have any health conditions impeding their development? III. What are the factors that support or inhibit a tamaiti/child's potential? 	<ul style="list-style-type: none"> I. Parent/s, and tamariki, tamaiti/child. Interviews. II. Observing tamaiti/child in their home and neighbourhood. Parent/s, other adults. Interviews. III. Parent/s, and tamariki, tamaiti/child. Other adults. Focus groups. Interviews.
4. Hauora/wellbeing can be defined differently according to age (e.g., tamariki/children), an adult, or by culture.	<ul style="list-style-type: none"> I. How does the tamaiti/child define and rate their hauora/wellbeing? II. How does the tamaiti/child's parent/s define and rate their hauora/wellbeing? III. Are there any cultural factors influencing the tamaiti/child's hauora/wellbeing? IV. What are the factors that support or inhibit a tamaiti/child's hauora/wellbeing? 	<ul style="list-style-type: none"> I. Tamariki, tamaiti/child. Focus groups. Interviews. II. Parent/s. Interviews. III. Focus groups. Tamariki, parent/s, other adults. Interviews. Observing tamaiti/child in their home and neighbourhood. IV. Focus groups. Tamariki, parent/s, other adults. Interviews. Observations. Photos.

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
<p>5. Tamariki/children's occupations are patterned into habits, routines, and rituals. Habits are responsive to their roles and to the layout of their physical (e.g., physical features of neighbourhood, home or school; weather), environmental (e.g., school curriculum, community social capital, governmental supports), societal patterns of time use (e.g., school hours, cultural norms), and other people in their environment (e.g., tautoko/support and increased access to resources that support a tamaiti/child's participation in occupations, guidance/mentoring, manaakitanga, whanaungatanga).</p>	<p>I. What are the tamaiti/child's daily and weekly routines? (e.g., how ADLs are performed (steps/sequence of activity) where, when, with whom; daily, weekly, annually, seasonal, specific habits, routines, rituals).</p> <p>II. How are the tamaiti/child's patterns of occupation coordinated with other members of the household/peer groups/community?</p> <p>III. How do features of the physical environment shape routines (e.g., shared bedroom, perception of the neighbourhood (e.g., is it un/safe), proximity of places where occupations are performed)?</p> <p>IV. What are the tamaiti/child's roles, responsibilities?</p> <p>V. What are the whānau/family rituals?</p>	<p>I. Tamaiti/child, parent/s, and observing tamaiti/child in their home and neighbourhood. Weekly diary.</p> <p>II. Parent/s. Focus groups. Interview. Weekly diary. Observations.</p> <p>III. Observations. Focus groups. Tamaiti/child, parent/s, and other adults. Interviews. Mapping activity, (focus groups) and with tamaiti/child and whānau/family.</p> <p>IV. Focus groups. Tamaiti/child, parent/s. Interviews. Observations.</p> <p>V. As above.</p>

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
<p>6. Resources (i.e., physical, social, geographic, cultural, institutional, and temporal) will influence (i.e., constrain or afford) a tamaiti/child's patterns of participation in occupations, their potential (e.g., what is tamaiti/child good at and enjoys, their aptitudes, diversity of social networks) and hauora/wellbeing.</p>	<p>I. What are the resources (physical, social, cultural, institutional) that are available to the tamaiti/child-participant that support their engagement in occupations, their potential and hauora/wellbeing?</p> <p>II. What are the resources that are needed for the tamaiti/child to engage in occupations, realise their potential and hauora/wellbeing?</p> <p>III. Are there occupations that the tamaiti/child would like to do but currently does not do, or would like to do more often?</p> <p>IV. Are there resources that the tamaiti/child needs, in order to support their potential and their hauora/wellbeing, that they are missing out on?</p> <p>V. What resources might better support the tamaiti/child's patterns of participation in occupations, their potential and hauora/wellbeing?</p>	<p>I. Tamaiti/child, parent/s, other adults, and community agencies. Focus groups. Interviews. Observations. Documents/websites.</p> <p>II. Tamaiti/child, parent/s, other adults, and community agencies. Focus groups. Interviews. Photos. Observations. Documents/websites.</p> <p>III. Tamaiti/child, parent/s and other adults. Focus groups. Interviews.</p> <p>IV. Tamaiti/child, parent/s and other adults. Focus groups. Interviews. Observations.</p> <p>V. As above.</p>

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
<p>7. Poverty constrains tamariki/children's patterns of participation in occupations, their potential and hauora/wellbeing both directly (i.e., resources and environment available such as house, transport, school, facilities for recreations in the community) and indirectly (i.e., income available for food, transport, recreations etc.).</p>	<p>I. What is the whānau/family's income? (Use poverty line of <60% of median NZ income: combined household income, gross, BHC).</p> <p>II. What is the residential area the whānau/family live in (area level deprivation, using NZiDep questionnaire; focus group demographics.)</p> <p>III. What is the level of individual deprivation the whānau/family is experiencing? (Use NZiDep questionnaire.)</p> <p>IV. How does a lack of income directly (i.e., missed opportunities) impact on the child's participation in, and patterns of occupations?</p> <p>V. How does a lack of income indirectly (i.e., lack of resources/deprivation) impact on a child's participation in, and patterns of occupations?</p> <p>VI. What impact is this having on the tamaiti/child's potential/aspirations (e.g., what do they want to be or what do they see as possible for them in the future) and hauora/wellbeing?</p>	<p>I. Parent/s. Interview.</p> <p>II. Parent/s – using NZiDep area measure with whānau/family residence location, observations.</p> <p>III. Parent/s – using the NZiDep questionnaire and focus group demographics. Other data about deprivation gleaned from interview with parent/s, or other adults. Observations of home and neighbourhood (e.g., lack of resources, type of neighbourhood/state of environment).</p> <p>IV. Parent/s, tamaiti/child, other adults. Interviews. Maps. Observations.</p> <p>V. As above.</p> <p>VI. Parent/s, tamaiti/child, other adults. Interviews. Observations.</p>

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA SOURCES AND DATA COLLECTION METHODS
8. Tamariki/children and their parent/s and whānau/family exert agency in relation to their patterns of participation in occupations, potential and their hauora/wellbeing.	<p>I. In what ways does the tamaiti/child cope with their circumstances (e.g., enhance occupational participation, identity, or potential and hauora/wellbeing)?</p> <p>II. In what ways do the parent/s and whānau/family cope with their circumstances?</p> <p>III. What supports for the tamaiti/child and their whānau/family are provided by the local community or the government (i.e., what do they utilise, or are aware of, reasons for avoiding)?</p>	<p>I. Tamariki, tamaiti/child, parent/s, other adults, community agencies. Focus groups. Interviews. Observations. Documents/websites.</p> <p>II. As above.</p> <p>III. As above.</p>

7.3.3.1 Inclusion Criteria.

Inclusion criteria for the tamariki and their whānau/family for both the focus groups (Stage One) and the in-depth data gathering (Stage Two) were:

- Living in a neighbourhood with high deprivation as defined by the NZDep (Salmond & Crampton, 2012b) or the NZ IMD (Exeter et al., 2017), checked by matching their home address with the NZDep or NZ IMD databases.
- Income: Living in material poverty/hardship (e.g., parent/s on a low income as defined by a New Zealand income poverty measure (i.e., less than 60% of the 2021 NZ median income, net, and from all sources of income, BHC deducted, and adjusted for household type) (Perry, 2021).
- The child was attending a low decile school (e.g., decile 1-4 out of 10) (Ministry of Education, 2022b).
- English language was the primary language spoken in the home.

The process used to ensure that whānau met the inclusion criteria occurred within the recruitment process (i.e., community workers discussions with whānau, self-recruitment posters), and the whānau reading through the information sheet and discussing the study with me (e.g., answering their questions, checking criteria) either face-to-face or via phone.

Inclusion criteria for community workers in Stage One were:

- Working with whānau in the chosen case study neighbourhoods.
- Have conversational English.
- Engaged in efforts to reduce poverty's effects on whānau.
- Experiences of supporting tamariki participation that would help inform the study's research question.

Inclusion criteria for other adults in Stage Two who were directly supporting the tamaiti/child in their occupations were:

- Had a role in providing support for the tamaiti/child's occupations.
- Have conversational English.
- Were nominated by the whānau as suitable participants.

As English is my primary language, conversational English was one of the inclusion criteria so that there were no significant language barriers to conducting the research. There were no exclusion criteria on the basis of ethnicity, gender, or health status. However, children with a significant disability were not eligible for inclusion in the study as one of the primary aims was to understand the issue of living in poverty. The presence of severe physical and mental disability would have added a significant, complicating factor to be accounted for in the findings.

The total number of participants sought for the study across the two case studies was 5-6 tamariki per focus groups, 1-2 community workers from each case (in Stage One), and 1-2 tamariki drawn from each focus group and their parents/whānau, and 1-2 other adults from each whānau (in Stage Two of the study). (Refer to Appendix K: Table detailing the number, type, and location of participants in the study.)

7.3.3.2 Recruitment Process.

Through my prior networking, key contacts within organisations in each of the two neighbourhoods agreed to support access to the case, including assistance with recruitment to the study, providing a location for the first stage of data collection—the focus groups. These contacts within each organisation were also pivotal in identifying staff (community workers) who played a role in supporting tamariki/children's participation and might be recruited, and who I approached in each neighbourhood/case. Community workers were initially approached by email or phone contact. Their views were sought in order to provide a broad perspective about poverty issues, and the current interventions that support tamariki and whānau in their community.

As explained previously, recruitment occurred through my established connections with leaders within local neighbourhood organisations who were working or who have worked with tamariki and their whānau living with poverty. Specifically, Stage One of the study exploring tamariki and community perspectives, initially involved meetings/hui with representatives from these organisations in the locations of the two case studies to discuss the research and provide recruitment materials (Refer Appendix L: Information Sheet – Community Organisation: Recruitment; and Appendix M: Community Recruitment Sheet – Participation Selection Criteria). Following this,

information sheets for tamariki and adults were provided to neighbourhood organisations (e.g., community centres, schools) for distribution (Refer Appendix N: Information Sheet for Tamariki/Children Discussion Group; and Appendix O: Parental Information Sheet (Focus/Discussion Group)), along with study posters (Refer Appendix P: Recruitment Poster) placed strategically within the organisations to foster recruitment and self-selection by whānau and their tamariki into the first phase of the study (focus groups). I also spent time helping out with specific activities at the neighbourhood community centres (e.g., helping with free food distribution) speaking to members of the community about the study, and community workers assisted in recruitment by actively approaching members of their community who showed an interest in the study.

For Stage Two, involving in-depth data gathering with tamariki/children, their whānau and other adults, and my observations in the field, one or two tamariki from each of the focus groups and their whānau were invited to take further part in the study based on their ongoing interest to participate. Tamariki participation was based on their assent, parental/guardian consent and their ability to best inform the research question (Refer Appendix Q: Information Sheet for Tamariki/Children Second Stage of Study; and Appendix R: Parental Information Sheet (Second Stage of Study) – Parent/s). Other adults who were directly supporting the tamaiti/child in their occupations (e.g., teacher, church minister, after-school programme staff) in this in-depth stage of the study were recruited after nomination by the tamaiti/child and their whānau (Refer Appendix S: Participant Information Sheet – Other Adults).

7.3.3.3 Informed Consent.

Stage One initially involved gaining access to interviewing community workers/organisational representatives (e.g., youth worker, school principal, neighbourhood community centre managers) by seeking the signed consent from their organisation, typically their direct manager (refer Appendix T: Permission for Researchers to Access Organisations, School and Staff) along with the informed consent by the staff member/community worker (refer Appendix U: Participant Information Sheet – Organisational Representatives; and Appendix V: Consent Form – Organisational Representative).

In terms of the focus groups, after it was established by the researcher (i.e., in a phone conversation with the nominated parent) that the whānau met the inclusion criteria and that their tamaiti/child would like to participate in the focus group, parent/s completed the informed consent process, and the focus group demographic questionnaire (Refer Appendix W: Parent Consent Forms – Focus/Discussion Group & Consent: Release of Creative Works and Images: 1st Stage of Study; and Appendix X: Demographic and Health Questionnaire – Tamaiti/Child Focus/Discussion Group) and supported their tamaiti/child to provide informed assent (Refer Appendix Y: Child Assent Form – Focus/Discussion Group: 1st Stage of Study). Agreement to conduct the focus group at each of the community centres was established with the managers, along with suggesting a suitable staff member to assist in each of the focus groups. The assistants were provided with basic information and training about the group and completed a confidentiality form (Refer Appendix Z: Confidentiality Form – Focus Group Assistant).

For the second, in-depth stage of the study with tamariki, their whānau and other adults (or stage 2) parent/s completed the informed consent process, along with supporting informed assent by the tamaiti/child (Refer Appendix AA: Parent/Guardian Consent for Tamaiti/Child Participation, and Consent Form: Release of Creative works and Images – Stage 2 of Study; and Appendix BB: Assent Form – Tamaiti/Child: Stage 2 of Study) and for parental interviews (Refer Appendix CC: Consent Form – Parent/Guardians: Stage 2 of Study). The parent/s and tamaiti were provided with choice about which data gathering activities they were willing to take part in, and where these would occur, along with times and dates of their choice. I provided the supporting adult/s, who were invited by the tamaiti/child and their parent/s to participate, with an information sheet by email, along with an opportunity to ask me questions about the study before providing their informed consent to participate (Appendix DD: Consent Form – Other Adults: Stage 2 of Study).

7.3.4 Data Gathering Plan

Formulation of a detailed data gathering plan is recommended before commencing a case study research project (Stake, 2006; Yin, 2018). For this study, development of the plan initially involved detailing the conceptual design (including topical information questions that guided data gathering, refer to Table 7.1). Following, the plan was

developed to provide details of community consultation and recruitment processes, and protocols for the storage of data and the safety of the researcher and participants (e.g., as social distancing requirements related to the COVID-19 pandemic was still current at the time). Plans and protocols for the focus group, interview, and observations were stated. Details about organisation of equipment needed during data collection were documented (e.g., focus group materials, audio recording devices, cameras, maps etc.). Timelines for data gathering were outlined. Ethics approval details were incorporated. (Refer research protocols: Appendix EE: Focus Group H&S Protocol; Appendix FF: Home Observation Protocol; Appendix GG: Community Observation Protocol; Appendix HH: Photoelicitation and Creative Media Protocol; Appendix II: Researcher Safety Protocol; Appendix JJ: Sensitive Data Safety Protocol; Appendix KK: Type, Location and Duration of Data Gathering.)

7.3.5 Data Collection

Qualitative CSM uses a range of methods for data collection such as interviews, observations, and document review (Leadley et al., 2024; Merriam & Tisdell, 2016; Stake, 1995, 2006, 2010). The conceptual structure guided the types of data gathering methods that would be used and who/where the data would come from (refer Table 7.1). When collecting data on sensitive topics (e.g., material poverty) and when gathering data with tamariki/children, particular care and sensitivity is required such as careful use of language, being attentive to assenting processes, and researcher reflexivity (Graham et al., 2015; Willumsen et al., 2014). Data collection was completed in two stages, with the first stage using focus groups and the whānau demographic questionnaires, along with community worker interviews. The second stage occurred during home/community visits with four tamariki (one from case one, and three from case two, less from case one due to recruitment difficulties) and their whānau, and other key adults who played a role in supporting the tamariki/children's participation, and is detailed below. Document review occurred in both phases and throughout the study; details of documents reviewed are provided below.

7.3.5.1 Tamariki and Community Workers' Perspectives (Stage One).

Semi-structured interviews were conducted with community workers from each of the neighbourhood community centres. These were conducted at a venue of the participant's choice (e.g., an office at their workplace) and were aimed at gaining their

views on the poverty related issues effecting tamariki/children's participation in occupations. These interviews also explored community worker's views about the current supports and funding in place to facilitate participation, and suggestions for improvements to existing supports or for additional interventions. (Refer Appendix LL: Indicative Questions for Interviews – Organisational Representatives.) Interviews were digitally audio recorded and transcribed verbatim by the transcriptionist (S. Nayar). (Refer to Appendix MM: Confidentiality Agreement: Transcriber.)

This initial stage of the study involved conducting a focus group in each neighbourhood community centre, with four to five tamariki participants per group. The focus groups were conducted at two community centres, each respectively located in one of the selected neighbourhood/case study areas. Before data were gathered with participants, a demographic questionnaire, completed by the tamariki/children's parent/s, was used to gather information about family income, composition of the household, child's age, gender, health status/allergies, and the school they attended. (Refer to Appendix X: Demographic and Health Questionnaire: Tamaiti/Child: Focus/Discussion Group.) Focus groups aim to understand the views of a select number of people (e.g., 5-10 participants/group) on a specific topic, through well designed questions, led by a skilled interviewer/moderator in a safe environment. Focus groups can provide a broader range of views on a topic compared with single interviews (Krueger & Casey, 2015). When conducting focus groups with young people and exploring sensitive issues (e.g., poverty) careful thought should be given to the following: creating a safe space (e.g., familiar environment, support from family, informal atmosphere, reassurance, inclusion of food); use of fun activities; keeping the age range similar (i.e., within 2-3 years); using age appropriate and non-stigmatising questions; providing skilled moderation (e.g., active listening, respect, sensitivity, humour, being flexible); and keeping the session length to under 1-hour (Adler et al., 2019; Gibson, 2007; Krueger & Casey, 2015; Ponizovsky-Bergelson et al., 2019).

For the focus groups in the current study, careful consideration was given to the design process including aspects such as the location (i.e., community centres familiar to tamariki and their whānau), and day and time (i.e., held after school and during the week so as to minimise disruption to the family's schedule). There was a deliberate attempt to ensure the group was pitched at an age-appropriate level, felt comfortable

and safe, and reduced the power imbalance between myself as an adult researcher and the tamariki (Adler et al., 2019; Krueger & Casey, 2015; Vogl et al., 2023) through the types and design of questions (i.e., age appropriate, sensitively worded), engagement of a focus group assistant known to the tamariki, conducting the focus group in a community centre they were familiar with, and appropriate group processes (e.g., a clear group structure, child friendly/fun activities such as talking and drawing-based data gathering, and inclusion of food/drink). Cultural safety was important to ensure all tamariki felt comfortable. As the group was conducted in an Aotearoa context, with many participants being Māori, tikanga processes such as mihimihi, karakia, whanaungatanga⁸ were used to help the process (Hudson et al., n.d.; Moorfield, n.d.; Opai, 2021).

Questions posed in the focus group related to key topical questions in the case study conceptual structure. Discussion focused on gaining insights from the tamariki such as their favourite occupations (i.e., occupational choice and identity), their weekly activities (supported by completing a weekly timetable as a group) and the location and frequency of the activities, and transport used to get to the activities (supported through mapping the activities onto a large map of the city for the group). Tamariki were also asked about the supports available to them, areas of restricted participation (i.e., patterns of and participation in occupations), and their views on maintaining their health and wellbeing, and their life dreams. (Refer Appendix NN: Facilitator's Focus Group Pack, for full details on the administration and process involved in conducting the focus groups.) After the first focus group in case one, and upon reflection about the challenges participants found in reading and drawing onto the map as a group, the mapping activity format was changed. For the focus group in case two, each participant was encouraged to draw their own map onto a large A3 sheet of paper. (Refer Appendix OO: Example of Anonymised Hand Drawn Map by Participant in Focus Group Two.)

After 2 weeks, a follow-up group session (Krueger & Casey, 2015) was conducted with the focus group participants at each of the neighbourhood community centres, where

⁸ Mihimihi is a process of greeting and acknowledging people in an initial encounter. Karakia is a Māori ritual, chant, prayer used to start and end meetings, activities. Whanaungatanga involves a process of relationship building and connection (Moorfield, n.d.).

a summary of the group's results was presented in order to receive feedback and clarify specific data (e.g., types and frequency of certain occupations). As the initial focus group was conducted during the COVID-19 period in NZ (i.e., limits on indoor gatherings), a risk management plan was developed (New Zealand Government, 2022, Oct 10). (Refer Appendix PP: AUT HSW Risk Assessment Data Collection Plan: COVID-19; and Appendix QQ: Information Sheet – Community Organisation: COVID-19 Precautions.)

The focus group sessions were digitally audio recorded to assist with analysis. All interviews were reviewed and due to the dynamic nature of the interactions in the focus groups, I was only able to transcribe audible elements verbatim.

7.3.5.2 In-depth Perspectives of Tamariki, their Whānau, Other Adults, and Research Observations (Stage Two).

In the second stage of the study, data gathering consisted of an invitation for one or two tamariki and their whānau from each focus group and case/neighbourhood (based on their assent, parental/guardian consent, and their ability to best inform the research question) to take further part in the study exploring the key topics of the research. Data gathering methods were developed from the conceptual framework (i.e., issue statements and topical information questions, refer to Table 7.1). Tamariki were able to select from a choice of child-friendly data collection methods (photoelicitation, daily occupations diary, semi-structured interview). Data collection with the tamariki occurred alongside observations in the home and community, and an interactive whānau mapping activity detailing the locations and frequency of their occupations outside their home, and the modes of transport used to access those occupations (Barker & Smith, 2012; Carter & Ford, 2013; Leadley, 2019). These research activities were detailed on a 2 week timetable for the parent/s and child's record and adjusted as needed to suit any changes to their routines/preferences. Generally, this stage of data gathering provided more in-depth understandings about poverty's effect on the tamariki/children's patterns of participation in occupations and generated information from a greater number of perspectives, than did the data from the focus groups.

7.3.5.3 Semi-Structured Interviews.

Interviews are a cornerstone of qualitative research, providing an opportunity to co-construct and provide rich data from the perspectives of the participants (Rossman & Rallis, 2017), and can complement observation methods in case study research (Stake, 1995, 2010). However, interviews require careful planning such as pre-planned questions, and effective interviewer skills (e.g., active listening, ability to build rapport). Semi-structured interviews (or an interview guided approach) are most effective if open-ended questions and naturalised conversation styles are employed (Rossman & Rallis, 2017; Stake, 1995, 2010).

While many interview strategies used with adults are useful with tamariki/children (e.g., active listening, rapport building), specific considerations for tamariki are required. These include use of age-appropriate language/questions, less formality and more flexibility with the interview style. Interviews with children are often conducted in familiar and safe environments such as in the child's home and with the parent/s present. Consideration also ought to be given to addressing adult-child power dynamics by allowing the child to take the lead in discussions and paying attention to the child's non-verbal communication (e.g., body language). Interviews with children are helped by employing encouraging and affirming approaches (Ey, 2016; Ponizovsky-Bergelson et al., 2019). Additionally, in Aotearoa, cultural safety considerations are required in research including when working with tamariki and their whānau (e.g., tikanga as outlined below) (Hudson et al., n.d.).

For this study, age appropriate and sensitively worded interview questions were constructed (refer Appendix RR: Interview Questions for Tamaiti/Child/Participant). The interviews were conducted in a private space of the child and parent/s choice that was comfortable for them (e.g., home, neighbourhood community centre) and in a space adjacent to the parent/s or centre staff. A less formal and semi-structured interview style with an affirming and encouraging communication approach was used to enable the child to lead the interview, and which included culturally safe practices (e.g., for whānau Māori these included karakia, mihi mihi, or whanaungatanga). With whānau who identified as Māori, interviews also included selected use of Te Reo Māori, or the language of the whānau/family, such as greetings or key terms, as the

use of Te Reo can assist with establishing relationship and trust (Hudson et al., n.d.; Opai, 2021).

Semi-structured interviews (Creswell & Poth, 2018; Rossetto, 2014; Rossman & Rallis, 2017; Stake, 1995, 2010) were conducted with the parent/s at a time, date, and venue of their choice, and focused on their tamaiti/child's patterns of occupations and the supports for their participation in occupations, their potential and wellbeing (refer Appendix SS: Questions for Interviews with Parent/s). All parents elected to be interviewed in the whānau home. The other important adult/s chosen by the child, who supported them in their occupations, were interviewed at a time, date, and venue of their choice, with a focus on how they supported the tamaiti/child's participation in occupations, their potential and wellbeing (Refer Appendix TT: Questions for Other Adult Interviews). All interviews were digitally audio recorded and transcribed verbatim by the transcriber (S. Nayar). (Refer to Appendix MM: Confidentiality Agreement: Transcriber.)

7.3.5.4 Photoelicitation.

The use of creative research methods such as photography with tamariki/children has been acknowledged as having benefits. Photoelicitation can enable a child's perspective about what is important to them, supports greater depth and more authenticity about their views, can complement the interview process, and helps to address power dynamics by placing control and ownership with the child and their parent/s. It is also relatively easy to use, is less reliant on the child's verbal and literacy skills, and for the child it can be fun and engaging, and may develop new interests and skills (e.g., photography, creativity and reflection) (Barker & Smith, 2012; Bunting et al., 2016; Groundwater-Smith et al., 2015; Lomax, 2012; Nathan et al., 2023).

Photoelicitation has been used successfully to gain insights from tamariki/children's perspectives about occupational patterns (e.g., weekly routines) (Bunting, 2016), in the context of poverty (Leadley et al., 2020), and their views on the experience of poverty (Lomax, 2012). Challenges in using this method may include difficulties ensuring participant anonymity, providing adequate guidance and support, ensuring tamariki are credited for their work, and meeting copyright obligations; while also acknowledging this method is limited by contextual factors (e.g., time, place, cultural,

technology) (Barker & Smith, 2012; Groundwater-Smith et al., 2015; Nathan et al., 2023).

All tamariki participating in the second stage of this study provided their written, informed assent, along with their parent/s written consent, for their photos to be used in the study, including an explanation about copyright matters (e.g., how the photos would be used in the thesis/publications) and that their anonymity would be ensured. I provided each child with a disposable camera, provided the child and parent/s with a verbal and written explanation about its use and the process involved (i.e., to take photos of activities that were important to them, to seek permission of others if including them in photos, maintaining their personal safety during this activity). (Refer Appendix HH: Photoelicitation and Creative Media Protocols.) After the child had completed this task, I had the photos developed before giving them back to the child and parent/s to keep in a follow-up interview (audio recorded), where I asked them to explain the activities and context they choose to photograph and why it was important to them. (Refer Appendix UU: Photoelicitation Interview Questions: Tamaiti/Child-Participant.) All potentially confidential images (e.g., faces, names, other people) in photos were either removed or blurred to protect participant anonymity and the photos were credited with the person who took them.

7.3.5.5 Weekly Activity Diary.

Time use diary method (TDM) is well-established in social science and occupational science research, helping to understand people's behaviour and occupations in terms of temporal patterning and routines (Hunt & McKay, 2015; Orban et al., 2012; Paolisso & Hames, 2010; Ziviani et al., 2008). However, limitations with TDM include cross-cultural differences in conceptualising time, individual and cultural differences in reporting on activities, and shortcomings in a person's ability to accurately recall daily routines. Underreporting on irregular activities or those of shorter duration is noted as an issue, along with the absence of intimate, simultaneously occurring, and socially undesirable activities (Farnworth & Fossey, 2003; Hunt & McKay, 2012; Paolisso & Hames, 2010). While there are several approaches to time use data collection (e.g., observation, experimental sampling), the TDM collects time use data via a daily or weekly log entry or through interviews and has proven to be a robust approach (Paolisso & Hames, 2010; Ziviani et al., 2008). This method has been used successfully

in research exploring patterns of occupation, including for tamariki (Orban et al., 2012; Ziviani et al., 2008), and in exploring the influences of poverty on a child's patterns of occupation (Leadley et al., 2020). TDM is useful when complemented with interview methods and where a time-geographical approach is used (Farnworth, 2003; Orban et al., 2012; Ziviani et al., 2008).

In this study, a weekly diary was constructed and utilised that consisted of 7 days, Monday-Sunday, chronologically constructed (i.e., 6:00am-11:00pm), and with entries to describe the daily activities the child completed in a typical week, their locations, and who was involved in the activities. A similar diary had been successfully employed in previous research (Leadley et al., 2020). (Refer Appendix VV: A Young Person's Weekly Activity Diary.) Instructions on the weekly diary were provided for the child/participant and their parent/s, and the first day of the diary was filled in with me, both for guidance and to support consistency in how the diary was completed. The key parent was asked to support the child to complete the weekly activity diary. In a follow-up interview (audio recorded) with the child and their parent/s, the completed diary was reviewed (e.g., clarifying questions if any elements were unclear), along with a brief discussion about the child's weekly routines.

7.3.5.6 Mapping Activity.

The use of visual methods such as mapping in qualitative research to reveal geographic-spatial, temporal, and occupational aspects of phenomena is relatively novel, particularly so with tamariki. For example, hand drawn maps were used, alongside other methods such as focus groups to explore children's experiences of play and physical activity in low SES communities (Darbyshire et al., 2005). In another study, occupational maps were drawn by migrant adult participants to explore their constraints in occupational participation and their sense of identity (Huot & Laliberte Rudman, 2015). Occupational mapping was used in my earlier master's study to explore the location, frequency, and modes of transport to occupations for a tamaiti/child in the context of material deprivation (Leadley, 2019). Advantages of this method include providing contextual, spatial, and visual forms of data not easily gained from other methods. Mapping is complementary to other research methods. It provides an interactive and engaging process for participants (e.g., tamariki/children). The activity can help address power imbalances by placing choice and control with the

participant, and helps to reveal tacit, mundane, and routine aspects of occupations (Darbyshire et al., 2005; Huot & Laliberte Rudman, 2015).

The mapping activity was used in both stages of the study; that is, during focus groups and as part of in-home data collection, and included instructions and using a completed example. The mapping activity involved the use of a cartographic map of the city (changed to a hand drawn map for use only in focus group 2) where locations of key occupations and routes were marked out using a felt pen. Additional information was elicited through conversing with the tamaiti/child and their parent/s while they drew on the map, which was written onto post-it notes by the child and placed onto the map (e.g., details about occupations, forms of transport, and frequency of access). For inclusion in the thesis, all drawn maps were transposed using copying paper, with additional written and colour-coded details (i.e., names of places, scales, colour coding for occupations). After adjustments were made to anonymise the location of the whānau home, the copied maps were scanned for inclusion in the thesis. (Refer Appendix WW: Interview Questions for Tamaiti/Child-Participant and Whānau: Interactive Mapping Activity.)

7.3.5.7 Observations.

The use of observation as a data collection method is well-established in social science research (Guest et al., 2013; Watts, 2011). Observations are commonly used in CSM where a qualitative, interpretative stance often requires a participant observer approach, where the researcher is not only observing but engaged to a varying extent in the activities of the participant or group being observed (Merriam, 1988; Merriam & Tisdell, 2016; Stake, 1995, 2010). A participant observation approach, such as utilised in Stake's (1995) CSM, sheds light on the uniqueness and complexity of a case, enabling the observer to gain insights into participant experiences and capture information about routines, rituals, and naturally occurring activity that is contextualised. Observing can also provide insights into the reasons for people's actions, and can assist in confirming the quality of data collected from other methods, such as interviews, which are subject to inaccuracies due to participant recall or reluctance to discuss certain topics (Guest et al., 2013; Merriam, 1988; Merriam & Tisdell, 2016; Stake, 2010).

However, there are challenges and limitations to the observational and participant observational methods, such as the need to be sensitive to and monitor the observer-observed relationship, including the effects on participant behaviour when being observed. Additionally, complex confidentiality matters such as whether to reveal the researcher's identity in a group setting need to be managed, as well as deciding how best to record observations to inform the research questions (e.g., recall and accuracy, descriptive or interpretative records) (Guest et al., 2013; Merriam, 1988; Merriam & Tisdell, 2016; Stake, 2010).

The participant observation method was utilised in this study. It included time spent in the whānau/family home and involved my general observations during initial visits and during interviews at the home, and observations of specific activities conducted in the home (e.g., of the child and their whānau morning, afternoon/evening routines). Participant observations were also undertaken for one community activity in which the tamaiti/child and their whānau were involved. For all observations, these were agreed to by the tamaiti and their parent/s, were pre-arranged and planned, were time limited (so as not to be a burden to the whānau), and were conducted in a sensitive manner. In group/community settings, I acted as a guest of the whānau (e.g., attending as part of the audience and not revealing my researcher role to others in the group). After each session, I recorded my observations into my research diary and later onto a computer record as detailed descriptions of the setting, events, and activities, along with my personal reflections and interpretations in relation to the research question. (Refer Appendix FF: Home Observation Protocol; Appendix GG: Community Observation Protocol.)

7.3.5.8 Document Review.

Additional analysis of governmental policy, funding, and agencies, including NGOs, that supported the tamariki in the context of each case were completed in both phases and throughout the study. It involved examining publicly accessible agency websites and relevant documents or reports (Leadley et al., 2024; Merriam, 1988; Stake, 1995, 2006). The goal was to gain multiple perspectives about the research question and a contextualised and more informed understanding of the specific efforts that were being made to address the issues of poverty and its impacts on tamariki/children's participation in occupations. Examples of documents reviewed during this case study

included websites of the schools, community centres, and other NGOs in the neighbourhoods, and locally focused government statistics and police crime data reports.

7.3.6 Data Analysis

Qualitative case study research utilises analytical strategies such as direct interpretation, categorical aggregation, and interpreting correspondence or patterns (i.e., consistency under certain conditions, or for how disparate bits of information might link/relate to each other) (Stake, 1995). Direct interpretation involves examining a particular instance in a case and deriving meaning. Direct interpretation can also support description about the context of a case. Categorical aggregation consists of collecting a number of occurrences about something arising in the case and assigning them to named categories, with the aim that further meanings will emerge (Stake, 1995). Categorical analysis is somewhat akin to the process of thematic analysis (Terry & Hayfield, 2021; Terry et al., 2017), and to qualitative latent content analysis processes (Drisko & Maschi, 2016; Mayring, 2022; Stake, 1995).

7.3.6.1 Individual Case Analysis.

Data for each case were initially analysed separately in order to capture the uniqueness of each case, its context, to preserve the diversity of perspectives, and to reveal how each case helped answer the research question and key issue statements in the study, before a cross case analysis was completed (Stake, 2006). Practically, these forms of data analysis involved collecting and storing data in an efficient manner, making regular and reflexive observations in the field, recording these into a research diary, and immersion in the data (i.e., continued reading and reviewing of data sources). Specifically, within each case, data from each source (e.g., focus groups, individual interviews, mapping, photographs) was first examined (e.g., reading and reviewing data) to support a descriptive process. Direct interpretation was used in some instances to treat data descriptively. For example, to describe the actual organisation, or the layout of the neighbourhood or a home, or to describe the patterns of participation in occupations that occurred throughout the week, modes of transport, and frequency of access to these occupations (i.e., mapping data). A specific example involved when Jarad spoke about his need for social activity with his friends out of school, “once school finishes, I just hang around at my school”. My direct

interpretation was this encapsulated his routine and the opportunity to participate in this important occupation; thus, was discussed under the heading 'Hanging out at school' in his report. Additionally, my observations, alongside participants' reports, contributed to a rich description of the neighbourhoods studied.

In using the categorical interpretation analysis strategy, data were also coded and aggregated to form categories or themes. An example of this analysis came from what I observed about the degraded state of Riverfield's parks and playgrounds, "a lot of graffiti, rubbish, and broken glass littered throughout... unused tennis courts, with broken asphalt surfaces and unusable facilities". Alongside the reports of several parents, my observation was interpreted and categorised as a sense of risk and diminished opportunities for tamariki/children's participation in their neighbourhoods and ultimately led to case report headings such as 'Haven't Got Facilities For our Tamariki'. This interpretation was further supported by the community workers' repeated description about the high level of poverty, lack of resources, and risks in their neighbourhoods, and further evidenced by the document review (e.g., locally based government statistics and police crime data) that formed two related but distinct headings in each of the case reports of 'A Big Challenge is the Environment' and 'Day to Day Survival'.

Next, categories were explored across the different data sources to search for correspondence/patterns in relation to the research question (e.g., participation in occupations) (Leadley et al., 2024; Merriam, 1988; Stake, 1995). For example, in the first case study, the tamariki in the focus group and the first tamaiti/child interviewed displayed a pattern of spending time in sedentary occupations after school and while at home due to the lack of opportunities afforded to them arising out of a context of living in poverty. When completing the second case study, this pattern of sedentary time use remained consistent for the tamariki and under the same context (e.g., predominance for sedentary activity, after school and at home). Tamariki/children's time use was then further analysed, in each case, in terms of time spent in passive (sedentary) and active occupations across the week. Practically, this involved tallying time spent (hours/minutes) in activities throughout the week separately for each child who participated in stage two of the study, and the tamariki in both focus groups (collectively), and then displaying it in pie graphs. (Refer to Appendix XX: Example of

time use data table used to create individual pie graphs; and Appendix YY: Time use data table used to construct the cross-case focus group pie graph.)

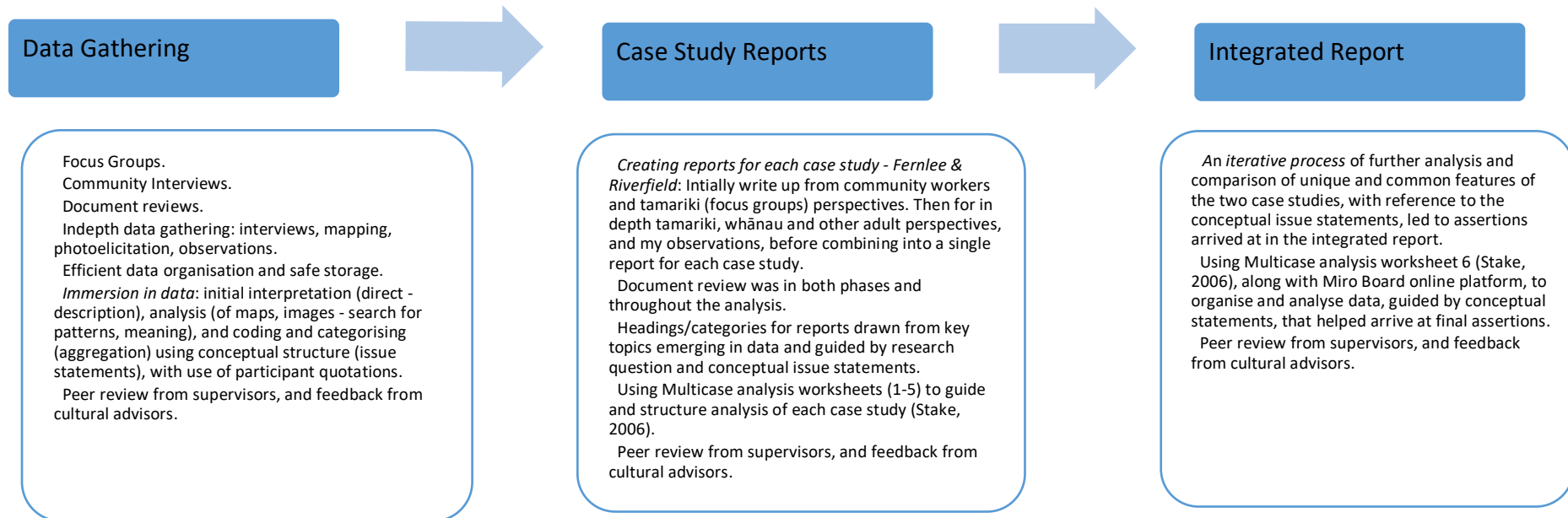
7.3.6.2 Cross-Case Analysis.

Once analysis was completed for both cases, it was written into two case study reports (Fernlee and Riverfield). Case reports provide a view of the case/s, the complexity and issues being examined and interpreted by the researcher in the natural settings in which they occur, and are based on the findings (Stake, 1995; 2006). Case reports are structured and include criteria such as a conceptual framework. They clearly define the case, have a narrative form, effectively integrate participant quotations, are sensitive to the multiple perspectives about the phenomenon being studied, and provide the reader with a vicarious experience (Stake, 1995, 2006). According to Stake (1995), case reports can take one of three forms: describe the case from a chronological or biographical perspective, or from the researcher's developing understanding of the case, or describing key elements in the case. The approach I took was to describe the cases in terms of the key elements, and to frame it in relation to the conceptual structure or issue statements in the study, as this aligns to the instrumental case study design used.

The two case reports are organised with the community perspective first, followed by the tamariki perspective (from the focus group), and then the individual tamariki and whānau, and other adults' perspectives. Headings in the reports were drawn from the language of the participants and represent key ideas or categories that were interpreted from the data. After the themes were constructed, consideration was given as to how they related to the issue statements in the conceptual structure and the research question, as not all emergent themes were in the issue statements, with some unexpected findings. For example, I had not anticipated how important the provision of resources for organisations at a local level could effectively support their efforts to enable tamariki/children's participation in occupations.

When the individual analysis process was completed for each of the two cases and case reports were written, a cross-case analysis was conducted. While two cases do not show a high degree of interactivity amongst cases, as with a higher number of cases, a smaller number of cases can provide useful insights into the phenomenon and

allow for the in-depth and unique nature of each case to be preserved (Stake, 2006). Cross-case analysis was guided by Stake's (2006) advice and worksheet resources, and practically arranged using an online thematic mapping platform (i.e., Miro Board). (Refer to Appendix ZZ: Examples of Stake's (2006) Worksheets 2-6 for Multicase Analysis; and Appendix AAA: Example of Miro Board platform used in final stages of cross-case analysis.) This phase involved an iterative process of further analysis through comparison of the two cases in relation to the conceptual structure and issue statements to form key assertions. Generating assertions about the cases is consistent with the instrumental nature of case study design. Assertions are statements or generalisations that are based on interpretations of the findings in the case study that help to answer the initial issue questions posed in the conceptual structure of the study (Stake, 1995). For example, in this case study, multidimensional poverty across both case studies was restricting tamariki/children's patterns, choices, and participation in occupations, leading to the assertion: Poverty constrains the choice and range of occupational opportunities for tamariki/children, both directly and indirectly. Refer to Figure 7.2 Data Analysis Process Flowchart Used in Case Study.

Figure 7.2*Data Analysis Process Flowchart Used in Case Study*

7.3.7 Rigour/Trustworthiness

In order that research is seen as trustworthy and useful, it needs to have processes that ensure its quality or rigour (Hammersley, 2023; Patterson et al., 2022; Stanley & Nayar, 2014). While the concept of rigour, or its equivalent terms in qualitative research such as trustworthiness, is contested and problematic (Patterson et al., 2022), one approach is to ensure research is reliable (consistent), valid (accurate) (Creswell & Poth, 2018) or credible, dependable, and transferable (Lincoln & Guba, 1986). To help ensure rigour, a well-planned and transparent research design includes ethical and cultural considerations; alignment between research aims, epistemology, and methodology; and acknowledgement of subjectivity (i.e., researcher influence) and the researcher's axiological position, along with recognising the inherent complexity of naturalistic qualitative research (Patterson et al., 2022).

For qualitative CSM, rigour/trustworthiness is typically achieved through triangulation of data sources (i.e., using different methods and theories to examine the topic), along with member checking or providing participants with the opportunity to examine and comment on all data collected from them and researcher interpretations of that data (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Simons, 2009; Stake, 1995, 2006). The use of multiple data collection methods such as interviews, observations, and document review was a key form of triangulation utilised in this study. An example is that when examining a child's level of participation in occupations, data were compared from interviews (child, parent/s, other adults), their weekly diary, family mapping activity, photo elicitation method, and my observations to reach the conclusions in the case report. Comparison of data with a number of different theories and evidence drawn from the extensive literature review to explain the findings was another form of triangulation used. For example, when reviewing the multiple, complex and intertwined poverty and non-poverty factors that were influencing a child's participation, potential, and wellbeing, I examined the data using occupational science, life course and transactional theory, resource and family stress theory, and capability theory.

While member checking is a commonly used process to support rigour in qualitative research and in CSM, the process is problematic, requiring careful planning and reflexivity (i.e., fit with the research design, epistemology and researcher axiology).

The process also needs to avoid unintended negative consequences, such as increased time/burden for participants or shame, to manage participant responses (e.g., how best to make changes/omissions asked for by participants), and to balance researcher-participant power dynamics, such as expectations of the researcher as expert and different levels of engagement by participants in the process (Motulsky, 2021).

The member checking process used in the Stage 1 focus groups involved conducting a follow-up discussion group, where a summary with non-identified information was presented back to the participants for feedback, along with provision of a written summary for the child and their parent/s with the option for them to provide further feedback. In Stage 2, member checking involved returning individual transcripts from interviews with adults (anonymised) to those participants, shortly after transcription was completed (e.g., typically several weeks after the interview). For the tamaiti/child, it involved providing them with an age-appropriate summary of the key content from the data gathering in which they were involved. After initial input from supervisors and cultural advisors (i.e., to help avoid any sensitive and culturally unsafe content), a separate, printed draft case report was returned to each whānau (approximately 3-4 months after the data gathering was completed), and with the choice on how to provide feedback being decided by the whānau (e.g., an in-person hui, by phone, email). A case report based only on the community workers' interviews was provided to each of the adults interviewed, by email, with an invitation to provide feedback. The stance I took (i.e., to honour participants' views and feedback), was to adopt all suggested changes provided by tamariki, whānau, other adults, and the cultural advisors. On the whole, the changes suggested by the participants were minimal. Details of the level of feedback, engagement by participants, and suggested changes are provided in a summary table (refer Appendix BBB: Table of Member Checking Process and Responses).

Challenging assumptions and exploring alternative explanations for findings, such as a strengths-based rather than deficit view of child poverty, was another form of rigour or credibility used in the study (Merriam & Tisdell, 2016; Stake, 1995, 2006). Ensuring the study's findings provided a sufficient level of participant quotations adds to its trustworthiness, as the reader is able to compare my interpretations with the participants' views on the issue (Creswell & Poth, 2018; Patterson et al., 2022). Writing

the case reports in a narrative style with tentative assertions or conclusions reached helps to enable naturalistic generalisations, or the way readers can arrive at their own understanding of the case/s, providing for a vicarious experience for the reader and further adding to trustworthiness and transferability of the study's findings (Creswell & Poth, 2018; Stake, 1995, 2006). Additional strategies to achieve rigour included an auditable trail of data gathering and decision-making (i.e., maintaining all research documents in an organised process), a reflexive approach as a researcher such as the use of a researcher diary, regular supervision (peer review), and gaining cultural advice (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Patterson et al., 2022; Stake, 1995, 2010).

7.3.8 Ethical and Cultural Considerations

Essential ethical considerations in any research include ensuring participants provide their informed consent to participate and that their confidentiality is guaranteed (Alderson & Morrow, 2011; Graham et al., 2013; Graham et al., 2015). For tamariki/children under the age of 18 years (or under the age of 16 years in NZ), consent involves the written approval from their parent/s and the ongoing assent of the child (National Ethics Advisory Committee [NEAC], 2019). In order to protect tamaiti/child participants from harm it was necessary for me, as a researcher, to ensure I was mindful of their ongoing assent in case they wished to withdraw from the study. I used age-appropriate language and child friendly research methods, and took a reflexive approach to my interactions with them given the power dynamics between myself as an adult and a researcher and the tamariki (Alderson & Morrow, 2011; Graham et al., 2013; Graham et al., 2015). I checked for their ongoing assent throughout each step of the data gathering (e.g., asking for ongoing verbal assent, observing for changes in body language that might indicate disinterest or disengagement in the study activities). Wherever possible I enabled the tamaiti/child and their parent/s to lead or be in control of the data gathering process. For example, whānau were encouraged to choose which data gathering methods to complete; were given a choice of location, date, time, and when to take rest breaks; and the tamaiti/child were able to lead the activities and control the audio recording equipment.

Furthermore, I needed to remain cognisant about the potential vulnerabilities that the tamariki/children and their whānau/family faced due to their socioeconomic circumstances (Graham et al., 2013; Schweiger, 2019). Considerations included not creating a financial burden during home-based observations, being sensitive about potential for stigma/embarrassment, and taking a strengths-based approach when working with participants, and throughout the research process (i.e., data analysis and reporting). The use of such strategies was aided by learning from other research conducted on the topic, through consultation with the communities involved prior to the study starting, and through a sensitive and reflexive approach as a researcher, (e.g., use of affirming language, building rapport/whanaungatanga with participants, challenging my assumptions about what tamariki of their age do, and adopting ongoing feedback from my supervisors and cultural advisors).

Ensuring my safety as a researcher was also carefully managed. It involved being familiar with the research setting, liaison with community staff in the location, and managing my health and safety (e.g., travel, presence of dogs, COVID-19). I also engaged a third-party support person when working in the community (i.e., aware of location, time, dates of my community activities and was able to provide support as required). (Refer Appendix II: Researcher Safety Protocol; and Appendix CCC: Confidentiality Form: For Third Party Support Person.)

Throughout the course of this study, I encountered a number of challenges. Initially COVID-19 lockdowns in Aotearoa NZ meant the study was not able to proceed, and then a specific risk management plan was required in order to start data collection during the period immediately after the lockdown ended in March 2022, but while the country's pandemic precautions continued. During this time, precautions were taken such as hygiene protocols, safe distancing requirements etc. (For a full account of how these risks were carefully managed, refer to Appendix PP: AUT HSW Risk Assessment Data Collection Plan: COVID-19; and Appendix QQ: Information Sheet – Community Organisation: COVID-19 Precautions.)

Another delay to starting the research was the lengthy ethical approval process that required approximately 1 year to complete. Initial concerns of the ethics committee included size and scope to the project for a PhD study (e.g., initially three case studies

were proposed involving over 30 participants) and the use of a pilot focus group. Concerns were also expressed about the level of commitment required of and safety of whānau in stage 2 of the study (e.g., time, number of visits required, ensuring choice about data gathering venues, and perceived levels of discomfort and privacy for whānau). In response, I modified the study by removing the planned pilot focus group; reducing the number of cases from three to two; strengthening the rationale for and providing an improved safety management plan for observations occurring in the home and community; explicitly providing participants with choice for types of and location of data collection, and ensuring control by whānau over the level of commitment they provided in the study. (Refer Appendix JJ: Table detailing the Type, Location and Duration of Data Gathering in Research Project; Appendix FF & GG: Home and Community Observation Protocols.)

As this study took place in Aotearoa NZ, I also needed to adhere to the articles of te Tiriti o Waitangi (i.e., Tino rangatiratanga, Kawanatanga, Ōritetanga, and Wairuatanga) (Came, Kidd, et al., 2021; NEAC, 2019; Wilson, 2014). In this study, it involved consultancy with Māori to ensure Māori kaupapa was upheld (e.g., manaakitanga⁹, whanaungatanga), and tikanga/protocols were adhered to, such as providing mihimihi, karakia, and the appropriate use of Te Reo Māori (Hudson et al., n.d.; NEAC, 2019). As I am a Pākehā researcher of European ethnicity, it was important that I sought cultural advice from Māori advisors (e.g., AUT's School of Clinical Sciences' Mātauranga Māori Committee¹⁰), and that I engaged with a Māori cultural advisor throughout the research, and other cultural advisors as required (e.g., Pasifika). (Refer Appendix DDD: Confidentiality Agreement: Cultural Advisor.) A Māori cultural advisor was initially recruited, and a Pasifika advisor was later recruited in response to inclusion of a Pasifika family in stage two of case study two.

Consultation that was completed with organisations in the city where the study took place, as well as through the university where the PhD was conducted, helped to shape

⁹ Manaakitanga is a Māori concept of showing respect, kindness, and hospitality (Moorfield, n.d.).

¹⁰ AUT's School of Clinical Sciences' Mātauranga Māori Research Komiti/Committee consists of a panel of Māori and other professional staff who provide advice on proposed studies from the perspective of a Māori worldview and research matters relating to te Tiriti o Waitangi. Komiti members draw on their knowledge of Māori research ethics and the historical harms done to Māori by colonisation and more recently by researchers, and draw on their personal networks in providing guidance for researchers.

the study design. It included consultation with local Māori academics that the researcher worked alongside in a tertiary teaching institution and with community organisations (involving Māori, Pasifika, and Pākehā staff) working with tamariki and whānau living in poverty in the location where the study was conducted. Additional consultation was conducted through the AUT's Clinical Sciences School's Mātauranga Māori Committee. Initial cultural advice for the study included providing a choice of koha (gifts) that were appropriate for and chosen by participants (e.g., suitable vouchers for the tamariki and of their choice) and maintaining a strengths-based approach that kept the aspirations of Māori at the forefront of the study, and this advice was adopted. (For a full list of community and cultural consultation and its adoption into the study design, refer Appendix EEE: Consultation Table – Feedback.)

Before the research could commence, a full and complete application to the Auckland University of Technology Ethics Committee (AUTEC) was submitted. AUTEC granted ethics approval for the study to commence (AUTEC ethics approval number: 20/210. Date approved: Stage 1 – 25/09/2020 and Stage 2 - 01/07/2021; Ethics number: 20/210). (Refer Appendix FFF: AUTEC approval letters.)

7.4 Conclusion

Conducting research requires a research design that details the researcher's ontological, epistemological, axiological, philosophical, and theoretical stance. Careful consideration was given to the methodological, ethical, and cultural requirements when conducting the study. Notwithstanding the complexities involved in this PhD study, all pertinent details of the research design have been outlined in Chapters 6 and 7. The following two chapters provide an overview of the findings from the Riverfield case study (with the Fernlee case study report located in the Appendix A). These two case studies bring to light the views of the tamariki/children, their whānau/families, other adults and organisations in their community who support their participation in occupations, their potential and wellbeing, and the challenges that living in poverty brings. The case study is followed by a presentation of the integrated findings and assertions reached from the two case studies in relation to the research question.

Chapter 8 Findings from the Riverfield Case Study: Part One

8.1 Introduction

Riverfield and Fernlee are two neighbourhoods in the same large city in Aotearoa NZ, that formed the basis for the two case studies explored in this thesis. Both neighbourhoods have similar socioeconomic and demographic characteristics, but also their own unique features. Combining both reports into these chapters would be lengthy and removing parts would not do justice to the richness that is found in both reports. In this chapter, the Riverfield case study is presented, as there were two more whānau involved with the in-depth data gathering stage in the Riverfield case study than in the Fernlee study. Thus, the Riverfield case report was seen as providing a broader range of experiences relating to the research topic. The Fernlee case report is located in Appendix A. The first part of the Riverfield case report provides a description of the neighbourhood, along with the perspectives of staff working in organisations supporting the community. Then a summary of results from the Riverfield focus group is presented, which is followed by the story of Miriama and her whānau. Chapter 9, that proceeds this chapter, presents the stories from the two other tamariki (Jarad and Ofa) and their whānau in the Riverfield case study. Figure 8.1 below outlines the participants in this case study and their roles. This same format (i.e., description of the neighbourhood, community workers' reports, focus group summary, and an in-depth whānau story) is followed for the Fernlee case study report in Appendix A.

Figure 8.1

The Participants in Riverfield Case Study and Their Roles



8.2 Community Pride

Riverfield is a neighbourhood where many whānau have lived for generations. There is a strong sense of identity, of belonging, and the neighbourhood is one in which the residents are proud to live. For a number of the Māori who live in Riverfield, they whakapapa (connect through their genealogy) to the local hapu of the area and are mana whenua or the Indigenous local whānau of the whenua¹¹/land. As Nikau, the manager of Riverfield East Community Centre told me, “People around [here]... I know they all love this area, and the point [is] that they don’t want to leave this area because they’ve been brought up [in Riverfield]” [interview].

Riverfield¹² is a suburb in the same large city in Aotearoa NZ to that of Fernlee. As with Fernlee, Riverfield was developed in the 1950-60s, when it had been used for farming, and after colonisation by the British Crown and confiscation of the whenua from the ownership of local Māori hapu and iwi¹³ (Ministry for Culture and Heritage [Manatū Taonga], 2023, September 27; Te Ara: The Encyclopedia of New Zealand, 2015, June

¹¹ Whenua is the Māori term for land; but also country, nation, state, one’s territory, or domain (Moorfield, n.d.).

¹² Riverfield – is a fictitious name for the neighbourhood in Case Study 2, to help protect participants’ anonymity.

¹³ Hapu is a Māori term meaning clan, subtribe, or group of related families living in a local area. Iwi is the Māori term for the larger group of hapu, descended from a common ancestor or a tribe, and who inhabit a larger area of land/region (Moorfield, n.d.).

11). Based on 2018 NZ census data, and my observations of the Riverfield neighbourhood, the area is a developed suburban space with physical features such as intensive housing (i.e., 3,057 households and a population of 9,642); an extensive roading network; a large local shopping centre and a few other local small shopping and business areas; three medical centres (including a kaupapa-based Māori service); several churches with community services; two community centres; a couple of community gardens; and a few green spaces and parks/playgrounds (Stats NZ, n.d.). The majority of people living in Riverfield community are from either European/Pākehā (47%), or Māori (46.2%) ethnic backgrounds, but there are a range of other ethnicities such as Pasifika (12%), and Asian (10%) peoples. This range of ethnic background brings with it a diverse range of cultural and religious beliefs and practises. Additionally, a large proportion of the community (51%) are tamariki, rangatahi, and young adults (under the age of 29 years) (Stats NZ, n.d.) which makes meeting the needs of the youth of Riverfield a priority. The neighbourhood helps meet this need through its kura (schools) including several kindergartens, a kohanga reo, three primary schools, and one kura kaupapa¹⁴ Māori primary school, a local intermediate, and a state high school that serves the wider community.

8.3 A Community of Champions

Riverfield has a reputation for being a neighbourhood where a lot of poverty exists, and one in which violence, gangs, and crime are prevalent. This has created stigma and a labelling of the community and its residents that can be detrimental, particularly for the aspirations for its tamariki and rangatahi. However, there is a lot about this community that is positive including the potential of its tamariki and rangatahi to flourish and succeed. Such potential is illustrated by their talents in education, sports, cultural, music and artistic endeavours, or the potential to become future community leaders. From Nikau's perspective, recognising this latent ability to succeed requires the support of the current leaders in the neighbourhood, and the whole of the community, in order to help their tamariki and rangatahi reach their fullest potential in life.

¹⁴ Kura means school in Māori. Kohanga reo is a pre-school or kindergarten, and Kura kaupapa is a primary school, where both are operated and taught in the medium of Māori custom and language (Moorfield, n.d.).

We've got a lot of champions out there...[but] the neighbourhood... it's bad, not good... so these kids get stuck into that stereotype... and a lot of them already say 'oh I'm from [Riverfield]'... being labelled... [but] if we can help the whole family, those little champions that are coming up... support... those aspirations 'oh I want to be, oh I want to do'... you fellas can do stuff, be who and whatever you want... yeah like some of the kids [are] singing and... performing and that's awesome, or they MC... events... with art they're out there creating the murals that are surrounding our whare...[or] 'I'm not into art... but I really want to make sure I organise', 'holy moly... you might be the next manager'. So, you got to look at those traits and those champions, it's in there but they just need that... nurturing, the support... all of them have got something in there it's about drawing them out, about building their confidence. [Nikau, interview]

Realising the potential of the tamariki and rangatahi in Riverfield, fostering positive relationships, and providing the support for their confidence and skills to flourish, can result in their future reciprocity. From Jim's perspective, the manager of Riverfield Community Church Centre, this can occur through the volunteering of their time and energy back into the community when they are young adults. As Jim stated,

And it's good too to give, to say 'hey we're giving back now'. So you guys we helped from when, from when you were born to now and you're giving back to the community, that's what you do... That has to come through relationship. The financial web of, building into these kids that are here so that they can... just see other opportunities out there. They can see 'oh that would be cool'... so you know just... provide different sort of spaces and different... opportunity. [interview]

8.4 Doing the Do: Working Together – Mahi Tahī

The community services in Riverfield such as the kura, churches, sports and recreational clubs, and the health and community centres, provide important supports and opportunities for tamariki, rangatahi, and their whānau. In particular the community centres provide essential services such as free access to daily essentials, advice, advocacy for the community, and a network of in/formal supports. As Nikau said,

My role here [as community centre manager] is about getting out there and doing the do... working together... with the community and whatever that looks like... need or wants... any aspirational stuff... just working alongside our whānau... create those relationships between

ourselves and the community... what issues they might have or what celebrational stuff that they're going through or the positives and the negatives in their whānau. But also listening, supporting them where they need like you know, if it's like kai, if it's like going down to WINZ¹⁵ and that and sorting stuff out like that. Or we've been giving them information on 'hey my son's celebrating his graduation, where is a good place to get a suit from you know'. [interview]

Riverfield has two community centres. Based on informal correspondence with both managers, the centres have faced a period of re-building of their capacity due to a number of years with shortfalls in funding and resources, re-locating premises, disruptions to leadership, and understaffing. Despite organisational issues affecting the provision of community services, both the Riverfield East and West Community Centres have been long standing hubs for the community. They provide safe and trusted spaces, and that continue to deliver programmes to meet the needs of the neighbourhood.

I think the positive is definitely [Riverfield West Community Centre]... It's got a lot now. It's got a lot of great programmes coming out, coming out of it and things like that and even back in the day when there was a computer room and things like that there's been good things from there. [Carey, Riverfield primary school teacher, interview]

As the need is great in Riverfield, other organisations have also historically provided support for whānau. For example, the Riverfield Community Church Centre is one of the largest and most active in the neighbourhood. Jim, their manager, discussed the range of services they provide to support the neighbourhood.

We are a distribution hub for food... we run like a women's group for our ladies in the community... we do have a holiday programme... [we have a school van for] the kids that... don't have a ride to school... we have a Wednesday night programme that's attached to our community meal and that's just an encouragement and engagement you know, another chance to connect with the kids. [The] community connectors... their role is to hear the aspirations of the community, whānau. And take them from here to there so if they need help, you know health, they'll get them on the right [track to] the hospital... If they need help for WINZ, they can advocate for them. [interview]

¹⁵ Work and Income New Zealand (WINZ) is a government department providing social assistance and welfare support.

At one of the main state funded, low decile (1) primary schools in the neighbourhood, Riverfield Primary School, there is a high level of funding to support the learning, emotional, social, and occupational needs, as many of the tamariki come from whānau living in poverty. This level of support extends beyond the classroom to their involvement in extracurricular activities such as sports and cultural groups, where every attempt is made to eliminate financial and material barriers to participation for the tamariki.

We have a lot of different activities in this school... we have a social worker... counsellor... we have different supports... you name it this school has it... there's a lot of outside agencies in our kura... we've got Rainbow Reading and ESOL¹⁶ and you know every other thing that you can think of... we're a decile 1 and so decile 1 do get a lot more outside agencies... Yeah the trips are free... Even to the point of clothing so we do [free] shoes... jackets... We do [free] breakfasts every morning... we do [free] lunches as well we do fruit throughout the day... we do sports... we coach basketball and touch too. We get that rapport on the outside. [Carey, interview]

While there is a high level of support provided at the state primary school, this is likely to decrease as the tamariki move to intermediate kura/school. This is due to the larger intermediate kura having enrolment from a wider geographical region, including whānau from broader socioeconomic backgrounds, thus increasing the decile rating and consequently a lower proportional level of funding and supports (Ministry of Education, 2022a). This is the case for the only state funded intermediate kura in the neighbourhood, Riverfield Intermediate, where the decile rating is 5. As Sue, a volunteer at the Riverfield Primary School and Riverfield Community Church Centre explained, “Once they get to intermediate... when kids leave primary school, lots of things in their little lives seem to stop” [interview].

8.5 Intergenerational Poverty: Struggling with the Basics

For many whānau living in Riverfield, coping with day-to-day life is difficult, with not enough money to pay the bills such as rent or fuel for the car, the costs of kura for their tamariki, or even the ability to afford essential household items such as kai. This

¹⁶ Rainbow Reading is a programme in New Zealand aimed at improving children’s enjoyment and success in reading. ESOL (English for speakers of other languages) are programmes in NZ that support children to learn when English is their additional language.

is evident in the neighbourhood with a number of the community centres having to provide free kai. In many cases, whānau living in Riverfield have experienced poverty that has persisted over several generations.

Yeah each generation picks up the same with others you know it's either the drug life, the gang life... this community you know is in poverty and... they're not going to say much... people just carry on... a lot of people out there struggling around in our community with basic food and stuff like that. [Nikau, interview]

There's a lot of... food insecurity... the need is just unbelievable... a number of kids that would come to us and say 'man we're just struggling... mum and dad have got no food'...[and] the health of our community is definitely in decline... obesity... respiratory issues... there'll be mould through a lot of the houses. [Jim, interview]

A further issue for many households in Riverfield is access to transport that is either constrained or absent. Lack of transport can result in tamariki not attending kura on a consistent basis, particularly when the weather prevents walking, and can have negative impacts on their education. A fairly simple and cost-effective solution is the provision of free transport for some of these whānau by the Riverfield Community Church Centre. However, capacity is limited and many tamariki miss out on this service.

Like my van run... yeah totally voluntary... Jim pays just for the fuel... the van it provides transport for kids that can't get to school on time every day... Most of the families that I connect with don't have transport... No car... often no transport because they only have one car between all of them and the person that owns the car works... I saw [a] mum coming through the carpark pushing a baby in a pram on a very wet yucky day so I said 'look can I help you?' So I've been picking [him] up since he was 5... See if I had a bus... Oh we would fill it up... in this community... many houses... have kids that... have to walk to school... You know there's so much you can do... I would like to think, that it's consistency, the kids are learning to go to school every day. They're learning the importance of going to school every day. And it helps the families knowing that their children are being picked up and dropped at school... and brought home. [Sue, interview]

8.6 A Big Challenge is the Environment

The entrenched material hardship that pervades the lives of many whānau living in Riverfield is widespread throughout the neighbourhood and reflected in the low quality of housing, high rates of health problems, the historic under development of the area, and the high prevalence of unemployment, gangs, violence, and crimes. For example, and similar to Fernlee, the neighbourhood has very high levels of SED and is classified at the highest level on both the NZDep, at 10/10, and the IMD18, at 5/5 (Massey University, n.d.; The University of Auckland, n.d.). NZ census data reveal the depth of poverty with a large number of households on low income and benefits (i.e., median income = \$21,500/year¹⁷), a high rate of unemployed (9.6%), low levels of educational status (25% with no qualification), and with these issues higher than the city average (Stats NZ / Tatauranga Aotearoa, n.d.). Furthermore, many homes are cold, damp (30%), and mouldy (21%), higher than the city average, and with households frequently reporting health problems (e.g., that cause activity limitations =11%, higher than the city average for those between 0 and 29 years) (Stats NZ / Tatauranga Aotearoa, n.d.).

Riverfield has high rates of crime, with NZ Police crime data for violent assaults over the last 12 months, revealing there is 5.6 times the rate of violent crime in Riverfield compared with a neighbouring, more affluent part of the city (New Zealand Police [Ngā Pirihimana O Aotearoa], 2023a). What community leaders like Nikau are calling for is a fairer level of investment or distribution of wealth and resources into Riverfield, that he believes would help to improve the lives of the whānau, tamariki, and rangatahi living there.

I think around here a big challenge is the environment... at the moment how it looks, it's gloomy, dark and not good... there's a high rate of unemployment around here... it's... full of gang members and drug dealers and stuff...[while] that's correct... that doesn't mean everyone's a drug dealer and everyone's a gang member... The challenge is... people just, turn a blind eye... to what's happening here in this community. You know it's easy to turn a blind eye and focus on another community but then this community... the community that's... deprived, you know is in poverty and that they're not going to say much so then... people just carry on and oh never mind about

¹⁷ The Medium income for all New Zealand is \$31,800/year (Stats, NZ, n.d.).

them...[but] resources, haven't been invested into the area... look at certain areas they're just getting more and more when we're getting still nothing... we're just used to that, having nothing... Yeah and we're just sick of being where we're at because our people... deserve more and better. [Nikau, Interview]

This level of deprivation in the neighbourhood extends to spaces where tamariki ought to be able to play safely with their peers and engage in physically-based recreations such as the use of playgrounds, greenspaces, and to play sports without constant adult supervision or the risk of violence. Community workers reported that the recreational areas have not been well developed, are in a state of degradation, and are unsafe places for tamariki to play. As Jim said,

I think... the... playgrounds...[are] terrible in [Riverfield] and we don't... have... like what [Fernlee] has. Where it's a destination playground, we've been fighting for that for years... we have ah you know a lot of engagement issues down in you know [Riverfield] park at the moment... yeah fights, fires... Not a safe space...[and our local] playground... Oh it's hopeless... It's just you know the, council are embarrassed when they come over and say 'oh you've got this park', but 'you know you guys'... when you go and use it, it's hopeless. [Interview]

8.7 Falling Through the Cracks

While Riverfield does have a number of organisations that facilitate participation in occupations for tamariki through their education and extracurricular activities (e.g., school, arts, music, drama, sports), outside of kura most occupations have associated costs. For example, there are no public pools in the neighbourhood, and the community shopping mall, movie theatres, and the community library are all located some distance away (approx. 3km distance). Overall, the level of resources and services available in Riverfield to support tamariki and rangatahi to participate in occupations is lacking. Consequently, many miss out on or are excluded from opportunities that would help to provide them with enriching experiences and that help build a social network that supports them and their whānau.

I just think because the amount of young people there are in our area, a number of them are falling through the cracks... If they're connected to the school probably, but if they fall through the cracks of school their sports often dry up because they don't have access to clubs... And so I definitely see some of our kids not engaging in sports like

you'd hope they would you know... there's the kids... a lot of them just aren't engaged, they've slipped through the cracks, they aren't going to school... and they're bored... there's a lack of [support]... and then it just starts a negative cycle and they spiral out of control. [Jim, interview]

Furthermore, the community-based services in Riverfield that can help meet the needs of whānau and their tamariki are stretched and underfunded. This has meant a number of community initiatives (e.g., free counselling, budgeting, education, childcare services), have either not been sustained or are unaffordable for whānau.

You know in the 90s and 2000s early 2000s, this place had enough funds to run all of those kind of programmes... and everyone would have you know second chance education... we had everything... we had a contract with Ministry of Education... we were at the highest level of funding we could get... and they said to us you guys have been amazing because... they knew how much we were investing in... this community... And because we're a no fees child care... we were very sad to lose the child care... obviously a no fees child care's really still needed... The sad part was the fact that we're closing something where the need is still there and that's not normally good economics or a good way of doing things. [Jim, interview]

8.8 Riverfield Focus Group

The focus group was conducted at the Riverfield West Community Centre, assisted by the community centre manager, Aisi, and with four tamariki/participants who all met the study inclusion criteria. Refer to Table 8.1 Summary of Riverfield Focus Group Demographic Data. Discussed below are a summary of the findings from the Riverfield focus group.

Table 8.1*Summary of Demographic Data from Riverfield Focus Group*

Number of participants	Four
Age range and gender	10-12 years including 1 hine/girl and 3 tane/boys
Ethnicity	Māori, Tongan
School	1 attending a low decile primary school (decile 1) 1 attending a medium decile intermediate school (decile 5) 2 attending an integrated church-based school with mixed primary and intermediate levels, located in Riverfield, medium-high decile school (7/8)
Household Composition	1 whānau were a single parent household (tane, Māori) 1 whānau were a single parent household (a father, but who had a partner living with him) (hine, Māori) 1 whānau were a two-parent household (2 were brothers/tane, Tongan) Households consisted of 4 to 12 members Largest household consisting of the tane, his mother, their siblings, and several other whangai'd rangatahi
Parental Employment	2 households with sole parents receiving Work and Income benefits 1 two parent household had both parents in part/full-time paid work
Health/Disability	No reported health or disability issues

8.8.1 What I do at Home and Having Fun

These tamariki reported consistent weekly routines with key occupations including self-cares, *“wake up and get ready for school... shower... have breakfast... brush teeth”*, kura/school, whānau activities, playing with siblings, using the computer and watching TV, restorative activities, and contributing to household chores. *“Family time, at home”*, *“playing with whānau at home”*, *“cleaning the house”*, *“dishes, laundry”*, *“mowing the lawn”*, and *“shopping, groceries”*. No tamariki in this group were involved in voluntary, caregiving, or paid work roles. Sedentary recreational occupations and hobbies were a key part of the tamariki/children's weekly routine, were primarily located at their kāinga, and were low-cost or free. Three of the four tamariki were involved in organised sports but for limited periods of time in the year. However, none were participating in any out of school extracurricular activities. Free play in the neighbourhood was constrained, partly due to limited resources, *“no rugby equipment, gear”* (focus group participant), and the majority of their occupations were located

close to their kāinga and were mainly based in Riverfield. No tamariki in the Riverfield group were accessing afterschool or holiday-based programmes. Figure 8.2 shows the range of weekly, routine occupations engaged in by these tamariki.

8.8.2 Hanging Out with Whānau and Friends

Social occupations were restricted to activities with their whānau or at their kura, *“spending time with my whānau at home”*, *“seeing my best friends at school every day”* and incidental time (i.e., before or after school). For one child/tamaiti, they were able to, *“go to play at the skate bowl/park”* but only once per week with her father. These tamariki did not have friends over to play or visit them at their kāinga. No tamariki reported encounters with antisocial activity in Riverfield. Cultural and religious activities occurred at church for three tamariki, but not at their kura. The importance of whānau occupations, including extended family activities were culturally important to all tamariki: *“time with family”*, *“chatting with my family”*.

8.8.3 Kura is Cool

Kura or school was an important occupation including: *“school, learning”*, and *“Breaks... playing with friends”*; although for this group, cultural activities at their kura were not a clear feature. This group did not report any negative experiences at kura. Homework was completed by only two tamariki, involved in a *“Homework group”* once per week. Two tamariki walked to and from kura each day and two were driven by their mother. Transport was provided by parent/s if it was raining.

8.8.4 What I Want to Do

The Riverfield group identified a range of occupations that were not available to them: *“League”*, *“soccer”*, *“Play games with friends... PlayStation broken”*, *“[go to] the mall, shops”*, *“travel, out of the country”* and *“get a job”*. They attributed restricted access for gaming/communication devices to, *“broke, not fixed”*, or lacking sports equipment, *“rugby equipment, gear”*. A number of occupations were absent in their lives that they did not discuss (e.g., visiting nature parks and beaches out of the city, or going to the movies). Their key supports included *“my friends”*, *“teacher, coach”*, *“my dad”*, *“mum”*, *“parents”*, and *“[confidence in] myself”* or their own agency and skills (e.g., finding alternate leisure activities such as socialising with peers via cell phone). While known

risks to tamariki exist in Riverfield, this group did not identify it as barriers to their participation.

The geographical patterning of the occupations for these tamariki is shown Figure 8.3 with most activities occurring close to their kāinga and in their neighbourhood. The most frequently accessed occupation and location outside of the kāinga was kura. This was followed by access to sports in some cases (3/4 tamariki), shops/supermarkets, church (3/4 tamariki), kāinga of extended family (1 tamaiti), or a friend's kāinga (1 tamaiti), play at the park (1 tamaiti), and community centres (3/4 tamariki). Transport typically consisted of walking (to/from kura for 2/4 tamariki, with the other two transported by car, or to extended family, community centre, friend's place, local park), or via parental car (e.g., to supermarket, sports, community centre). There was no use of public transport or other forms of AT used (e.g., bike, scooter etc.).

Figure 8.2

Riverfield Focus Group – Weekly Timetable¹⁸

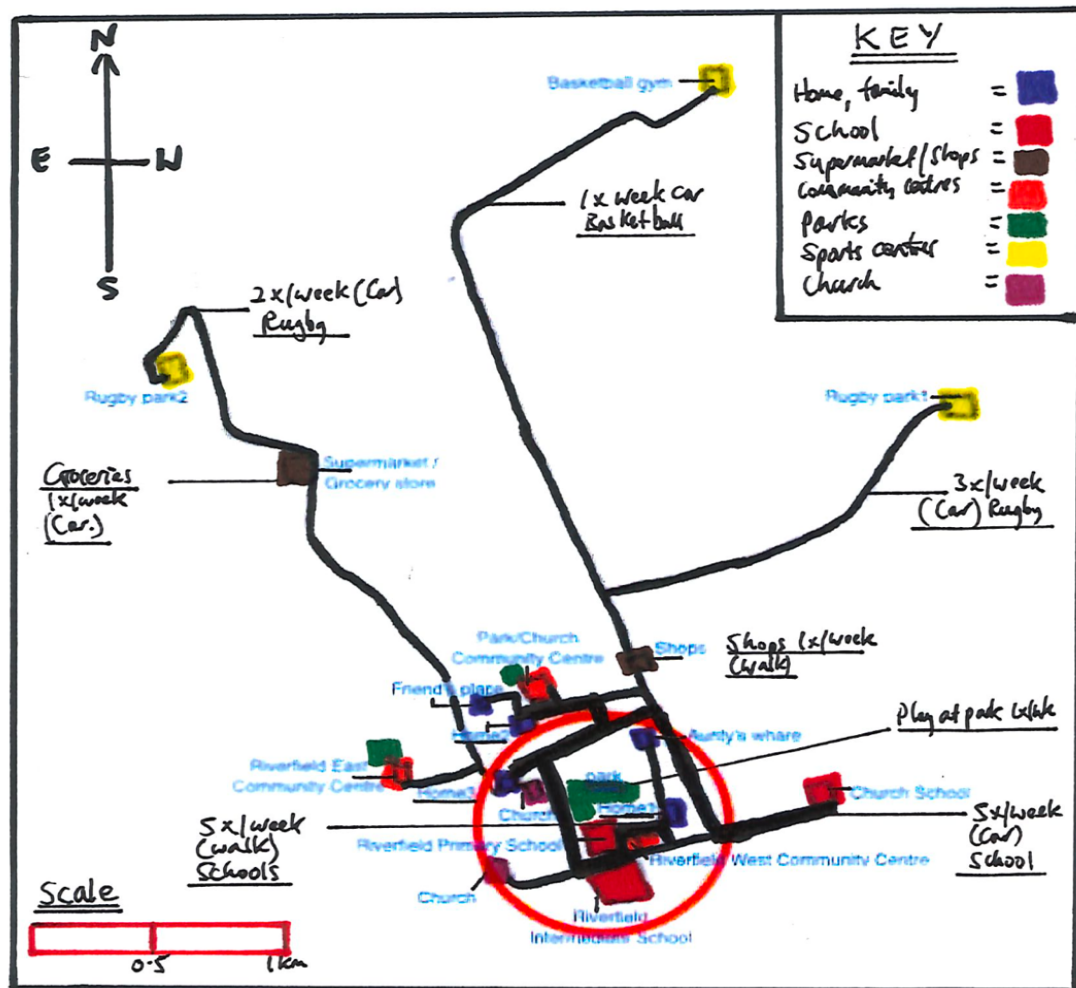
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning (when wake-up to 11:59pm)	Wake up & get ready for school (brush teeth, shower sometimes, tidy up room sometimes), have breakfast. Go to School (*walk/car). School - learning	Wake up & get ready for school (brush teeth), have breakfast. Go to School (*walk/car). School – learning	Wake up & get ready for school (brush teeth, shower sometimes, tidy up room sometimes), have breakfast. Go to School (*walk/car). School – learning	Wake up & get ready for school (brush teeth), have breakfast. Go to School (*walk/car). School – learning	Wake up & get ready for school (brush teeth, shower sometimes), have breakfast. Go to School (*walk/car). School - learning	Wake up, brush teeth & shower sometimes, tidy up room, have breakfast. Playing rugby games (winter) Online - Texting on ph., playing online games (PC).	Wake up, brush teeth & shower sometimes, tidy up room, have breakfast. Online-ph./PC(games). Go to Church (2 children only).
Midday (12pm-3pm)	School - learning Breaks*(Playing rugby, basketball, playing with friends, texting.	School - learning Breaks*(Playing with friends).	School - learning Breaks*(Playing with friends).	School - learning Breaks*(Playing with friends).	School - learning Breaks*(Playing with friends).	Online - Texting on ph., playing online games (PC). Play at local park. Mowing the lawn/chores.	Shopping-groceries. Online - Texting on ph., playing online games (PC).
Afternoon (3-5pm)	Finish school**(walk-/car home). ***Online: (social - texting friends, playing online games with friends, chatting with friends). Go to play at skate bowl/park. Workouts (rugby-winter). Play with siblings/family at home.	Finish school** ***Online(social). Play basketball at park. Training (rugby winter). Groceries.	Finish school** ***Online(social). Going to the shops (sometimes). Play with siblings/family at home. Training (rugby winter).	Finish school** ***Online(social). Play with siblings/family at home. Training (rugby winter). Tidy my room.	Finish school** ***Online(social). Going to the shops (sometimes). Play with siblings/family at home. Tidy my room. Playing Basketball competition-city gyms.	Texting on my ph. playing online games Play with siblings/family at home.	Online - Texting on ph., playing online games (PC). Play with siblings/family at home.
Evening (5pm- bedtime)	Dinner/Dinner/ Dinner with family. Wash dishes. Online -Texting on my ph., computer (PC games), or watching TV, then sleep.	Homework group (2 children only). Dinner/Dinner/ Dinner with family. Wash dishes. Online-ph./PC/TV, then sleep.	Dinner/Dinner/ Dinner with family. Wash dishes. Online-ph./PC/TV, then sleep.	Dinner/Dinner/ Dinner with family. Wash dishes. Online-ph./PC/TV, then sleep.	Dinner/Dinner (Takeaways) Dinner with family. Wash dishes. Sometimes watch movies/- videos – TV-stay up late. Texting. Sleep.	Dinner/Dinner/ Dinner with family. Wash dishes. Sometimes watch movies/videos – TV-stay up late. Texting. Sleep.	Dinner/Dinner/ Dinner with family. Wash dishes. Online-ph./PC/TV, then sleep.

Colour codes: Green=activities for fun; Blue=Activities need to/impt.; Purple=Activities do/like to with family; Red=Jobs, responsibilities.

¹⁸ The data in this weekly timetable integrate the weekly activity timetable data of all four tamariki in this focus group.

Figure 8.3

Map of Riverfield Neighbourhood Showing Locations Where Occupations Occur for Participants in the Focus Group



Key: Thicker black lines indicate regular, daily access and thin lines indicate occasional access. The red circle shows a 1km radius around their homes where the most frequently occurring occupations take place.

8.8.5 Staying Healthy, Happy, and Reaching my Dreams

The Riverfield group identified the important occupations and people that supported their hauora/wellbeing; for example: “my family”, “friends”, “movies, videos”, “people being good, kind to others at school”, “learn stuff”, “my phone”, and “food and fruits”. The values, supports, and resources they reported as helping them to reach their potential in life included examples such as, “workout... eating vegetables”, “family”, “school” and “friends”. Material poverty was not a feature in their reports, and may be due to adaptive preferences (Sen, 1999), whakamā in being identified as poor, or both. Additionally, these tamariki shared their vision for a bright future. For example, “my

goal is to... be a basketball star”, “having a job of... a Youtuber”, “make my family proud”, “rugby player”, “graduate school and get a job”, and “own a business”.

8.9 Introducing Whānau Tahi¹⁹: Miriama, Kahurangi, Hemi, and Maraea

Miriama is a bright and bubbly young Māori hine/girl, who was about to turn 11. She lives with her older sister Kahurangi (16 years), her father Hemi (43 years), and his partner Maraea (39 years) in a small *whare*²⁰/house in Riverfield. Hemi has 5 other tamariki; Aria, aged 7 years lives with her grandmother (Nan) in another town, and 4 adult tamariki live in the city. Miriama and her whānau moved into the neighbourhood in the last 6 months. Hemi is a sole parent, although his partner, Maraea, is living with him. Miriama’s mother is *“in and out”*, *“we just tautoko*²¹ *each other for the children”* [Hemi, interview].

Since leaving high school at approximately 15 years of age, Hemi has worked in labouring jobs and roadwork, but hasn’t *“been able to keep full time jobs because... of circumstances and how life is... mostly unemployed, I was on the dole... still am off and on, you know... I struggle with addictions sometimes... I struggle with anxiety”* [Hemi, interview]. Hemi is receiving the Sole Parent Support benefit (Work and Income [Te Hiranga Tangata], n.d.-b).

Hemi described himself as a *“full time dad”*, having taken *“time off work to... look after my daughters... I tend to keep my children close to me because... I don’t know life... the way that it, is handed... and dealt them, bit of a rough time you know”* [Hemi, interview]. His valued and primary role is raising his daughters, Miriama and Kahurangi, with values such as looking after, respecting, and being there for each other to ensure their hauora. Hemi admitted *“I battle with... parenting, which is quite a struggle in itself. So we work it out... the children keep me... grounded”* [interview]. Carey, one of Miriama’s teachers at her kura, described Hemi’s supportive approach as, *“He’s a very active father... yeah, he is forever just here helping out or else he comes*

¹⁹ Tahi means one in Māori.

²⁰ Whare in Māori means the house, a physical building, place of habitation (Moorfield, n.d.).

²¹ Tautoko in Māori means to provide support (Moorfield, n.d.).

on all of our trips and [is]... a big face at basketball he... would be one of our most supportive whānau” [interview].

The where the whānau live in is a former state house, now privately owned, built of wooden weatherboards and late 1950s style construction. It has been divided in half and, as a result, is only 83sqm, approximately half the size of the current average NZ house size of 160sqm (Stats NZ, 2020b). There are 2 bedrooms, a short hallway, 1 bathroom, 1 small kitchen, and a small laundry area, but a large and long backyard. Consequently, there is constrained space in the where for the whānau, and Miriama and Kahurangi share a bedroom.

During my visit to interview Hemi, I observed how small the kitchen was, with only enough space for a table with 2 chairs, not enough for the whānau to dine at. There was no lounge or living room and overall space throughout the house was constricted. I imagined the space constrained Miriama and her whānau from spending time indoors together in activities like eating meals, watching TV, playing or having friends over to play and stay overnight. When I arrived at 7:30am for my morning visit, Maraea was sitting on the front porch and said “The house is too hot and stuffy to stay indoors”. With this being the early part of spring, it was clear to me the house does not have adequate cooling or ventilation. [Observations during initial visit to Miriama’s kāinga²²]

8.9.1 A Struggle to Keep up with it All

Hemi, Miriama, Kahurangi, and Maraea have a low weekly income with limited material resources at their disposal, making it difficult for the whānau to cope with everyday costs of living. Drawing on recruitment screening questions and Hemi’s interview, their household income is approximately \$600/week, after tax. The privately owned property costs \$200/week to rent, leaving approximately \$400/week for food, power, phone/internet, transport, child-related costs etc. The NZ poverty line for a whānau consisting of two parents and 1 child <14 years AHC, is \$665/week (Perry, 2021), placing Hemi and his household well below the poverty line. Based on the results of the NZiDep questionnaire (Salmond & Crampton, 2012b) completed by Hemi, in the last 12 months the whānau needed support with food costs (e.g., food grant/banks), were missing out on fresh vegetables/fruit, had to buy cheaper food,

²² Kāinga in Māori means the home, one’s address, habitation dwelling (Moorfield, n.d.).

were missing out on clothing/footwear, were receiving clothing/money grants, and were feeling cold due to heating costs. Despite these material limitations, Hemi does what he can to adapt and find solutions such as growing a vegetable garden, recently planting fruit trees, and raising chickens to supplement kai in the whare through the eggs they produce.

We'll probably go visiting or shopping... just... once a week, so mostly pay day. Which is Wednesday to Thursday... Oh it's... always hard... Yeah that one there is quite a struggle aye, keeping up with it... spend most of our money on gas [petrol]. Just to get our family around... Oh man, and because prices of food has gone up that doesn't help either. So the gas is you know quite restricted. And the food is pricey so you end up with, hardly any gas and hardly any food... And then [rent] oh man!... Yeah so that's why I do the [food bank]... Oh man [chickens] they give me eggs... Yeah it does, it definitely helps out in the pocket and the cupboard. [Hemi, interview]

I noticed how effectively Hemi has transformed their backyard from an underutilised area to a space with a vegetable garden, some recently planted fruit trees (donated by the community centre), a chicken coop made from recycled materials, and a number of other recycled household items such as furniture, gym equipment and scooters that Hemi and his tamariki make use of.... The whānau have a dog named Brody, 15 chickens (fed mainly from scraps from the community centre), and a rabbit named Rebecka. So quite the menagerie! [Observations during initial visit to Miriama's kāinga]

8.9.2 Haven't Got the Facilities for Our Tamariki

While the Riverfield neighbourhood has facilities and services for tamariki, such as local schools, community centres, parks, and recreational groups including sports clubs, these come with costs (fees, equipment, transport, parental time). From Hemi's perspective, free or low-cost options such as play or sports-based activities at the local park would be an attractive option to whānau like his. However, the facilities are either unavailable or in a degraded state.

I bet it was really good back in the day... the nets were still up then... Really that's the Council... you know. You have a look at this space... been on the map for a long time and they haven't got the facilities for our children... Yeah there's not much for them to do here... if we could create things more for them I believe that it will be less stress for the community, you know. There'd be more smiles in the community. You

know there'd be more active people... Oh, well, more positive. [Hemi, interview]

The Riverfield park is in the heart of the neighbourhood, next to the Riverfield West Community Centre and the schools. There are rugby and soccer fields, and a green space, a few trees, including some recently planted fruit trees. The playground is quite small, but with relatively new facilities. The skate bowl and half basketball court have a lot of graffiti, rubbish, and broken glass littered throughout. Across the field are unused tennis courts, with broken asphalt surfaces and unusable facilities. [Observations in Riverfield]

8.9.3 Heaps of Mischief People: I Just Mind my Own Business

Along with the lack of facilities in Riverfield, the presence of crime and bullying constrained safe, free play among tamariki, and whānau time in spaces such as the local park. Both Miriama and Hemi were cognisant of these risks and it altered, and in some cases restricted, the way they engaged in recreation at the Riverfield park. Hemi's response was to protect his daughters by having rules about when they could visit, not allowing Miriama to play at the park with her friends, or supervising them when they do. Amidst these challenges, Miriama displayed resilience, courage, and an ability to stand up for herself, or take deliberate action to avoid unsafe situations, when faced with antisocial behaviours by some of her peers such as vandalism at the local park or bullying and violence at her kura/school. Mariah, one of her teachers, explained, "*She is tough... she won't back down from anybody... strong willed... we had an incident today... yeah [she] didn't get in the middle of it when it was going down*" [Mariah, interview].

[At the skatepark]... Very, very heaps of mischief people... Because... they try to smash the windows and I'm like 'Don't smash the windows'... There's this boy, he grabbed a nail and gave it to this little boy and the little boy was about to smash the window when I grabbed it off him!... There's this girl, she bullies everyone at school. She gave my friend a hiding... she hasn't been coming to school... It only happens because they do some stuff that they don't like... That's why my friend got a hiding. So I just mind my own business. [Miriama, interview]

I notice that our children try and find things to do which aren't very nice sometimes. You know like vandalism and stuff so I don't appreciate my daughter being around any of that... Yeah we stay home a lot... Because yeah don't like getting in trouble too much... So

yeah I keep her close to me... she's got her skate friends over there, her scooter and everything, so I allow her to go over there... So I've got to... check on them... if it starts getting dark, then that's the time you come home. [Hemi, interview]

The Riverfield West Community Centre hall glass doors were smashed during recent vandalism, which the centre manager told me has been re-occurring, along with regular fights, intimidation, and use of drugs amongst some of the youth who hang out at the skate park. The manager said the centre team are trying their best to address some of these issues, by requesting more funding from the council for staff to work with the youth, and for improved facilities. [Based on my observations while in Riverfield]

8.9.4 I've Got Heaps of Friends

Miriama's outward-going character means that she makes friends easily and enjoys socialising, which has helped her adjust after only recently moving into the neighbourhood. As Carey and Mariah, her school teachers discussed, "*[Miriama] came midway through the year so she didn't start the year with us... She's very confident*" [Carey, interview], and "*I think she's quite friendly...She's picked up on one of our quite flamboyant boys and kind of befriends him... they're just besties*" [Mariah, interview].

Miriama's main forms of socially-based occupations include spending time with her friends before, during school, and occasionally after school at the park under her father's supervision, or when playing for her school basketball team once a week.

I just head to school... I wait for my friends... And I grab a ball... And when my friends come we just hug and say 'Hi'... And we play and then when I come back home I see my dad at the community centre. And I play with my friend... And then when she's going I'm coming home... So I've got heaps of friends. [Miriama, interview]

However, based on her weekly activity diary, the time spent playing with her friends at the park does not occur often. There was also no evidence that Miriama visited her friends' homes or had them over to play or stay at her kāinga. Overall, her time spent in social activities, out-of-school, in-person, with her peers is restricted and limited to approximately 2 hours/week (refer to Miriama's Weekly Timetable in Appendix GGG).

8.9.5 She's a Top Learner: What Tamariki Need to Thrive and Flourish

Kura is where Miriama mainly gets to play and socialise with her friends, participate in learning, recreational and cultural activities. *"I like going to school... I like playing basketball... I practice at school at lunchtime... all I dream of...[is] just being a basketball star"* [Miriama, interview]. Miriama also spoke about her other school-based activities she is proud of. *"My Pasifika dancing... I help a lot of people at my school... My friend... I help him with a lot of things... Oh yeah, and on my test for maths I got all of them right"* [Miriama, interview].

Her caring, confident, and responsible nature has meant that she has been able to fit into her new kura easily, making friends, as well as succeeding in her learning. While early in her life course, Miriama's sporting ambitions are reflective of her desire to do well and create a positive future for herself, with both Miriama and her father being proud of her educational achievements. From Hemi's perspective, what helps his daughter to flourish is being able to experience childhood in its fullest, being explorative, and nurturing her passions.

She does really good at school... she's been doing quite a bit at school... I don't pressure her too much into anything. Yeah [my philosophy is] just to look after each other. And to yeah respect each other. Be there for each other yeah... Learning. And, laughter... That's what they need to thrive and yeah and then they can become anything... if you put your mind to it... Yeah be excited in everything that you do so that you can flourish... She hasn't made her mind up fully on what she wants to do so I just let her be a child... And just support her... Because she's such... an explorer. [Hemi, interview].

Miriama's teachers share a belief in her potential to succeed in life: *"I think she's... very clever. She's a bright girl"* [Mariah, interview]. From the teachers' perspectives, what is important for tamariki like Miriama to achieve their potential is support, positive role modelling, and opportunities to explore and participate in a range of occupations for tamariki.

She's actually one of our top learners to be honest... she's able to go and follow instructions quite easily... She's a very confident young lady. She's actually... fine with her curriculum levels... someone like Miriama with so much different talents to be picked up... would just be... a blessing... Realistically [she] could be whatever she wanted to be really, that little girl... Just being encouraged to do what you want

to do and give things a go... when you've got people who are going to help, support you in things like that... yeah, just to be encouraged, to be role modelled... Support... And given different avenues to try new things. [Carey, interview]

The school website states that reading in the kāinga is recommended, along with homework tasks assigned by the teacher and learning life skills through household chores such as cooking, gardening, or shopping. Additionally, the school is part of the Duffy programme that involves the provision of free books for reading in tamariki/children's homes. While Miriama is engaged in activities at her kāinga that support learning life skills, she does not complete any homework and is not reading books or being read to by her father at home on a routine basis. Instead, Hemi sees more value in his daughters having free time after kura and learning through participating in household chores and play.

Oh well I don't see any homework!... It's pretty... hard case. I was like 'Oh no homework... That's cool... That's what we wanted when we were little'... You know because usually at the end of the day you don't want to be going home and doing school work... she... learns a lot... how to do dishes!... help with cooking... got a smoker out there and she cooks eggs in there. [Hemi, interview]

8.9.6 In the Front Row: Pasifika Dance

Miriama's role in the school Pasifika dance group started fairly recently but she already enjoys being part of this cultural and recreational activity, socialising with her friends, learning Pasifika cultural traditions, as well as the added incentives like sweets and earning a little bit of pocket money. Hemi told me that his partner, Maraea, has Pasifika and Māori whakapapa (family genealogy) and that she was influential in encouraging Miriama to join the group. Also, the gentle encouragement from her teachers, like Carey and Mariah, for Miriama to join new groups and take on new challenges at her kura has helped support her to participate in this and other kura-based cultural groups such as kapa haka.

We just call ourselves the Pacific dancers... It's proper performance... a real performance... yeah we do... get like money... Yeah we get kai. We get pork. We get pig... Yeah... after our performance we get money and a bag of lollies. [Miriama, interview].

So she's only just joined Pasifika. She's been watching it and then it's just that encouragement to her... supporting her to, 'If that's what you want to do then it can happen' you know... She's only... just started... performing... and you know she's in the front row... It's the same for kapa haka you know she loves it. [Carey, interview]

Miriama and Hemi invited me to attend a community event involving the school Pasifika dance group that Miriama is a member of. The event was organised by the teachers from her school and hosted by the staff from Riverfield East Community Centre. An MC was hosting the event, along with solo performances of Pasifika songs sung by one of the adults. The younger tamariki, including Miriama, then performed their set of choreographed Pasifika dance moves, accompanied by music. When Miriama was dancing in the group, I could see that Hemi was really proud of his daughter, when he joined in enthusiastically with the crowd with loud cheering and applause at the end of each dance. During one of the dances, and as is custom in some Pasifika cultures, the parents, including Hemi, went up on stage and placed money onto the costumes of their tamariki, as a sign of respect and acknowledging their dancing talents. After the event the whānau and tamariki mingled and there was a wonderful array of Pasifika foods such as roasted pig, kumara/sweet potato, taro, marinated raw fish, rice and followed with fruit, ice cream, and cakes! [My observations from attending Miriama's Pasifika dance group community event.]

8.9.7 She's a Tik Tokker and a Blogger: The Weekly Routine

Miriama's after-school routine involves spending time in her room playing on social media applications viewing TikTok posts or creating her own video posts, writing stories on her Chromebook, texting and talking to whānau and friends on her cell phone, or watching TV. “[Afterschool] I just like, grab my Chromebook... And then I watch a movie... On the Chromebook” [Miriama, interview]. (Refer to Miriama's Weekly Timetable in Appendix GGG.)

After school and walking home, Miriama [goes] straight to the internet and then do a couple of hours on there... she just loves to stay up all night and be on the computer... She's a tik tokker and a blogger at the moment... When you have a look on Tik Tok they have all these awesome things that they can do... Post your video, to make your video. And they really enjoy that... Yeah she talks to family on the phone and stuff like that... at the moment no phone for her... well she's smashed it, dropped it. [Hemi, interview]

Time spent in her room, in sedentary occupations including resting and eating, is comforting, have creative and social elements, and enables her to participate in free/low-cost activities throughout her week. Figure 8.4 below shows Miriama in her room relaxing, eating, spending time on her computer, and getting ready to watch a movie with her father. *“We were having a late night snack... watching a scary movie with dad”* [Miriama, photoelicitation interview].

Figure 8.4

Miriama in her Shared Bedroom, Engaging in Activities of Importance to Her: Relaxing, Eating and Getting Ready to Watch a Movie With Her Father



Note: Photograph taken by Hemi

Miriama occasionally spends time outside around their property throughout the week, including the weekends, in activities such as playing with the family pets or playing at the park with her friends under her father’s supervision, when the weather permits. However, most of her out of school time is spent indoors on her computer. Hemi was rather ambivalent about the amount of time Miriama spends on online activities, considering that if outdoor activities are of interest to Miriama then she will engage with these when she wants. While Miriama spoke about the importance of *“stay[ing] fit”* [interview] as supportive of her hauora, the restricted ability to play outdoors and lack of available recreational occupations on offer means this is not what is occurring. Instead, Miriama’s habit is to spend most of her free time at home, resting or on her computer, including time spent late into the evenings during the week.

I am allowed to stay up like very late. Or I’m allowed to stay up like every day... I sleep in and wake up at like 1, 2 o’clock [in weekends]... we just sleep... Have a wash... I don’t really go to the park... [To chill

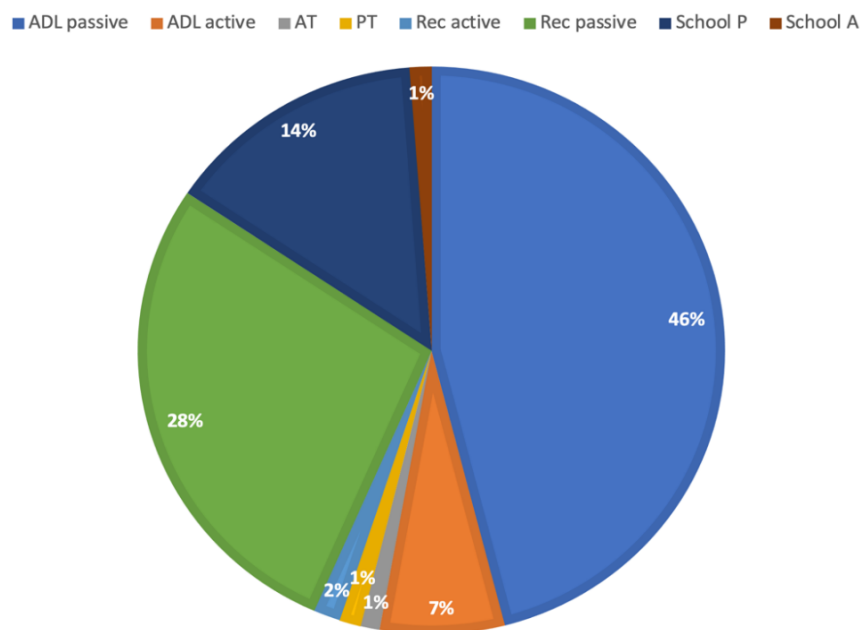
and relax] I watch YouTube. Get in bed. Blankets on. [Miriama, interview]

At the moment I've just let her do that [use the computer or phone]... And when it comes to outside activities, then... if... it's interesting the phone disappears. If it's not interesting then the phone is back, so then you know when you're doing something right because the phone's gone. [Hemi, interview]

Data from Miriama's time use pie graph shows she is spending approximately 7 hours/day or 28% of her time each week in passive activities, and approximately 6 hours/week or 3.5% of her time (less than 1 hour/day) in PA (Figure 8.5).

Figure 8.5

Proportions of Time Spent in, and the Passive or Active Nature, of Miriama's Occupations During the Week



Note: ADL=activities of daily living²³, AT=active transport, PT=passive transport, Rec active=physically-based recreations, Rec passive=sedentary recreations, School P=passive school activities, School A=active school activities.

8.9.8 Breakfast Isn't on My Schedule

Miriama's weekly morning routine involves completing daily activities (bathing, dressing, grooming), getting herself ready, and walking to her kura independently.

²³ ADLs differentiated as passive (i.e., sleep, rest, mealtimes) and active (i.e., personal hygiene, showering, toileting, grooming, chores, and shopping).

(Refer to Miriama's Weekly Timetable in Appendix GGG.) *"8 o'clock wake up yeah, and go and have a wash. She doesn't have breakfast... she just goes straight to school"* [Hemi, interview]. During the week, she was conscientious about checking her alarm.

Every day to make sure it's not wrong. And I put my alarm at 7 o'clock and I go at 7.15... I just bring my bag, and like do my hair, wash my face and that's it and brush my teeth... I don't like having breakfast, breakfast isn't on my schedule... Yeah and then I just head to school, say bye to my dad. [Miriama interview]

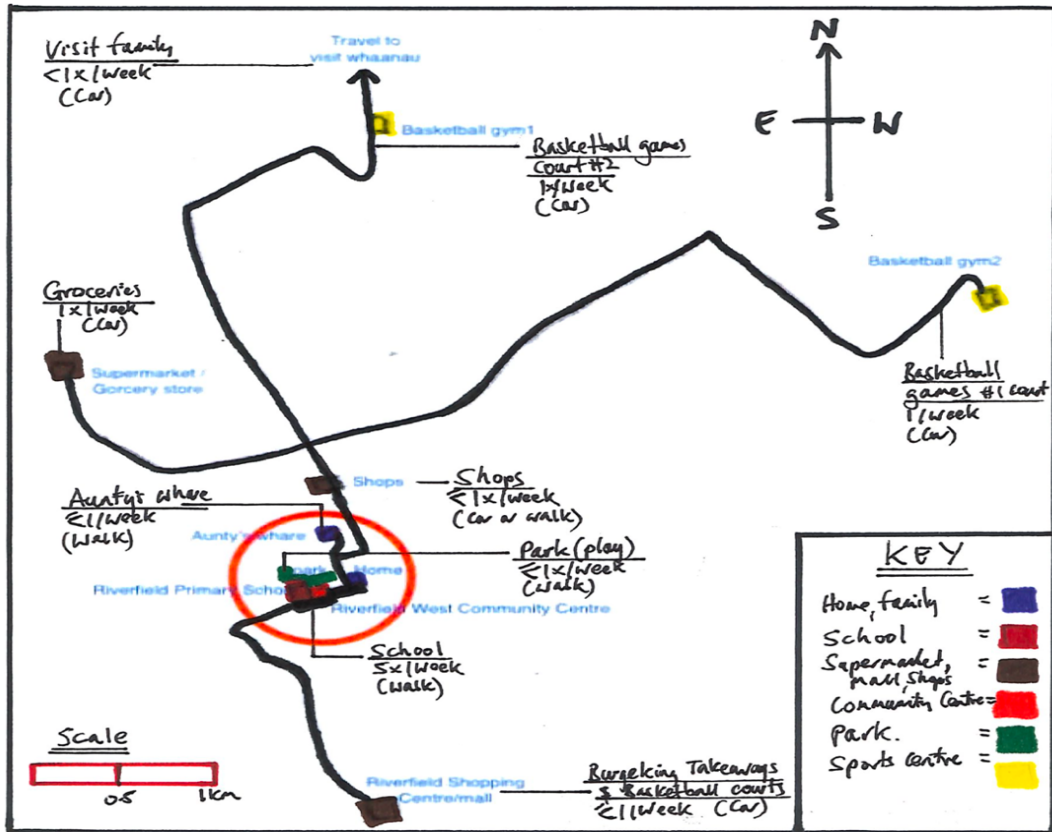
While Miriama spoke about healthy kai supporting her hauora, *"eat[ing] vegetables"*, skipping breakfast was not one of her priorities, but this may in part be shaped by the constrained kitchen/dining space in the kāinga and restricted access to kai/food. Other aspects related to the small size of the whare (i.e., one bathroom), meant sharing of spaces for personal daily activities.

I arrived around 7:30am on a warm spring morning. Maraea was sitting on the doorstep. She greeted me and we spoke briefly before she called out to Miriama and then let me into the entrance hall. Hemi called out to me, "Good morning", from his bedroom. Then Miriama came out of her room, still in her pyjamas, and greeted me. I noticed how restricted the space was in the entrance way. While I waited with Maraea, Miriama went about her daily activities such as grooming herself in the bathroom and then returned to her room to get dressed for school. Kahurangi was still in bed asleep in their shared room. After returning to the entrance way, Miriama put on her shoes and got her school bag. Then she was ready for school and left at about 7:50am, walking across the street towards her school. [Observations, Miriama's morning routine]

Miriama's independence in getting ready for kura means little prompting is required by her father, and walking the 0.4km to and from kura adds to her physical activity levels throughout the week (approx. 10-15 minutes per day). Hemi provides transport to/from school on rainy days, with this likely to increase during the winter months. Refer to Figure 8.6 Miriama's Map.

Figure 8.6

Map Showing the Locations of Miriama's Occupations in Riverfield and the City



Key: Thicker black lines indicate regular, daily access and the thin lines indicate occasional access. The red circle shows a 1km radius around her home.

8.9.9 A Boil up and a Cup of Tea: Whānau Routines

In terms of other evening routines such as mealtimes, these are typically not shared or eaten together; instead, Miriama and her whānau often eat in their bedrooms. “So we just have, either dinner in the sitting room [kitchen] or yeah... here by myself... So there’s hardly any dinner times or lunch times [together]. It’s just help yourself” [Hemi, interview]. The constrained spaces in the whare, with minimal living and dining room spaces, make it difficult to have meals together as a whānau. However, for Miriama, the times she can have a meal with her father are special for her and she treasures these moments. This was evident in the photo in Figure 8.7 she took of a shared meal

with her father. *“Boil up²⁴ and cup of tea. I like it a lot and I like my cup of tea. Dad made it and he is good at making this kai”* [Miriama’s photoelicitation interview].

Figure 8.7

A Favourite Shared Meal for Miriama, of a Boil Up and a Cup of Tea



Note. Photograph taken by Miriama

8.9.10 You’ve Got to Pay for Some Fun Stuff

The physical and out of home occupations that Miriama participates in for fun, play, and recreation are primarily close to her home (refer to Figure 8.6, Miriama’s map), low cost or free, or are supported by the local kura. Such occupations include playing basketball with her father or riding her scooter with friends at the local park, playing in the school basketball team on a Friday night, and being a member of the school Pasifika dance group. While some of these activities such as playing in the school basketball team have most of the costs met by the kura, expenses still remain for the whānau such as the purchase of basketball boots and travel costs and these expenses are not easy to meet on a restricted budget.

Ah fees were \$30 a term which I thought was pretty cool... Yeah and then we just had to travel to our games but otherwise, I love the game... we have to pay for everything... Yes so... Basketball shoes are not cheap. Quite pricey for those. Actually cost a lot more than, when I was little... You got to buy them... Yeah you have a good look and try and budget. But, try and make it as awesome for them as well. [Hemi, interview]

²⁴ Boil up is a traditional Māori food, consisting of a soup made with meat/bones and vegetables (e.g., kumara/sweet potato, watercress, puha, cabbage), and often boiled together with flour-based dumplings called ‘doughboys’ (Moorfield, n.d.).

Other recreational activities, however, that Miriama wanted to participate in such as roller skating at a rink in the city were not available to her, due to the cost of entry fees and hiring of equipment such as skates. *“We went to go skating... You know that park?... Yeah indoor skating rink... but you got to pay and you get tickets and stuff”* [Miriama, interview]. Restricted access to physical recreations appeared frustrating for Miriama and only further reinforced her tendency towards sedentary habits. Hemi also reiterated these constraints on the availability of recreational occupations and took the approach of doing his best to facilitate free, recreational activities for his daughters, with the hope that if their financial circumstances improve more options would be open to them.

Yeah so we... got scooters, bikes and... we just go play a lot of yeah basketball... we go to Burger King because Burger King has... basketball courts...[and] has a nice feed!... That’s the best part!... Basketball’s just a part of it... So we just stick to the free stuff for now until we, yeah, are blessed with many more. [Hemi, interview]

Miriama’s photo of herself, Figure 8.8, in a scary clown mask, dressed for ‘trick and treating’ for Halloween, is an example of a popular tradition that Miriama and her whānau enjoy. This is an example of a low-cost activity available to her and that has additional benefits such as receiving free sweets. *“I like this holiday, but Christmas is my favourite, and then Halloween, I got lots of sweets at Halloween. I wore this scary clown face”* [Miriama’s photoelicitation interview].

Figure 8.8

Miriama Wearing a Scary Clown Mask for Trick and Treating on Halloween Day



Note. Photograph taken by Hemi

8.9.11 Just Good Old Family Time

Time spent together as a whānau in activities such as Friday nights sharing kai and watching TV/movies together, spending time in low-cost, outdoor activities, or occasionally eating out at a takeaway restaurant are amongst some of the important whānau-based activities that Miriama and her whānau enjoy. Whānaungatanga or staying connected with extended family/whānau through visiting and spending time together socially embody key values for Hemi, Miriama, and their whānau.

We like playing basketball... down by the park... We take the dog for a walk... Sometimes we go to the shop...[or visit] my cousin and my aunty... Oh yeah I visit my nan and whānau on Friday too... I visit my [younger] sister and nan because my sister she doesn't live with me.
[Miriama, interview]

Family is important to me... So I try and put in the effort you know, take them to whānau... I just go give the aroha... we've got big family... on this side of the city... Fridays me and my sister and my nephews and my children... we catch up with each other and we meet up wherever or else we come over home and meet each other... just good old family time. [Hemi, interview]

Connectivity and going for drives to visit extended family, or for other whānau-based activities with her father, sister, and Maraea was something that Miriama looked forward to during the week and is evident in the photo in Figure 8.9 that Miriama took of her going out for a drive in their car as a whānau. *"This one was when we were in the car with my dad and sister... we went out to the Chinese restaurant. We ate rice, honey chicken, broccoli and veges"* [Miriama's photoelicitation interview]. However, these whānau connection activities and travel are constrained due to their low household income and the costs of fuel.

Figure 8.9

Miriama Going Out for a Drive in Their Car for a Whānau-based Activity of a Meal Out



Note. Photograph taken by Hemi

Other whānau-based occupations that Hemi valued his tamariki being able to participate in included traveling to the beach to go swimming, diving, or collecting food such as kaimoana²⁵, watercress, and puha. For his tamariki, these activities have elements of culturally relevant skill development, and are supportive of their potential and hauora. The activities at the beach are fun for the whole whānau, and are culturally important for Hemi (e.g., connection to the whenua and moana).

So we go out and pick heaps of food... Yeah watercress, puha... And we go diving and stuff so... Yeah she'll come out and learn about the sea, sand, crabs... What like jump in the water, go get them a feed. Learn about, kinas, all the seafood and the ocean. [Hemi, interview]

However, these important activities are restricted due to financial constraints such as low household income or the costs of travel. This was reflected in Miriama's weekly routine and mapping activity, and when she spoke about the lack of activities that occur throughout her week: *"Um we don't do nothing [in the weekend], we just sleep... I don't really go to the park"* [Miriama, interview].

The Riverfield case report is continued in the next chapter, where the stories of the other two tamariki (Jarad and Ofa) and their whānau in the Riverfield case study are presented.

²⁵ Kaimoana is a Māori term of seafood and shellfish. Moana is the Māori term for the ocean or large areas of water such as lakes (Moorfield, n.d.). Watercress and puha are Māori names for locally sourced types of vegetables.

Chapter 9 Findings from Riverfield Case Study: Part Two

9.1 Introducing Whānau Rua²⁶: Jarad, Tui, Ana, Ria, Gareth, Tai, Nikora, Aroha, Maia, James, Anita, Sarah, Rawiri, and Ataahua

Jarad is a shy, but polite young 11-year-old tane²⁷/boy who lives with his mother Tui (aged 38 years), two younger sisters Ana (7 years) and Ria (6 years), his closest older brother Gareth (15 years), and other older siblings Tai, Nikora, Aroha, Maia, James, Anita, Sarah, Rawiri, and Ataahua. Jarad's older siblings are all adolescents or young adults aged between 15 to 20 years. The whānau whakapapa to Maniapoto Iwi.

“During my first visit with Tui, I introduced myself with my mihimihi and Tui connected with my Irish ancestry, speaking about her Irish and Māori whakapapa” [Observations at Tui's kāinga]. Seven of Jarad's siblings are Tui's biological tamariki and four are whāngai²⁸ or from other local whānau and have lived with her in her kāinga for a number of years.

Tui is not in work currently, and is on the Work and Income Sole Parent Support benefit. She left school around the age of 16 years, without completing her high school qualifications. Tui has since worked in a variety of paid roles, including most recently as a technician at a plastics factory. For the last 20 or so years, and since the birth of her first child, she has been in paid work, while raising her tamariki mainly as a sole parent. Tui spoke about how stressful it has been and how it has impacted negatively on her health. More recently, she has remained out of paid work and in the full-time care of her tamariki, particularly her youngest, Ana and Ria.

I didn't go right through school... I've been... working since I was 16... No, I'm not working... at the moment... my mental health might not be the greatest... I'm thinking about going back to work. I just want to make sure that I'm ready... I left my job because I realised my babies missed me... leaving by half past five in the morning and getting home at 6 at night. Still have to do dinner. Kids... and I was working

²⁶ Rua means two in Māori.

²⁷ Tane is Māori for boy, son, man, male (Moorfield, n.d.).

²⁸ Whāngai is a Māori tradition of adopting/fostering a child, and where traditionally the tamaiti/child was a blood relative such as a cousin (Moorfield, n.d.).

60, 62-70 hours a bloody week, I'd work weekends too... because when you go back to work if the children get sick and sent home from school I don't actually have the support. [Tui, interview]

The whare the whānau live in is a state-owned or Kāinga Ora (Housing New Zealand) property that is built of wooden weatherboards, of late 1960s style construction. The house has 4 bedrooms, with a lounge, 1 bathroom, a small kitchen, dining room, and laundry. The size of the house is 130sqm, 20% smaller than the average NZ house (Stats NZ, 2020b). Not all of Tui's tamariki are living in her whare at any one time, with a couple of the older rangatahi at times living elsewhere. However, with most of the tamariki currently living in the whare, it means sharing bedrooms. For example, at the time of the study, Jarad was sharing his room with some of his sisters, Tui shared her room with Aria and Ria, and the other 2 rooms were shared by Jarad's older brothers, and sisters. While Tui is aware of the constrained space in the whare and the need for adequate insulation, she was grateful that she was in a state house with lower than average market rent.

Four bedrooms not enough, not enough... I got them to redirect it straight out of my benefit because it's housing... They've just currently took it up... \$148 a week. Gosh that's heaps... My power bill on the other hand... I'm looking at 200... 250... a week... It's pointless when the heat goes straight out the windows... can feel the breeze coming in the windows at night. It's cold in the winter and I think they just put these little... things on to like stop the cold and I don't know how that works. [Tui, interview]

When I first visited Jarad's home, I noticed that there was no fence at the front of the property, the driveway and lawn were damaged with large chunks of the broken concrete and holes in the lawn where cars have been parked. There is a badly damaged BMW parked in the driveway with a tarp covering it. This is Tui's only car, a write-off after an accident, that she cannot afford to fix. The backyard is quite large with a few trees, a trampoline and an above ground temporary pool. Even with many tamariki living in their home, Tui maintains the place well. However, according to Tui, despite repeated attempts by Kāinga Ora, the house is not well insulated as heat is still lost through the inadequately insulated windows and poorly designed and fitted curtains. [My observations during initial visit to meet Tui at her kāinga]

9.1.1 Keep Them off the Street

Tui spoke to me about why she whāngai or fosters rangatahi/young people into her kāinga. In most cases, the rangatahi come from neighbouring homes where the relationships with their parent/s are so strained that they are living on the street, and where usually there is a connection between one of Tui's rangatahi and the whāngai'd rangatahi. Tui's values of *"Be kind. Be fair. Just. And don't lie... or steal"* align with the challenges these rangatahi face. They show her active commitment to address these issues in her neighbourhood, where, in her view, this support is not being adequately provided. Others who support the whānau, like Sue, a volunteer at the local Riverfield Primary School and at the Riverfield Community Church Centre, reiterated Tui's friendly and kind-hearted nature. *"Yep. I mean she's the most, friendly... Likeable smiley happy go lucky person... I mean she amazes me"* [Sue, interview].

Yeah 7 are mine, the rest are, whāngai'd children... Keeps them off the street and if they're not happy at home, gives them somewhere they can be who they are... I've got Rawiri... he's 15... he's, local around here. He actually got into trouble last year so I had to... Rope him in and sit him down and have a yarn with him but he's doing better he's... back at school so yeah... It's a safe home... Like you got to be kind, you've got to be fair, you've got to be just... You can only heal hurt with a bit of love aye... because we're big on that in this house. [Tui, interview]

Tui appeared to me to be very lively, energetic, sociable and has an extroverted personality. She spoke about her love for her tamariki and also the whāngai she does for youth in the neighbourhood who are on the streets, and her 'open door' attitude to any young person who needs support to stay in her home as long as they need. My initial impressions were of a mother who had enormous love for all her tamariki, including those who were whāngai, and I was amazed at how she copes with a household of 15! She seemed to me to be the 'street social worker' or the 'local neighbourhood mum'. [My observations during visit to interview Tui]

The risks in Riverfield, such as at the local skatepark, and especially in the evenings, for tamariki like Jarad, are present in the minds of mothers like Tui. Her method of keeping her tamariki safe is to ensure they understand the rules she has in place for them not to visit these places or be there alone, particularly in the evenings. Asking her older rangatahi to watch out for their younger siblings in order to keep them safe and to follow her rules are other ways she helps protect her younger tamariki. Even so,

Jarad is aware of the risky and unsavoury nature of the local playground and skatepark, and follows his mother's advice to not hang out there. "[The skatepark it's]... *sketchy... Yeah oh there's not really that much people that go there now... 4 days ago I saw like ah, the fire [brigade] people [at] the community centre*" [Jarad, interview].

If you're bloody caught down there by the big brother... Gareth... so none of his siblings will be caught at the skate park... Yeah stay on our street... Stay together. If the street lamps come on, you're frickin late you know... they need to be home before the street light comes on.
[Tui, interview]

9.1.2 That's How We Have to Do it: Do it Cheaper

Living on a benefit and raising a large household of tamariki is tough. Drawing on the recruitment screening questions and Tui's interview, the combined household income is approximately \$860/week, after tax, including child support payments (New Zealand Government, 2020, October 2). The rent Tui pays for the Kāinga Ora property is \$150/week, leaving \$710/week for all their other weekly expenses (e.g., kai/food, power (including heating), phone/internet, transport, clothing, footwear, and other child-related costs). The NZ poverty line for a whānau consisting of a single parent and 3 children <14 years BHC is \$925/week and AHC is \$705/week (Perry, 2021). The state-subsidised social housing (Work and Income, n.d.-c) provides for affordable rent and helps to reduce their weekly household expenses. Relative to housing costs, this places the household just under or close to the poverty line. However, the whānau are experiencing deprivation based on the results of the NZiDep questionnaire (Salmond & Crampton, 2012b) completed by Tui, where, in the last 12 months, they needed support with food costs (e.g., food grants/banks), had to buy cheaper food, and missed out on fresh vegetables/fruit and clothing/footwear.

In order to survive, Tui spoke about how she needs to carefully manage her budget by shopping in bulk for certain food items each week, preparing large meals that can feed the whole whānau, and not wasting any kai. In a large household such as hers, certain expenses are particularly difficult such as the high costs of power due to high usage of hot water and electronic devices (e.g., phones and computers). Having a restricted budget, the rising costs of fuel, and limited access to a car mean that travel by a vehicle is constrained and instead occurs by walking or biking. Tui's other active strategies to

manage the household budget and help instil a work ethic in her tamariki include encouraging them to take up part-time paid work, such as Gareth who is 15 years of age and currently employed in a part-time fruit picking job.

So many devices... [Hot water] cylinder, yeah I remember the days coming home from work and having cold showers because my kids [had used all the hot water]... [and]... Between 200 to 250 a week [for food]... If it's a meat week. Aye so, cupboard pantry food one week, meat the next. That's how, we have to do it... find it cheaper to buy, 5kg sugar... and then, the meat weeks is fucking insane... Even when I do treat with steak... I... slice it up. Put it in a wrap. With some shredded lettuce, carrot... mayo you know... it's just cheaper... Don't really go far, petrol's expensive... my BMW got written off... Cheaper on the bike, mate... Yeah so all the older ones, Gareth up... they've all got part-time work. Oh my big ones are full-time... Well if they work hard for something, they make their own money and they buy their own things, they appreciate things a lot more. [Tui, interview]

9.1.3 Nothing For Him to Do

The out-of-school occupational opportunities in Riverfield for tamariki like Jarad that are free or low-cost are limited. For example, close to Jarad's kāinga there is a small park but, as Jim, manager of the Riverfield Community Church Centre, has reported, it has very limited playground facilities. However, the centre provides a youth night, once a week, with free food, fun activities and free kai that Jarad and his siblings used to attend. Based on Jarad's interview, however, this group no longer matched his interests. *"Like every Wednesday... like you got free dinner... no I don't... go there anymore"* [Jarad, interview]. While there are sports clubs in the neighbourhood, these involve fees and equipment that Tui cannot afford. Furthermore, Tui believed there should be more occupations for tamariki like hers to participate in that are free such as when she was a child, or that are outdoor-based, culturally relevant, and teach tamariki life skills.

Because there's nothing for him to do. Do you know what I mean?... there are things like the community centre... just across the road... for young teens... they're the only ones that I really know of... Shit, I reckon there could be more... that the children do need more... Like a YMCA. That's what we had when we were at school...[or] know how to hunt and gather... pig hunting or fishing. [Tui, interview]

Sue, an adult who supports the whānau, explained how the combined effect of material poverty that whānau face, such as a lack of transport and the long-term under-resourcing by government, means constrained access to and a reduced level of free or low-cost activities for tamariki to participate in. In her mind, the solution is to provide increased funding to community centres such as the Riverfield Community Church Centre, from the state and local city councils.

There's so much need in this little place... we need to be addressing the issues, like, transport, finance, all that for our children to be engaged in after school stuff... But you see the problem is nobody's interested in funding a piddly little community group trying to address the needs of their community... Just don't have the resources... And even a little pool of dollars, that we could dip into so these kids could have some access to after school activities. [Sue, interview]

9.1.4 By 8am Walk to School and Home Before the Lights Come On

I wake up and I get ready for school... around... 7... Yeah and then I'll get up, I'll wash my face and then have breakfast... And then, yeah I'll make my bed and clean up and get ready, get changed into my uniform. And then, I wait for like 8 o'clock because that's when like the bus comes... And if there's not a slot, spare seat... if there's like one person away, I will go. I'll take that spot... but there's not usually a space... [Sue] will go and then I'll just walk to school... usually walk. [Jarad, interview]

Jarad is independent in beginning and carrying out his ADLs in time for school, including his personal daily occupations in the kāinga such as dressing, grooming, showering. He also helps to support his younger sisters to get ready (e.g., checking on them). Jarad's independence and the support for his sisters means Tui can rest a bit longer in bed in the mornings, after a busy night looking after the household. However, based on Jarad's interview and weekly diary, he appeared not to have a consistent routine for oral hygiene. I also observed that he had a tendency to skip breakfast, even though he considered kai and "eating" [Jarad, interview] supportive of his hauora. (Refer to Jarad's Weekly Timetable Appendix HHH.) While a free breakfast at his kura/school could be helpful, based on the Riverfield Intermediate School website the

kura does not participate in the free KickStart²⁹ (KickStart, 2020; Ministry of Social Development, n.d.) breakfast programme and only provides free lunches. Furthermore, restricted spaces in the whare such as only one bathroom and a small dining room space, and the number of occupants means that negotiating the use of the bathroom for personal daily activities and using the kitchen for shared meals together as a whānau are constrained.

He's up before me... so he gets up around about 6, 6.30... shower. Breakfast... but he helps get them [his younger sisters] ready too... Yeah, Sue sometimes if she's got a spare seat she'll give him [a ride], let him jump in the van... [otherwise] he walks... my days are quite easy. It's my evenings that are full on... Very busy. [Tui, interview]

Jarad's kura is approximately 1.1km away from his kāinga (i.e., a 15 minute walk), resulting in an approximate total of 30 minutes walked each day. While the church-based community centre van provides transport for primary-aged school tamariki, like Ana and Ria, the limited capacity means they can only provide Jarad a ride if there is a spare seat. As Sue said in her interview, "well if I had a spare seat, I'd throw him in the van". In addition, as there is no reliable access to a family car, on rainy days it tends to result in Jarad staying home from kura. "Sometimes my mum will, if it's like pouring down my mum will take me... Or I just stay home" [Jarad, interview].

It was a wet, early summer morning in the city when I arrived at Jarad's home around 7:30am. The weather was atrocious and was pouring with rain, continuing all morning. As I approached the door, one of his sisters, Ria, was waiting for me. She went to fetch her brother and after some minutes he came out of his room in his pyjamas, looking rather bleary eyed. He greeted me and then shot off to his room to get this uniform on. While I waited in the hallway, Ria was busy getting herself breakfast. When Jarad re-appeared from his room he went to check on his sister. Jarad did not have any breakfast. Tui was still in bed asleep. Jarad then said he did not think there would be a seat for him in the van, so after he checked with his mother for permission, I dropped him off at school. [My observations during the morning visit to Jarad's kāinga]

²⁹ KickStart is a programme that provides free breakfast into schools in NZ, based on a partnership between NZ government and private food companies such as Fonterra (dairy products) and Sanitarium (breakfasts foods) (Kickstart, 2020).

9.1.5 Kura: Smashed It

On Tuesdays and Wednesdays at school we have PE. And Tuesdays and Wednesdays we have tech. Plus like ah social dancing, with group science and food and drama... I always do those... Oh yeah... we have to clean up the class at the end of the day... Ah I don't do kapa haka [at school]... School. Whānau. Friends [help me reach my dreams].
[Jarad, interview]

Jarad enjoys attending kura/school and sees the value of it to his future success in life. He attends on most days of the week, has an important classroom role, and kura is a place where he gets valuable time to socialise with his friends. Tui was proud of her son's success at kura stating: *"He's awesome. He had a maths test on Monday. I was like 'How did you go' and he goes 'Smashed it mum'"* [Tui, interview]. In her interview, Sue also recollected how well Jarad engaged in his learning during his early primary years, *"He was like that in primary school. He just got on and did things, he did really well in his class just because he just gets on"*. However, Jarad's inconsistent attendance due to a lack of available transport on rainy days, that likely declines further during the wetter, winter months of the year, may, in the longer-term, negatively impact his education.

While Jarad engages in his mahi³⁰/work at kura he is not in the habit of completing homework. Tui did not raise any concerns about the absence of homework. However, the Riverfield Intermediate School website does recommend that homework is completed each weekday, and that parent/s should take an active interest in their child's learning, spending approximately 30-45 minutes a day with them in these tasks. (Refer to Jarad's Weekly Timetable Appendix HHH.)

9.1.6 Hanging Out at School

The only time that Jarad spends with his friends occurs on an incidental basis before, during, and after kura, particularly in the brief period after kura and before his friends go home on the bus, or through online gaming activity and texting his friends at his kāinga. Given the lack of opportunities for socially-based occupations and the restraints on his ability to play with his peers in the neighbourhood and in his home, the incidental opportunities Jarad has to socialise with his friends is valuable to him in

³⁰ Mahi means work, accomplish, to do, perform, a job, or to be productive in Māori (Moorfield, n.d.).

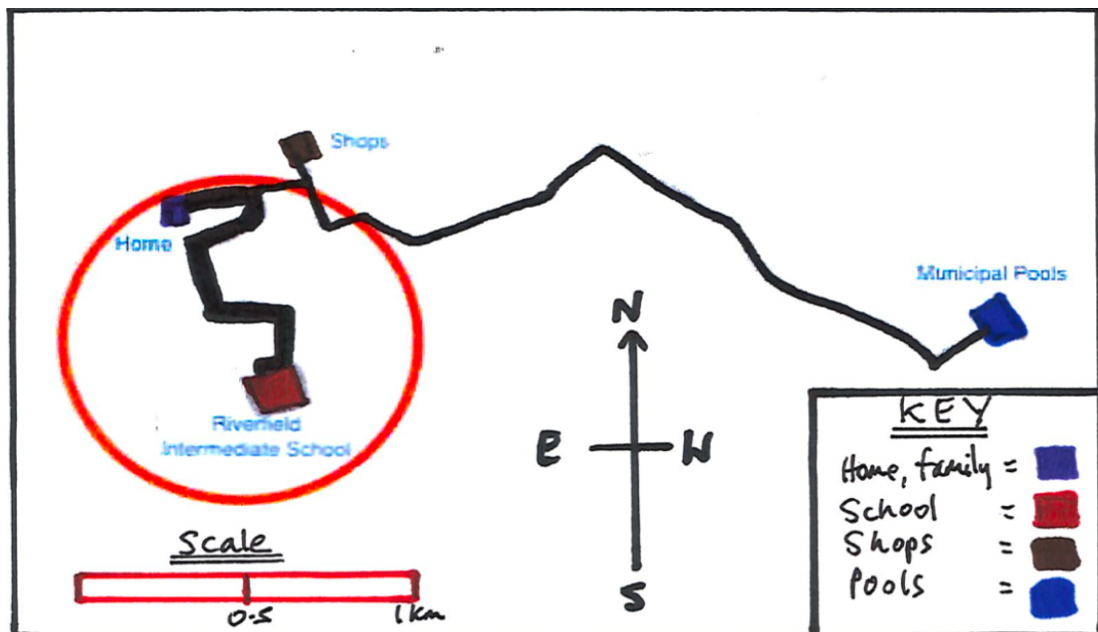
terms of his hauora and he maximises his time spent in these activities. (Refer to Jarad's Weekly Timetable Appendix HHH.)

Oh yes sometimes [we play in breaks at school]... [and] when school finishes I just hang around at my school... There's a carpark and that's usually where me and my friends play handball... because they go on the bus so they stay there until the bus comes... and when they go I just walk home...[at home] I text my friends. [Jarad, interview]

Drawing from Jarad's weekly timetable, his map, interview, and my observations, the size of the whare in relation to the number of occupants restricts the option of having his friends over to play indoors or for other social activities such as sleep-overs. Additionally, while Jarad previously visited the home of one of his friends who lives locally, this has since stopped and he chose not to explain why he ceased these visits. "Not anymore [my friend]... No I just stopped visiting them" [Jarad, interview]. During my final follow-up visit with Jarad, he spoke about having fun when he recently attended a friend's birthday party that was held at the local municipal pools. However, this appeared to be a rare occurrence. (Refer to Jarad's map in Figure 9.1 below, and his Weekly Timetable Appendix HHH.) Consequently, his time spent in social activities, in-person, with his peers is limited to approximately 3-4 hours/week.

Figure 9.1

Map Showing the Locations of Jarad's Occupations that Occur in Riverfield and the City



Key: Thicker black lines indicate regular, daily access and the thin lines indicate occasional access. The red circle shows a 1km radius around his home.

9.1.7 Just Drop on the Couch

Jarad's after-school routine primarily involves spending time at his kāinga in recuperative occupations, texting, screen time, or spending time in his bedroom alone. "[Afterschool] I eat!... Yeah sleeping... Yeah just chilling on my bed or watching TV... texting with my friends... or playing the game" [Jarad, interview]. The photo in Figure 9.2 that Jarad took of his bedroom and his stuffed toy, where he spends time chilling out, is reflective of his need for time alone, to rest, and to be away from a busy household. This was a need that Tui also recognised that Jarad required to support his hauora, amidst their busy and boisterous kāinga.

[After school] he'll come home, sometimes he just drops on the couch and just lays there for about an hour... then he'll toddle on and get out of his uniform, find something to eat... or he's begging his brother to go on the PC... Jarad's pretty much got the TV from like about 5 'til about 7 yeah... You never feel alone in this house... but when he does go in his room and close the door we realise okay he's over us... Yeah because we all got to remember that we all need a little bit of space at times too. [Tui, interview]

Occasional afternoon activities involve, "his big brother will send him down to the shops to go get him some munchies... Yeah and then... Ataahua will come in, all the card games will come out" [Tui, interview]. Jarad also helps out around the kāinga with household chores that are helpful for his mother in maintaining a busy household. "Oh yeah I [tidy my room]... I still do that...[and] like cleaning up the lounge and washing the dishes, drying. That's usually it... and vacuuming" [Jarad, interview].

Figure 9.2

Jarad's Shared Bedroom and his Stuffed Toy



Note. Photograph taken by Jarad.

Jarad's evening mealtime routine consists of mostly eating alone at around 7pm. The restricted space in the whare (e.g., small dining room) and the number of occupants, contributes to this absence of a shared evening meal as a whānau. Jarad's habit of getting to bed late (i.e., around 11pm each weeknight) has created an evening routine of a late bedtime. Even though Jarad considered "*sleeping*" [interview] vital to his hauora, his bedtime routine during the school week may be reducing his level and quality of sleep. The challenges Tui faces as a sole parent each evening, in a busy household, getting all her tamariki off to bed, are other factors contributing to his late bedtime sleep routine. (Refer to Jarad's Weekly Timetable Appendix HHH.)

Dinner's always late... We never have dinner together... Oh no like I'll cook dinner but... I'm like "grub's up"... Yeah and then um everyone eats... No not allowed to stay up all night he gets growlings...[but] they're still wandering through the hallway around... 10 o'clock and then I'm like rah... 11 I'd say 11 [before they get to bed]... And then I'm up 'til about 1. [Tui, interview]

9.1.8 I Don't Play Those Anymore: Shying Away From Sports and PA

Jarad used to enjoy participating in sports and outdoor physically based recreations, but the onset of his epilepsy, combined with the challenges Tui has faced in getting adequate medical treatment for this condition, and the lack of local, free, and low-cost out-of-school organised extracurricular activities, has resulted in minimal engagement in such occupations. Jarad is, however, participating in organised PA at his kura with PE occurring two times a week, for approximately 1 hour/session, and during some of the time in his breaks, engaging in active play with his friends. "*I like sports and playing games and running... Basketball... and volleyball but I don't really play those anymore... at school... We have PE classes but we usually don't do basketball. We do heaps of like... capture the flag*³¹" [Jarad, interview]. Walking to/from kura most days each week adds to Jarad's weekly levels of physical activity. Additionally, his increased time spent playing with his siblings in the backyard, during the summer months (i.e., 3-4 months/year), further contributes to increased levels of physical activity. Overall, Jarad spends approximately 6 hours/week or 3-4% of his time (less than 1 hour/day) in physically based recreational occupations. The restricted number of activities and high

³¹ This is a school-based game that encourages teamwork and physical activity. 'Capture the flag' (or catch the flag) involves two opposing teams trying to get the other team's flag to win.

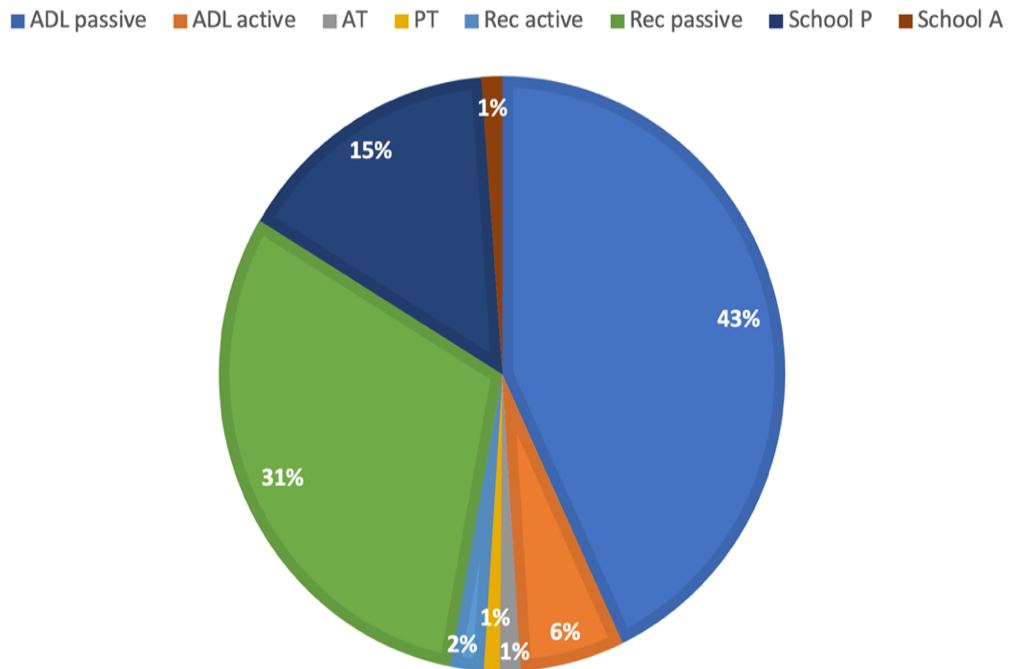
amount of time spent in sedentary-based recreational activities that Jarad participates in outside of kura and at his home is captured in the map he drew (refer to Figure 9.1 above) and Jarad's time use pie graph (refer to Figure 9.3 below).

Since the onset of epilepsy, approximately 2 years ago, Jarad no longer participates in sports out of school time. His seizures occur spontaneously, leaving him tired for at least a day, and he has become reluctant to be away from his kāinga and engaged in physical or social recreations. *"I don't really play [sports] anymore... Ah yeah I have seizures... it's just bad... I don't know when it's coming. Like it can come anytime... if I have a seizure and I wake up, I'll just go back to sleep"* [Jarrad, interview]. Tui has seen this fear of seizures, as well as his habit of staying up late and subsequent tiredness, contributing to a decline in his motivation to engage in outdoor recreations. Additional factors include delays in getting specialist medical treatment or an inability to afford private specialist services, a lack of income and transport to access services, and Tui's busy life managing a large, busy household.

All the activities and all the sports I think... He only stopped because once he found out that he [has epilepsy]... with our household he's fine but when it's trying to get him... outside the home... he sort of shies away...[and] half the time it's because he's too tired... I actually think it's motivation... Well the thing is, we've been waiting now 2½ years for his EEG [through the hospital service]... and it still hasn't... happened so... I stopped recording his seizures because well what's the point because they're going to charge me every time the ambulance comes... you know trying to explain to the hospital that I have other children at home yeah like it's not going to hurry them up... So... actually... we need more [medication]. [Tui, interview]

Figure 9.3

Proportions of Time Spent in, and the Passive or Active Nature, of Jarad's Occupations During the Week.



Note: ADL=activities of daily living, AT=active transport, PT=passive transport, Rec active=physically-based recreations, Rec passive=sedentary recreations, School P=passive school activities, School A=active school activities.

One of Jarad's favourite occupations was reflected in his dream to be "a gamer" [Jarad, focus group interview]. He engages in gaming on a routine basis as an alternative to physical recreation, playing games on his brother's computer, or on the household PlayStation. The importance of this occupation is reflected in the photo in Figure 9.4 of him playing on the PlayStation. "I like watching TV, and YouTube... playing on the PC... Roadblocks" [Jarad, photoelicitation interview]. However, long periods of screen time can negatively affect his epilepsy, and while Jarad is aware of this and uses strategies to cope, he continues to engage in this activity for sustained periods of time. Overall, Jarad spends approximately 7 hours/day or 29% of his time each week (out of his total 31% in passive recreations) in computer or screen-based activities at home. (Refer to Figure 9.3 Jarad's time use pie graph.)

Oh yeah that affects my seizures as well... like spend on the game too much because it's bad for my health... I have glasses and stuff... blue skinned glasses... Yeah they help... yeah [Gareth] he kicks me off... Oh I used to [have medication] but I ate it all... Yeah [mum] said... she'd get me some more. [Jarad interview]

Figure 9.4

The Important Occupation of Playing Games Online at Home



Note: Photograph taken by Jarad.

9.1.9 Outdoor Recreation all the Way

Jarad's main areas of social activity, outside of kura, include time spent playing at his kāinga with his siblings, outside during the summer months on the trampoline or in their pool in the backyard, indoors playing free games (e.g., cards, Jinga), or watching movies and TV together. Throughout the summer months Tui hosts BBQs in the weekends and invites her friends and some of her extended family/whānau, including Jarad's cousins. The large outdoor backyard makes it possible to host these social events that Jarad and his whānau really enjoy.

In summer-time around Christmas... Yeah, the pool, the big TV goes out the back... all the lanterns come out and fairy lights... So the children sleep on the tramp, we have a tent out there... Half my lounge... we have the bonfire pit... Yeah tramp turns into playground for the younger ones... Yeah I love outdoors, we love outdoors. [Tui, interview]

Jarad captured in the photos shown in Figure 9.5, the fun and relaxing time he was having with his whānau at a weekend BBQ at their place during the early months of summer. *“Playing on the tramp with my sisters... my cousins... and chilling out with my family”* [Jarad, photoelicitation interview].

Figure 9.5

Fun Outdoor Activities at Jarad's Kāinga during a Summer Weekend



Note. Photographs taken by Jarad and Tui.

Tui also spoke about the importance of having her tamariki engage in outdoor, nature-based activities. Additionally, wherever possible, Tui makes use of free, low-cost activities such as going for walks or playing fun games at the park with her tamariki. These activities that connect with nature (i.e., the whenua and taiao³²), and provide opportunities to learn new skills, are supportive of their potential and hauora, are fun for the whole whānau, and have cultural importance for Tui.

So [I] take them for walks through the... gardens... And stuff like that you know. Oh yeah I'm that mum... Or like we'll do a treasure hunt or things like that... even the river walk you know along the water... Yeah it's free... Now summer's here it will be more... outdoor recreation all the way... We do a lot of camping with the kids... lot of travelling... so yeah we used to do a lot of that with our kids... teach them how to hunt and gather. [Tui, interview]

However, these whānau and outdoor occupations were something that Tui said used to happen, and acknowledged were unlikely to happen this year given their lack of transport and low income. *"Shit this year I think though we'll just be spending it at home"* [Tui, interview]. For Jarad, the absence of fun whānau activities is felt as a loss and has meant he has to make do with mainly staying at his kāinga during his weekends and his holidays. *"[During our holidays we] still do the same thing as I would do on the weekends. Often times we'll probably go out to our cousins or do something fun...[But last holidays] Nothing. Oh we just stayed home"* [Jarad, interview].

³² Taiao in Māori encompasses the natural world, the environment, the Earth (Moorfield, n.d.).

9.2 Introducing Whānau Toru³³: Ofa, Monū, Malohi, Tui, Tapuaki, and Falala

Ofa is a quiet and thoughtful 12-year-old tamasi'i³⁴/boy who lives with his mother Monū (40 years), father Malohi (43 years), and three younger siblings—Tui his brother (10 years), Tapuaki his sister (9 years), and Falala his youngest brother (7 years). Malohi and Monū migrated from Tonga about 13 years ago; Monū with her parents, and Malohi on his own. The fāmili³⁵/family (Schneider, 1997) are part of the local Tongan community and attend the local Tongan Christian church every Sunday. The Tongan language is spoken in the home, along with English. Monū and Malohi's values centre on fāmili, maintaining healthy relationships, positive role modelling for their tamaiki³⁶/children, supporting each other and helping others who are in need, and their Tongan culture and Christian values.

I want to be a good leader for them. Yeah. Like a role model... With the family. [Malohi]

And that helps our other families and relatives. [Monū]

It's funny, when they... go somewhere like the homeless here... "all the people oh daddy you got the money?" [Malohi]

They see it, they say they need money. [Monū]

And I think they got 10 dollar, 20 dollar, to give to the person. [Malohi]

So they would rather give it than buy their things. That's what happens now. [Monū]

But can't stop them. [Malohi]. [Parental interview]

Ofa's fāmili live in the Riverfield neighbourhood in a privately owned rented property; a former state owned house (Kāinga Ora [Homes and Communities], 2019, November 19) built of wooden weatherboards, of late 1950s style construction. The fale³⁷/house is 94sqm, making it almost half the average NZ house size (Stats NZ, 2020b). There are three bedrooms, one bathroom, a lounge, dining room, kitchen, and laundry. Having six people in the fale, means that spaces are constrained and often shared. For

³³ Toru means three in Māori (Moorfield, n.d.).

³⁴ Tamasi'i means boy in the Tongan language (Schneider, 1997).

³⁵ Fāmili is a term stemming from English that in Tongan means the immediate/nuclear family typically (Schneider, 1997).

³⁶ Tamaiki means children in the Tongan language (Schneider, 1997).

³⁷ Fale means the family house or a house in the Tongan language (Schneider, 1997).

example, the tamaiki are sharing rooms, with Ofa and Tui in one room, and Falala and Tapuaki in another. Monū and Malohi are in the third bedroom. The fale has inadequate heating and insulation, which is the responsibility of the property owner. As explained by the local church minister, Rev Mr. Lopeti, who lives close by:

The house is too small... And [doesn't] keep them warm in the cold climate in winter. ...I'm talking in the physical... I don't think that house is good for kids... Because that house and my house they were same building period... I don't think any insulation there... Yeah mine is [insulated]...[and] owned by the church... Ofa's house... They're renting. [Rev Mr. Lopeti, interview]

When I arrived at Ofa's home for my first visit, I could see that the family kept the house tidy. The front lawns are mown and there is a colourful flower garden in the front yard. There were two vehicles in the driveway, Malohi's work van and the family car (a SUV). In the shed and in the backyard are a number of items that are stored such as outdoor furniture, and engine parts. My thoughts were that this house is quite small for a family of six. The Tongan church is close by and Rev Mr. Lopeti is one of their neighbours. Most of the houses in the street and neighbourhood appear to be either current or former state houses but that are often privately owned, like Ofa's. There are also a few newly built houses along the street. [My observations in my initial visit to Ofa's fale]

9.2.1 Aim for a Better Life

Both Malohi and Monū are in paid shift work roles, leaving them with limited time and energy during the week. Malohi works at a dairy processing plant located approximately 50kms from their fale. He leaves early for work (5:00am) in a work van, collecting several other Tongan workers on the way. He returns to their fale by late afternoon, tired, and sleeps for a few hours. Monū works shift work as a caregiver in a local rest home, leaving in the evening (11pm) and returning early morning (7am). Shift work leaves her feeling tired and typically she goes back to sleep briefly before waking to drop off the tamaiki/children to 'apiako³⁸/school. Both parents receive little more than the minimum wage. Additionally, Malohi has about 3 months off work, due to a seasonal shut down at the factory, leaving him with reduced yearly income. They

³⁸ 'Apiako means school in the Tongan language (Schneider, 1997).

receive a modest top up to their household income in the form of a benefit, the Working for Families Tax Credit (WfFTC) (Inland Revenue [Te Tari Taake], 2023).

Despite the parents' long hours of work, and the small additional benefits from the government, the fāmili are experiencing material hardship. Drawing from recruitment screening data and the parental interview, the combined household income is approximately \$800/week, after tax, and including WfFTC. With rent costing \$480/week, this leaves only \$320/week for all their other weekly expenses (e.g., food, power, phone/internet, transport, school and child-related costs, traditional clothing, tithing/donations to the churches etc.). The New Zealand poverty line, based on household composition of 2 parents and 4 children <14 years (Perry, 2021), and AHC are deducted, equates to \$1,000/week, clearly placing the fāmili under the poverty line. Drawing on the results of the NZiDep questionnaire (Salmond & Crampton, 2012b) completed by Monū, in the last 12 months the fāmili needed support with food costs (e.g., food grants/banks), were missing out on fresh vegetables/fruit, had to buy cheaper food, were missing out on clothing/footwear, and were receiving clothing/money grants.

Ofa is cognisant of the hardships his fāmili experience and the restraints this has on their requests for material items: *"Oh yeah we're getting new ones soon [bike] because the chain's a bit loose... for Christmas. Hopefully"* [Ofa, interview]. Rev Mr. Lopeti, who knows the fāmili well, is aware of the hardship they experience:

I sometimes support... with... foods...[Ofa's] really good on... sports... but, the parents can't supply it... just to say income, the income for the parents... Because sometimes they can't afford to take him to the sports, sometimes they can't afford to buy... some kits for the sports, rugby... like shoes... [and some Tongan] festivals... they can't afford to go there you know...[costs of travel] And the time [for the parents].
[Interview]

Despite this level of material hardship, Malohi and Monū have life goals for improved employment that gives them greater job satisfaction, enables more quality time with their tamaiki, and greater income. For example, Malohi is currently being considered for lay ministry in their church, and Monū wants to return to studying as a social

worker which was curtailed when her mother became ill and passed away during the COVID-19 pandemic.

We have many plans... to move forward step by step. Like now my... Ofa's 13 years... Have aim for... better life... a goal for life. We plan when Ofa's 15 to buy the house... Yeah that's the plan but depends because of work... I have a plan I try for my own... small business... I want to have a lawnmower, a small business... Yeah got the trailer now... I've got the mower, trimmer, water blaster... Minister aye... My church now this December ah, big meeting this weekend. [Malohi] Nominated him to be [a minister] [Monū]. [Parental interview]

The parents also see education as the key to helping their tamaiki rise out of poverty in the future. From the parents' perspective, choosing what they thought to be the best 'apiako in their community, a local Catholic-based integrated school, that includes both primary and intermediate levels, is part of ensuring the educational success of their tamaiki. The reasons for choosing the 'apiako included its close proximity to their home (i.e., 1.3km distance), the Christian values the 'apiako espouses, its higher decile rating of 7/8, and the negative impressions the parents have about the Riverfield state primary and intermediate schools. Although, the 'apiako charges a modest fee, the parents manage their budget carefully in order to afford these additional weekly costs. Monū reported that they pay the 'apiako fees of \$440/year/child on a weekly basis of \$8/child/week, or a total of approximately \$32/week.

9.2.2 Not Much Things to do

The availability of out-of-school, free or low-cost groups, clubs, and other recreational occupations in Riverfield for tamaiki like Ofa are minimal. In his interview Ofa spoke about the limited choices available to him in his neighbourhood, "*Not that much things to do*". Nonetheless, the support offered from the local Tongan community and church supports Ofa and his siblings to participate in cultural, religious, and after school educational activities. The photo taken by Monū in Figure 9.6 of Ofa performing a dance at his local church highlights how important these occupations are to him and the supports that are in place to enable his participation. "*That's me doing a dance... about a Bible story... for the last day of Home Centre... with my friends and cousins*" [Ofa, photoelicitation interview].

Figure 9.6

Ofa Performing a Bible Story Dance, in Tongan Traditional Clothing, at his Church.



Note: Photograph taken by Monū.

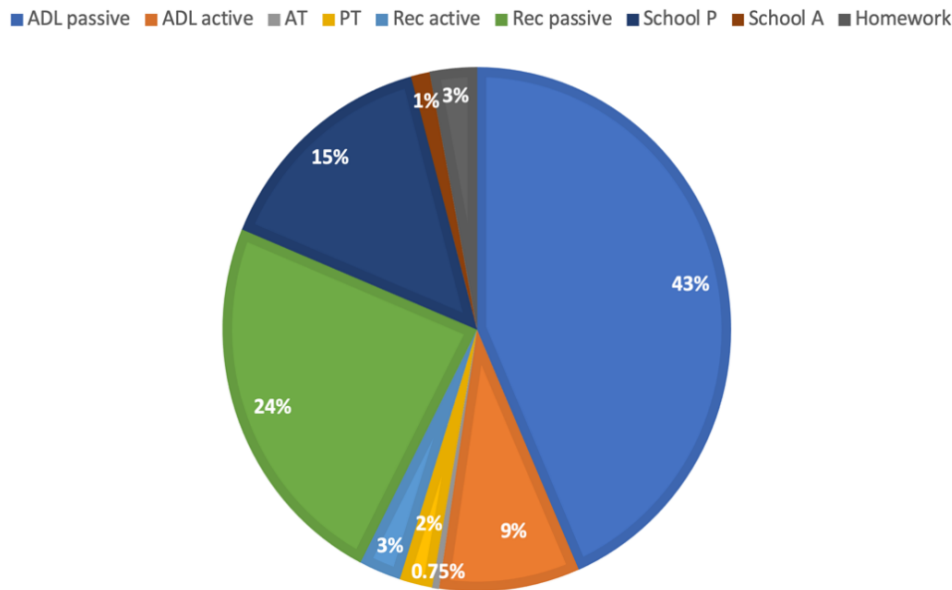
9.2.3 Don't go Outside

Due to the dangers that are present in Riverfield, particularly for tamaiki, Ofa's parents have specific rules to help protect them from harms (e.g., violence, negative influences etc.). These rules include not allowing them to be outside of the property or in the neighbourhood alone, and providing them with transport to and from their 'apiako/school. As Monū explained in her interview, *"There is a time limit ... Have to come back... before dark"*. Ofa is aware of these rules and he and his siblings diligently abide by them as instructed by his parents. *"Yeah my parents said not to go outside... when they're not here"* [Ofa, interview].

However, while providing transport to 'apiako helps ease Monū's safety concerns for their tamaiki, *"I am concerned about the safety of my children in this neighbourhood, if they walk to and from school"* [My notes in a follow-up visit], it results in restricted opportunities for walking during the week (refer to Figure 9.7 below Ofa's time use pie graph). Ofa's growing level of maturity and independence means he is also capable of walking to/from 'apiako independently. However, more recently, Monū has started a gradual process of allowing Ofa and his siblings to take on some of this responsibility. *"We walk...[to] you know where there's that café, dairy? And then my mum picks us up... She usually comes there... me, Tui and my two younger siblings"* [Ofa, interview].

Figure 9.7

Proportions of Time Spent in, and the Passive or Active Nature, of Ofa's Occupations During the Week.



Note: ADL=activities of daily living, AT=active transport, PT=passive transport, Rec active=physically-based recreations, Rec passive=sedentary recreations, School P=passive school activities, School A=active school activities.

9.2.4 Help my Siblings: Then 8o'clock we Hit the Road to School

Oh I usually wake up... 6:30... 6:45... sometimes I shower. If I didn't shower the day before on that afternoon. And I do my siblings' lunch, get them to wake up... and 8 o'clock we hit the road to our school.
[Ofa, interview]

Ofa's ability to independently begin and carry out his ADLs in time for the school routine such as dressing, grooming, showering, and getting ready for school were clearly evident during my morning visit to his fale. He also provided a lot of support for his siblings to help them get ready in the mornings, reflecting three of his core values of *"Family. Showing kindness to people. Helping out"* [Ofa, interview]. This is particularly valuable for his parents given their paid work requirements. *"So that's the routine, they just wake up in the mornings. Ofa is, the first one of course and then when he comes out he'll wake up the next and the next so... 'Your bag is there'"* [Monū, interview]. While Ofa takes on these adult responsibilities, his parents were concerned it might be too much for a young person, as Malohi said, *"I think it's respectful but I think... Maybe it's too much for [Ofa]"* [interview]. Additionally, the small size of the

house relative to the number of occupants results in spaces being shared which constrains some daily activities such as negotiating time for personal activities (e.g., only one bathroom).

I visited Ofa's home around 7:30am. Ofa greeted me at the door and he showed me into the kitchen where he was busy making school lunches for his younger siblings. Boiled and smashed eggs with mayonnaise on white bread, sliced, and wrapped in plastic wrap, along with a few slices of apple each, in their lunch boxes. Then Ofa ducked away to wake his brothers and sisters with instructions like, "time to get up now" and "your uniform is on the chair". Shortly after, Monū came into the kitchen and cheerfully said "good morning", but looked tired and bleary eyed, having not long been back from her shift work and having only had a brief sleep. Malohi had already gone to work earlier that morning. After Monū checked on Ofa's preparations, she popped a large bag of chips into Ofa's school bag for the children to share. Then Ofa went about getting himself ready for school such as retrieving his bag and putting on his school shoes. He was already in his school uniform. He said to me when I asked, "I have been up since 5:30am and had my breakfast and then started to get the lunches ready". [My observations during the morning visit to Ofa's fale]

The demands of the parents' paid work (e.g., Malohi leaving early, Monū still in bed after her shift) and with Ofa having his breakfast first before making the lunches, means that they do not get to eat their breakfast together as a fāmili on a routine basis. Additionally, as the 'apiako does not participate in the KickStart free breakfast or the government funded free lunch programme (Ministry of Education, 2023, March 28) it results in further strain on the household budget and increased morning tasks for Ofa.

9.2.5 Just Take a Rest

Once 'apiako/school has finished, as part of his afternoon routine Ofa and his siblings walk to the shops close by to their 'apiako and are collected from there by Monū, returning home with her in the car. As she said, "*so when they go to school I tell them [my children] just, start walking [after school] and then I'll come and meet you at the dairy*" [Monū, interview]. (Refer to Figure 9.9 Ofa's map showing the regular travel by car to and from 'apiako.) Ofa explained his after school routine as typically involving:

School finishes about 2.45... put my bag away, lunch box in the sink. Take a shower. Do some Education Perfect³⁹, homework... And then... Roadblocks⁴⁰ (gaming) and then we just eat... dinner yes dinner's at like 7.30...[and] sleep time... [on Fridays] Same thing but, [to chill I] lie on the bed and just take a rest... Or maybe just sit in the sun, look at the sky. [Interview]

Having time to rest after 'apiako was seen by both Ofa and his parents as important to his health (Mo'ui lelei) and wellbeing (Mo'ui⁴¹) with Malohi saying, "Give him a rest... Sometimes he go 'oh daddy, mummy I can't do something I'm tired"; and Monū added,

when they get home they just get changed and everything... relaxing sometimes he's just in the lounge, listening to music... So we respect that... We know that he's still got his duty done but we just let him have a sleep and then ask, 'do it later on'. [Parental interview].

9.2.6 School: Where I Learn and Play

'Apiako and education are important to Ofa for a number of reasons. As Ofa said, 'apiako supports his learning and helps him achieve his full potential in life, "Studying. Definitely studying [helps me achieve my dreams]... I want to be like a... businessman... Yeah work on posters, art work and stuff like that" [interview]. It is also a large part of his weekly routine, where he has most social contact with his friends, along with opportunities for physical activity, skill development, and voluntary roles that contribute in positive ways to the community. Further evidence of Ofa's value in his education is demonstrated in Figure 9.8 in a photo of him in his uniform, proud, and ready for 'apiako.

I play with my friends at school... sometimes we play soccer on the field... some days we just chat... sometimes we do like a little bit of soccer training... And some basketball... yeah I'm going with my school to [the pools]... that's...my favourite thing this year... we have those [bike lessons] at school... sometimes we go gardening... I'm in my own environment agent group... nature, planting plants [in] the gully... Plant some trees... I think [at] the... zoo. [Ofa, interview]

³⁹ Education Perfect is an online education platform for learning and homework activities such as reading, maths, science. <https://www.educationperfect.com/>

⁴⁰ Roadblocks is a free online game for young people.

⁴¹ Mo'ui lelei is the term for health and Mo'ui is a term meaning life or wellbeing in Tongan language (Schneider, 1997).

Figure 9.8

Ofa Outside of his Fale in his School Uniform, Ready for 'Apiako.



Note: Photograph taken by Monū.

9.2.7 Home Centre: Helping our Tamaiki and Fāмили

In addition to the routines of schooling, Ofa engages in homework set by his teacher on a routine basis, mainly consisting of online maths tasks. Both Ofa and his parents view homework as vital to increasing his educational success.

Oh we do... Education Perfect [everyday] Yeah. Except for Fridays, Saturdays and Thursday... Yeah they give us maths buddies [online tasks]... It's just like maths questions like 10x something or... fractions, percentages... If we didn't do it before Friday we have to do it on the weekend. [Ofa, interview]

A further educational opportunity for Ofa and his siblings, and his Tongan peers in the neighbourhood, is the Home Centre that he attends once a week. This is a programme designed and administered by the local Tongan community, aimed at providing positive educational outcomes for Tongan tamaiki/children, as well as instilling and sustaining their Christian and Tongan cultural values and practices for the whole fāмили. As Ofa's parents reported in their interview: "Coming in from... school, one hour EP [Education Perfect]. I like EP... Oh yeah, yeah the community-night study" [Malohi] and "It's very helpful... The homework centre. That's very useful" [Monū].

I attended the Home Centre group at Ofa's local Tongan church with Ofa, his siblings and Monū. After arriving at the centre, and once seated, the children were quickly engaged in the online platform 'Education Perfect', led by a Tongan volunteer, who was an experienced school teacher. The children all had their own laptops (Chromebooks gifted by the Ministry of Education). After about 45 minutes there was a maths quiz followed by the children's choice of a

Pasifika general knowledge quiz, much to their general glee! As this was the second to last class for the year, the top students were presented with a prize for their efforts throughout the term – a large chocolate bar each! Both Ofa and his younger brother Tui were amongst the students to receive a prize. Once completed, one of the Tongan male parents closed with a prayer. After the event, as this was the last education lesson for the year, there were take-away pizzas and soft-drink that all involved enjoyed! Next week there would be a celebration event for the year involving an umu (or Tongan traditional feast). [Community observations at the Home Centre programme]

9.2.8 Rugby Player of the Year

Ofa is a skilled rugby player and is passionate about the sport. This passion is reflected in one of his dreams, *“I want to be like a famous rugby player”* [interview] that likely reflects the importance culturally of rugby both in Tongan and Aotearoa NZ societies. In his interview, Malohi expressed his pride in his son’s achievements in rugby, *“He is player of the year”*. Ofa’s rugby skills have not gone unnoticed by his church minister, Rev Mr. Lopeti, *“Yeah, yeah he’s good at rugby”* [interview]. In spite of this passion, Malohi had more practical career aspirations for his son, *“Ofa’s like... he wants to... be an All Black, and I tell him he’s alright but listen, when you 30 years old, I think no more...I [want] Ofa, to working like, architect”* [interview].

Ofa plays rugby on a regular basis during the winter months (i.e., May-August, or 4 months/year) for a rugby union club located on the other side of the city. Ofa’s parents do what they can to support him and his brother Tui in this sport, but given their restricted time and finances, and with a fāмили of four tamaiki, Ofa’s uncle helps out. Ofa’s uncle is involved in the rugby club and his level of commitment to supporting his nephews in their sport reflects the values in their extended family/fāмили and community of helping one another. As Rev Mr. Lopeti explained, *“I never take him to the rugby because... the uncle’s, he’s able... they are having the kids in the same team, they just pick him up”* [interview]. Refer also to Figure 9.9 Ofa’s map, showing the routes travelled by car to rugby training and games in the city that are some distance from the fāмили fale.

I played for [the Sharks] Rugby Club this year, but I’m playing for [Riverfield East] Rugby Club next year... [my position is] prop. Half back... [we play games on] Saturday... [and train] Four times a week...

Yeah after school... Oh vehicles. Mum picks me up sometimes too after trainings or when she's busy uncle will bring and drop me off and coach... Because we're close to coach [he is] Dad's cousin... [and we did] pretty well [we won] Yeah, heaps. [Ofa, interview]

However, during the other months of the year (i.e., approximately 8 months) Ofa is not routinely participating in any out-of-school sports. Despite a lack of out-of-school sports, he participates in physically based occupations at his 'apiako such as playing with his peers before school starts and during school breaks, and PE two times per week for around 1 hour/session. “[PE is] normally Tuesday and Thursdays... Ah catching the flag and kick the ball⁴²... Yeah [on] the field” [Ofa, interview]. While the school offers a range of sports throughout the year, these were not options for Ofa and his siblings due to the family's material restraints and is reflected in his interview where he considered taking up another sport. “Sports, I'm kind of thinking about playing league”. (Refer to Figure 9.7 Ofa's time use pie graph.)

9.2.9 They're Really Strict About Gaming

Oh we used to have one [PlayStation, but it's broken. I have a]... laptop... Yeah sometimes after... 1 hour of homework we do, just play games... Yeah, really bad. They're really strict about that one [time on devices]... Oh probably like 30 minutes at least... 45. [Ofa, interview]

While Ofa engages on a routine basis in sedentary-based recreational occupations in the fale (e.g., TV, computer), in his interview Ofa spoke about wanting more time playing online games, “I think it's just gaming”. However, his parents have clear rules about computer use, limiting the time and insisting that homework is completed before engaging in these activities. Furthermore, his parents have rules about the type of content their tamaiki can watch online or on the TV, by following the NZ classification labelling system (e.g., no restricted content). “The latest Top Gun... not allowed [as its R rated]” [Ofa, interview]. While Ofa spoke about adhering to these rules, he still appeared to spend a considerable amount of time in gaming activities. As his parents pointed out in their interview, “They play[ed]... the PS4... But I think too much... And they... Just spend most time with Tui, with his siblings” [Malohi] and “with

⁴² These are school-based games that encourage teamwork and physical activity. ‘Catch the flag’ is the game capture the flag; and ‘Kickball’ being similar to baseball/cricket where the ball is bowled and kicked, instead of using a bat, and the kicking team tries to score the most runs to win.

the Roadblocks” [Monū]. Consequently, Ofa is spending a high proportion of his time, out of school, gaming, a passive recreational activity. Refer to Figure 9.7 Ofa’s time use pie graph (and Appendix III Ofa’s Weekly Timetable).

During my afternoon visits I observed that Ofa and his siblings tended to return to their rooms, and it appeared to me that this was one way they found to gain more time on their devices. Ofa’s weekly dairy served to confirm this observation with his free time afterschool and in the weekends routinely spent at home, playing online games on his laptop. [Observations during my afternoon visit to Ofa’s fale.]

9.2.10 Attached to Us all the Time

Based on Ofa’s interview and weekly timetable, having friends over to play and socialise (e.g., sleep overs) was not occurring on a routine basis and was, in part, due to the restricted space in the fale. While Monū stated that friends are able to visit their home, and they support Ofa and his siblings to play and socialise at their friends’ homes, she said this was not happening often, with their preference being, she thought, to spend more time together as a fāmili. *“Yeah he’s allowed [friends over]... Yeah. We always drop him off to a birthday or sleep over... But I think they’re more attached to us all the time”* [Monū’s interview].

Outside of his ‘apiako, most social activity and play for Ofa occurs together with his siblings, indoors at their fale and around their property a few times per week. *“We play Last Cards... sometimes we play Marco Polo... it’s when you’re blindfolded, and you have to shout Marco and try and tag other people when they’re blindfolded... sometimes... we bike ride to my cousins”* [Ofa, interview]. Monū also stated the tamaiki are permitted to bike to visit their cousins who live close by but this does not occur on a routine basis (i.e., estimated at less than once/week, based on Ofa’s weekly timetable and interview). Play beyond their own property or in the extended neighbourhood is restricted due to parental concerns about safety.

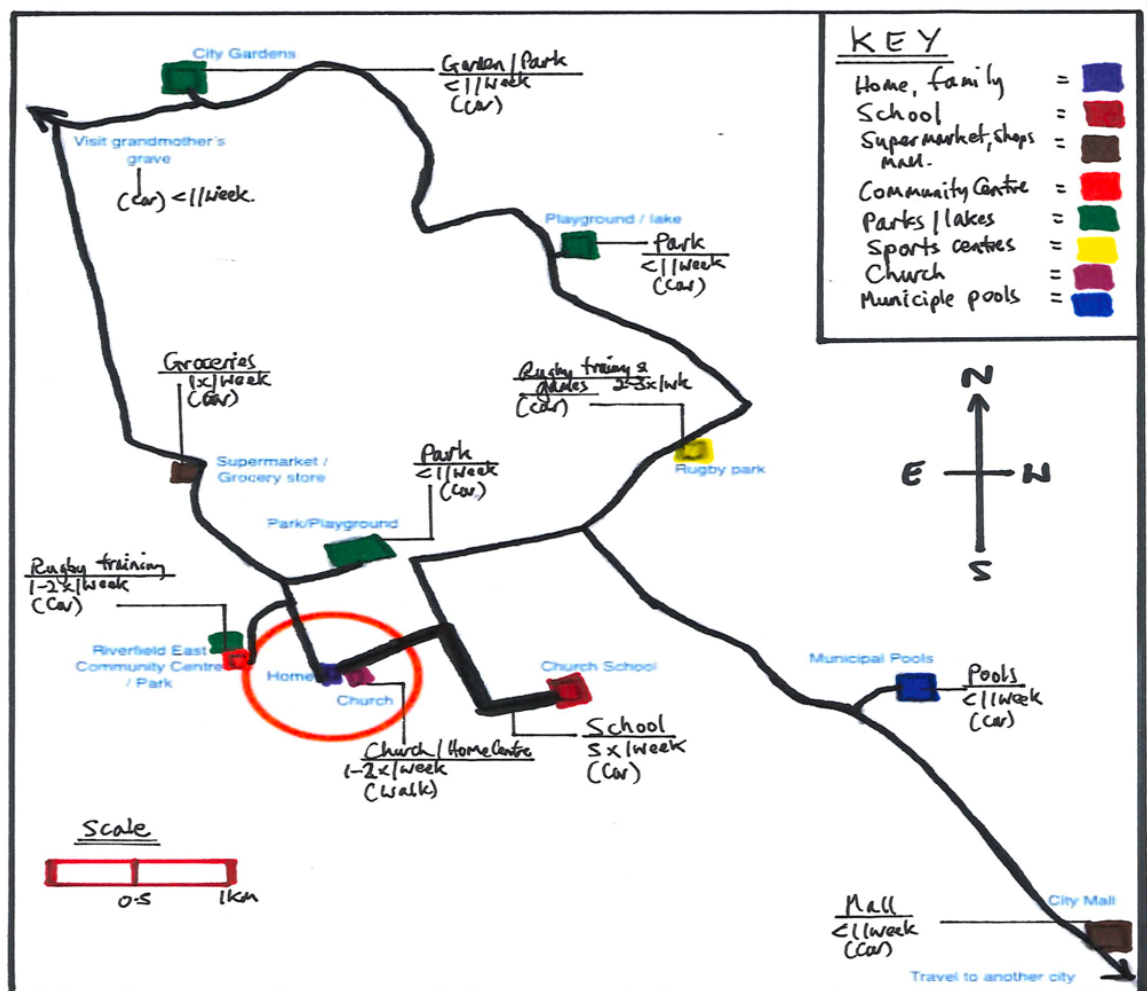
Furthermore, outdoor fāmili activities are not part of the weekend routine, constrained by their parents’ limited energy and time, and costs of travel. As Monū said in her interview, *“Sometimes we always plan to go for a family walk... But it hasn’t happened yet!... Tell the kids they can run around”* and Malohi added, *“Yeah, yeah go to the park... maybe one a year!... Too tired and the kids say ‘oh daddy can we*

go to the park? Oh, oh maybe tomorrow, or next week!” (Refer to Appendix III: Ofa’s Weekly Timetable.)

Additional social activity with Ofa’s peers could occur through extracurricular activities offered by the ‘apiako including groups involving arts and music (based on the school website). However, Ofa and his siblings are not participating in any of these activities, potentially reflecting the associated costs (e.g., fees, transport), and the time requirements for the parents, given their paid work commitments and needing to support four tamaiki.

Figure 9.9

Map Showing the Locations of Ofa’s Occupations that Occur in Riverfield and the City



Key: Thicker black lines indicate regular, daily access and the thin lines indicate occasional access. The red circle shows a 1km radius around his home.

9.2.11 The Evenings and Weekends: That's Our Fāмили Time

Evening mealtimes are routinely spent together and seen by Ofa and his fāмили as important, with both parents at home in the evenings and weekends. However, morning mealtimes are not spent together due to the parents' work schedules. *"When they get home... and then they ask me 'oh ah what's for dinner?'... then I said 'you guys can start off with some snacks or whatever you can eat first before we do a family dinner'"* [Monū's interview]. Friday evenings, and particularly the weekends, are special times for the fāмили, as they can spend time together in important occupations such as mealtimes, watching movies on TV, completing household chores, catching up about their week, and attending church. *"Well, we do movie nights... every Friday night we get snacks, chill and we laze around just watching movies"* [Ofa, interview].

Like during the weekend that's our family time... we have like family movie night... and then just spend time with us. And daytime in the weekend we like to work together... we do shopping... Yeah mostly cleaning out because during the week we can't really clean... Because that's the time that I have a day off from work... We allow them to freely talk to us... so we can help each other... For church we have to go to the church. [Monū's interview]

Ofa's help around the home in support of his parents continues after school and in the weekends, including cooking a Friday night pasta meal on an occasional basis, completing chores around the house, and caring for his younger siblings if their parents are out. As Monū explained *"Ofa now he's already start cooking pasta and... We had pasta the day before so we just brought the ingredients and then he just [made it]"* [interview].

Oh yes we sometimes have pasta night... Yeah once a month... Yeah it's easy... Oh cheesy pasta and pasta with cheese and mince... The spaghetti ones are good... Sometimes I cook when parents are going out somewhere... Mowing the lawn. Cleaning my room, cleaning the lounge. Dishes yeah. [Ofa, interview]

The importance to Ofa of fāмили is highlighted in the photo taken of the flower garden in Figure 9.10. The garden was originally planted with his maternal grandmother, who passed away a couple of years ago, and Ofa continues to help his mother care for.

"Especially important to me because I water them every day... they are for my

grandma... planted by grandma, just before she passed away” [Ofa, photoelicitation interview].

Figure 9.10

The Flower Garden Dedicated to his Late Grandmother, at their Fale.



Note. Photograph taken by Ofa.

The holiday periods are another special time in the year when Ofa and his siblings get to spend more time at their fale and in activities with their fāmili and friends. This also involves visiting extended fāmili, and attending religious and cultural events, both in the city and, at times, traveling out of the city. *“Oh sometimes we travel to [another city] to see family there... sometimes hang out with friends. Sometimes go to the [mall]... in the holidays”* [Ofa, interview]. Figure 9.11 shows the importance to Ofa of fāmili rituals and religious events in his life such as celebrating Christmas. *“That’s the Christmas lights my family set-up... our Christmas tree... its beautiful”* [Ofa, photoelicitation interview]. However, the fāmili do face restrictions in their ability to travel due to costs involved, and some travel to desirable locations is limited. This restriction was reflected in Ofa’s hope to visit the beach this year, *“[I’d like to] go to the beach”* [Ofa’s interview], and in the observations of their church minister, *“sometimes they can’t afford to take him to... [Tongan] festivals... they call it the flower show... they can’t afford to go there you know... And the time”* [Rev Mr. Lopeti, interview].

Figure 9.11

The Fāmili Christmas Tree Decorated, in their Fale.



Note. Photograph taken by Ofa.

9.3 Conclusion

Riverfield is a neighbourhood that is faced with many challenges and, like Fernlee, has not received the development and resources its tangata/people deserve. However, it is a community with tangata/people and hapu who are proud to call it their turangawaewae⁴³/place or home, and this shared identity, the many talents of its people, and the dedication of those who serve the community are some of its strengths. This includes the tamariki and their whānau who participated in this study, who are faced with a number of difficulties that living in poverty brings such as trying to make ends meet or staying safe amidst the risks posed in their neighbourhood. However, collectively these tamariki are missing out on participating in a range of occupations many of their peers would take for granted and poverty modifies their patterns of occupation. Despite the threats that poverty brings, these tamariki and their whānau have adapted to their circumstances, remain resilient and hopeful, and have dreams for a bright future that sustains their potential and hauora/wellbeing. The following chapter, provides an integration of findings from both case studies (Riverfield and Fernlee), comparing and contrasting the findings of each case study in light of the research question and issue statements, and where tentative assertions are reached.

⁴³ Tūrangawaewae is a Māori term that can mean domicile, or a place to stand, where a person has a right to belong, usually through kinship (Moorfield, n.d.).

Chapter 10 Integrated Findings from Case Studies

10.1 Introduction

This chapter provides an integrated view of the findings from both cases studies (Riverfield and Fernlee), drawing on a comparative analysis of the case studies that was guided by Stake's (2006) multiple case study analytical process. As discussed in Chapter 7, this process involved comparing and contrasting the findings from both cases for their unique characteristics and similarities, utility, and prominence in the context of the research question and issue statements. As a researcher, I had a firm commitment to a child-centred and strengths-based approach that focused on the achievements and the capacity of the tamariki/children and whānau/families in the study, along with the aim to highlight Māori aspirations for equity as enshrined in Te Tiriti o Waitangi. These approaches helped to inform this process and informed assertions about the agency, learned skills, and aspirations of tamariki growing up in poverty, and the recognition and support provided by parent/s, whānau/family, other adults, and organisations in the community. Despite their best efforts, however, the cross-case analysis revealed how poverty negatively influences the patterns of occupations of these tamariki/children, depriving them of opportunities to participate in occupations needed to achieve their potential and support wellbeing into the future.

My assertions are listed in Table 10.1 and discussed below, with reference to the issue statements that guided the data collection and analysis processes. The discussion is organised into three broad categories of tamariki/children's agency, skills, and the supports that enable their participation in occupations, followed by the negative influences of poverty on their participation in occupations, their potential and wellbeing.

Table 10.1*Cross Case Study Assertions and Relevant Issue Statements*

Research Question: What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential and wellbeing?		
Assertion Number	Case Study Assertions	Related Issue Statements
Category 1: Skills, Agency, Coping Strategies, and Supports for Tamariki/Children's Participation in Occupations		
1	Tamariki/children exert agency over their occupational choices that helps to counter the effects of poverty in their lives.	Eight
2	The supportive approach of whānau/family and community enables occupational participation for tamariki/children and supports their potential and hauora/wellbeing.	One
3	Parent/s' efforts to lift their whānau out of poverty have both short-term and the potential to exert long-term effects on their tamariki/children's participation in occupations, their potential and wellbeing.	One
Category 2: Tamariki/Children's Occupations		
4	Poverty constrains the choice and range of occupational opportunities for tamariki/children, both directly and indirectly.	Six and Seven
5	Poverty disrupts and negatively influences tamariki/children's patterns of occupation (habits, routines, roles, family rituals).	Five
6	Some tamariki/children living in poverty help their whānau by taking on carer and household responsibilities at a young age.	Two
7	Whānau and organisations serving the community are well informed about what their tamariki/children need to participate in occupations but lack the sustainable resources required to act on this knowledge.	Six and Seven
Category 3: Tamariki/Children's Potential and Hauora/Wellbeing		
8	The impoverished pattern of occupations of tamariki/children growing up in poverty deprives them of capabilities to fully participate in future valued occupations as teenagers and adults.	Three
9	The pattern of occupations instilled in tamariki/children growing up in poverty does not support their hauora/wellbeing into the future.	Four

10.2 Skills, Agency, Coping Strategies, and Supports for Tamariki/Children's Participation in Occupations

10.2.1 Assertion One: Tamariki/Children Exert Agency Over their Occupational Choices that Helps to Counter the Effects of Poverty in Their Lives

The tamariki and their parent/s in both case studies showed considerable strength, skills, and strategies that helped them cope with and exert agency over their circumstances, despite the negative influences of poverty in their lives. This assertion aligns with other NZ studies highlighting the ability of tamariki and whānau to cope with poverty (EAG, 2012a; Houkamau, 2016). However, unique to the current study are the creative strategies tamariki found to engage in low-cost or free play, hobbies and leisure activities in their kāinga (e.g., listening to music, playing games in the backyard with their siblings), or delaying their desires for material items/repairs required for recreational activities and participation in occupations that incurred costs (e.g., recreations, social, family, and cultural activities).

The tamariki also spoke about the support they chose to provide for their parent/s in their kāinga/home, both emotionally and with productive occupations (e.g., household chores). They also took advantage of informal skill-based learning from their parent/s and whānau/family that supported their future capacities as home makers, parents, employees, and participants in their culture; such as household maintenance, meal preparation, gardening, or learning culturally important traditions and knowledge such as whakapapa⁴⁴/genealogy. Their care and generosity extended to their kura/school (e.g., supporting friends, classroom helper roles) and, in some instances, in their community (e.g., voluntary roles). In terms of helping to keep themselves, their siblings, and, at times, their peers safe from harm, these tamariki followed parental rules to avoid play at risky places in their neighbourhood, avoided joining in with their peers or discouraged them from engaging in antisocial activity, and, in some instances, used strategies to reduce chances of bullying and experiences of violence from peers at kura. Overall, their agency, strategies used, empathy for others, and the life skills

⁴⁴ Whakapapa is the Māori term for one's genealogy or family line of descent (Moorfield, n.d.).

they were learning helped to mitigate the effects of poverty, supported their wellbeing and their potential for future participation.

10.2.2 Assertion Two: The Supportive Approach of Whānau/Family and Community Enables Occupational Participation for Tamariki/Children and Supports their Potential and Hauora/Wellbeing

In both case studies, whānau/family and, in particular parent/s, lessened the impacts of poverty and were fundamental in their tamariki/children's participation in occupations. Whānau/family helped sustain tamariki/children's hauora/wellbeing, and enhanced the possibilities for their future potential and aspirations. NZ government policy and strategy relating to child poverty, wellbeing, and physical activity emphasises the importance of opportunities for engagement in healthy activities and the role of whānau/family in supporting this engagement (DPMC, 2023a; Sports New Zealand, 2020). Parental support was important to the tamariki in a number of ways. At a foundational level it included providing them with a loving, safe, and stable kāinga/home environment; providing for their basic needs; instilling of culturally important values such as manaakitanga (caring for each other); whanaungatanga (sustaining healthy whānau relationships); facilitating learning of their whakapapa (or family genealogy); positive role modelling; and kaitiakitanga or protecting them from harm in the neighbourhood.

Furthermore, my study highlights the way parent/s employed a range of strategies that helped to mitigate the effects of the poverty the whānau experienced. For example, careful budgeting of their income and expenses such as shopping strategically, not wasting food, or growing kai at their whare to supplement what they bought (e.g., raising chickens for eggs, and growing fruit and vegetables). Other strategies included supporting their tamariki to engage in their chosen occupations wherever possible (e.g., budgeting to pay fees and buy sports equipment), and accessing funding to pay for their tamariki/children's participation in after-school and holiday programmes. These parent/s also contributed to the hauora/wellbeing of their neighbourhood; for example, volunteering at their local community centre, helping out with activities at kura or at church, or supporting at-risk rangatahi in their neighbourhood. However, the provision of support to participate in occupations was not restricted to the home

environment or from the parent/s. It also involved learning and emotional support from older siblings (tuakana-teina dynamic, such as mentoring), or gained from time spent with extended family/whānau (e.g., uncle, aunty, grandparents), kura, and community groups.

10.2.3 Assertion Three: Parent/s' Efforts to Lift Their Whānau Out of Poverty Have Both Short-Term and the Potential to Exert Long-Term Effects on Their Tamariki/Children's Participation in Occupations, Their Potential and Hauora/Wellbeing

The parent/s interviewed for both case studies all aspired to improve the lives of their whānau/family. For two sole parents it included remaining out of paid work, in part due to health issues, but also to be available to raise and support their young tamariki. While this meant they were better able to cope, had more time to be with their tamariki and support them in occupations such as school trips, sports team, or whānau activities at their kāinga, the relatively low sole parent benefit (i.e., below the poverty line, high NZiDep scores), and even, in one instance, with state funded housing, meant a lower income, level of resources, and ability to support participation in occupations for their tamariki.

Alternatively, for the parents of the two other tamariki, remaining in paid work and engaging in further tertiary study, or aims to start a business, were the approaches taken to developing a brighter future for their whānau. Paid work meant increased household income that could better support the household and their tamariki in chosen occupations, and the study or business plans were seen as ways to increase income, develop a career, and enable more control and flexibility in their work-family dynamic. However, due to relatively low total weekly wages earned, high costs of living (particularly household rent), they still remained in material poverty (i.e., below the poverty line, high NZiDep scores). Furthermore, they all found they had reduced time to spend with their tamariki and were often exhausted from their hours in paid work, including shift hours, and having to care for their tamariki and manage the household as a sole parent or with a number of tamariki/children in the kāinga.

Overall, however, both tamariki and their parent/s were hopeful for their future, despite the lack of material opportunities open to them and the history of

intergenerational poverty evident for the whānau/families in these case studies. A key solution to escape poverty that was identified by both parent/s and tamariki was education and a well-paid job, an approach that is supported in the NZ government child poverty reduction policy (DPMC, 2023b). The range of strategies exerted by these tamariki are presented in Chapter 11, Figure 11.1.

10.3 The Tamariki/Children's Occupations

10.3.1 Assertion Four: Poverty Constrains the Choice and Range of Occupational Opportunities for Tamariki/Children, Both Directly and Indirectly

Across both cases the opportunities and choice of occupations that tamariki could participate in were directly and indirectly constrained by multidimensional poverty, or low income, resources, and living in an impoverished neighbourhood. The multidimensional nature of poverty and its negative impacts on the health and wellbeing of Aotearoa NZ tamariki due to reduced access to basic resources, poor quality housing, inequitable access to education, and living in a deprived neighbourhood has been previously evidenced in NZ child poverty monitoring reports and in Ministry of Education documents (Duncanson et al., 2022; Education Counts, 2021). However, unique findings from the current study highlight poverty's influence in terms of their participation in occupations.

The tamariki in this study seldom (i.e., less than once/week) took part in play or recreations, social or cultural activities, or organised extracurricular groups/clubs or hobbies, outside of their kāinga/home or kura/schools and in their wider community, due to the costs of fees, equipment, and travel or having no/limited access to a vehicle. An example of the direct impacts of poverty was evident in the desire of the majority of tamariki across both case studies to join a sports team, limited by the costs and resources required. A specific example that highlights these unaffordable costs occurred in Miriama's case, where her father could not pay the costs of entry fees, hireage of skates, and costs of travel for his daughter to go roller skating. Educational resources such as computers were often shared, quiet spaces in the kāinga/home to complete homework were limited, and paying for extra tuition was typically not an

option. Travel out of the city to participate in family holidays, or nature-based activities such as to visit the beach or camping, and cultural events were simply not possible due to the costs involved. These direct impacts resulted in a geographical patterning of participation in occupations that occurred primarily within their immediate neighbourhood (i.e., on average within 1-3 kms radius from their homes).

Indirect impacts on tamariki/children's choice of and participation in occupations included the parent/s limited availability to support participation, due to long hours spent in paid shift work, managing a large household as a sole parent, or where they had health issues. However, their need for parental supervision was heightened due to local playgrounds or sports facilities being unsafe or degraded. These indirect factors further constrained tamariki participation in active play in the neighbourhood, organised sports, and recreational and cultural activities such as clubs, art, music, dance (kapa haka), or going to the movies with friends. Activities that were more than a few kilometres from home were only made possible with the support of extended family, kura, or community groups; hence, the geographical patterning of occupations largely centred on their kāinga/home and immediate neighbourhood. Drawing on two specific examples to highlight this point, the long shift-work hours and a busy household (e.g., four young tamariki in total) left Ofa's parents feeling too tired to take them for walks at the park. In Mateo's whānau, with his mother being a sole parent of three tamariki, in full-time paid employment and part-time tertiary study, meant it was difficult to find the time to support her tane/son in organised sports, or supervise him playing basketball with his friends at the local outdoor basketball court.

Equally, occupational opportunities and choices were indirectly constrained due to the lack of age-appropriate groups or services for the tamariki. At Fernlee, the community centre's after-school programme was designed for under 10-year-old tamariki, and the youth worker typically catered to rangatahi/youth above the age of 13 years, meaning that there was no age specific after-school and holiday programmes for 10-12-year-olds like Mateo. In Riverfield, there were no functioning after-school and holiday programmes at all at the community centres. Further indirect constraints occurred due to safety risks when playing in their neighbourhoods (e.g., violence, criminal and antisocial behaviours) which meant that for Mateo, Miriama, Jarad, and Ofa, playing

with their friends at their local playgrounds, skateparks, and in their neighbourhoods without constant adult supervision was off limits.

10.3.2 Assertion Five: Poverty Disrupts and Negatively Influences

Tamariki/Children's Patterns of Occupation (Habits, Routines, Roles, Family Rituals)

When examined at both the focus group and individual levels, it was evident that poverty was negatively influencing their habits, routines, roles, and ability to engage in whānau/family rituals. At the focus group level, the weekly routines of most tamariki were dominated by sedentary activity at their kāinga, a lack of routine physical activity, and an absence of time spent with peers, outside of kura and across the week. The majority were not engaging in homework. Figure 10.1 below shows the time spent in occupations across the week, combined and averaged for all participants in both focus groups. (Refer Appendix AY: Time use data table used to construct the cross-case focus group pie graph.)

When examined at the individual level, similar trends in routines were observed, along with irregular bedtime and dental hygiene routines, and for the majority an absence of homework. In addition, whānau/family routines, such as eating evening and breakfast meals together, were disrupted by the parent/s' work schedules and the restricted spaces in their kāinga (e.g., small kitchen and dining room spaces).

In terms of habits, there was a preponderance of sedentary activities across all tamariki in the study that was largely explained by the restricted occupational choices available to them. The four tamariki in the case studies tended to spend time in their bedrooms in restorative activities, with attempts to find time and space alone in their kāinga. This pattern of sedentary activities was mitigated, in part, by most tamariki regularly needing to walk to and from kura/school; although, in one case, bad weather often impacted their attendance when a walk in the rain was involved. Disrupted sleep habits, skipping breakfasts, and, in one instance, a lack of dental hygiene were also evident.

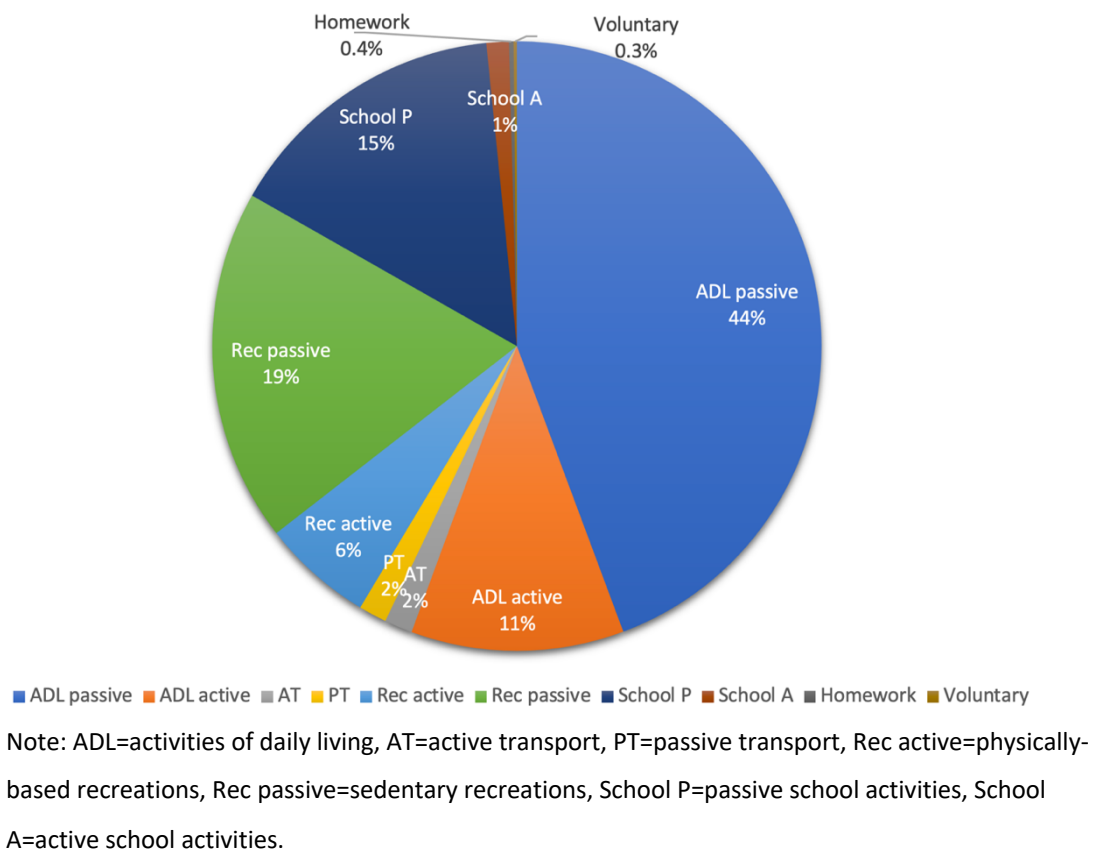
In terms of role development, opportunities to experience diverse sports, social, creative and cultural roles, as detailed in Assertion 4, were constrained for the tamariki

across the case studies. Consequently, they lacked opportunities to form an identity as a member of a team, cultural group, choir, etc., and the benefits this brings a young person.

While there were instances of important whānau/family ritualised activity being sustained, such as watching a movie and eating a meal together, occasionally spending time with extended family, and in some cases attending religious events, many other whānau/family rituals were constrained due to poverty. For example, visiting nature-based locations (e.g., beaches, parks) or going on holidays together, and regularly spending time in the culturally important activity of being with whānau (outside of the nuclear family). The lost opportunities to engage in these vital whānau/family occupations was experienced as a loss by the tamariki and their whānau.

Figure 10.1

Pie Graph Showing Time Spent in Occupations for Tamariki in Case Study 1 and 2 Focus Groups.



10.3.3 Assertion Six: Some Tamariki/Children Living in Poverty Help their Whānau by Taking on Carer and Household Responsibilities at a Young Age

While most of the household responsibilities for whānau/families in this study were taken care of by adult members of the whānau, some tamariki voluntarily took on the role of caregiver and/or routinely carried out household occupations in the kāinga/home, such as getting younger siblings up and ready for school or preparing meals. Engaging in adult roles in the home can again be attributed to parent/s' long hours of low paid and shift work for Aotearoa NZ whānau/families in poverty. While shouldering these responsibilities is helpful for whānau, there can be negative outcomes for the young person such as embarrassment, isolation, and impacts on their education.

Further, the unpaid work of child-caregivers is largely overlooked by politicians and policy makers. This point is highlighted in the example of Ofa, aged 12 years, who routinely got his younger siblings ready for kura/school (e.g., waking them, organising their uniforms and school bags, making and packing their lunches). In another example, Jarad, aged 11 years, assisted his mother to get younger siblings ready for kura and helped to prepare their breakfasts. Cultural values such as manaakitanga (e.g., kindness and helping parent/s in the home), whanaungatanga (e.g., sustaining healthy family relationships), along with the circumstances for these whānau (e.g., long hours in shift work for parent/s, a large household) created the need for these tamariki to fulfil these roles. While Ofa and Jarad saw themselves as 'stepping up' to help their parent/s and that their contribution to the household and the hauora/wellbeing of their parent/s was helpful and essential, there was parental concern that their tamariki were doing too much.

10.3.4 Assertion Seven: Whānau and Organisations Serving the Community are Well Informed About What Their Tamariki/Children Need to Participate in Occupations, but Lack the Sustainable Resources Required to Act on this Knowledge

Locally-based community organisations in Fernlee and Riverfield were clear about the occupational opportunities that tamariki were missing out on and needed in order to

sustain their wellbeing and potential. However, a lack of sustainable resourcing at the local level hampered efforts to provide services that helped to facilitate tamariki/children's participation in important occupations such as attending kura/school, extracurricular groups like after-school and holiday programmes, and pro-social activities (e.g., sports, arts, music). This finding has not been revealed in NZ-based research findings reviewed for this study.

A key occupation for tamariki/children is attending kura/school but, for some, participation was constrained by their whānau/family's lack of access to a car/vehicle. With insufficient resourcing to provide transport options, community providers were unable to adequately address the issue. A locally-driven solution, however, occurred in Riverfield where the church-based community centre funded a small van with a volunteer driver. This enabled some tamariki to regularly attend kura, leading to positive educational outcomes for them. However, this service only met the needs of a small number of whānau, with many missing out due to the centre's limited resources. There was no evidence of this service being provided elsewhere in the city.

Progressing from the local, low-decile primary school/kura to the medium-decile intermediate school/kura that served their area meant a decline in funding for a range of services that support participation and hauora/wellbeing, even when many of the tamariki at these kura experience poverty. Subsequently, kura/schools have decreased capacity to fund sports, extracurricular activities, and school trips, resulting in these costs having to be met by whānau/families. In addition, funding for medium decile schools does not provide for truancy, counselling, and social services. As pointed out by the principal of the Fernlee Intermediate School, changes in central government policy related to funding meant locally-based and coordinated services to address truancy had been reduced, and the provision for health professionals to work in low-medium decile intermediate schools/kura such as Fernlee (e.g., social workers, occupational therapists) to help meet the social and occupational needs of the ākonga/students and their whānau, are non-existent but badly needed. In contrast, at Riverfield Primary School, a low or decile 1 kura, a high level of support services and funding are provided for the tamariki/children's participation in sports, cultural groups, school trips, health and counselling services. This level of integrated health and social

services in kura/schools has been advocated for as strategy by NZ education experts (Haig, 2014).

Provision of community-based extracurricular activities for tamariki throughout the kura/school years was seen as necessary by the tamariki, their parent/s, and the community workers in these neighbourhoods. Locally based extracurricular services (e.g., before, after-school, and holiday programmes) can help to provide opportunities and choices for leisure and social activities that are vital for tamariki. Such activities are seen to help develop skills, tamariki/children's identity and friendships, as well as enabling them to contribute in voluntary or civic roles in their neighbourhood. Funding for after-school activity and holiday programmes was, however, insecure, reflecting short-term shifts in government policy, and a lack of long-term funding commitments. Where there was funding, rather than supporting equitable participation, the conditions of the funding accentuated inequities, as reflected in related government policy (Work and Income, n.d.-a). Tamariki whose whānau were not in paid work or study were excluded from accessing these activities as their parent/s were ineligible, unfairly further reducing the occupational opportunities for these tamariki.

A further service that had been discontinued in the Fernlee and Riverfield neighbourhoods, was the community policing programme, which involved having police based at and working with at risk tamariki, rangatahi, and their whānau at the local level. From the community organisation's perspective, the policing programme brought positive benefits, including channelling tamariki and rangatahi towards pro-social occupations, which helped prevent them transitioning into more serious participation in criminal activity. However, changes to national level police policy (Coquilhat, 2006; New Zealand Police, 2008) have meant the loss of these services and, in the minds of some, such as the Fernlee centre manager, have contributed to escalating crime in their neighbourhoods and a bleaker future for these tamariki and rangatahi.

Given the high proportion of Māori and Pasifika tamariki and rangatahi in neighbourhoods such as Fernlee and Riverfield, there is a need to find solutions to the issues they face that are led by tamariki and rangatahi and their communities, the hapu and iwi, and other ethnic/cultural groups such as Pasifika communities in these

neighbourhoods. This approach aligns with child-centred and community led principles (Aimers & Walker, 2016; EAG, 2012a), and with te Tiriti o Waitangi articles such as Tino rangatiratanga, Kawanatanga, and Ōritetanga, that are associated with improved outcomes for tamariki Māori (Came, Baker, et al., 2021). Equally, such an approach is required for other ethnicities such as Pasifika tamariki/children (Education Counts, 2023a).

10.4 Potential and Hauora/Wellbeing

10.4.1 Assertion Eight: The Impoverished Pattern of Occupations of Tamariki/Children Growing up in Poverty Deprives Them of Capabilities to Fully Participate in Future, Valued Occupations as Teenagers and Adults

For the most part, the development and occupational abilities of the tamariki in this study was as expected, such as independently performing ADLs (e.g., self-cares, walking to/from kura or school) and engaging successfully in productive occupations outside the kāinga, such as learning at their kura. In terms of their potential for a bright future, the tamariki across both case studies held positive aspirations such as finishing kura and finding employment. They saw the key supports to help them reach their potential as their whānau, friends, teachers, encouragement, and a belief in their potential. This was largely echoed by their parent/s and community workers, along with an emphasis on the importance of cultural and religious values, participating in important childhood occupations such as play, developing self-confidence, and keeping their tamariki safe in their neighbourhoods.

The reality of living in poverty, however, differed markedly from these expectations for most of these tamariki. Instead, they had patterns of occupation characterised by high levels of sedentary activity that can be directly attributed to living in an unsafe neighbourhood (e.g., playing at the park) and lack of financial resources to support playing organised sports or hiring, buying, or maintaining the equipment required to participate in physically active pastimes (e.g., roller skates, a bicycle, a swimsuit, sports shoes). In addition, they experienced disruptions to schooling and did not do homework, at least in part because of the lack of study spaces in the home and lack of

resources (e.g., sharing one computer across the family, cost constraints on internet access). These constraints on tamariki/children's occupational choices meant restricted opportunities to have fun, realise their talents, develop life and employment related skills, gain a sense of competence and self-worth, and build social networks outside the immediate whānau, threatening their potential to grow over their life course and become who they wanted to be. These are not impacts individual tamariki or whānau can overcome.

Collectively, and in line with a large body of evidence, such constraints point to reduced possibilities for rising out of poverty through future social, cultural, educational, and employment opportunities. However, the assertion that poverty constrains tamariki/children's patterns of occupations sheds light on the causal links between growing up with few material and financial resources and ongoing cycles of poverty.

10.4.2 Assertion Nine: The Pattern of Occupations Instilled in

Tamariki/Children Growing up in Poverty Does Not Support their Hauora/Wellbeing into the Future

The tamariki in this study identified that their hauora was supported through having fun with whānau and friends, the kindness of others, kura, in some cases their religious community, and confidence in themselves and their own agency. They understood the importance of a healthy lifestyle (e.g., suitable nutrition and physical activity). Their parent/s and the community workers also recognised the importance of being exposed to culturally and socially important values, including whanaungatanga or positive whānau relationships. In addition, parent/s identified the tamariki/children's occupations (e.g., being a child/tamaiti, having fun); the actions they took as parents to support the tamariki/children's self-esteem, giving them a say on issues that are important to them, and keeping them safe in their neighbourhood; and investment by local and central government in their community as supporting hauora.

Poverty, however, undermined the hauora/wellbeing of these tamariki across both case studies. The time use data collected revealed irregular sleep, oral hygiene, and mealtime routines. From the perspectives of the parent/s, negative influences on their tamariki/children's hauora included not being able to play freely in their

neighbourhoods, an inability to routinely visit extended family/whānau, and severely constrained options for holidays as a whānau or participation in culturally important occupations, sports, and other recreations. These concerns and views tended to be shared by the other adults who supported them in their community. Additionally, and while not directly identified by the tamariki or their parent/s, their sedentary patterns of occupation contrasted with their belief that a healthy lifestyle is supported through regular physical activity.

While the tamariki who participated in this study appeared to accept the disadvantages they experienced, and to lack awareness that their level of physical activity did not support health, collectively they perceived the constraints in their lives as a loss and as negatively impacting their hauora.

10.5 Conclusion

While there were some unique differences in the neighbourhoods in these two case studies (e.g., the availability of services for tamariki), they shared many similarities. The findings from both cases highlight the challenges faced by tamariki and their whānau living in poverty in terms of the restricted opportunities to participate in a range of competence developing and health supporting occupations, with direct and indirect consequences for their health, hauora/wellbeing and potential for a brighter future. This is despite the skills and agency exerted by the tamariki to cope with the disadvantages they face, the careful management, role modelling and aroha/love of their parent/s and their wider whānau/family, and the conscientious efforts of the organisations who support them in their neighbourhoods. The next, and final, chapter provides a discussion about the findings with an integration of underpinning theory in the study, and review of the literature to help answer the research question.

Chapter 11 Discussion

11.1 Introduction

Child poverty has a pervasive adverse influence on tamariki/children's occupations, even in the context of their attempts to cope, the support of their parent/s and whānau/family, and the positive social capital of their communities. This study used a qualitative research design of an intrinsic and multiple case study methodology to examine the influence of poverty on tamariki/children's patterns of participation in occupations, and the consequences of that for their hauora/wellbeing over the lifespan and capacity to fulfil their potential. The results of the study are considered below in relation to pertinent up to date evidence drawn from further searches on all areas related to the research question. That included updating the original MMRS undertaken to inform the design of the study, with new evidence from the 2020-2023 period integrated into this discussion (refer to Appendix G: Table of Updated Child Poverty Participation Studies).

11.2 Restating the Research Problem

Child poverty is a pervasive and global issue that has its roots in a history of unequal distribution of income, resources and economic development, between and across countries, and inequitable access to these resources and services that would otherwise enable tamariki/children growing up in poverty to reach their potential and to flourish (Schweiger & Graf, 2015; UNICEF, 2016; 2020). In economic terms, that represents a substantial waste of capacity in the future workforce, coupled with an ongoing burden on the health system, given the known links between growing up in poverty and prevalence of non-communicable diseases.

While child poverty levels in Aotearoa NZ, and globally, have been steadily declining, continued concerted effort is required to sustain this downward trend in the face of challenges such as the current cost of living crises in NZ and globally, changes in political will to address the problem, and the ongoing impacts of large scale conflicts and climate change (Greer & Morris, 2020; UN, 2020b; World Bank, 2022). For example, the latest UNICEF Innocenti report (2023) finds NZ 19th out of 39 OECD

countries for child poverty rates, and equally about mid-range for efforts to reduce child poverty since 2012. Additionally, there is much inequity in the level of child poverty globally (UN, 2020a), which in Aotearoa is concentrated amongst people of Māori and Pasifika descent and those with disabilities. This situation needs urgent attention (Duncanson et al., 2022; Perry, 2022). In Aotearoa NZ, and in other countries, the ethnic disparities can be traced back to a history of colonisation and unfair racially based policies (Came et al., 2019; Moewaka Barnes & McCreanor, 2019). For the disability community, inequity can equally be linked to ineffective governmental policy (Murray, 2019; Ombudsman NZ [Kaitiaki Mana Tangata], 2020).

Conceptualising child poverty is complex, and the term can be defined and measured in different ways. The perspective taken in this study is that of tamariki/children's rights and a capability-based approach that views child poverty through a multidimensional lens (Brando & Schweiger, 2019; Leadley et al., 2020; Lister, 2021). From a rights perspective, poverty breaches tamariki/children's rights to an adequate standard of living, to succeed in their education, and to participation in a range of occupations such as play/recreations, social and cultural activities. A capability approach views child poverty as a constraint on a child's ability to do and be what they desire, to realise their capabilities and reach their full potential in life (Brando & Schweiger, 2019; Leadley et al., 2020; Schweiger & Graf, 2015; UN, 1989).

In order to bring a fresh perspective to the complex interactions between the daily lives of tamariki/children living in poverty and the substantial evidence of adverse outcomes, in terms of their educational achievement, employment prospects and health status as adults, this study adopted an occupational perspective consistent with Dewey's insistence on understanding the embedded and contextualised nature of people's lives as a basis for addressing the problems they experience. Therefore, the research question was: *What are the ways in which poverty shapes tamariki/children's patterns of participation in occupations, their potential, and wellbeing?*

11.3 Synopsis of Findings

The findings from this study revealed that poverty had a pervasive influence on tamariki/children's patterns of, choice, and participation in occupations that, if they persist into adulthood, will remain a lifelong threat to health, hauora/wellbeing and

future potential. In terms of patterns of occupation, while for a large part the tamariki in this study exhibited habits and routines that would be expected for their age (Cronin, 2016b; Matuska & Barrett, 2019) and these were occurring with regularity throughout the week, (e.g., getting ready for the day, attending kura/school, whānau/family time), poverty was observed to have a modifying effect. For example, their habitual pattern of occupations (i.e., their routines) included irregular sleep patterns, disrupted dental hygiene and mealtimes, extensive time spent in restorative and sedentary activities (e.g., resting, attempts to spend time alone, watching TV, playing on cell phone/computer), which are contraindications for physical and mental health. Their periodic absenteeism from kura/school, and absence of homework and reading routines in the kāinga/home threaten achievement of qualifications from school and reaching their potential in the workforce.

The roles that the tamariki in this study held, while expected for their age (e.g., son/daughter, friend, student, helping out in their home or at kura) (Cronin, 2016b; Matuska & Barrett, 2019; Smith, 2013), were limited in range. For example, they often were not able to join a recreational, social or cultural club/group (e.g., sports, hobbies, art) that would support role development and occupational identity (i.e., a composite sense of self formed out of occupational participation) (Forsyth et al., 2019; Taylor & Kielhofner, 2017). Not being able to engage in social activities with their friends in their community placed additional limits on their development of social roles and relationships. While whānau/family rituals were evident for all the tamariki, such as spending time in a shared evening meal and watching TV together, or playing games together, poverty restricted opportunities for whānau time such as mealtimes, recreational and important cultural activities (e.g., time spent in nature/taiao), or going on holidays together. Additionally, the findings revealed that the tamariki/children's geographic patterning of their occupations was very limited, with frequently accessed occupations concentrated in their local neighbourhood (i.e., within 3 square kms from the centre of their neighbourhood and homes), with walking and the household car being the primary forms of transports utilised.

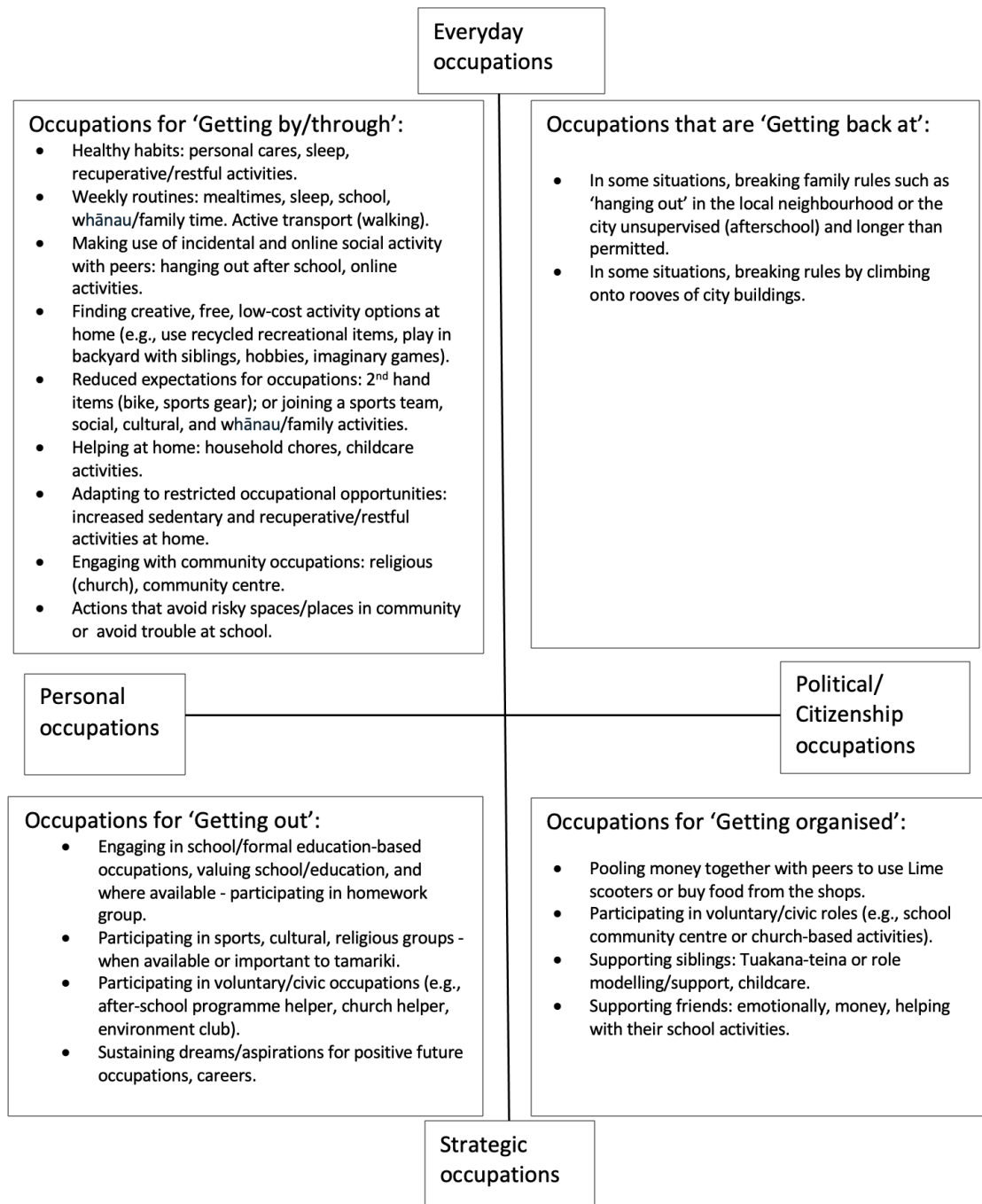
The tamariki in this study experienced constrained choice and participation in occupations across a broad range of life areas, and they were missing out on many typical childhood occupations (Case-Smith, 2015; Cronin, 2016a, 2016b; Humphry &

Womack, 2019; Vroman, 2015). This included organised recreational or extracurricular activities or groups out of kura/school time (e.g., sports, clubs, hobbies, music, arts, or kapa haka), and free play in their neighbourhood (e.g., spending time playing at the park with friends, riding a bike). For most tamariki, this resulted in a sense of disadvantage and loss that impacted their emotional wellbeing/hauora, and created threats for their health (e.g., high sedentary activity and unmonitored screentime). While for some tamariki non-poverty factors (e.g., a child's health, volition) were contributing to reduced participation, which has also been observed by other researchers (Thompson et al., 2009; Veitch et al., 2013), for the most part poverty constrained their patterns, limiting their choice and participation in occupations. Multidimensional poverty factors included the direct influences of low household income (i.e., to pay for fees, equipment, or transport), and restricted access to material items (e.g., recreational equipment). There was also indirect influences such as decreased parental time, health and energy; parental concerns about their tamariki/children's safety in their neighbourhoods; the lack of locally-based free and low-cost tamariki/children's activities, and underdeveloped, degraded and unsafe recreational spaces for tamariki in their neighbourhood (e.g., inadequate playground facilities, and threats of bullying, violence or criminal activity).

Poverty's influence occurred despite the best efforts of the tamariki themselves, their parent/s, extended family/whānau and community workers to offset the negative effects on their lives. Amongst the tamariki, data revealed personal agency, such as the use of recuperative and free activities in their kāinga/home, and the strategies they employed to maximise incidental time with friends. Based on Lister's (2021) schema about forms of agency exercised by people in poverty (discussed in Chapter 3), Figure 11.1 below presents an adaptation focusing on tamariki/children's agency in relation to occupation. For the most part, tamariki exercised 'getting by' activities (or coping with poverty), but also significant strategic 'getting out' and 'getting organised' actions. There were, minimal 'getting back at' activities (e.g., antisocial actions). This figure draws on data from the focus groups and interviews with the tamariki living in the Riverfield and Fernlee neighbourhoods.

Figure 11.1

Forms of Occupational Agency Demonstrated by Tamariki in the Fernlee and Riverfield Communities



Note. Occupational forms of agency, adapted from, Forms of agency exercised by people in poverty, *Poverty* (p. 129), Lister (2021). Copyright Polity Press, 2021. Adapted with permission.

In addition, a range of protective factors were evident. These included parental and extended family/whānau supports, a stable home, free access to kura/school, neighbourhood supports such as NGOs (e.g., community centres, churches), and government funded supports. For example, affordable state housing, or access to

funding for after-school and holiday programmes in some instances. Generally, the experiences of whānau/family and members of the community in these two case studies was one of pride in their neighbourhoods, of hope, and one in which they were striving to build a better life for their tamariki and whānau. However, for the parent/s, they expressed their concerns such as for the safety of their tamariki when participating in occupations in their neighbourhood, and the potential for the poverty they experienced to have lasting negative implications for their tamariki.

These findings strengthen the assertion that child poverty is occupationally unjust and deprives tamariki of their rights to participate fully in occupations of importance for them and their whānau (UN General Assembly, 1989). Explanations of how this injustice operates include that a transactional process is occurring for tamariki and their whānau, where household and environmental factors interact at the individual and family levels to constrain tamariki/children's occupations (Engle, 2012; Leadley et al., 2020). The findings also align with the family investment theory, where a lack of resources in the home (e.g., low income, recreational equipment, limited access to a vehicle) (Cooper & Stewart, 2021) contribute to constraints in participation in a range of occupations for tamariki such as recreations, education, and whānau/family activities. The findings provide partial support for the family stress theory, (i.e., high and sustained stressors for parent/s and their children) (Cooper & Stewart, 2021), such as the ongoing pressures of long hours of low paid or shift work, or sole parenting, resulting in limited parental availability to support the participation of tamariki. Environmental explanations, such as safety concerns and diminished recreational resources in the neighbourhood (Biggeri & Cuesta, 2020), were also evident in explaining the restricted choice and availability for recreational occupations.

11.4 Alignment of Findings with Current Evidence

Subsequent to the initial review of published research and reports generated by agencies, governments and non-governmental bodies, internationally and in Aotearoa NZ, evidence of the deleterious effects of child poverty have continued to mount. That evidence is reviewed here, sequenced as per the assertions presented in the previous chapter.

Tamariki/children and their whānau/families attempt to be agentic in order to counteract the impact of poverty on tamariki/children's occupations. Key strategies by the tamariki, and that have not been highlighted in the published literature reviewed for this study, and as outlined Figure 11.1 above include: maximising social activity through incidental and online activities, finding creative and free activities in the home (e.g., indoor basketball, imaginary games with siblings), and adapting by engaging in sedentary, recuperative or restful activities in home (e.g., resting, or quiet, solitary hobbies such as art, listening to music). The provision of support and role modelling, at times in a reciprocal manner, between siblings (i.e., tuakana-teina dynamic) and with friends as an agentic strategy was also novel to this study. Further unique findings in this study, were actions by parent/s such as resource seeking (e.g., accessing and repurposing recreational items) and providing supervision in higher risk places in the neighbourhood (e.g., local parks) that helped to augment participation in occupations for their tamariki. Additionally, the rules they had for when and where they could engage in occupations in their neighbourhood helped to keep their tamariki safe.

The findings from this study matched evidence in the existing literature for tamariki/children's agency in occupations including relying on their own resources or accessing free activities in their home or neighbourhood (e.g., hanging out with friends; games, TV/computer at home) (Castonguay & Jutras, 2009; Day & Wager, 2010; Ho et al., 2016; Redmond, 2009; Ridge, 2011). Tamariki also reported restricting participation in activities to reduce costs for their family, along with saving money to help pay for activities (Egan-Birtan, 2010; Ho et al., 2016; Leadley et al., 2020; Redmond, 2009; Wager et al., 2010). Their participation in productive activities in the home such as household chores or carer roles supports their parent/s, and remaining engaged in their education and participating in voluntary roles in their community supports their future potential (Egan-Birtan, 2010; Leadley et al., 2020; Redmond, 2009; Ridge, 2011; Schwartz et al., 2015). Parental support for their tamariki has been shown to be helpful and to range from sacrificing their own needs, careful budgeting, teaching life skills, and providing a loving, supportive home environment in order to support their tamariki/children's occupations (EAG, 2012a; Leadley et al., 2020; Maholmes, 2014; Ridge, 2011). More recent research has highlighted how parents find creative ways to reduce barriers to participation in sports through planning ahead,

seeking financial support, asking for help from extended family/whānau or others in their community, and borrowing or purchasing cheaper sports equipment (Hernandez et al., 2023; van Leeuwen et al., 2022).

Expressions of concern and evidence from child advocates about what tamariki/children who live in poverty do and do not do continues to mount. Consistent with previous research (Andresen & Meiland, 2019; Sports NZ, 2021a; 2021b), the findings from this study underscored that tamariki/children growing up in poverty experience exclusion from occupations. Recent studies show the restricted participation these tamariki/children face, due to low SES, in recreational occupations such as sports, and physically-based leisure activities (Ahmed et al., 2023; Männikkö et al., 2020; Owen et al., 2022; Perks, 2020; Rittsteiger et al., 2021). However, the evidence is not uniform, with two studies finding only small or no differences for the effects of low SES on children's participation in non-organised (i.e., unstructured, no adult input or play-based) leisure-based physical activity (Owen et al., 2022; Rittsteiger et al., 2021). Additionally, a Swedish study concluded that cultural or parental logic (e.g., parental social class, parental prior experiences and preferences) was more significant than socioeconomic factors (i.e., household income, parental education and time, marital status, number of children in the household, migration background, availability of leisure facilities) in explaining reduced participation rates in extracurricular activities for children from lower SES families (Hjalmarsson, 2023). However, this study was based solely on Swedish data and did not account for either parental or children's concern for their safety when participating in leisure/recreational activities in their neighbourhoods. Whilst other studies provide evidence for the constraints that poverty has for tamariki/children's participation typically in specific occupational domains, unique to this study, the findings highlighted restrictions across all domains of tamariki/children's occupations.

The evidence from the present study, and aligned with reviewed published research, highlights the threats to tamariki/children's development arising from living in poverty. This study's findings showed that spatial and resource constraints in the home limited routines for homework. Outside of the home, in one instance, periodic school absenteeism due to weather and lack of transport added further challenges to formal learning. The acquisition of skills and capacities was constrained further by a narrow

range of occupations (e.g., recreational, social, cultural) and the care giving responsibility taken up by some of these tamariki. Recently published evidence further strengthens the claim for the negative effects of poverty on tamariki/children's developing cognitive, physical, behavioural and emotional capacities (Evans & De France, 2022; Gibson-Davis et al., 2022; Lee & Zhang, 2022), along with their negative experiences at school (Education Counts, 2022; Jang-Jones & McGregor, 2018), which combine to impact their school attendance, education and subsequently their potential (Manhica et al., 2021; Ministry of Justice, 2020; Sosu et al., 2021).

While more research is required about the implications of being a young carer, evidence does point to these roles being personally and culturally important to these young people (e.g., a sense of duty, developing skills, helps their whānau/family). However, there is also evidence of adverse consequences for tamariki such as injuries, impacts to their hauora, disrupting social and school activities, and reduced educational outcomes (Joseph et al., 2020; McDonald et al., 2009). Additionally, NZ is ranked at the lowest level on an international scale that assesses countries' efforts to establish legislation, policies and services to support young carers (Leu et al., 2023).

What is lacking in the broader evidence is a coherent explanation for the reduced cognitive, physical, behavioural and emotional functioning of tamariki growing up in poverty, and how this is influenced by impoverished patterns of occupation and constraints in their occupational participation. The occupational perspective brought to this study points to the lack of diverse, challenging occupations that lay a foundation for human development.

Threats to the health and hauora/wellbeing of the tamariki in this study were also evident. In terms of health risks, low levels of physical activity, overcrowding in the home, disrupted sleep, mealtimes, and dental hygiene, and unmonitored screentime were all present in the data. This existed despite the tamariki/children's voiced knowledge of healthy lifestyles and diet, a desire to have time alone, and insights about some risks involved with online activities. Recent evidence related to tamariki/children living in poverty confirms the threats to health they experience from high sedentary lifestyles (Männikkö et al., 2020; Owen et al., 2022; Perks, 2020), restricted personal space in the home (Marsh et al., 2019), disrupted sleep patterns

(Adams et al., 2023; Ministry of Health, 2021b; Muller et al., 2020) and mealtimes (Berge et al., 2018; Watts et al., 2017), and poor dental hygiene (Cope & Chestnutt, 2023; Kanagaratnam & Schluter, 2021), and unmonitored screentime (Bozzola et al., 2022; Hedayatrad et al., 2022; Männikkö et al., 2020; McArthur et al., 2022; Núñez-Gómez et al., 2021).

With respect to their wellbeing, the findings from this study highlighted risks stemming from constrained time spent together as a whānau/family (e.g., mealtimes, family activities), and the restricted ability to engage in play, leisure, or social activities with their peers. Published evidence has highlighted the negative affect on tamariki/children's wellbeing from constrained time together as a whānau/family (Andresen & Meiland, 2019; Dinisman & Ben-Arieh, 2016), and in social activities with peers (Chen, 2020; Dinisman & Ben-Arieh, 2016; Phiri & Abebe, 2016). This study, however, draws attention to the connections between poverty and the way it constrains tamariki/children's patterns of and participation in occupations, that has a negative effect on their health, hauora/wellbeing, and that can have lifelong adverse outcomes for them.

11.5 The Significance of the Findings

The new insights that this study brings to the discourse on child poverty, and that is not revealed in other research, is the transactional process that occurs between the patterns of, and participation in occupations associated with growing up in poverty and tamariki/children's potential (i.e., development, health, and future participation) and hauora/wellbeing over their life course. This is consistent with Dewey's pragmatist concept of habit wherein a person's habitual patterns of thought, and thus their behaviours, are shaped through social factors and through complex transactions that continuously occur between the person, their occupations and their context (Bunting, 2016; Morgner, 2020; Pratt, 2016). The patterns of occupation that are a feature for the tamariki in this study, due to poverty, such as a regularity of sedentary activity instead of playing in a sports team or physical recreational activities, can set up a lifetime of being sedentary. Equally, not getting to spend time with friends, interact with nature, have new experiences, pursue their talents or cement helpful learning habits, limits skill development, social and cultural connectivity, negatively affecting

their hauora/wellbeing, their dreams of participation in future occupations, and their potential for educational and vocational success. This is most starkly evidenced by the occupational maps that make clear the limited range of occupational experiences the tamariki are exposed to.

This study also makes a unique contribution to the body of knowledge about child poverty, not only because of the focus on patterns of occupation for tamariki, but also because, in doing so, it draws together information about the situation holistically for two communities, including the different contexts and the range of people and organisations involved within those communities. Thus, it brings a comprehensive picture of the situation, identifying the multiple influences at play, and the exchanges amongst those influences as they shape tamariki/children's participation, something that is lacking in the extant literature.

Other distinctive features of this study include that it brings an Aotearoa New Zealand perspective, and one which acknowledges the influence of our unique physical, social, cultural, and institutional contexts on tamariki/children's patterns of participation in occupation. This study also highlights the voices of tamariki in the poverty space, asserting that their experiences and perspectives are important, lending valuable insights about their occupations that have not been heard before. The perspectives of whānau Māori are a key feature in this study and include the importance of whānau, and of key Māori values such as whaunaungatanga, kaitiakitanga (protection of tamariki), and connectedness with the whenua and taiao, despite the impacts of poverty, in helping to shape the health, hauora, and patterns of participation in occupations of tamariki.

11.6 Child Poverty: The Right to Participate in Occupations and Achieve One's Capability

The benefits to tamariki/children of engaging in play, and physically active recreations such as sports, dance, or active transport (walking, biking) is strongly encouraged as it sets up healthy habits in childhood and supports their health and wellbeing (Ministry of Health, 2021a; National Health Service [NHS], 2021; Sports NZ, 2023). While other research has shown that poverty limits tamariki/children's participation in occupations

such as physical activity and sports (Owen et al., 2022; Perks, 2020), education (Cooper & Stewart, 2021), social activities (Andresen & Meiland, 2017; Ho et al., 2016), and productive occupations including civic engagement (Schwartz et al., 2015), this study has revealed how pervasive poverty's influence is over all aspects of their occupations, restricting their choice of and rights to participate in occupations. This impoverishment of occupation brings with it the loss of the potential benefits that can arise out of these occupations.

As recognised in the UNCRC, tamariki/children have the right to be able to participate freely in occupations that are important and meaningful to them. This includes play, recreational, social, cultural, religious/spiritual and educational activities (UN General Assembly, 1989). Such rights to occupational participation are supportive of their development, health, hauora/wellbeing, and their potential to grow into adulthood, achieve their aspirations and engage as full citizens in society (Humphry & Womack, 2019; Mandich & Cronin, 2016). These positive or substantive rights include the right to choose freely and to full participation in a range of occupations that are recognised in the position statement by the World Federation of Occupational Therapists (WFOT) (2019). These include the benefits from early life habits that reflect healthy lifestyle patterns (Lioret et al., 2020), and engagement in occupations throughout the life course that help enable a child, or person, to achieve their fullest potential (Hocking et al., 2022; Leadley et al., 2020). From a tamariki/children's rights perspective, the findings provide further evidence of the way in which poverty breaches tamariki/children's right to participate in occupations, excluding them from parts of life that are important and meaningful for their growth, health and hauora over their life course, and consequently brings with this negative implications for their longer-term prospects (Leadley et al., 2020; Schweiger & Graf, 2015; Treanor, 2020).

Evidence from this study that poverty constrains tamariki/children's patterns of, choice, and participation in occupations lends weight to the argument that child poverty is occupationally unjust and that these tamariki are excluded from a range of typically occurring childhood occupations. This injustice is accentuated for tamariki of Māori and Pasifika ethnicity, in Aotearoa NZ, as they experience inequitable rates of poverty (Leadley & Hocking, 2017; Leadley et al., 2020). Furthermore, the deprivations that tamariki experienced in terms of their freedom to participate and engage in

occupations of their choice, due to poverty, is evidence of occupational deprivation (Leadley & Hocking, 2017; Leadley et al., 2020). For example, all the tamariki in this study wished to engage in a range of sports and other important recreational, social and cultural occupations, that are important for their health and hauora, but were prevented from doing so due to multidimensional poverty related factors.

From a capabilities approach (CA), family and environmentally-based conversion factors (i.e., limited parental and community resources in the context of poverty) constrained these tamariki/children's capability to translate their freedoms/choices (of occupations) into meaningful outcomes/functionings or what they wanted to do (Brando & Schweiger, 2019; Robeyns & Byskov, 2021; Schweiger & Graf, 2015). While their parent/s, extended family/whānau, and their community were active in their attempts to help these tamariki realise their full potential, the whānau/family's limited means and the lack of sustainable resources available to the community resulted in their current patterning of and participation in occupations (functionings), and limited choice and range of occupations (freedoms) (Brando & Schweiger, 2019).

Subsequently, this posed risks to their health and hauora/wellbeing, meant missed opportunities for enriching experiences in their lives and opportunities to engage in age appropriate roles that are important for their occupational identity and self-concept (i.e., sense of capability or self-esteem, and their place in the world), development of skills and talents, their social capital or networks, and an ability to contribute to their community and culture (Cronin, 2016a, 2016b; Lee & Kielhofner, 2017; Matuska & Barrett, 2019). Consequently, such constraints on their functionings and freedoms poses risks to their future capability or potential to participate in important future occupations and their aspirations of who they want to be and become.

However, and given the poverty-based restraints experienced by these tamariki, there was a general acceptance and adaption to their constrained participation. Although, they still viewed their reduced participation in occupations as a loss and as being unfair, with this having a dampening effect on some of their occupational aspirations. This was highlighted when they spoke about their inability to join a sports team or extracurricular groups, play in their neighbourhood and socialise with their peers and their extended family/whānau (kanohi ki te kanohi or in person). This generalised

acceptance of their diminished occupational opportunities, including not identifying a range of other childhood and whānau/family occupations they were missing in their lives, from a CA is indicative of adaptive preferences where one begins to accept life's circumstances due to constraints such as lower socioeconomic factors (Robeyns & Byskov, 2021; Sen, 1999). It may also be that a sense of shame/stigma or whakamā in being identified as poor (Leadley & Hocking, 2017; Sarti et al., 2015; Schweiger, 2019) or missing out on occupations, or both, may be underlying some of their underreporting and acceptance of reduced participation in occupations.

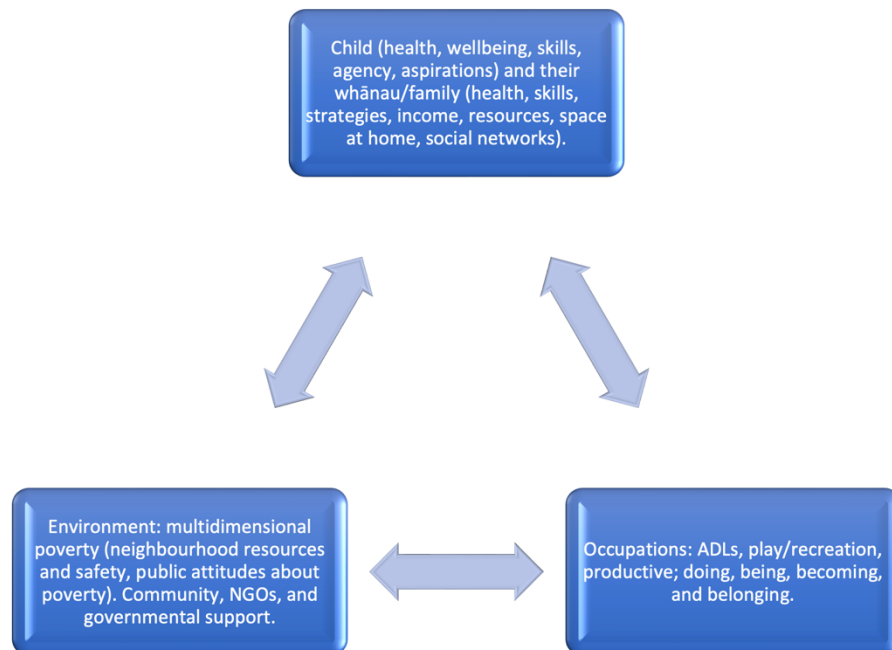
11.6.1 Transactionalism: Explanations for the Ways Poverty Influences

Tamariki/Children's Patterns of and Participation in Occupations, their Potential and Wellbeing over the Life Course

Based on the findings of the current study, viewed from transactional, occupational, and life course theory perspectives, a complex environmental phenomenon like multidimensional poverty can be seen to impinge on a child's patterns of occupation (e.g., sedentary activity, study habits), their choice of and access to occupations (e.g., education, physical and social recreations), which over their life course negatively influences their development, health and wellbeing (e.g., physical and cognitive skills, obesity, mental illness). In turn, a child's ability to exert agency and adapt their participation, along with environmental supports (e.g., parent/s, community agencies and government supports) can moderate the impact of poverty on a child's occupations, their health and hauora/wellbeing. However, poverty's impact over the course of a child's life, dependent on the positive affect of moderating factors, remains as a likely negative effect on their future outcomes (e.g., chronic ill-health, disability, education, employment, reduced civic engagement), and serves to perpetuate long-term or intergenerational poverty (Cooper & Stewart, 2021; Evans & De France, 2022; Gibson-Davis et al., 2022). Refer to Figure 11.2 below showing the complex and dynamic transactional process that occurs between a child and their whānau/family, poverty and their occupations.

Figure 11.2

The Complex and Dynamic Transactional Processes That Occurs Between a Child, and Their Whānau/family, Multidimensional Poverty, and Their Occupations.

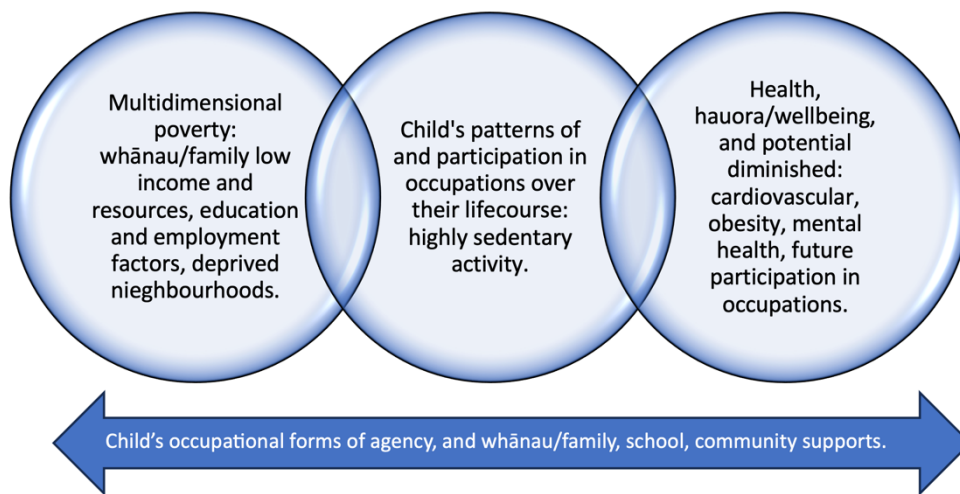


In terms of poverty's bidirectional effects on a child's occupations, this study provides tentative evidence for the associated interactions between poverty, occupation and health. This interaction starts with the multidimensional poverty a child experiences, that leads to reduced participation in occupations such as physically based recreations and social occupations (Leadley et al., 2020; Perks, 2020; Wager et al., 2010). In terms of reduced physical activity, the resultant impact on the child's life is a likely predominance of sedentary activity with associated high levels of screen time in the home, (often unmonitored by parent/s) (Hedayatrad et al., 2022; Männikkö et al., 2020). The high levels of sedentary activity can contribute to reduced cardiovascular fitness and in the longer-term an increased risk of obesity and chronic illness that further decreases a person's capacity for physical activity (Oosterhoff et al., 2019; Qi et al., 2023). Additionally, the restricted social interaction and high online screentime may lead to behavioural and mental health problems, that can have effects such as reduced participation and engagement in helpful occupations such as school, recreational and social activities (Männikkö et al., 2020; Noonan et al., 2018). Supporting this premise, other research provides preliminary evidence for a

bidirectional relationship between poverty, obesity and health (Jansen et al., 2013), poverty, child and parental mental health (Lowthian et al., 2023; Treanor & Troncoso, 2023) and child behavioural problems (Zhang et al., 2020). Refer to Figure 11.3 below portraying the bidirectional relationship between poverty, a child's occupations, and their health and hauora/wellbeing.

Figure 11.3

The Bidirectional Relationship Between Poverty, a Child's Occupations, and Their Health and Hauora/Wellbeing



11.7 Limitations of this Research

This study has a number of limitations, primarily arising from the scope of a PhD, that meant the assertions and conclusions reached remain tentative. These include the limited number of focus groups and number of tamariki that participated in the interviews, along with only having two cases in a multiple case study design. As such generating theory based on findings could only be tentatively achieved. Furthermore, ethical constraints imposed on the study and limited resources (e.g., researcher resources) meant that time spent with each whānau and community led to data gathering that was completed over short periods of time, as snapshots, and this limited assertions that examined poverty's effects over time. Notwithstanding these limitations, this study has revealed valuable perspectives about how poverty influences patterns of occupations, participation trends, and the implications this has for the potential, hauora/wellbeing and prospects of tamariki. Subsequently, these findings

provide useful insights on how child poverty policy and strategy in Aotearoa NZ can be adapted to best support tamariki growing up in poverty to flourish.

11.8 Child Poverty: The Role of Occupational Therapy Through a Transdisciplinary Lens

Whakaora ngangahau/occupational therapy has a historical legacy of addressing social justice issues and in working to improve the lives of those who are faced with the most disadvantage such as with a mental illness, physical disability and socioeconomic constraints (Scaffa, 2019; Wilcock & Townsend, 2019). The profession has also long recognised the value and effectiveness in working collectively to tackle health and social issues through an interdisciplinary approach, working together on a shared goal for the person/client or group of people (AOTA, 2022; Braveman, 2016; Falk-Kessler, 2019). However, a transdisciplinary approach goes beyond a discipline specific role, and when addressing a health or social issue can involve non-health professionals and all members of society (Bintley & George, 2023; Rezaei & Seyedpour, 2022). Benefits of this approach when working on a social issue can include greater ability to solve complex problems such as child poverty by transcending discipline specific silos, providing multiple and wholistic perspectives (Bintley & George, 2023), including people in the community with lived experience (e.g., children and adults living in poverty). A transdisciplinary approach to the problem aligns with a pragmatic philosophy that examines social issues in their totality and values democracy, with the aim to find real world solutions (Morgan, 2014; Pratt, 2016).

Evidence for the role of occupational science and occupational therapy in addressing social issues or wicked problems such as poverty is growing (Gutman, 2021; McDougall et al., 2023; Rudman, 2021). Recently published literature delineates the approaches that can be taken such as focusing on ensuring human rights are met for all people and improving social determinants of health and deconstructing structural issues that underpin inequalities (Hammell, 2020, 2021; Hocking, 2019), transformative and empowering approaches such as with social occupational therapy and occupation-based community development (Albuquerque & Farias, 2022; de Melo et al., 2020; Estrany-Munar et al., 2021; Sit et al., 2023), and public health and health promotion strategies (Reitz & Scaffa, 2020).

There are a growing number of studies that provide evidence of occupational therapy interventions in the child and youth poverty space. These include active participatory approaches with socially vulnerable children and youth at risk of human rights violations (Costa et al., 2023), engaging and empowering youth in a transformative approach to addressing socio-historical and structural issues such as poverty (Gonçalves et al., 2021; Mthembu et al., 2023), co-designed and contextualised approaches for out of school programs for children living in poverty (Forbes & Kerr, 2023), the use of occupational focused trauma-informed care approaches in schools with children who have experienced adverse childhood experiences (ACEs) (Lynch et al., 2020), the Developmental Screening Monitoring, and Enrichment (DSME) program with low-income children that improves their readiness for school (Lee, 2023), enabling play based occupations for children living in low-socio-economic communities (Bartie et al., 2016), occupation therapy interventions with homeless youth who enter transitional housing (Simpson et al., 2020), and occupation-based social skills and sensory approaches with homeless and poor housed preschool children (Rybski & Israel, 2019). However, there is a need for ongoing research, such as substantiated in this study, that elucidates occupation-based and transdisciplinary solutions for the constraints on children's patterns of participation and their potential and wellbeing resulting from poverty.

A public health approach to addressing child poverty, in order to be effective, needs to address the issues that affect tamariki from the individual and community levels, up to governmental/policy level (Frieden, 2010; Leadley et al., 2020; Lysack & Adamo, 2019; Scaffa, 2019). From this approach, child poverty interventions can be constructed using a multi-tiered public health strategy focused at three levels (Arbesman et al., 2013; Lynch et al., 2020; Lynch et al., 2023), and that incorporates a transdisciplinary approach (Bintley & George, 2023). Tier 1 or a universal level, concerns central and local governmental policy that addresses child poverty (e.g., equitable access to participation in extracurricular activities, including addressing environmental issues such as degraded spaces, lack of facilities, safety concerns) in order to promote hauora and development for all tamariki. Tier 2 or the targeted level provides interventions aimed at groups of tamariki who are specifically at risk due to the effects of poverty.

For example, community and group-based interventions to improve educational outcomes and the development of healthy occupational skills such as relationship and problem-solving strategies. Tier 3 involves an intensive and individualised approach where occupational therapy and transdisciplinary interventions are aimed at supporting tamariki and their whānau experiencing poverty-related challenges. For example, school absenteeism, or reduced participation in occupations due to poverty and illness/disability.

11.8.1 Tier 1: An Occupational Science Approach to Child Poverty Policy.

Child poverty mitigation policy in Aotearoa NZ is not well informed by occupational science and lacks a focus related to strategies that address the disruptions that poverty brings to tamariki/children's patterns of, choices and participation in occupations. This study and a previous single case study on the topic (Leadley, 2019; Leadley et al., 2020) have highlighted poverty's pervasive and negative effects on tamariki/children's occupations (e.g., ADLs, school, play/productive activities), despite the attempts by them, and their whānau/families and communities to adapt to the limitations on participation they experienced. Based on the findings from this study, specific changes to current child poverty reduction policy should include:

1. Ensuring ongoing consultation and decision-making about the needs of, and solutions to address child poverty are guided by communities (Horghagen et al., 2018; Scaffa, 2019), occurring at a neighbourhood level and involving tamariki and their whānau, the hapu/iwi, and that is also informed by the perspectives of communities from other cultures (Aimers & Walker, 2016; Department of Internal Affairs, 2021).
2. Policy on improving school attendance should encompass ensuring consistent transportation to kura/schools for tamariki living in impoverished communities who are most affected (e.g., lack of access to household transport), alongside other strategies such as providing funded support for kura/schools (Ministry of Education, 2022a). Options might include funding for kura- and neighbourhood-based walking bus schemes (New Zealand Transport Agency [Waka Kotahi], 2022), free provision of active school transport (AST) options that are age-appropriate (e.g., bike, scooters, along with training in safety, basic

repairs, equipment required, and with local AST repair hubs etc.), utilising public transport options where suitable (e.g., based on a child's age, location), and provision of free transport on wet weather days of the year.

3. Government policy should include funding to provide for material resources required for education/school (e.g., AST items, clothing, required extracurricular items, free books/learning resources, e-devices etc.), and other services that meet the socioemotional and skill development needs of tamariki attending low-medium decile primary/intermediate/high schools. For example, school hubs with intradisciplinary health professionals such as kaiwhakaorangahau/occupational therapists who provide group and individual-based interventions that support the development of positive life skills (e.g., healthy food choices and meal preparation skills), sustaining social activity/relationships and mental health, or occupational identity (e.g., participation in voluntary roles at kura/school, or community) (Bazyk et al., 2018; Haig, 2014; Leadley, 2019; Leadley & Hocking, 2017; Lynch et al., 2023; Pfirman et al., 2023). Currently, the NZ schools free lunch programme is primarily provided by external catering organisations (Vermillion et al., 2021), but these could be transformed to be delivered by school-based kitchens, supplemented by gardens/produce grown at the kura/school, and involve the tamariki in meal planning and preparation. See, for example, the Rhode Street Primary School programme, a kura located in a poor neighbourhood in Aotearoa NZ (Rhode Street School, n.d.).
4. Policy ought to be designed that eliminates the costs associated with participation in sports and extracurricular activities for tamariki and their whānau experiencing poverty, irrespective of their parent/s' employment status. For example, a zero-fees policy for all sporting codes and all extracurricular activities (e.g., arts, drama, music, cultural activities), free provision of the equipment required (e.g., uniforms, footwear, arts/music items etc.), and locating the activities in the tamariki/children's neighbourhoods, or the provision of free transport where required.
5. Governmental policy needs to ensure funding for afterschool and holiday programmes for tamariki living in deprived communities, that is accessible to all

tamariki, and that is designed to meet the interests and needs across the entire age spectrum (i.e., 1-18 years). For example, universal funding/no means testing, a minimalist approach to the application process (i.e., registration with the local organisation only), matches the interests of the middle childhood-early adolescence stage (e.g., 10-13 years), and has universal design principles that enable accessibility for tamariki of all abilities (i.e., those with a disability). These programmes would benefit from the involvement of kaiwhakaora-ngangahau/occupational therapists, other health professionals and disciplines, alongside tamariki, their whānau and their communities, in the design and monitoring of these programmes to ensure the best fit for the tamariki and their whānau (i.e., meets their personal, socioeconomic, and cultural needs). Further, such programmes should include universal design principles (Rodger & Kennedy-Behr, 2017), with the goal of promoting occupational skill development, health and wellbeing for all tamariki (Bazyk & Bazyk, 2009; Faehrich & McCann, 2015; Kugel et al., 2017; Martin et al., 2023; Miller & Petersen, 2012).

6. Governmental policy ought to focus on providing consistent improvements in high deprivation neighbourhoods that help to ensure the safety of tamariki and whānau, along with ensuring high quality recreational facilities. For example, such policy should include the return of community constable services along with increasing funding to support the involvement of Māori wardens (New Zealand Police, 2023b; Te Puni Kōkiri, 2021, August 3), support for community safety and wellbeing projects, ensure all neighbourhood facilities meet universal design principles (Cronin, 2016c; Rigby et al., 2019; Rodger & Kennedy-Behr, 2017), have high quality playgrounds (e.g., destination, nature-based, universally designed) (Rodger & Kennedy-Behr, 2017; Sargisson & McLean, 2012; Stanton-Chapman & Schmidt, 2021), and include other recreational facilities and equipment for young people (e.g., pools, sporting resources).

11.8.2 Tier 2: Community and Group Interventions.

At this level interventions ought to be designed to meet the specific needs of tamariki, their whānau and communities, and be designed as programmes for groups of tamariki

and their whānau, either delivered at kura/schools or other organisations in their neighbourhood. These interventions need to be sustained, given the high levels of housing instability for those living in poverty (i.e., frequent changes in address), so that the benefits are ongoing and expertise or social capital is not lost. For example, for the communities that participated in this study, that might include kura/school transport services that meet the localised needs of whānau, or ensuring a network of local services for tamariki and their whānau are sufficiently equipped with resources and evidenced-based strategies to support their participation in occupations. At the Tier 2 level, group interventions might include efforts to strengthen social networks in the community, clean up outdoor recreational spaces (collaboratively between communities and city councils), and work with communities to decide what facilities are important for tamariki. An essential planning consideration is, how these outcomes can be achieved despite the low income/restricted resources of whānau who might enrol their tamariki in such services. Other interventions could include supports to help prevent harm through online activities (e.g., diversion away from, and education on safe and balanced use of, online activities), or occupation-based programmes for tamariki that increase opportunities for participation in a variety of activities providing fun, skill-based learning experiences.

11.8.3 Tier 3: Individualised Interventions.

At this level services are individualised and could involve a kaiwhakaora ngangahau/occupational therapist and a transdisciplinary team (i.e., other health professional/s, school, community centre/church staff etc.) working with tamariki and their whānau to address specific poverty and health/disability related needs. For example, due to poverty and other individual factors individualised supports are provided for a rangatahi/young person who is disengaged from kura/school or engaging in anti-social activity, or to help equip a whānau/family with resources and strategies that enable their tamaiti/child with a health/disability challenge to confidently participate in extracurricular occupations beyond their kāinga/home (Arbesman et al., 2013; Gillen, 2019; Lynch et al., 2020; Lynch et al., 2023; Scaffa, 2019).

11.9 Implications of the Findings

The results of this study shed further light on the ways that poverty influences tamariki/children's patterns of, choice, and participation in occupations and the implications this has for their development, health, potential and hauora/wellbeing. The findings offer preliminary evidence that poverty disrupts a child's habits, routines, roles and whānau/family rituals, constrains their participation in occupations broadly and that this is experienced as a disadvantage and a sense of loss by these tamariki. The poverty related factors that cause this disruption are broad, dynamic and intertwined, with constrained household income and resources, parental health and availability, and neighbourhood level factors such as risks to tamariki and the inadequacy of locally based facilities and services for them, acting in a transactional manner to severely constrain a child's patterns of, choice and participation in occupations. The negative effects of poverty occur despite the best efforts of the tamariki, their whānau, organisations in their neighbourhoods, and governmental child poverty reduction strategies. What is often missing is consistent governmental support for locally based solutions (e.g., community and hapu led) that meet the needs of tamariki and their whānau. Therefore, the rights of these and other Aotearoa NZ tamariki living in poverty are being breached, as they do not have access to an adequate standard of living and to fair levels of participation in education, play, social and cultural activities. From an occupational science perspective, this provides further evidence for child poverty as an occupational injustice and as a cause of occupational deprivation. The evidence from this study can better inform policy and practice related to addressing child poverty in Aotearoa NZ by drawing attention to poverty's effect on tamariki/children's occupations.

11.10 Future Research

While this study and previous research by Leadley, Hocking and Jones (2020) has provided valuable insights into the ways poverty influences tamariki/children's patterns of and participation in occupations, their potential and wellbeing, more research is required. So far, these studies have not explored poverty's influence on occupations in rural settings, or in other urban centres in Aotearoa NZ. It would be useful to replicate this study in other western and developed countries, as well as in

low-middle income countries. Research that is transdisciplinary (i.e., involving other disciplines), or uses differing methodologies could be utilised, such as kaupapa Māori/Indigenous methodologies, mixed methods, longitudinal, or experiential designs that reveal how poverty effects tamariki/children's patterns of and participation in occupations. Further research could flesh out the multiple ways in which poverty limits tamariki/children's potential, and the mechanisms by which constrained access to diverse, health and development supporting occupations contribute to poor health, educational and vocational outcomes. Additionally, other research is required that specifically designs and tests the effectiveness of the suggested occupational science informed child poverty policy and interventions, that is transdisciplinary, and fully involves tamariki, their whānau and communities.

11.11 Conclusion

This study has revealed that while tamariki/children are agentic and take on responsibilities to support whānau/family life, their patterns of occupation in the home and in their community are severely constrained by poverty. Poverty and impoverished neighbourhoods affect both how much they do and the diversity of occupations they can access. That occurs despite the best intentions and efforts of the tamariki, their whānau and their communities. Multidimensional poverty was shown to have pervasive impacts, including a history of under resourcing in these communities. Consequently, poverty has adverse implications for tamariki/children's potential and hauora/wellbeing over their life course. If solutions are to be found that enable full participation in occupations for these tamariki, and that supports their potential and hauora, then child poverty policy and public health approaches need to be informed by evidence such as this occupationally based research. Interventions need to be transdisciplinary, and should be led by tamariki, whānau, and their communities themselves, including local hapu and Iwi.

Glossary of Māori and Pasifika Terms

Term	Meaning
<i>Ākonga</i>	is the Māori term for student, pupil, or learner
<i>‘Apiako</i>	means school in the Tongan language
<i>Fāmili</i>	is a term stemming from English that in Tongan means the immediate/nuclear family typically
<i>Fale</i>	means the family house or a house in Tongan language
<i>Hapū</i>	is a Māori term referring to a clan or a sub-tribe consisting of a number of whānau/families sharing a common ancestor
<i>Hauora</i>	meaning in Māori to be well, health, fit, of good spirit, vigorous and is a holistic view of health often equated with the concept of wellbeing
<i>Hine</i>	means girl, daughter, or younger woman in Māori
<i>Iwi</i>	is the Māori term for the larger group of hapu, descended from a common ancestor, or a tribe, and who inhabit a larger area of land/region
<i>Kaimoana</i>	is a Māori term of seafood and shellfish
<i>Kāinga</i>	in Māori means the home, one’s address, habitation dwelling
<i>Kaitiakitanga</i>	a Māori concept meaning the stewardship, guardianship, care, and conservation of things in life, including in one’s immediate and wider environment
<i>Karakia</i>	is a Māori ritual, chant, prayer used to start and end meetings, or activities
<i>Kaumātua</i>	A Māori term for an older man, or respected person with status
<i>Kura</i>	the Māori term for school
<i>Kura Kaupapa</i>	a Māori primary school designed and run under Māori custom and using Te Reo Māori as the primary language medium
<i>Kohanga reo</i>	a pre-school, or kindergarten designed and run under Māori custom and using Te Reo Māori as the primary language medium.
<i>Mahi</i>	means work, accomplish, to do, perform, a job, or to be productive in Māori
<i>Mana</i>	equates to someone’s prestige, their status, charisma, and is a spiritual force imbued in a person, object, or place
<i>Manaakitanga</i>	is a Māori concept of showing respect, kindness and hospitality
<i>Mātauranga</i>	means the world of Māori knowledge, wisdom, skill, including education and academia

Term	Meaning
<i>Mihimihi</i>	is a process of greeting and acknowledging people in an initial encounter
<i>Moana</i>	is the Māori term for the ocean, or large areas of water such as lakes
<i>Mo'ui lelei</i>	meaning health in the Tongan language
<i>Mo'ui</i>	means life, or wellbeing in the Tongan language
<i>Pākehā</i>	is a Māori term meaning a New Zealander of European or foreign descent
<i>Pāngarau</i>	is the Māori term for the subject of mathematics as taught school (Moorfield, n.d.)
<i>Rangatahi</i>	is the Māori term meaning youth, young people, adolescents
<i>Taiao</i>	in Māori means the natural world, nature, the Earth, or the environment
<i>Taitamariki</i>	is a Māori term meaning youth
<i>Tamaiti</i>	is a Māori term denoting child
<i>Tamaiki</i>	means children in the Tongan language
<i>Tamariki</i>	is a Māori term meaning children
<i>Tamasi'i</i>	means boy in the Tongan language
<i>Tane</i>	is Māori for boy, son, man, male
<i>Tikanga</i>	is a Māori concept that involves the correct procedure, rules, processes, protocols required in social encounters, and that are often customary to a Māori community
<i>Tūrangawaewae</i>	A Māori term that can mean domicile, or a place to stand, where a person has a right to belong, usually through kinship
<i>Tuakana / teina</i>	A Māori concept meaning a mentor, (tuakana), typically an older sibling or peer, who provides guidance or support for a young sibling/peer (teina), helping with their education/learning of skills and values for life, and where this kindness and learning can be reciprocated by the teina.
<i>Uaratanga</i>	means values in Māori and in the school context is about teaching tamariki about key principles, life values, and skills important from the Māori worldview
<i>Whakawhanaunga atanga</i>	means a process of getting to know someone and forming a connection or a relationship. Sometimes this term is shortened to whanaungatanga
<i>Whakapapa</i>	is the Māori term for one's genealogy or family line of descent
<i>Whakamā</i>	is a Māori term meaning shame or embarrassment

Term	Meaning
<i>Whakaora ngangahau</i>	is the Māori term of the profession of occupational therapy
<i>Whakapapa</i>	is the Māori term for one's genealogy or family line of descent
<i>Whāngai</i>	is a Māori tradition of adopting/fostering a child, and where traditionally the tamaiti/child was a blood relative such as a cousin
<i>Whānau</i>	is a Māori term meaning family or extended family
<i>Whare</i>	in Māori means the house, a physical building, place of habitation

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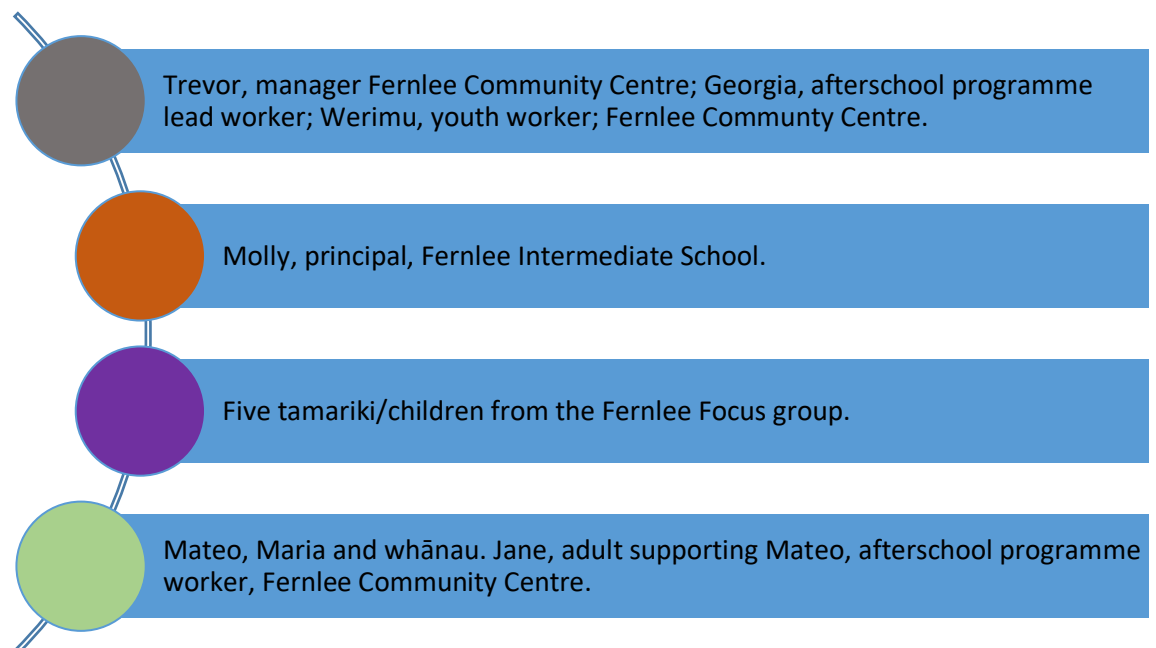
Appendices

Appendix A: Case Study One: Fernlee

Introduction

Fernlee was the first case study completed for this thesis, but is presented here in the appendix for practical reasons as discussed in Chapter 7. While the socioeconomic and demographic features are similar to the Riverfield neighbourhood, Fernlee does have its own unique history and circumstances that are reported here. The format of the case report that follows includes a description of the neighbourhood, reports from people who work in the community, a summary of the focus group, and ends with the story of Mateo and his whānau. Refer to Figure A1.1 below that outlines the participants in this case study and their roles.

Figure A1.1 the Participants in Fernlee Case Study and Their Roles.



A Close-Knit Community

Fernlee⁴⁵ is a suburb in a large city in Aotearoa New Zealand that was developed in the 1950-60s. The land was initially under the ownership of the local Māori hapu and the iwi, including the current mana whenua or the indigenous local whānau of this whenua/land. However, in the late 1800s during colonisation most of the land was wrongfully confiscated by the British Crown (Ministry for Culture and Heritage [Manatū Taonga], 2021, November 1). Following this the land was farmed, prior to its urban development (Te Ara: The Encyclopedia of New Zealand, 2015, June 11). Currently, and based on 2018 NZ census data and on my observations of the Fernlee neighbourhood, the area is a developed suburban space with physical features such as intensive housing (i.e., 2364 households and population of 7462), an extensive roading network, a large local shopping centre and a few other smaller shopping and business areas, two medical centres, several churches, two community centres, a couple of community gardens, and a few green spaces and parks/playgrounds (Stats NZ / Tatauranga Aotearoa, n.d.). The majority of the community are from either European/Pākehā (56%) or Māori (46%) ethnic backgrounds, but with a range of other ethnicities such as Pacifica (10.5%) and Asian (9.5%) peoples⁴⁶. This range of ethnic backgrounds brings with it a diverse range of cultural and religious beliefs and practices. Additionally, a large proportion of the community (52%) are tamariki/children and young adults (under the age of 29 years) (Stats NZ, n.d.). This makes meeting the needs of the youth of Fernlee a priority. The neighbourhood helps meet this need through the kura/schools, including several kindergartens, a kohanga reo, two primary schools, a local intermediate, a kaupapa Māori based high school and a state high school that serves the wider community.

Fernlee is a neighbourhood where there is a thriving sense of community and belonging, and where whānau and people look out for each other. As the afterschool programme worker Georgia told me,

It's a very close knit community...so in that sense it's like everyone knows everybody and everybody's like someone's cousin, aunty or brother or

⁴⁵ Fernlee – is a fictitious name for the neighbourhood in Case Study 1, to help protect participants' anonymity.

⁴⁶ Note that some people identify with more than one ethnicity so the total here is above 100%.

sister...it's good for our tamariki because...cousin or aunty or someone will come and pick them up or something and take them away for the day even if it's just like going to the park you know or going to the dairy for lollies or something like that...There is that connectedness. [Interview]

In addition to the informal community supports, there are a range of organisations in Fernlee providing essential services and supports for whānau, their tamariki and young people. These diverse services include the kura, churches, health services, government and non-governmental agencies, and the community centres. However, the main community centre in Fernlee, with its location in the heart of the neighbourhood, run by those from within the wider community, is secular-based (in contrast with the other church-based centres) and open to the public, is a safe and trusted space, and is a service that has the long-term interests of the community in mind. The centre delivers a wide range of supports for whānau and tamariki that are often not provided for elsewhere. As Trevor the manager of the Fernlee Community Centre explained,

So you get I guess...the sports kind of stuff whether it's...[our local] rugby [club]...which is really, really big with the kids...netball and all the sports stuff...the church youth groups for those kids into that kind of stuff...the [organisations] ...supporting a young person...who's been in a bit of trouble...[they] do some really good stuff with young people...[But] the community [centre] is here for [the] long term...[it's a] hub of action, happening all the time...you're gonna see lots of different kinds of...groups and people and culture, faiths. [interview]

The Fernlee Community Centre provides a diverse range of services that help to meet the needs of whānau, tamariki and rangatahi. These include basic household essentials such as kai/food, access to the internet, or supporting people's capabilities through budgeting and counselling services, or learning new skills and free resources in order to build and grow gardens at home. For tamariki and rangatahi the centre provides out-of-school programmes that enable participation in fun, supervised and safe occupations on a routine basis, rangatahi mentoring, and skill and role development through voluntary work opportunities. Most of these services have low costs, or are free, or, in the case of the after-school and holiday programmes, parent/s can access state funding to help pay for their tamariki to participate.

I just think this community centre has...lots of things here...finding better ways...financially [for whānau]...\$15 vege pack...We do internet...building a garden box...teach our community how to prune a tree...planting fruit trees...at people's houses...cheap after school care...we've got a youth programme...mentoring...our young people...we allow young people to come to for free. Our holiday programmes are cheap...[and] we offer...work experience. [Werimu, Youth worker, interview]

While the weather is good we really do try and take advantage of the playground. We do have some sports equipment as well...they can play like basketball and stuff or kick a rugby, a soccer ball around...do some crafts...like painting and things...teach the kids ukulele...the kids have loved it!...play with some board games...We also do baking days, that's probably a favourite! [Georgia's interview]

Another important part of the neighbourhood are the kura/schools, that not only provide a free (state funded) safe place to learn, play and socialise during kura hours, but also offer opportunities to participate in a diverse range of after-school sporting and extracurricular activities. As explained by Molly, the principal of the only Intermediate school/kura in Fernlee,

We offer a huge range of sporting activities, in our school...basketball and waterpolo...[and winter sports such as] netball, hockey...touch [rugby]...[and in summer] indoor cricket...indoor football/futsal...[and] for...kids that don't want to do sport, we have art club, chess club, games club...[and]...we have kapa haka, Pasifika [groups]...[and] we have a rock band. [Interview]

Leaders of the Day: Cheerleading our Champions

The community workers in Fernlee, interviewed for this study, recognise the capability of the tamariki and rangatahi in their neighbourhood to become who they want to be and to be leaders in their community and beyond. While poverty exists as a barrier to achieving these positive outcomes, the community workers realise that this potential exists in these tamariki and rangatahi now, given the unique talents and abilities that each of them has, and that this needs to be nurtured in the present rather than in the future.

I guess one of the sayings is, you know, our kids are the leaders of tomorrow, but actually partly disagree with that because I think they can be leaders of the actual day...some of our kids are awesome leaders within their community and their school...they can make real positive change. [Trevor's interview]

This leadership can be achieved through mentoring, and providing opportunities to participate in occupations that help to develop their skills, identity, roles and self-confidence or that enhances their mana⁴⁷.

If they're really good at sports...you need to be there cheerleading for them and actually oh even if they're...really bad at sports, you still have to be there cheerleading for them no matter what...the...leader can be drawn out...realising [the] bigger purpose, creating a pathway for them...and it doesn't have to be real big...we had one person who's really good at talking...now he hosts events...in front of everyone...creates a fun environment for other people...being able to draw out their skills that they have is probably the biggest thing that we can do for them...just try and get together and champion, championing them, championing them wherever they are. [Wiremu's interview]

Giving Back: Civic and Voluntary roles

An important part of participating in occupations for young people and their whānau in Fernlee is the ability to engage in activities that help others. These opportunities provide tamariki and rangatahi with an opportunity to give back to their community, or to develop skills and roles through voluntary-based work. In this way they contribute to the social connectedness and wellbeing of their community. Some of these opportunities are facilitated by community organisations such as the Fernlee Community Centre.

We have...done a lot with the older people at the...flats across the field...we'd...go over and do like an Easter play or something...Christmas...we went over there and we sang carols for them. We handed them out gifts, the kids made gifts for them...writing cards, making oh we made sugar cookies for them...Yeah it is quite cool though because some of the kids that years ago attended [the community centre] after school...they will often pop in and they'll just start volunteering or helping us. [Georgia's interview]

We offer work experience...where we've taken them in 'hey look be a volunteer here, let me teach you how to be like a leader in this type of role'...I've...got two of them working under me now at the centre here. And...they're taking charge of all the junior [programmes]. [Wiremu's interview]

⁴⁷ Mana is a Māori term that equates to someone's prestige, their status, charisma, and is a spiritual force imbued in a person, object, or place.

Day to Day Survival: Fernlee

While Fernlee has a number of community-based resources and strengths such as its close-knit social networks, playgrounds, greenspaces and organisations that support tamariki and rangatahi to participate in occupations, poverty is also an everyday reality for many whānau in this neighbourhood. For example, and similar to Riverfield, Fernlee has very high levels of socioeconomic deprivation and is classified at the highest level on both the NZ Index of Deprivation (NZDep), at 10/10, and the Index of Multiple Deprivation (IMD18), at 5/5 (Massey University, n.d.; The University of Auckland, n.d.). This means there are a large number of households on low income and benefits (i.e., median income = \$25,000) with a number of whānau who are living below the poverty line, who are unemployed (i.e., 9.3%), with low levels of educational status (i.e., 26% with no qualification), and with these statistics higher than the city average (Stats NZ, n.d.). Additionally, many homes are cold, damp (28.5%), and mouldy (20%), higher than the city average, and with households frequently reporting health problems (e.g., that limit activity =10%, higher than the city average for those between 0-29 years) (Stats NZ / Tatauranga Aotearoa, n.d.). Fernlee also has high rates of crime. For example, based on NZ Police crime data for violent assaults over the last 12 months Fernlee has 4 times the rate of violent crime compared with another more affluent part of the city (New Zealand Police [Ngā Pirihimana O Aotearoa], 2023). For tamariki, when wanting to play in the neighbourhood, the risks of harm and danger are clear, at least in the mind of the Fernlee after-school programme staff member, Georgia.

Crime is quite high here...yeah it is not a safe community...we see fights every week...there are times where I will take the after-school care kids out onto the playground, I have to, I'll run, I'll pull them right back in because, there will...be very violent fights that are breaking out so...Yeah the police are always here. There's a lot of car theft at the moment...the liquor store is always getting ram raided until they built concrete blocks. [Interview]

Living in this neighbourhood for many whānau and their tamariki requires a survival mode and brings with it many challenges such as not having enough money to put kai/food on the table, pay for basic household necessities such as soap, shampoo, clothing, or paying for electricity to heat the home. Learning to live with poverty in Fernlee, means living day to day, with a short-term outlook and making the best of the

resources you have available to you. For rangatahi, this may mean finding creative ways to bring in more income, like part-time work, to off-set costs for their whānau. This tough reality is not only experienced by the adults, but also tamariki and rangatahi and makes setting longer-term goals and aspirations difficult.

Our young people don't understand what goals are because...they live their day, for tomorrow...our community [has] learned to live day by day. With food, with money...there's a huge number of families in our community that are needing financial support. Need extra food support...like blankets and stuff like that...Basic necessities...being able to shower with soap...they don't really have the right facilities or stuff to keep their hygiene up or be able to have the money for a haircut...it's a passed on generation that kids have now learned to just focus on tomorrow...Yeah and it's just survive each day. [Wiremu's interview]

I think some of [our youth they]...are just thinking about, how they're going to earn enough money on their shift to buy food, yeah or how they're going to help their sibling or how they're going to, just save enough money to get their phone replaced. [Georgia's interview]

The Chains of Poverty

In addition to the constraints that poverty has for tamariki and rangatahi in formulating goals, that are not related to their immediate, daily existence, is the restrictive and dragging down effect poverty can have on their dreams for their future. For example, by constraining success in their education, or development of social circles with peers from more affluent backgrounds, dreaming of a future career, or rising out of poverty. In many instances, young people do not see a bright future ahead and instead resign themselves to a life of poverty and to social networks similar to their own. This is despite the best efforts of those working in organisations that support them in their community.

Those young people are like 'this is my life, this is how I'm going to grow up. I can't wait to be on benefit you know because this is my life. I probably won't get a job'...Yeah it's a cycle...And 'nah I don't want to hang out with you, you're too rich' kind of thing and then they all stick in their groups...It's just they'll grow up like that you know they'll just grow up stuck in those chains of belief, believing...that's life. That those...walls that have been put up around them is life and that's how the next generation...they're going to be. [Wiremu's interview]

I've just realised I don't actually think I hear them telling me what they like or telling me what they want to be...for some...kids...in a family with...more support or more income they'll often talk about what they want to do when they grow up...They'll be like 'I want to do this and this'...But these kids, I actually don't think I've ever had one of them, come up to me and say 'oh Georgia I really want to'...I have asked them and often they just say 'oh I don't know'. [Georgia's interview]

Filling the Gaps: Missing Out on Occupational Opportunities

Community organisations in Fernlee do their best to fill the gaps in services that support the participation of tamariki and rangatahi in occupations. As Trevor said in his interview, “[We are] doing our bit in our neighbourhood...filling in those gaps that don't take place [at] other organisations.” And as the Fernlee Intermediate School principal pointed out,

I know that [Fernlee] Community Centre offers a few things...Yeah [and church-based centres]...They do try too...And some of our kids play sport for club teams...I think some of the local churches have like youth groups...whether you're religious or not I think kids have that need at this stage to be social. So...you know I think that's filling a gap. [Molly's interview]

While opportunities do exist for tamariki and rangatahi to participate in sports, arts, music, cultural and extracurricular activities such as those provided through the local intermediate kura and other groups in the community, these extracurricular activities all have associated costs or require parents to commit to supporting the participation of their tamariki in other ways (e.g., being able to take time off work). While kura do have funds to help those experiencing financial hardship, these are limited.

We offer a huge range of sporting [and cultural] activities, in our school...[but] there could be kids out there who don't play because they haven't got the gear...[transport] can be a barrier for some of our parents...I do know that it's difficult for parents...it's a huge added cost...[for] kids...who are in rep[resentative] teams. [Molly's interview]

They're missing out...Definitely missing out. We've got one young girl who loves playing rugby but can't keep up with the fees...Sports fees are expensive...A barrier is definitely money. A barrier is definitely food...Yeah because they're hungry...another big barrier is transport...They don't have a vehicle...they don't have money for a bus. They borrow money you know yeah becomes...it's a cycle. [Werimu's interview]

For many whānau, these costs come on top of the struggles they already experience including paying for the essentials such as kai. Missing out on participating in these beneficial occupations can place their health and wellbeing at risk.

I guess all those little gateways to whether it's sport or whether it's dance classes or touch...if you don't have parents who are going to funnel you into those little areas. Then that's a kind of a gap...So providing those opportunities, particularly when they're at intermediate. I think it's such a vulnerable age.
[Trevor's interview]

These missed opportunities can extend beyond daily and weekly extracurricular activities to include important time with their whānau.

I think those shared experiences with their families...to the beach on the holiday and go tenting or camping...those kind of shared experiences with families where they can. Just go out and unwind...[but] it's a bit harder for parents to get those kind of resources together...[so] there are a lot of kids that will just stay around [our neighbourhood] all summer holidays kind of thing and not have that kind of little moments. [Trevor's interview]

There's Not Much to Do

On top of whānau having insufficient income or resources to support their tamariki in occupations, is the additional problem of a lack of available free or low-cost occupations, outside of school time, that are located within the neighbourhood.

My first response is to say there's not much...well the neighbourhood...There's just...not enough things that I think are obvious or accessible to people...Yeah costs and things...it would be cool to maybe have somebody doing more of that [children's activities]...Yeah maybe things on the weekends...Clubs or groups like I don't know arts and crafts or like...I mean it's very difficult to get things free but even just like low cost. [Georgia's interview]

Historic underinvestment in a neighbourhood like Fernlee has likely contributed to this lack of available free or low-cost occupations for tamariki.

The Holiday programme used to be funded differently, where we would get a...grant up front...No one had to apply for subsidy...the price would be cheaper for everybody...We were able to get, you know, 180 kids...That was a whole little community of people...you know, being kept busy during the school

holidays and...[now] the Holiday programme is the OSCAR⁴⁸ subsidy...targeted at parents who are working or in full time study. So [if] your parents are, you know, they might be on benefit...they won't be entitled to that...I think the kind of...logic behind it is, are you at home, you should be looking after your kids... So...there'll be the free-range kids...that during the holidays...They'll just...roam around. [Trevor's interview]

Furthermore, missing out on opportunities to engage in positive, safe and supervised occupations, and having nothing structured to do, has consequences for tamariki and rangatahi living in Fernlee.

There are some things out there...local churches have like youth groups...some of our kids play sport for club teams...community centre offers a few things...but there's not a lot for this age group. And that is becoming increasingly a problem from what I see on the...Facebook page with large groups of kids roaming around the streets...all hours of the night. [Molly's interview]

Chocolate Bars to Scooters: Young People Drawn into Crime

The tamariki and rangatahi who are missing out on occupations, with unstructured and unsupervised time, out of school time, are more likely to feel bored and to spend time with peers faced with similar circumstances. Coupled with elements of poverty such as the extreme resource-seeking activities like stealing food to survive or to gain small moments of pleasure (e.g., stealing a chocolate bar), can led young people down a pathway to more serious criminal activity.

The free range kids that during the holidays, the parents are like, 'they're all sorted'. They'll just go down [at the] skatepark and roam around...Left to their own devices...some of these kids they'll start getting into trouble and you know, get bored...will wander around the park might go to the mall and steal some chocolates...These kind of kids, they went from stealing chocolate bars to scooters to bikes. And to cars...Ram raids. [Trevor's interview]

Additional factors in the lives of these tamariki and rangatahi, such as adverse experiences, may be present and likely contributes to their involvement in anti-social activities. As Molly pointed out, “what we think is a normal sort of home life, these kids live in homes...so far beyond what we think of as normal...And layering on...parents with extreme mental health issues and substance abuse and domestic

⁴⁸ Out of School Care Recreation (OSCAR) is a NZ-based accreditation programme for after-school programmes, that are funded by Work and Income NZ. <https://www.oscarnz.nz/oscarnz>

violence like...It's huge" [interview]. Another contributing factor is truancy, and from Molly's perspective a rise in truancy has been associated with the ending of a truancy prevention programme.

A possible solution to the youth crime [is] if they're in school...Yeah there used to be a really good one. That was a partnership between the police [and] OT [Oranga Tamariki⁴⁹] and the schools and...we'd have monthly meetings and all these agencies would turn up. That's...many years ago. And now, you're on your own basically...If it's wet and the family have no transport a lot of families don't send their kids to school. Mental health issues...Both [parents and children]...not seeing the value in education. [Interview]

Additionally, what is required, says Molly, is state funding for social and health services located at her kura.

I know that we are entitled to a social worker being a low decile school...But they're not funding them anymore...Well I would get notified by the Ministry on average two or three times a week of a domestic harm incident. Who will be one of our families...there's a lot of issues in the homes that kids are being exposed to, domestic violence, drug taking, alcohol abuse. So I'm like. How can you say that they're not needed you know. [Interview]

While for some tamariki and rangatahi, gangs can offer a sense of belonging, they also bring negative consequences. Even with support from the Fernlee youth worker, a pathway into criminal activity can result in a bleaker future.

We've had, like young people...[where] the parents...aren't present in their life...on that journey of gang life... 'I know that you want to be like, being a part of a gang as a community thing' ...Almost like a, yeah family kind of, you grow up belonging. And it also makes you feel like staunch as well...[and] they might be in trouble with the police...I don't always go in and get them but I'm just like 'what happened? Oh you've done this'. And so 'nah he can spend the night in the cell that's too big for me mate, he deserves the consequence for that'. But like if it's like stealing a chocolate or something then yeah, yeah well I'll go get him and just have a talk to him. [Wiremu's interview]

Furthermore, the cessation of locally-based initiatives such as a community constable in Fernlee, in Trevor's opinion, have resulted in this positive programme no longer

⁴⁹ Oranga Tamariki/Ministry for Children, is the NZ government department that supports tamariki and their whānau/families where there are concerns for the safety and wellbeing of the tamariki. <https://www.orangatamariki.govt.nz/>

being available to help prevent tamariki, rangatahi, and their whānau from encountering the law in a negative way.

So, it was so six years ago...they closed down the station...and then kind of centralized them. And I think lost that kind of connection...because...So the kids had a connection with the local officer...with some of these children there's not a good relationship with the police, because obviously the police, have probably gone to their house...Whereas with the Community constable there was a positive...link cause...they saw the softer side...he was preventive...friendly, you know, builds that relationship with the family and can navigate that young person away [from crime]. [Trevor's interview]

Fernlee Focus group

The focus group was conducted at Fernlee Community Centre with the support of Georgia, afterschool programme staff member, and with five (5) tamariki participating, who all met the study inclusion criteria (refer Table A1.1: Summary of Fernlee Focus Group Demographic Data.) Discussed below in the table are a summary of the findings from the Fernlee focus group.

Table A1.1: Summary of Demographic Data From Fernlee Focus Group

Number of participants	Five (5)
Age range and gender	12-13 years: 2 hine/girls and 3 tane/boys
Ethnicity	European/Māori, Māori, and Asian
School	3 attending a low-medium decile (4) intermediate school 1 hine in 1 st year of high school with a medium decile (6) 1 tane was home schooled by his mother/single parent
Household Composition	2 whānau were single parent households (Māori, tane) 3 whānau had both parents at home (Māori, tane & hine, and Indian hine) 2 Māori tane were in a co-habituating household (whānau lived together) Households consisted of 4–7 members.
Parental Employment	1 household with a sole parent was receiving a Work and Income benefit 1 sole parent household in full-time paid employment 2 households either one or both parents employed part-time/full-time
Health/Disability	No reported health or disability issues

What I do at Home and Having Fun

Similar to the tamariki from Riverfield, these tamariki, reported weekly routines that were largely consistent, (i.e., only minor variations), with key occupations involving self-care activities (e.g., dressing, grooming, eating), *“have a shower...brush my teeth...make my own breakfast”*, kura/school, whānau activities, playing with siblings, using the computer and watching TV, restorative or restful activities (e.g., sleep, rest), and contributing to household chores. *“Dinner together”, “playing games together”, “talking together”, “make my bed”, “clean bathroom, vacuum”, “dishes”, “baking, cooking”* and *“shopping, groceries”*. Two tamariki were involved in voluntary roles (e.g., community centre, church), but none reported roles such as caring for whānau or paid work. Sedentary recreational occupations and hobbies, along with restorative activities, were a consistent and evident feature of the weekly routine for these tamariki, with these activities primarily located at their kāinga (home), and being low-cost or free. None of the tamariki were participating in organised sports teams, even though they indicated sports was fun and important for them, and most were not involved in any extracurricular activities (e.g., cultural, art, music clubs, or groups). However, two participants occasionally attended the Fernlee after-school and holiday programmes, and associated activities such as: *“Night market. Friday nights at the mall”*. Free play in their neighbourhood was constrained, in part due to a lack of resources (e.g., bikes, scooters). The majority of their occupations were located close to their kāinga and based in Fernlee. Refer to Figure A1.2 showing the range of weekly, routine occupations engaged in by these tamariki.

Hanging Out with Whānau and Friends

Social occupations were limited to activities with their whānau or at their kura, *“time with friends at school...playing”*, incidental time (i.e., before or after-school) *“hanging out with my friends”*, or through online gaming activity. No tamariki reported having friends over to play or to visit them at their kāinga. Two tamariki reported encounters with antisocial activity when hanging out afterschool, *“climb on the roof [of buildings]”*, or watching peers ‘tag⁵⁰’ walls. Cultural and religious activities were limited to kura (e.g., kapa haka) or for a couple of tamariki, involved attending church. However, time

⁵⁰ Tagging in NZ means drawing, painting or damaging or defacing a building or structure, or graffiti, that is illegal, but that can have artistic, expressive or other purposes.

with whānau was culturally important for these tamariki, *“spend time with my family”, “family time”*.

Kura is Cool

Kura, or home-schooling in one case, was important to these tamariki providing learning, cultural and social activities, *“Te Reo, learning”, “ games, playing, hanging out with friends at school”, “uaratanga [values, life skills], karakia, kapa haka”*.

Homework, was not, however, part of the routine for most tamariki (i.e., 4/5). The majority of tamariki walked to and from kura each day (i.e., 3/5), with one catching the bus to kura and driven home, and the other home schooled. Transport was provided by parent/s if it was raining.

Figure A1.2

Focus Group 1 Fernlee – Weekly Timetable⁵¹

Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning (when wake-up to 11:59pm)	Wake up (6:30-7:30am). Get ready for school, shower. Breakfast, or snack, Laughs(**Family). Chores/jobs School: Karakia, Kapa haka, PE, Learning; or Homeschool	Wake up (6:30-7:30am). Get ready for school, shower. Breakfast, or snack, Laughs**, Chores/jobs School: Karakia, Kapa haka, Sports group. Learning; or Homeschool	Wake up (6:30-7:30am). Get ready for school, shower. Breakfast, or snack, Laughs**, Chores/jobs School: Karakia, Kapa haka, Sports group. Learning; or Homeschool	Wake up (6:30-7:30am). Get ready for school, shower. Breakfast, or snack, Laughs**, Chores/jobs School: Karakia, Kapa haka, PE, Learning; or Homeschool	Wake up (6:30-7:30am). Get ready for school, shower. Breakfast, or snack, Laughs**, Chores/jobs School: Karakia, Kapa haka, Sports group. Learning; or Homeschool	Wake up late (10/11am), get ready for the day Breakfast, Laughs** Chores/Jobs Snacks Online-Watch Netflix shows	Wake up, wake up/10-11am, get ready for the day, pray Breakfast, Laughs** Chores/Jobs Snacks Get ready for/attend church (not all children attend church)
Midday (12pm-3pm)	Lunch, laughs(peers) Eat food, snacks, Food Activities in breaks: 3 sec hold rugby, games, Bball, playing (Hanging out with friends at school). Uaratanga, Te Reo Māori, Learning	Lunch, laughs(peers) Eat food, snacks, Food Activities in breaks: 3 sec hold rugby, games, Bball, playing (Hanging out with friends at school). Uaratanga, Te Reo Māori, Learning	Lunch, laughs(peers) Eat food, snacks, Food Activities in breaks: 3 sec hold rugby, games, Bball, playing (Hanging out with friends at school). Uaratanga, Te Reo Māori, Learning	Lunch, laughs(peers) Eat food, snacks, Food Activities in breaks: 3 sec hold rugby, games, Bball, playing (Hanging out with friends at school). Uaratanga, Te Reo Māori, Learning	Lunch, laughs(peers) Eat food, snacks, Food Activities in breaks: 3 sec hold rugby, games, Bball, playing (Hanging out with friends at school). Uaratanga, Te Reo Māori, Learning	Lunch Food Housework play games* Go to town for church activities, Walk the dog (fortnightly at Dad's place – 1 child)	Shopping-groceries (1/week) Lunch Food Go to the Mall, interact with people (1 child goes to Mall)
Afternoon (3-5pm)	Finished school, Walking home (with friends, hanging out), buy pies, or bus to the centre (only 1 child). Homework (online, only 1 child). Sleep/Laugh, play games= (*e.g. online games (Roadblock), Bball (indoors), board games). Arts & crafts	Finished school, Walking home (with friends, hanging out), buy pies Homework (online) Sleep/Laugh, play games= (*online, or other indoors games).	Finished school, Walking home (with friends, hanging out), buy pies, (sometimes on scooters & go to The Base, any day we can) Homework (online) Sleep/Laugh, play games= (*online, or other indoors games).	Finished school, Walking home (with friends, hanging out), buy pies Homework (online) Sleep/Laugh, play games= (*online, or other indoors games).	Finished school, Walking home (with friends, hanging out), buy pies Sleep/Laugh, play games= (*online, or other indoors games).	Sleep. Rest & eats. play games*, laughs (Family). Spend time as a family playing games/on computer/board games/Rubik's cube/ Bball(indoors). Family – Art & crafts (1 child).	Sleep Class prep play games*, laughs (Family). Play with my pets. Go home and sleep. Do whatever.
Evening (5pm-bedtime)	Eat, Sleep, shower, Shower, snacks. TV sometimes. Leftovers, dinner, laughs (**Family). Dishes, chores. Stay up (**TV/online games), then sleep.	Eat, Sleep, shower, Shower, snacks. Leftovers, dinner, laughs (Family). Dishes, chores. Stay up (**TV/online games), then sleep.	Eat, Sleep, shower, Shower, snacks. TV sometimes. Leftovers, dinner, laughs (Family). Dishes, chores. Stay up (**TV/online games), then sleep.	Eat, Sleep, shower, Shower, snacks. TV sometimes. Leftovers, dinner, laughs (Family). Dishes, chores. Stay up (**TV/online games), then sleep.	Eat, Sleep, shower, Shower, snacks. TV sometimes. Leftovers, dinner, laughs (Family). Dishes, chores. Night market (the Mall – some children only). Stay up all night*, then sleep.	TV sometimes. Leftovers, dinner, dinner, laughs (Family). snacks. Dishes, Chores Shower shower Stay up (**TV/online games), eat, then sleep.	Go to church (some children only). Leftovers, dinner, laughs (Family). snacks. Dishes, Chores. Shower, Shower, eat, stay up (**TV/online games), then sleep.

Colour codes: Green=activities for fun; Blue=Activities need to/impt.; Purple=Activities do/like to with family; Red=Jobs, responsibilities. From audio/map. Updated at FU.

⁵¹ The data in this weekly timetable integrates the weekly activity timetable data of all five tamariki in this focus group.

What I Want to Do

Occupations these tamariki wanted to participate in, but could not included: *“Play netball”, “join my basketball team”, “join a music class and art class, “travel” “go shopping”* and one tamariki wanted to *“have a job”*. Restricted access was attributed to a lack of: *“fees...money”,* resources *“sports equipment”,* transport *“a bike, car and driver to get me there”,* and parental availability *“my parents...mum and dad”*. There were a number of occupations not mentioned, and these were potentially missing in their lives, including travel around and out of the city, holidays with their whānau, or socialising with their peers. *“Mum and dad...friends...aunty and uncle”* were primary supports in their lives, as well as their own sense of agency *“confidence in myself”* (e.g., making the best of resources available for play at their *kāinga*). While risks to tamariki in Fernlee are evident, these were not identified by this group, possibly owing to their actions to avoid dangers or their reluctance to discuss these matters.

The geographical patterning of the occupations for these tamariki is shown in Figure A1.3 below, and as in the Riverfield case study, most activities were occurring close to their *kāinga* and in their neighbourhood. Again, the most frequently accessed occupation and location outside of the *kāinga* was kura/school. Followed by access to the community centre in some cases (i.e., 3/5 tamariki), shops/supermarkets, church (for 1/5 tamariki), and visiting the night markets on some Friday nights or swimming at the municipal pools on an infrequent basis (1 tamaiti/child). Transport typically consisted of walking to/from kura and the community centre (for 3 out of 5 tamariki), catching the bus to kura and collected by car back to *kāinga* (1 tamaiti, 1st year high school), and one tamaiti was home schooled. Transport to supermarket and church was via parental car, and to/from the night market was provided by the community centre staff and van. Apart from the use of the bus to kura, occurring for one tamaiti, the other four tamariki were not using public transport and none were using other forms of active transport (e.g., bike, scooter etc.).

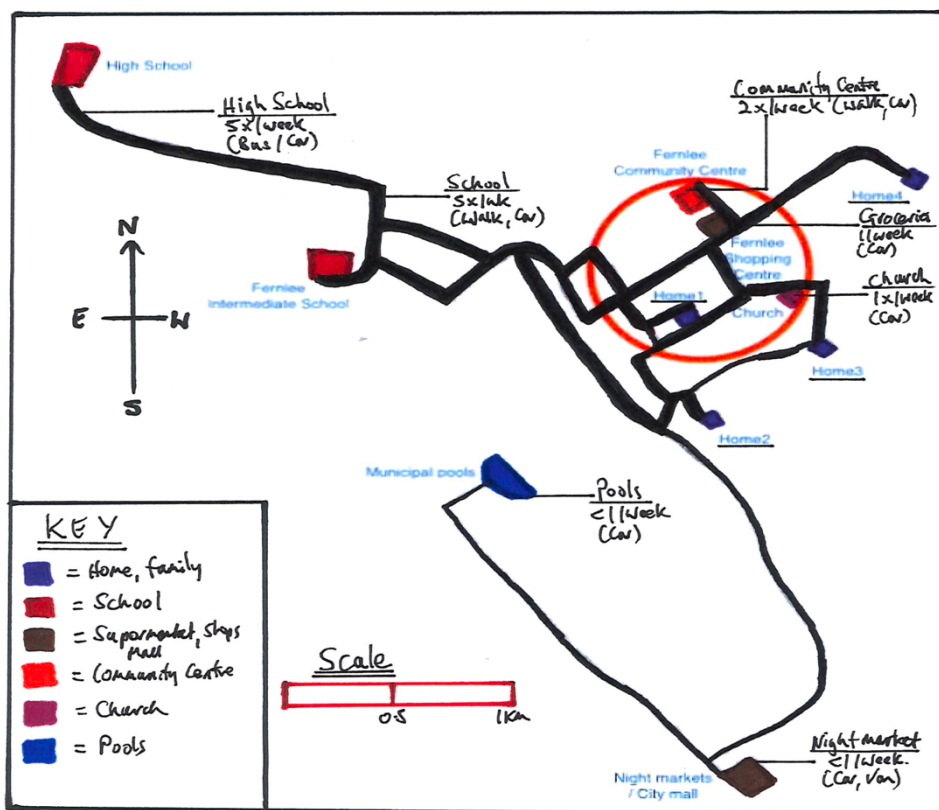
Staying Healthy, Happy and Reaching my Dreams

All tamariki identified important people and occupations in their lives that supported their hauora including: *“My family caring about me”, “friends making me laugh”, “church”, “music”, “vegetables and fruit”, “exercise”* and *“sleep”*. They also identified the supports, resources and values that helped them to reach their potential in life:

“People encouraging me”, “others believing in me”, “support...family, friends”, “encouragement” and “learning”. Material poverty was not a key feature of their discussion in the group, possibly due to adaptive preferences (Sen, 1999), or shame/stigma or whakamā in being identified as poor or missing out on occupations, or both. All tamariki held clear dreams or aspirations for a bright future. For example, “be a plumber”, “own a business...make my family proud”, “be a social worker”, “be a professional basketball player”, and “finish school”.

Figure A1.3

Map of Fernlee Neighbourhood Showing Locations Where Occupations Occur for Participants in the Focus Group.



Key: Thicker black lines indicate regular, daily access and thin lines indicate occasional access. The red circle shows a 1km radius around their homes where the most frequently occurring occupations take place.

Introducing Whānau Wha⁵²: Mateo, Aria, Keanu and Maria

Mateo is a friendly and thoughtful 12 year old tane/boy who lives with his mother Maria (39 years), and his siblings Keanu (older brother, 16 years) and Aria (younger sister, 8 years). They are Māori and whakapapa to Nga Puhī and Tainui Iwi (2 large Māori tribes) and have lived in the Fernlee neighbourhood all their lives. Given the high rates of crime in Fernlee, Maria reported during one of my visits that in the past they have had prowlers around the whare, and she had only started to feel safe in their kāinga (home) after they got Maisy, a large but friendly whānau dog.

Maria is a single parent who is working fulltime and studying part-time. She is a caring and hard-working mother whose kaupapa (ethos and goal) is to raise her tamariki, provide for the household, and develop a career in order to create a better life for her whānau. During my first visit to the home, I noted that “Maria seemed very busy, quite tired, but very organised” [My observations at Mateo’s kāinga]. Maria separated from the tamariki/children’s father a few years ago. He now lives in another town and the tamariki visit him occasionally, typically during the school holidays. Mateo described his father as “a builder...He’s like, he’s a strong...guy. He’s smart too. Like he’s pretty good at chess...a good pianist...he’s got fast reflexes...ninja reflexes”, adding that during visits they will “probably just go fishing...so when we’re inside...usually play this game called...Tekken...it’s basically street fighter” [Mateo’s interview]. Maria explained the financial and social consequences of this limited input:

He used to help out quite a bit...take the kids...during the school holidays just so I didn’t have to put them in holiday programme...come watch the...kids...Yeah and he’s moved on...actually lives [in another town] got a new partner...Oh well...he usually pays his child support...But I don’t necessarily...see it all in the same month. [Interview]

As a result, other male members of the whānau have become Mateo’s primary male mentors. Maria’s brother is “really good with...Mateo you know. Teaching him...how to be confident and...oh sometimes sports stuff...Yeah...because their father’s not around” [Maria’s interview]. Mateo also looks up to his older brother from whom he learns life lessons, or a tuakana-teina relationship. “My brother. Like if it’s physical and I get like, like frustrated, then my brother’s like ‘nah push, push keep on going’ ...My

⁵² Wha means the number four in Māori (Moorfield, n.d.).

brother like...teaches and stuff...because like boys have this sort of energy...it's sort of unstoppable" [Mateo's interview].

Maria's sister and her father, Mateo's koroua⁵³ (grandfather) lives locally. Mateo's koro, as he is known, is chronically unwell and lives alone since his wife passed away a number of years ago. Mateo's aunt and uncle (on his father's side) live in a nearby township and support the whānau, such as picking up the tamariki to stay with them and their cousins in the weekends.

My second visit to the home was to complete the interview with Maria. It was a Friday evening around 5:30pm after Maria had finished work. The tamariki were in the last week of their school holidays. Mateo and Aria were getting themselves ready to be picked up by their aunty to stay for the weekend with their cousins. Maria is multi-tasking, taking care of her tamariki and in conversation with me. She comments a few times how nice it will be to have time to herself (some of this will be spent in university study), but also how much she will miss her tamariki! Once aunty arrives and just before the tamariki leave, Maria gives them a loving hug and kisses and wishes them well in their stay with aunty. [Observations during visits to Mateo's kāinga]

Maria explained her approach to parenting as underpinned by "respect, definitely respect one another...Manaakitanga [kindness], you know help each other, support each other...just be kind...Oh love, love is definitely in there...Got to be love...and patience...listen to your kids" [Interview]. While emphasising that "the important thing is to have fun and enjoy what you're doing". Maria actively supports their practical skill development, opportunities to engage in their culture, such as attending kura, learn their whakapapa/family genealogy, and spend time together as a whānau. "I'll...teach them how to put the washing on...folding clothes... mowing the lawn...My father tries to teach Mateo Māori and whakapapa...Mateo's got a good ear for that sort of stuff" [Maria's interview].

The whānau have lived in their current whare/house for about the last 5 years. It is built of wooden weatherboards, of late 1970s style construction, and at 83 square metres(sqm) is only half the current average NZ house size of 160sqm (Stats NZ, 2020, February, 12). There are three bedrooms, a small lounge with an open plan kitchen, a

⁵³ Koroua or koro means grandfather in Māori (Moorfield, n.d.).

laundry, one bathroom, and a small area of lawn surrounding the whare. Mateo and his older brother have their own bedrooms, but Maria and Aria share a room. There is limited space for Mateo and his siblings to have friends over to play or stay over. While there is a heat pump in the lounge, Maria explained in her interview that “because of where the heat pump’s positioned ...Don’t really get heating down on the bedrooms” and the tamariki are “continuously getting sore throats” during the winter months. On a morning visit “I observed moisture on the windows and Aria had a cough” [My observations at Mateo’s kāinga].

A Dollar or Two: Just Enough

After Maria and the father of her tamariki separated, she returned to part-time work in the telemarketing industry while studying at the local Polytechnic. She has recently gained a full-time paid role as a community support worker, and has also started studying part-time in a Bachelor’s degree in legal studies at the local university. Full-time work helps the whānau financially. “[I work] as a community support worker...for...just over a year...And studying as well...[Our financial situation] at the moment [is] not too bad. You know, when I wasn’t working things were way worse, much worse...just on the benefit and studying” [Maria’s interview].

Nonetheless, Mateo and his whānau experience material poverty, with a restricted household budget. Drawing on the recruitment screening questions and Maria’s interview, the combined household income is approximately \$870-/week, after tax, including child support payments and the Working for Families Tax Credit (WfFTC) (Inland Revenue [Te Tari Taake], 2023; New Zealand Government [Te Kāwanatanga o Aotearoa], 2020, October 2). Their privately owned rental property costs \$440-/week, leaving \$430-/week for all their other weekly expenses (e.g., kai/food, power (including heating), phone/internet, transport, clothing, footwear, and other child-related costs). The NZ poverty line for a whānau consisting of a single parent and 2 children <14 years, and after housing costs, is \$590/week (Perry, 2021), clearly placing Maria and her household below the poverty line. Drawing on the results of the NZiDep questionnaire (Salmond & Crampton, 2012) completed by Maria, in the last 12 months the whānau needed support with food costs (e.g., food grants/banks), had to buy cheaper food, missed out on fresh vegetables/fruit and clothing/footwear, and felt cold due to heating costs.

Maria described the difficult decisions she has to make on a weekly basis, about whether to spend a little bit extra out of her weekly budget, such as special treats for her tamariki. While it might mean going into debt, using a credit facility that Maria does not let her tamariki know about, she will pay for household items, new clothes, or small recreational items for her tamariki so they can enjoy a few simple pleasures. While Mateo does negotiate with his mother for purchases, he is aware of the limited amount of money available and that some more expensive items, such as a bicycle, may not be immediately available. “If I’m lucky she’ll allow me to buy one thing...My mother’s thinking about getting me a bike” [Mateo’s interview].

Sometimes they’ll be like ‘Mum can we’, if they have a dollar or two...‘Mum can we have’ and stop in and get a fizzy drink or something like that. Yeah, I do allow them to treat themselves...I’ll just say to them, ‘you can choose one thing’...it’s usually clothes shopping, just shopping for stuff that we need in the house...but it’s not with money, it’s with my zip account and they don’t realise that...‘Oh mum have you got enough money’ and I’m like ‘no’. But you know...they love it, they love doing that...Yeah and just to see their faces light up when they have something...that they’ve been wanting or...they chose...Yeah even if it’s just something little like...putty⁵⁴ and stuff like that. [Maria’s interview].

Not Much To Do

For tamariki like Mateo in Fernlee, the out-of-school opportunities to do or participate in occupations that are low-cost or free and supervised by adults are minimal. While the kura and the community centre provide free or affordable occupations for tamariki, Maria reports how little else there is on offer in the neighbourhood. “Not much...Yeah outside of [school and the] community centre...yeah no not much...yeah it is a pity” [Maria’s interview].

However, in terms of out-of-school opportunities, the after-school and holiday programmes at the Fernlee Community Centre are one of Maria’s preferred options for her tamariki. This is due to the programmes being accredited with OSCAR (Out of School Care and Recreation) (OSCAR, 2020), the community centre’s relatively low fees (e.g., afterschool programme costs \$14/session/child), and government funding that

⁵⁴ Putty is a silicone-based product that can be stretched and moulded into shapes and is used for play or therapeutic purposes (e.g., eye hand coordination, sensory benefits).

means whānau like Maria's, can access subsidies to help pay for the costs of childcare. For example, the holiday programme costs \$40/day/child, and the after-school programme costs \$14/session/child. In Maria's case, as she is in paid work, she can access these funds through WINZ (Work and Income New Zealand). Based on Maria's gross weekly income, and the WINZ childcare criteria, she is entitled to receive approximately \$4.50/hour of afterschool care or up to \$90/week (for 20 hours of care), and up to \$226- (for up to 50 hours of holiday period care) per child under 14 years of age (Work and Income, n.d.).

For Maria, this funded care allows her to work full-time in paid employment without incurring significant extra costs in her weekly budget. Based on Fernlee Community Centre's website and interview with their staff, these programmes enable her younger tamariki to participate in supportive, safe and enriching out-of-school care activities and programmes (e.g., play, arts/crafts, music at the centre, visits to movies, and the zoo). However, while these programmes at the centre remain age appropriate for Aria, for Mateo he now has less interest in these programmes, with the activities provided no longer appealing to him, and where most of his peers do not attend. This concern was clear in Mateo's korero (conversation) with me on the topic, and was echoed by Jane, one of the adults who supports Mateo in the after-school programme.

Mateo said he finds the holiday programme a bit boring this year with some of the activities not to his liking such as the castle building games, they play using cardboard boxes and sheets. He said he thinks it is for the younger kids and not for those his age. While the tamariki get to participate in a range of activities such as going to the movies, or trips out of town, Mateo does not have any of his friends his age in the programme. Probably something that is more suitable for those of his age, matching to his interests, and that involves his peers would be more appealing. I am not aware of any programme like this in his community. [Based on my observations at the morning visit to Mateo's kāinga, during the school holiday period.]

I also wonder...it would be cool to have a programme that was like focussed more on the older kids...because we have a youth group here, we have like an after-school care group here, it would be really cool if there was something for the kids that were kind of in between like the 10 to 13...There's that gap with after-school care [and] holiday programme...How like can we support some of the older kids more because...it's easier for them to kind of get lost because they're more independent. [Jane's interview]

Out the Door By 8

So wake up at like 7.30 maybe, 7o'clock, get out of bed, have a shower, brush my teeth, then I have so either Nutrigrain, Weetbix or Rice bubbles...I get dressed and then...I get all my stuff ready, I put on my shoes and then I'm usually out the door at 8...I run...then I start walking, jogging...as soon as I get to school, I'll buy me a pie and then I'll go back in. [Mateo's interview]

Mateo is independent in most of his activities of daily living such as showering, dressing, grooming and other personal cares, getting ready for school, and regularly walking to and from school (approximately 2.5 km or 30 minutes each way, as shown in Mateo's map, Figure A1.4). These activities form a large part of his week and being independent in these morning activities at home, without his mother's prompting, and in terms of getting to/from school, shows a considerable degree of maturity on Mateo's part. His independence in these tasks goes a long way to helping his mother cope with the care of his younger sister in the mornings and getting herself off to work each weekday. (Refer to Mateo's Weekly Timetable Table A1.2)

Okay so typically in the morning Mateo will wake up around well between 7 and 7.30...Yeah and he'll get up, go straight to the shower...And then come out have breakfast and then, make his bed. And usually by the time I get out of the shower he's good to go...most mornings I drop...them all off at school...when it's not raining, he will walk...just after 8am...To meet up with his mates. [Maria's interview]

I arrived early in the morning around 7am at Mateo's whare. It was a cold, dark, winter's morning. Maria let me into the house. The tamariki were still in bed asleep. It was the school holidays and the tamariki were off to the holiday programme at the community centre. Maria was going to work. She said the routine today was similar to the school weekday one. Maria and I chatted for a bit as she made us both a cup of coffee. She then went to rouse her tamariki. Her daughter Aria was first out of bed, and was friendly and chatty. After a few more attempts by Maria, Mateo came out of his room, in his pyjamas, looking rather sleepy and greeted me. He made his breakfast, preparing himself some Weetbix, with milk and sugar. After breakfast Mateo went about his tasks of getting himself ready for the day. Mateo and his sister packed their lunch boxes for the day and at around 8am they were ready to leave. [Observations at Mateo's kāinga of his morning weekday routine.]

Table A1.2

Mateo's Weekly Timetable

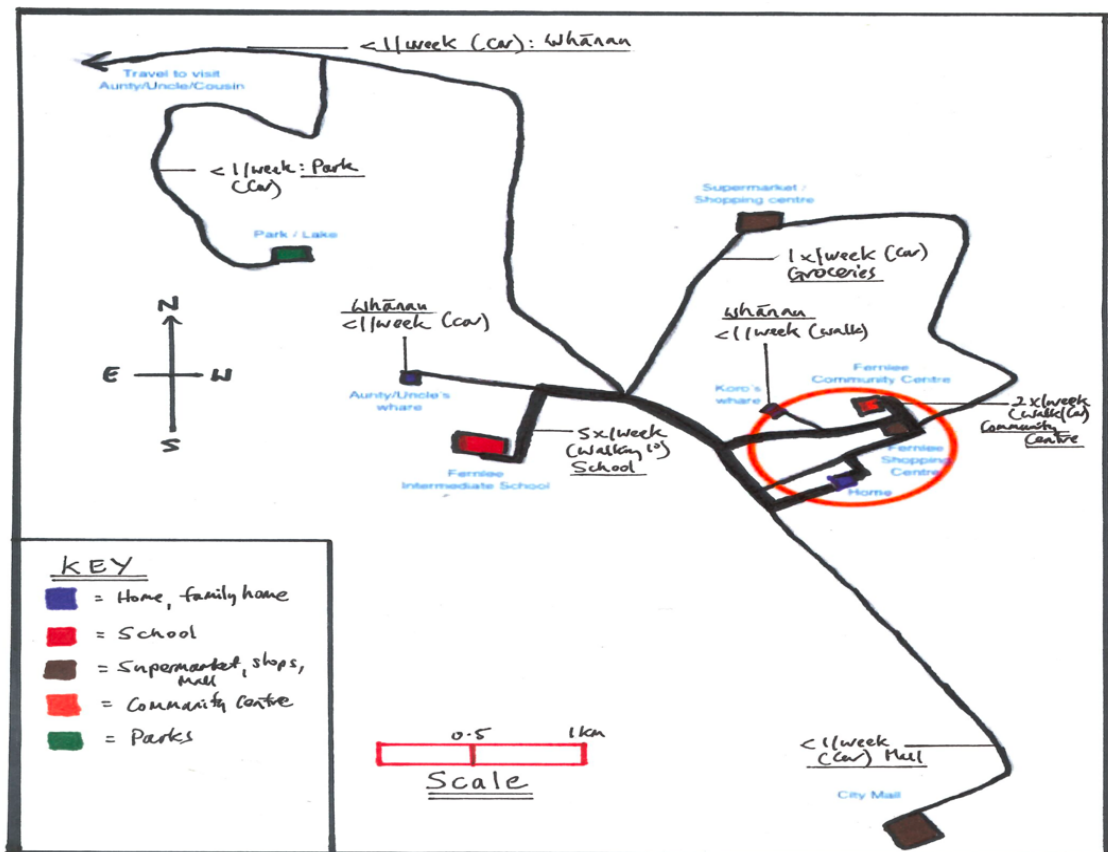
Weekdays – Monday-Friday	
Time	Activities
7/7:30-8:00am	Get up & get ready for school - shower, get dressed, breakfast, brush teeth, make my bed. (Home: whānau).
8:00-8:20/30am	Walk to school (or dropped by mum in car).
8:20/30-8:45am	Hang out at school. (School: friends).
8:45am-3:00pm	Pāngarau ⁵⁵ , Te Reo Māori, waiata, maths, kapa haka (2x/week), English, music, PE (2x/week); breaks/lunchtime (hang out with mates, play basketball). (School).
3:00-4:30pm or 6/6:30pm	Walk home with friends, maybe go to community centre (afterschool programme and meet sister, junior helper role/help-out staff sometimes, eat food and mum picks us up by 4:30pm), or walk with my friends to shops/mall and then walk back home by 6/6:30pm (Community: friends, community staff/or whānau).
5:00/6:30pm	Resting, watch TV, time on online devices (Home: alone).
6/7/8:00pm	Dinner (evening meal) together, and wash dishes (Home: whānau).
9:00-10:30pm /12:00am	Get ready for bed, go to sleep (but might go to sleep later than 10:30pm, use phone/computer). (Home: alone). 12:00am - stay up late Friday nights and watch movie (Home: whānau or alone).
Weekends – Saturday & Sundays	
Time	Activities
12:00pm	Sleeping in for ½ a day. (Home: alone).
12:00-1:00pm	Eat brunch with whānau/family. (Home: whānau).
1:00-6:00pm	Play online games, watch TV/movies, play games with my sister. (Home: alone, or with sister). Maybe go for a walk with whānau, or maybe travel/visit my aunty/uncle and cousins or other whānau (play on computer with cousin). (Community: whānau). Do the shopping with mum and sister. (Community: whānau). Complete some chores (make bed, tidy room, mow lawns/cut hedge). (Home: whānau).
6:00-7:00pm	Dinner (evening meal) together, and wash dishes (Home: whānau).
7:00-10:30pm	Play online games, watch TV/movies (Home: alone or whānau).
10:30pm	Get to bed and go to sleep. (Home: alone).

⁵⁵ Pāngarau is the Māori term for the subject of mathematics as taught in school (Moorfield, n.d.).

Note: The weekly timetable was compiled from Mateo's weekly activity diary, interview data from Maria and Mateo, and cross referenced with observations and mapping data.

Figure A1.4

Map Showing the Locations of Mateo's Occupations that Occur in Fernlee and the City.



Note. Thicker black lines indicate regular, daily access and the thin lines indicate occasional access. The red circle shows an approximate 1km radius around his home/neighbourhood.

I Want to Learn

Yeah...I want to learn...I'm in a Māori class...[my favourites are] PE [and] uaratanga⁵⁶ ...as soon as school starts usually have like Pungarau and Te Reo Māori so we do some like waiatas...hakas...For kapa haka...we hit the floor at 8:20...go back to class...Then we have lunch...we're learning about geometry...I'm in music class...and then after school we...have practices...[or]

⁵⁶ Uaratanga means values in Māori and in the school context is about teaching tamariki about key principles, life values, and skills important from the Māori worldview (Moorfield, n.d.).

usually...I walk to the dairy [with] my friends...Yeah oh I want to go there [kaupapa Māori High School]...[and] I do wish to finish school. [Mateo's interview]

Mateo really enjoys his time spent at his kura not only because he gets to hang out with his friends, but because of the learning he engages with such as being part of a Māori class with a focus on mātauranga⁵⁷ Māori, Te Reo Māori, Māori values (uaratanga), tikanga and regular cultural activities such as kapa haka and waiata. Mateo's aspiration to successfully complete his schooling shows the value he places in his formal education, helpful habits and routines related to his learning, and his determination to succeed are evident in his core values, "Courage, determination, bravery...and justice" [Mateo's interview]. Along with this is his desire to continue to learn in a Te Ao Māori context, and to follow his older brother Keanu's footsteps by attending the local Kaupapa Māori high school next year.

I noticed how important Te Ao Māori was for Mateo, in the first time we met during the focus group, when I introduced myself using my mihimihi and in my use of karakia. From that point on he often referred to me as matua, which I understood was his way of showing respect for the tikanga I followed in the group. [Observations during the Fernlee Focus Group.]

While Mateo engages in his mahi at his kura, he does not have a habit of completing homework outside of kura hours on a routine basis. He was quite clear with me that time out of kura should be for young people to engage in a range of activities that they are interested in and want to do, as opposed to more schoolwork. "I don't really get homework. Other classes do...[no] homework really...Because it's their own time...kids already have stuff to do" [Mateo's interview]. Maria did not raise any concerns about the absence of homework. In reviewing the school's website, while emphasis is placed on students completing any homework tasks assigned to them by their classroom teacher, they add that students should not feel pressured into homework.

Sports at School: That's About It

Mateo is not participating in formally organised sports outside of the kura. Despite this, the sports and physical activities that occur both informally and formally, such as

⁵⁷ Mātauranga means the Māori knowledge, skills, and wisdom (Moorfield, n.d.).

physical education (PE), 1 hour/session twice a week, during school time, are fun for him and also involve important social time with his friends. “I know he does play sport during...lunch breaks and stuff like that, like he’ll play rugby. Touch and basketball and stuff like that but, that’s as far as it goes” [Maria’s interview].

[During my school breaks] I usually play basketball...I play rugby with my mates. I do play soccer sometimes. And overall I just like play, hang out...Sometimes in PE...we do a couple of laps of the field to get like warmed up and then we play some kick the flag and then we might play like rugby or touch or soccer...Yeah we got a gym. We play some basketball... Yeah that’s about it. [Mateo’s interview]

While Mateo used to play sports, about a year or so ago he stopped. Maria thought Mateo’s changing interests (e.g., spending more time in online gaming), his developmental stage, and the anxiety he is experiencing in social settings were the reasons he no longer participates in sports outside of kura. However, living with constant budgeting considerations, Maria acknowledged that she is faced with tough choices when she makes decisions about her tamariki joining a fee-paying sports team, or other extracurricular clubs or groups. However, her older son Keanu, is able to participate in his chosen sport as the costs were met by his kura. Collectively, for Mateo, these factors are shaping his habits and routines related to participation in physically-based occupations, and are reflected in Figure A1.4 Mateo’s map showing the minimal number of sporting and recreational occupations that he engages in.

He used to...play inline hockey...what else did he give a go, touch and he was really good at it...but yeah he just stopped...[Mateo] picked up a bit of anxiety and [is] just more cautious...I think hormones...If anything that’s from [a] mother’s perspective...Yeah...it would definitely be financial [for sports]...Fees were expensive...Time yeah and transport, got enough petrol to get there...So time is definitely a big one. Trying to work you know...yeah my availability as well...My 16 year old...got to play in the basketball team for free didn’t have to [pay] fees...[but] that was through the [high] school. [Maria’s interview]

Hanging Out

For Mateo participation in socially-based occupations with his friends only occurs when hanging out, or through incidental means before, during and after school hours, or during online activity such as gaming. This restricted opportunity for participation, is in part due to risks in the neighbourhood. As Maria said about accessing free, locally-

based recreational facilities, “It’s not...a good idea sending the kids to the skate park...there are children down there that like to cause trouble and like to pick on people...it’s pretty bad down there...all the vandalism and stuff...that goes on there” [interview]. Mateo is also aware of these risks in Fernlee, his mother’s rules related to unsupervised time in his neighbourhood, and he mainly adheres to her instructions. Nonetheless, the restricted ability to play and socialise independently in the neighbourhood are clearly felt as a loss to him, limit his opportunity to develop his friendships, and are shaping his habits and routines related to social occupations.

If it’s raining or after dark then I can’t go to [the] shop, can’t walk down [there or]...stay out at the skate park...to play basketball...just chill out there...Go for a walk with like one of my best friends...I don’t, never walk with mates...It would be nice to go out for a walk with my girlfriend...she’s pretty cool...She gives me...this like nice chilled feeling...yeah she lives just down the road. [Mateo’s interview]

While all opportunities for time spent with his friends are important and fun for Mateo and likely support his hauora, the time spent hanging out afterschool, on the way home, is particularly salient for him. Hanging out offers an opportunity to be together, unsupervised by adults, in community spaces (e.g., the underpass on the route home), to relax, and engage in shared activities as a group of peers on a routine basis. The value to Mateo of this social activity is evident in the choice he sometimes makes to spend longer hanging out with his friends (e.g., not home until 6-6:30pm), despite his mother’s requests for him to walk directly to the Fernlee Community Centre. (Refer to Table A1.2 Mateo’s Weekly timetable.) Maria is likely concerned about the possibility of negative peer influences and the risks Mateo might be exposed to on the streets of Fernlee. While some of Mateo’s peers engage in tagging, he chooses to avoid this activity, demonstrating his courage and awareness of right and wrong.

Well after school...so like usually...I walk to the dairy, buy me maybe a drink or lollies and then I’ll walk down the tunnels...underpass...and then we hang out there, we play some songs, or some of my friends do like tag the walls on the inside, like they tag [when they do that]...I mean like there’s this path that leads up to like the road and I usually just sit there and listen to music...And then as soon as done that we walk up to until the lights...and then we go to the mall...If I’m like tired as and I don’t feel like doing it then 3.40...[but if I’m with my friends then I get home] 6o’clock, 6.30...She’ll try and find me but she knows

that if she can't find me...I'm just out with my mates...Yeah so she can call me and stuff. I just have to make sure it's not on silent. [Mateo's interview]

So with Mateo, he finishes at 3 and I don't finish til 4...he has to walk home from...Intermediate school...Yeah, but he manages and you know I trust him to walk home. But um. Some days he doesn't come home! Doesn't come straight home...Yeah he doesn't answer that either [his cell phone]...so, when that started happening I sort of...laid down the law...and said to him look...like 'I don't mind if you go to the community centre to the after school programme, you either go straight there or straight home'...Yeah but...Mostly it doesn't work. [Maria's interview]

Gaming: Shall I Just Stay Up?

[In the evenings] we play on our phones, play a game and then we go to bed...Well at 12o'clock I'm like I need to go to sleep but as soon as it hits 1am, I'm like, shall I just stay up? Just stay up until morning...I'm just...tired as all the time. [Mateo's interview]

One of Mateo's favourite occupations is gaming on the PlayStation or computer and this is where he routinely spends most of his time when at his kāinga after kura, in the weekends, and when he is at his cousins. The computer games are not only fun to play for Mateo, but they also provide an online form of social activity. Additionally, he spends time at home communicating with his friends by texting them on his cell phone. The photo Mateo took of gaming with his cousin, Figure A1.5, highlights the importance and predominance of this occupation in Mateo's life. "I took this one of my cousin because I love my cousin...not many photos of him...we're eating lasagne and playing the game and I was on the phone...at his place...having a good time, goofing around" [Mateo's photoelicitation interview].

However, Mateo also shows a disrupted sleep pattern that is linked to his irregular bedtime habits and staying up late playing online games. For example, in his interview and weekly activity diary, Mateo recorded his bedtimes as ranging from 5:00pm, 9:00pm, 10:00pm, and waking up at 11:00pm to play video games. Mateo's understanding of when he should get to bed (e.g., 10/11pm or later), are different to his mother's expectations where she states the bedtime routine is around 9pm. "Most days it's...bed at around 9pm...PlayStation or phone that I regret buying him" [Maria's interview]. (Refer to Table A1.2 Mateo's Weekly Timetable.) Furthermore, while Maria

sees the downside of too much digital time in the home for Mateo, it may be difficult for her to monitor and control Mateo's online activity as she is a busy, working, sole parent. Additionally, Mateo is aware of his mother's desire to restrict his online activity, but he appears to find ways to circumvent these parental limitations to this activity that has importance for him (Refer Figure A1.5). "I do like playing like, video games...though my mum tries to keep me away from it...She wants me to go to...bed at 10.30 but she knows I go to sleep late" [Mateo's interview].

Figure A1.5

Mateo Gaming at his Cousin's Place in the Weekends



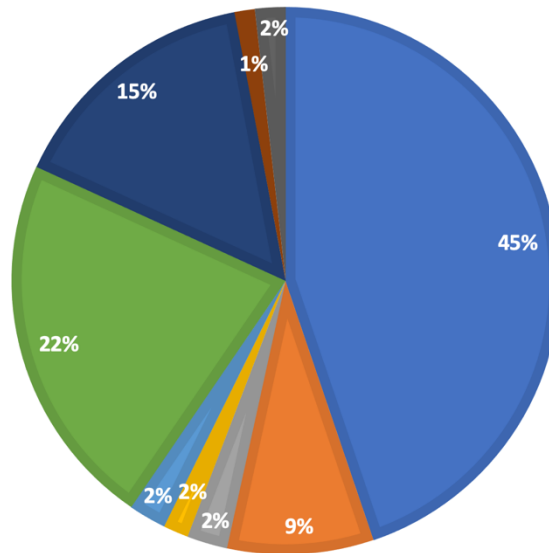
Note. Photograph taken by Mateo.

As a result, the disrupted sleep routine may be causing a degree of fatigue for Mateo. Jane, one of the after-school/holiday programme staff reported her observations of Mateo's regular tiredness. "I notice...he gets very tired...and...when I ask him he always just says he stays up too late" [Jane's interview]. However, as a consequence of this high level of passive activity at his kāinga, Mateo spends approximately 17% or 29 hours/week in screen time (4 hours/day) and approximately 4% of his time each week, or 6-7 hours/week (close to 1 hour/day), in moderate-vigorous physically-based occupations. While regular active transport (walking), and school PE are Mateo's main forms of physical activity (PA) each week, and help him get close to recommended PA targets, he is developing sedentary habits at home. Refer to Figure A1.6 Mateo's Time use pie graph.

Figure: A1.6

A Pie Graph Showing the Proportions of Time Spent in, and the Passive or Active Nature, of Mateo’s Occupations During the Week.

■ ADL passive ■ ADL active ■ AT ■ PT ■ Rec active ■ Rec passive ■ School P ■ School A ■ Voluntary



Note: ADL=activities of daily living, AT=active transport, PT=passive transport, Rec active=physically-based recreations, Rec passive =sedentary-based recreations, School P=passive school activities, School A=active school activities.

Chilling

Mateo has a number of other ways that he routinely occupies his time at his kāinga, other than gaming, and that are also important for him by engaging in play with his younger sister Aria, and that are fun, recuperative and support his hauora. “Apart from gaming!...But he actually loves to draw...And he loves reading...Mateo and his sister will sit up here and just draw...Watch TV...Or on their phone” [Maria’s interview].

Food...it returns me to my natural state...Kind of like takes my mind off what I’m thinking...Sleep and music...I do listen to chill...Oh yeah when I try to go to sleep I’ll play slow [music]...I do drawing every now and then...I draw tech stuff I draw like tech and monsters, demons but my sister draws like unicorns. [Mateo’s interview]

One of the photographs that Mateo took, Figure A1.7, is of the stuffed toys that he and his sister have at home and that are comforting, for play, and support his relaxation. This reminds me that he is still a young tane. “These are all my stuffed animals...We’ve had them since we moved in...since I was a baby...we just play around with them” [Mateo’s photoelicitation interview].

Figure: A1.7

Mateo’s Stuffed Toys, Part of the Important Ways he Engages in Restorative (Restful) Activities in his Kāinga.



Note. Photograph taken by Mateo.

Junior Helper

Mateo has a number of important roles in his life including being a member of his whānau and helping with chores at home and at kura, and a voluntary role as a helper at the Fernlee Community Centre after-school programme. These roles are an opportunity to develop skills for managing and maintaining the home, life skills (e.g., communication and time management skills), and playing with and guiding younger tamariki.

Clean my bed, clean my room since I have a messy room...Oh dishes...Sometimes I do the lawn for mum...since we have like...this hedge along the fence, like [Keanu] usually snips it and stuff, snips the sides and then my job is to just sweep it up, pick it up, put it in the compost bin...I usually take out the rubbish at school...usually do the cleaning and stuff...Oh PE gear...I get it out like each time some class has PE...[and] I’m like a helper down here at the [local] Community Centre...I’m a junior helper. [Mateo’s interview]

The junior helper role is an opportunity designed and coordinated by the staff at the community centre for tamariki who have come through the programme and shown a degree of aptitude to work with younger tamariki and who can follow instructions from staff. The tasks and responsibilities involved in this role include helping run fun games with the tamariki, helping out with other tasks such as organising equipment for activities and kai/food for refreshments.

I was able to observe Mateo engaging in this role during one of my visits to the community centre, and to see just how skilled he was in this role and what a positive opportunity this is for him. For example, when Mateo was playing games with the younger tamariki, he demonstrated a suitable ability to manage their behaviour, guiding and providing instructions in a sensible and mature manner, under adult supervision. When chatting to a staff member, she said that a number of the tamariki were very fond of Mateo and looked up to him, like an older brother, tuakana-teina relationship. After the games had ended Mateo came over to the kitchen and we chatted and I praised him for his skills in managing the game with the tamariki, to which he smiled, and looked really proud. [Observations during community event]

The value to Mateo of his participation in the junior helper role are echoed by Jane, one of the after-school staff.

Yeah he's got like really good people skills...and I think that will be good for him and opportunities in the future...I think it gives them something to like look forward to because I know he enjoys being here. And I think it...gives him...motivation, something to do, something to think about, something to grow in and become more skilled at and I think that's really important for all kids that age to find kind of an identity in it. [Jane's interview]

Whānau Time: We Celebrate Together

Spending time together on a routine basis as a whānau was particularly important for Mateo, Aria, Keanu and Maria, including time spent with extended family. For example, a routine of watching movies on TV, eating kai/food and having a korero on Friday evenings at home, or the regularity of sleeping in late on a Saturday and then having brunch in the weekends with pancakes, bananas and maple syrup!

Yeah dinner at 6o'clock, 7o'clock...And we always have dinner together...Yes we'll sit by the TV...[weekends] Sleep in and...usually have pancakes at 12o'clock...[with] my mum and my sister...so I cut bananas, maple syrup and then like under the two um no under the three or four pancakes put like a slice

of butter and like I heat it up or like I squish it down and...then more maple syrup. [Mateo's interview]

Whānau activities also include going for walks in city parks, or visiting extended family and hanging out with his cousins. While the time spent with his cousins in the weekends appeared to occur with regularity, the walks in parks together as a whānau did not. "Visiting family. What else...I guess we enjoy going for walks...or just going to the park...We haven't really done much lately" [Maria's interview]. These whānau activities provide Mateo with opportunities for socially-based occupations that are supportive of his potential and hauora. The photo taken by Mateo in Figure A1.8 shows the enjoyment that Mateo and his younger sister Aria have when they spend time with their mother, going out for drives such as to go shopping or to visit whānau. "In the car going to the vege shop...getting the groceries" [Mateo's photoelicitation interview].

Figure: A1.8

Mateo Spending Time Going Out for a Drive With his Younger Sister Aria and his Mother.



Note. Photograph taken by Mateo.

Additionally, Maria and her siblings make an effort to celebrate special events in their year such as birthdays, or just to be with each other and enjoy time together as a whānau. These important celebratory times together as whānau, the connectedness and support that is provided are most likely vital for Mateo and his siblings hauora.

[Most evenings] usually watch TV...Oh have dinner...And usually...if it's a Friday night...they'll come and have a big chat with me and, we'll just talk about the whole day...Oh yeah so me and my siblings we get together a lot...so we celebrate birthdays we try celebrate every birthday even if it's just a dinner, a birthday dinner. And as well with sister-in-law...we usually go over there for the weekend or just for the night and catch up...[and] go on big trips...we do like to travel. [Maria's interview]

Conclusion

Fernlee, similar to Riverfield, is a neighbourhood that is under resourced, has lacked development and is faced with long standing poverty for many of its tangata/people. Despite this, it is a connected community and one where its tangata work together to help ensure the best for their tamariki and whānau. This occurs through the services provided, and the efforts of those who serve the community, many of whom have grown up in Fernlee themselves. But poverty is a blight in the lives of a large proportion of tamariki and whānau who live in Fernlee. For the tamariki in this case study, as with Riverfield, this meant reduced choice of and participation in occupations, and modified patterns of occupation. Whilst these tamariki and their whānau remained resourceful, resilient, hopeful for a positive future, and adapted to their circumstances, enabling them to sustain their development, health and hauora, poverty remained a key risk in their lives.

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Appendix B: Literature Review Protocol and Search Results – Child Poverty and Potential.

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICO component of the research question – *What are the consequences of persistent poverty for tamariki/children’s future potential?*

These include:

1. Population/Participants: children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
2. Phenomenon: Clear evidence that poverty is defined at least by material definitions (i.e. low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).
3. Context/outcome is met: Potential = can be understood to mean the capacity a person/child has to achieve what they value in their life, from childhood and into adulthood, and is dependent on their development, growth, health, and participation in occupations (Humphry & Womack, 2019; Mandich & Cronin, 2016; Rodger & Kennedy-Behr, 2017).
4. Study type: Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g. in a reputable journal publication) or similar authoritative source.
5. Study publication period criterion is met (e.g. between 2009-2020).
6. Language limit is met (i.e. English language publication).

Exclusion criteria:

1. Articles are excluded if they **do not meet any of the above inclusion criterion.**
2. Conference proceedings, theses, dissertations are excluded.
3. Studies are excluded if after the critical appraisal process the articles are assessed to be of a low-quality study design.

MMRS Search terms.

Children: Child*, OR adolescents OR youth OR teenager

AND

Poverty: Poverty OR low income OR socioeconomic OR disadvantaged

AND

Participation: Potential OR development

Limiters:

Date range: 2009-2019

Language: English

Journals: peer reviewed/academic journals

Age groups: All child (0-18 years)

Search results (databases: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar). Initial total N = 1661. After initial review by researcher led to n=92, and after further review (i.e., full texts, check reference lists, match to PICO) led to n=35.

Search replicated for 2020-2023 period: N=103, with initial review led to n=6, and after further review (match to PICO) led to n=4.

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICo component of the research question – *What are the consequences of persistent poverty for tamariki/children’s ?*

These include:

1. Population/Participants: children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
2. Phenomenon: Clear evidence that poverty is defined at least by material definitions (i.e. low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).
3. Context/outcome is met: *Wellbeing* = wellbeing related to measurable material living conditions (e.g., income, health, housing), subjective stance such as a person’s self-rated view of their health and quality of life, different cultural perspectives, from an occupational perspective, and children’s views on wellbeing.
4. Study type: Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g. in a reputable journal publication) or similar authoritative source.
5. Study publication period criterion is meet (e.g. between 2009-2020).
6. Language limit is meet (i.e. English language publication).

Exclusion criteria:

1. Articles are excluded if they **do not meet any of the above inclusion criterion.**
2. Conference proceedings, theses, dissertations are excluded.
3. Studies are excluded if after the critical appraisal process the articles are assessed to be of a low-quality study design.

MMRS Search terms.

Children: Child*, OR adolescents OR youth OR teenager

AND

Poverty: Poverty OR low income OR socioeconomic OR disadvantaged

AND

Participation: Wellbeing OR OR well being

Limiters:

Date range: 2009-2019

Language: English

Journals: peer reviewed/academic journals

Age groups: All child (0-18 years)

Search results (databases: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar). Initial total N = 213. After initial review by researcher led to n=19, and after further review (i.e., full texts, check reference lists, match to PICO) led to n=7.

Search replicated for 2020-2023 period: N=37, with initial review led to n=14, and after further review (match to PICO) led to n=1.

Appendix D: Table Presenting an Overview of Primary Studies Included in the MMRS – Child Poverty and Potential (2009-2019) with updated table (2020-2023)

QUANTITATIVE STUDIES

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 1: Alvarado, Steven Elias. (2016). Delayed Disadvantage: Neighbourhood Context and Child Development. <i>Social Forces</i>, 94(4), 1847-1877. doi:10.1093/sf/sow020</p>	<p>N=9,997 Age: 5-14 years. <u>Study Aim:</u></p>	<p>Neighbourhood poverty: multidimensional (income, unemployment, education level, housing value). <u>Outcomes:</u> 1.PIAT-M(Peabody Individual Achievement Test-Mathematics). 2.PIAT-RR (PIAT-Reading Recognition) 3.BPI(Behavioural Problems Index) <u>Covariates:</u> wide array = Mother & household characteristics (obese, poverty, unemployed, single parent etc.), Child characteristics (ethnicity, age, obese, gender etc.)</p>	<p>United States of America (USA) 2010</p>	<p>Longitudinal – drawn from National Longitudinal Survey of Youth & Child and Young Adult (NLSY:CYA). <u>Quantitative.</u></p>	<p>Nationally representative sample. Multistage clustered sample from NLSY:CYA.</p>	<p>Survey. Interview – mothers, children and young adults. Geolytics Neighbourhood Change database.</p>	<p>Statistical analysis: OLS & FE Modelling.</p>	<p>1.Neighbourhood disadvantage reduces cognitive ability for children. 2.Neighbourhood disadvantage does not have an effect on younger children’s behaviour problems, and has an unexpectedly positive effect for older children.</p>
<p>Study 2: Baker, C. E., Kainz, K. L., & Reynolds, E. R. (2018). Family Poverty, Family Processes and Children’s Preschool Achievement: Understanding the Unique Role of Fathers. <i>Journal of Child and Family Studies</i>, 27(4), 1242-1251. doi:10.1007/s10826-017-0947-6</p>	<p>N=7700 Age: 9-58 months. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1.<u>Reading and maths tests.</u> 2.Family processes: (frequency of warm interactions & participation in home learning stimulation). <u>Demographic characteristics:</u> Family poverty(based on income required for household needs), parental education levels, number of children in the home, child race.</p>	<p>USA 2001</p>	<p>Longitudinal – drawn from Early childhood Longitudinal Study-Birth Cohort (ECLS-B). <u>Quantitative.</u></p>	<p>Complex stratified random sampling design.</p>	<p>Questionnaire & Interview with parents.</p>	<p>Statistical analyses: Little MAR test, multiple imputation (MI).</p>	<p>1.Poverty is associated with decreased reading and maths tests results/cognitive abilities in children. 2.Family processes are a mediating factor in the link between poverty and children’s decreased cognitive outcomes. 3.Parenting gender differences were observed for provision of warmth (poverty negatively related to father’s provisions of warmth).</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 3: Blums, A., Belsky, J., Grimm, K., & Chen, Z. (2017). Building Links Between Early Socioeconomic Status, Cognitive Ability, and Math and Science Achievement. <i>Journal of Cognition and Development</i>, 18(1), 16-40. doi:10.1080/15248372.2016.1228652</p>	<p>N=1084 Age: 1-15 years. <u>Study Aim:</u></p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> 1. Socioeconomic status (SES): Maternal education, family income. 2. Home/childcare environment: quality of early environment - enrichment and engagement, using HOME Inventory. 3. <u>Executive function</u>: CPT, DOG, & children's Stroop task. 4. <u>Language ability</u>: Letter-word identification & Picture Vocabulary subscales of Woodcock-Jonson. 5. <u>Problem-solving</u>: Relational reasoning (WASI), Planning (Tower of Hanoi), Calculation (subscales Woodcock-Johnson). 6. <u>STEM achievement</u>: demonstrated ability in science, technology, engineering and math (based on GPAs). 	USA	<p>Longitudinal – NICHD SECCYD (National Institute of Child Health and Human Development Study of Early Child Care and Youth Development). <u>Quantitative.</u></p>	National representative sample. Sample drawn from NICHD SECCYD.	Interview and observations in the home, completed tests with children.	Statistical analyses: measurement model, factor-analytic approach. Using Mplus.	<ol style="list-style-type: none"> 1. Maternal education a stronger predictor of early environment factors than income. 2. Lower SES in infancy is associated with lower levels of enrichment & engagement which in turn is associated with lower cognitive and language outcomes and consequently educational outcomes. Due in part to less exposure to educational toys, games in the home and less access to high-quality childcare.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 4: Choi, Jeong-Kyun, Kelley, Megan S., & Wang, Dan. (2018). Neighbourhood Characteristics, Maternal Parenting, and Health and Development of Children from Socioeconomically Disadvantaged Families. <i>American Journal of Community Psychology</i>, 62(3/4), 476-491. doi:10.1002/ajcp.12276</p>	<p>N= 3565 Age:birth-5 years. <u>Study Aim:</u></p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> 1.Social cohesion: mother’s report. 2.Social control: mother’s report. 3.Neighbourhood physical disorder: 5-item scale 4.Maternal parenting stress: 12-item scale 5.Maternal parenting quality: HOMES scale. 6.<u>Child behavioural problems:</u> Child behavioural checklist. 8.<u>Child’s general health:</u> mother’s report. 9.<u>Child’s cognitive development:</u> PPTV-revised. <p>Family characteristics: child’s gender, mother’s race, mother & father’s age, parental education, economic hardship (12-item scale).</p>	USA	<p>Longitudinal – Fragile Families and Child Wellbeing (FFCW) study. <u>Quantitative.</u></p>	Nationally representative sample. Sample drawn from FFCW from 1 st 3 waves (aged up to 5 years).	Interview with mothers & observations in home.	Statistical analyses: Structural equation modelling.	<ol style="list-style-type: none"> 1.SES indicators had significant effects on all children’s outcomes. 2. Ethnic disparities observed with poorer outcomes for no-white children. 3.Social cohesion indirect & direct effects on children’s behavioural problems & health status & indirect (via mother’s stress) effects on cognitive development. 4.Social control associated (modest) with child’s behaviour, cognitive development and general health. 5.Neighbourhood physical disorder direct effect on children’s behaviour & indirect & direct effects on cognitive development. 6.Parenting stress and quality of parenting two most important contributing factors to children’s outcomes.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 5: Coley, Rebekah Levine, Leventhal, Tama, Lynch, Alicia Doyle, & Kull, Melissa. (2013). Relations between Housing Characteristics and the of Low-Income Children and Adolescents. <i>Developmental Psychology</i>, 49(9), 1775-1789.</p>	<p>N=2437 Age:2-21 years <u>Study Aim:</u></p>	<p><u>Measures:</u></p> <p>1.<u>Home characteristics:</u> HOMES short form. E.g. physical quality of house, residential instability, housing type, burden of housing costs.</p> <p>2.<u>Child & adolescent functioning:</u> Child Behaviour Checklist (CBCL) & Woodcock-Johnson Psychoeducational Battery Revised (WJ-R) for cognitive achievement (reading & maths).</p> <p>3.<u>Child & family background characteristics:</u> marital status, single parent, number of people in home, Economic indicators (mother's education & age, employment status of mother, receiving economic assistance), child's age, gender & ethnicity.</p> <p>3.<u>Family processes:</u> Maternal psychological distress (Brief Symptom Inventory), Mother's reported stress, engagement in strength building behaviours (The Family Routines Inventory).</p>	<p>USA (1999-2005)</p>	<p>Longitudinal – Three-City Study (of the of low-income children and families). <u>Quantitative.</u></p>	<p>Stratified, random sampling, with analytical sample from all three waves.</p>	<p>Survey & interviews with mother/carers.</p>	<p>Statistical analyses: 3 level hierarchal linear models.</p>	<p>1.Poor quality housing associated with higher emotional & behavioural problems for children (more so) & also adolescents. In terms of cognitive outcomes the association with lower maths and reading levels was greater for adolescents.</p> <p>2. Low quality housing appears to induce higher levels of family stress/mental health and restrains family activities thus negatively impacting on children's socioemotional functioning. Mother's psychological distress & parenting stress were important mediating factors in children's emotional & behavioural functioning.</p> <p>2.Residential instability associated with children's emotional & behavioural (higher internalising & externalising symptoms) and cognitive functioning.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 6: Coley, Rebekah Levine, Sims, Jacqueline, Dearing, Eric, & Spielvogel, Bryn. (2018). Locating Economic Risks for Adolescent Mental and Behavioral Health: Poverty and Affluence in Families, Neighbourhoods, and Schools. <i>Child Development, 89</i>(2), 360-369.</p>	<p>N=13,179 Age: 15-16 years</p>	<p>1. <u>Youth mental and behavioural health outcomes</u>: (depressive, anxiety symptoms, intoxication & illicit drug use, property crime & violence).</p> <p>2. Family, neighbourhood & school income.</p> <p><u>Covariates</u>: youth age, race & ethnicity, number of household members, parents' age & marital status, immigrant status, neighbourhood indicators, & school urbanicity.</p>	<p>United States of America (USA) 1994-95</p>	<p>Longitudinal study – census data drawn from National Longitudinal Study of Adolescent Health (Add Health). Nationally representative sample.</p> <p><u>Quantitative.</u></p>	<p>Data drawn from wave 1 survey sample (Add Health), stratified nationally representative sample.</p>	<p>Youth reports using well-validated measures, & parents' reports.</p>	<p>Statistics: multilevel models, multilevel regression models.</p>	<p><i>School income primarily associated with youth outcomes; highlighting the important role of schools and peers for youth health & .</i></p> <p>1. Higher school income associated with increased risky behaviours (intoxication, drug use, property crime).</p> <p>2. Lower school income associated with youth outcomes (depressive & anxiety symptoms, interpersonal violence, boys' intoxication & violence).</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 7: Cooper, K., & Stewart, K. (2013). <i>Does money affect children's outcomes: A systematic review</i>. Retrieved from Joseph Rowntree Foundation https://www.jrf.org.uk/report/does-money-affect-children%E2%80%99s-outcomes</p>	<p>N=46,668 to N=34 <u>Study Aim:</u></p>	<p>Systematic review approach to identify studies (randomised controlled trials, natural experiments, longitudinal studies) examining the effect of money on <u>children's outcomes</u> (health, behaviour, cognition) and impact on expenditure of children's goods, maternal mental health, and home and parenting context.</p> <p><u>Databases used:</u> EconLit, SocIndex, IBSS, British Education Index, PsychInfo & Medline.</p> <p><u>Date:</u> 1998-2012.</p> <p><u>Search terms:</u> refer article, but broadly = financial resources, causal relationship, age, outcome terms e.g. cognitive.</p>	<p>Studies from EU & OECD: resulting studies from USA (primarily), UK, Canada, Norway & Mexico.</p> <p>SR conducted in 2012.</p>	<p>Systematic Review.</p> <p>Only Quantitative studies.</p> <p><u>Quantitative.</u></p>	<p><u>Sample:</u> <u>Inclusion:</u> stated research designs, measuring financial resourcing in childhood (individual and household level). <u>Exclusion:</u> studies not in EU or OECD, studies without English language abstract, dissertations/-PhDs.</p>	<p>SR</p>	<p>Analyses: inclusion/exclusions criteria applied, reading through studies and selecting according to criteria, coding, mapping and analysing effect sizes of study results.</p>	<ol style="list-style-type: none"> 1.Strong evidence that poverty associated with worse cognitive, social, behavioural and health outcomes. (Due to being poor, but also due to household and parental factors). 2.Effet sizes: cognitive outcomes =5-27% of a standard deviation (SD); Social & behavioural outcomes =14-15% of a SD. 3. Two main theories emerged to explain how income effects children's outcomes: i. Family Stress Model (stronger evidence for income's effects on maternal mental health & parenting behaviour); ii. The Investment Model (lesser extent on mediators like physical home environment). 4.Differential effects of income – more significant for lower-income households. 5.Stages of childhood: income more influential on behaviour in adolescence (some support); and income strongly influential on cognitive outcomes in early childhood. 6. Duration: Poverty that is persistent is more detrimental than in the shorter-term. 7.Source of income: support for income from benefits & allocation to mothers associated with improved for child outcomes.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 8: Côté-Lussier, Carolyn, Fitzpatrick, Caroline, Séguin, Louise, & Barnett, Tracie A. (2015). Poor, Unsafe, and Overweight: The Role of Feeling Unsafe at School in Mediating the Association Among Poverty Exposure, Youth Screen Time, Physical Activity, and Weight Status. <i>American Journal Of Epidemiology</i>, 182(1), 67-79. doi:10.1093/aje/kwv005</p>	<p>N= 1234 Age: 13 years mean.</p>	<p>1.Youth height and weight (for age and sex, BMI). 2.Time spent watching TV, on computer & internet. 3.Time spent in physical activity (PA). 4. <u>Feeling safe at school</u> 5. <u>Poverty</u>: household income. <u>Covariates</u>: youth's age, sex, maternal BMI, <u>victimization at school, school safety culture.</u></p>	<p>Canada 2007-09</p>	<p>Longitudinal study – part of Quebec Longitudinal Study of Child Development (QLSCD). <u>Quantitative.</u></p>	<p>Random sampling from QLSCD.</p>	<p>Interviews with family.</p>	<p>Statistics: statistical equation modelling.</p>	<p>1.Chronic poverty associated with feeling unsafe at school and victimization which was also associated with being overweight/obese. Indirect associations were found between sex, victimization, screen time and weight status. Direct association between feeling safe at school and weight status. Mediating variables for being overweight included: feeling unsafe at school, experiencing victimization, and higher maternal BMI.</p>
<p>Study 9: Ehounoux, N. Z., Zunzunegui, M. V., Séguin, L., Nikiema, B., & Gauvin, L. (2009). Duration of lack of money for basic needs and growth delay in the Quebec Longitudinal Study of Child Development birth cohort. <i>Journal of Epidemiology and Community Health</i> (1979-), 63(1), 45.</p>	<p>N=1929 Age: 2 ½ -4 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1.<u>Growth delay</u>: child height adjusted for age and sex. 2.<u>Poverty</u>: lack of money to meet basic needs, as reported by mother (e.g. rent, electricity, heating, clothing, medications, transport etc).</p>	<p>Canada. 2000-02</p>	<p>Longitudinal – Quebec Longitudinal Study of Child Development (QLSCD). <u>Quantitative.</u></p>	<p>Data drawn from QLSCD.</p>	<p>Interviews in homes with mothers/cares. Measurements with children.</p>	<p>Statistical analyses: descriptive statistics and multivariate analyses.</p>	<p>1.Lack of money for basic needs is associated with delayed growth in children aged 4 years. Poverty is associated with stunted growth in children and the effects are likely to occur later in life.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 10: Fagg, J. H., Curtis, S. E., Cummins, S., Stansfeld, S. A., & Quesnel-Vallée, A. (2013). Neighbourhood deprivation and adolescent self-esteem: Exploration of the 'socio-economic equalisation in youth' hypothesis in Britain and Canada. <i>Social Science and Medicine</i>, 91, 168-177. doi:10.1016/j.socscimed.2013.02.021</p>	<p>BYP N= 1927 Age: 11-15 years NLSCY N = 3421 Age: 10-15 years</p>	<p>1. <u>Self-esteem</u>. 2. Neighbourhood deprivation. <u>Covariates:</u> sex, age and minority status in children/youth, relationship with parents, happiness with family & family functioning, happiness with friends, maternal education, maternal depression, family structure, urbanicity, geographical region.</p>	<p>Britain - BYP Canada – NLSCY 2004</p>	<p>Longitudinal studies: British Youth Panel (BYP) & The National Longitudinal Survey of Children and Youth (NLSCY). <u>Quantitative</u>.</p>	<p>BYP – nationally representative sample United Kingdom (UK). NLSCY – sampling from Canadian children.</p>	<p>Self-reports from children/youth, and parental reports.</p>	<p>Statistic: three level multilevel models.</p>	<p>1. The risk of reporting low self-esteem amongst adolescents in Britain and Canada is similar across levels of neighbourhood deprivation. The risks may be higher in most deprived neighbourhoods, in Canada. 2. These results differ from those reported in USA, where neighbourhood deprivation is an independent factor for adolescent psychological outcomes such as self-esteem. This may be due to the differing state-subsidised health and social care systems in Britain & Canada compared to systems in USA.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 11: Fernald, Lia C. H., Weber, Ann, Galasso, Emanuela, & Ratsifandrihamanana, Lisy. (2011). Socioeconomic gradients and child development in a very low income population: evidence from Madagascar. <i>Developmental Science</i>, 14(4), 832-847. doi:10.1111/j.1467-7687.2010.01032.x</p>	<p>N=1232 Age:3-6 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1.<u>Cognitive development & executive functioning:</u> (analytic skills, problem-solving, memory, goal formation, planning & following goal directed plans) - Stanford Binet Intelligence Scales for Early Childhood 5th ed, (ESBS); Leiter International Performance Scales (Leiter-R); Woodcock-Munoz assessment; Day-night Stroop measuring cognitive control. 2.<u>Language development:</u> Peabody Picture Vocabulary Test, 3rd edition (PPVT-III), Strengths and Difficulties Questionnaire (SDQ). <u>Other child measures:</u> age, sex, birth order. 3.<u>Soecioeconomic variables:</u> maternal educational attainment, household wealth index. <u>Other household level variables:</u> urban/rural location, household composition (crowding), province indicators.</p>	<p>Madagascar (rural & urban). 2004-07</p>	<p>Longitudinal – follow-up study of a national nutritional survey of children aged 0-3 years. <u>Quantitative.</u></p>	<p>Two stage sampling procedure: randomly sampling and stratified by community size.</p>	<p>Interviews with mothers, and tests conducted with children.</p>	<p>Statistical analyses: Linear regression analyses (Stata version 10.0).</p>	<p>1.Poverty was associated with reduced cognitive and language outcomes (across a range of outcomes). 2. Results support theory that language (perisylvian) and executive regions(prefrontal) of the brain are more vulnerable to effects of living in poverty.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 12: Fotso, J. C., Madise, N., Baschieri, A., Cleland, J., Zulu, E., Kavao Mutua, M., . . . Essendi, Hildah. (2012). Child growth in urban deprived settings: does household poverty status matter? At which stage of child development? <i>Health & Place</i>, 18(2), 375-384. doi:10.1016/j.healthplace.2011.12.003</p>	<p>N=3693 Age: birth -4 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1. <u>Stunting:</u> height for age measured. 2. <u>Poverty:</u> (alternative measures) – Money metric (monthly household composition); Assets index (derived from household ownership of durable assets); Food poverty (household’s access to food); Subjective poverty (household’s perception of their poverty relative to their community). Controlled variables: Sex, age of child; mother’s education, length of stay in study area, marital status, household size, household environment index, control for slum dwelling.</p>	<p>Kenya (urban/rural). 2006-10.</p>	<p>Longitudinal – Nairobi Urban Health and Demographic Surveillance System (NUHDSS). Data drawn from Maternal and Child Health (MCH) component of ‘Urbanization, Poverty and Health Dynamics’ study. <u>Quantitative.</u></p>	<p>Sample drawn from MCH study (all cohorts in survey rounds 1-8).</p>	<p>Measurement of child. Interviews with mothers/- household.</p>	<p>Statistical analyses: descriptive, univariate, bivariate and multivariate analyses.</p>	<ol style="list-style-type: none"> 1. Poverty is associated with stunting in children. 2. Assets poverty & subjective poverty associated with stunting. 3. Food poverty strongly associated with stunting in early life (6-11 months). 4. Assets poverty (linked to long-term poverty) has strong association for older age (24 months). 5. Subjective poverty significantly associated with ages 12-23 months. 6. Boys are worse off than girls, maternal higher education and being in a union are protective factors.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 13: Fowler, Patrick J., McGrath, Lauren M., Henry, David B., Schoeny, Michael, Chavira, Dina, Taylor, Jeremy J., & Day, Orin. (2015). Housing mobility and cognitive development: Change in verbal and nonverbal abilities. <i>Child Abuse & Neglect</i>, 48, 104-118. doi:10.1016/j.chiabu.2015.06.002</p>	<p>N= 2442 Age: 4-16 years. <u>Study Aim:</u></p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> 1.Housing mobility: reported moves in last 12 months. 2.Address changes 3.Early mobility: moves made with child in their 1st 12 months. 4.<u>Cognitive development:</u> Kaufman Brief Intelligence Test (K-BIT). 5.<u>Behaviour problems:</u> Child Behaviour Checklist (CBCL). 6.Family instability: caregiver reported disturbances. 7.Child maltreatment: The Parent Child Conflict Tactics Scale (CTS-PC). 8.Child welfare services: Families receiving services. 9.Abuse Type. 10.Caregiver mental health: Short Form Health Survey (SF-12). 11.Faily income: all sources in last 12 months. 12.Youth demographics: child age, race, gender. 	<p>USA. 1999-2000</p>	<p>Longitudinal – National Survey of Child and Adolescent (NSCAW), examining families under investigation for child abuse and neglect. <u>Quantitative.</u></p>	<p>Two-stage stratified probabilistic sampling design.</p>	<p>Interviews with children, mothers/cares & caseworks.</p>	<p>Statistical analyses: Latent growth modelling (LGM), chi-square test, The Root Mean Square Error of Approximation (RMSEA), The Comparative Fit (CF) Index.</p>	<ol style="list-style-type: none"> 1.Housing mobility is associated with cognitive disruptions in children. 2. A rebound effect can occur, but frequent moves during infancy show more enduring effects, and generally a failure of these children to completely catch-up for cognitive outcomes.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 14: Georgiadis, A., & Hermida, P. . (2014). Family socio-economic status, mother's psychosocial skills, and children's human capital: Evidence from four low and Middle-income countries. In M. Bourdillon & J. Boyden (Eds.), <i>Growing up in poverty: Findings from young lives</i>. (pp. 51-69). New York, NY: Palgrave Macmillan. doi:10.1057/9781137404039</p>	<p>N= 8000 approx. Age: 8 years.</p>	<p><u>Measures:</u> 1.<u>Cognitive skills:</u> PPVT 2.<u>Child's psychosocial skills:</u> 'child's psychosocial skills index' (self-esteem, self-efficacy, and perception of respect from others). 3.Mother's psychosocial skills: similar to child measure. 4.Parental SES: parental education & household income. 4.Independent variables: child's gender, age, family birth order; caregiver as biological mother, mother's age & ethnicity, region of residence, rural/urban.</p>	<p>Ethiopia, India, Peru, Vietnam. 2009 (Round 3).</p>	<p>Longitudinal – Young Lives Longitudinal survey (a survey of children in low-middle income countries). N.B. There is a qualitative component of the Young Lives Study. <u>Quantitative.</u></p>	<p>Sample/data drawn from Young Lives Survey (8 year-olds at Round 3, 2009, across 4 countries). Survey uses multi-stage sampling methodology.</p>	<p>Survey - questionnaire (mothers/-cares, children).</p>	<p>Statistical analyses: descriptive & regression analysis.</p>	<p>1.Mother's psychosocial skills are positively corelated with children's psychosocial skills, and mediate the effects of household wealth on children's psychosocial skills (exception=Peru). 2.Mother's psychosocial skills are associated with children's cognitive skills (exceptions: Vietnam, Ethiopia). 3.Household wealth & parental education are strongly associated with children's cognitive skills.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 15: Hanson, Jamie L., Hair, Nicole, Shen, Dinggang G., Shi, Feng, Gilmore, John H., Wolfe, Barbara L., & Pollak, Seth D. (2013). Family poverty affects the rate of human infant brain growth. <i>Plos One</i>, 8(12), e80954-e80954. doi:10.1371/journal.pone.0080954</p>	<p>N=77 Age: Infant-4 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1. <u>MRI Scans:</u> covering apex of head to cerebellum, excluding non-brain tissue. Constructed a 'brain atlas'/whole brain including - gray matter, white mater, and the four primary lobes (frontal, temporal parietal, occipital). 2. <u>Subject demographics:</u> gender, age, child's <u>behavioural & emotional problems</u> assessed using Child Behaviour Checklist (CBCL); Maternal education level, household income (based on federal poverty line).</p>	USA	<p>Longitudinal – National Institute of Health MRI Study of Normal Brain Development. <u>Quantitative.</u></p>	Community-based recruitment strategy, with demographic data aimed to represent USA Census Bureau data.	MRI scans of children's brains.	<p>Statistical analyses: Mixed effects linear models.</p>	<ol style="list-style-type: none"> 1. Children from low-income families had lower total gray matter compared with children from higher income families. 2. As children grew older this difference widened. These changes were associated with behaviour problems in pre-school period. 3. Difference were primarily localised to frontal and parietal lobes, with the former responsible for executive functioning (planning, impulse and an attention control) and for later with sensory integration, visual processes and brain connectivity.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 16: Hosokawa, R., & Katsura, T. (2017). A longitudinal study of socioeconomic status, family processes, and child adjustment from preschool until early elementary school: The role of social competence. <i>Child and Adolescent Psychiatry and Mental Health</i>, 11(1). doi:10.1186/s13034-017-0206-z</p>	<p>N=1787 Age: 5-6 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1. Socioeconomic status (SES): yearly family income, parental education. <u>Mediators:</u> 1. Quality of Co-parental Communication Scale (QCCS). 2. Parenting practice: Alabama Parenting Questionnaire (APQ) – assess aspects of parenting behaviour. 2. Child social compliance: Social Skills Questionnaire (SSQ) – completed by teachers. <u>Criterion variables:</u> 1. <u>Child adjustment:</u> SDQ – measuring internalising and externalising behaviours.</p>	<p>Japan. 2014-15.</p>	<p>Longitudinal study – 1 year. <u>Quantitative.</u></p>	<p>Sample of 52 kindergartens and 78 nursery school in a large urban city in Japan (Nagoya city). Exclusion: developmental problems, uncompleted questionnaires & single-parent families.</p>	<p>Parents and/or teachers completed questionnaires.</p>	<p>Statistical Analyses: Structural equation modelling analyses. Comparative Fit Index (CFI), Incremental Fit Index (IFI), Root Mean Square Error of Approximation (RMSEA).</p>	<p>1. SES (family income and parental education) was both directly, and indirectly (destructive marital conflict, negative parenting practices) associated with poorer child mental health (less social competence & more symptoms of behavioural problems). 2. Evidence in support of both Family Systems Model (FSM) [family income linked to children's socio-emotional development via parent's psychological health] & the Family Investment Model (FIM) [family material advantages assist child development] were supported by the results of this study.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 17: Hung, Galen Chin-Lun, Hahn, Jill, Alamiri, Bibi, Buka, Stephen L., Goldstein, Jill M., Laird, Nan, . . . Gilman, Stephen E. (2015). Socioeconomic disadvantage and neural development from infancy through early childhood (Vol. 44, pp. 1889-1899).</p>	<p>N=36443 Age: 4 months-7 years <u>Study Aim:</u></p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> 1. Parental socioeconomic disadvantage: parental educational level, income (relative US poverty line), parental occupation, family structure. 2. <u>Neurological abnormalities</u> during childhood: exams by paediatricians, at 4 months, 1 & 7 years. Included global impressions, hard (e.g. cranial nerve deficits) & soft (e.g. motor problems) signs. 3. Pregnancy & delivery complications. E.g. placenta hypertrophy or insufficiency. <p><u>Confounding factors:</u> Mother's psychiatric, neurological, cardiovascular, pulmonary & metabolic conditions.</p>	<p>USA 1959-1974</p>	<p>Longitudinal – part of Collaborative Perinatal Project (CPP), a large study of neurological problems in children (a national birth cohort, N=50,000). <u>Quantitative.</u></p>	<p>Sample drawn from CPP study, included children whose mother's completed interview, and at least 1 neurological assessment.</p>	<p>Examinations of children. Reports by mother/care.</p>	<p>Statistical analyses: Logistic regression models, fitted logistic regression models.</p>	<p>1. Children of lower SES parents were more likely to show neurological abnormalities from 4 months to 7 years. This has potential lifelong implications for these children.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 18: Khanam, Rasheda, & Nghiem, Son. (2016). Family Income and Child Cognitive and Noncognitive Development in Australia: Does Money Matter? <i>Demography</i>, 53(3), 597-621. doi:10.1007/s13524-016-0466-x</p>	<p>N=8,041 Age:4-5 years. <u>Study Aim:</u></p>	<p><u>Outcome Variables:</u></p> <p>1.<u>Noncognitive skills:</u> SDQ to measure child's behavioural development.</p> <p>2.<u>Cognitive skills:</u> Matrix reasoning - Wechsler Intelligence Scale for Children 4th ed. (WISC-IV); vocabulary-PPVT; literacy & numeracy -assessed by parents & teachers.</p> <p><u>Independent variables:</u></p> <p>1.Household income: relative income</p> <p><u>Control variables:</u> parent's age, education & employment status; child's gender, birth order, birth weight & physical status; household size, presence of both biological parents at home; ethnicity; & English language spoken in the home; Parental investment (materials & time); parenting style & mother's & father's physical and mental health. Plus a neighbourhood facility index.</p>	<p>Australia 1999-2012</p>	<p>Longitudinal – Longitudinal Study of Australian Children (LSAC) survey. <u>Quantitative.</u></p>		<p>Test with children, reports/- assessments from mothers/carers & teachers.</p>	<p>Statistical analyses: OLS, fixed effects & GMM analyses.</p>	<p>1.Family income has significant effects on children's cognitive outcomes, but not on non-cognitive (behavioural) outcomes.</p> <p>2.Parental stress was a mediating factor in non-cognitive/behavioural outcomes for children.</p> <p>3.Parental physical and mental health, child characteristics (age, health gender), & household characteristics (parents education, both parents at home) were important determinants of child non-cognitive outcomes.</p> <p>4.Non-cognitive outcomes: moderate support for parental investment theory & strong support for parental stress & neighbourhood theories.</p> <p>5.Cognitive outcomes: Strong support for parental income theory & moderate support for parental stress & neighbourhood theories.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 19: Kiernan, Kathleen E., & Mensah, Fiona K. (2009). Poverty, Maternal Depression, Family Status and Children's Cognitive and Behavioural Development in Early Childhood: A Longitudinal Study. <i>Journal of Social Policy</i>, 38(4), 569-588. doi:10.1017/S0047279409003250</p>	<p>N=14,777 Age: 4 months – 3 years. <u>Study Aim:</u></p>	<p><u>Focal variables:</u></p> <ol style="list-style-type: none"> Poverty: household income below 60% median, before housing costs. Maternal depression: mother's self-report. Family status measure: biological parents married/cohabitating, lone mothers families, step families. <p><u>Outcome variables:</u></p> <ol style="list-style-type: none"> <u>Cognitive development:</u> Bracken Basic Concept Scale (BBCS). <u>Behavioural adjustment:</u> SDQ. <p><u>Controls:</u></p> <p>Child's gender, birth weight, breastfeed, number of siblings, first-born, ethnicity, English 1st language/spoken in the home; Mother's education, parental divorce, & employment status.</p>	UK	<p>Longitudinal – part of Millennium Cohort Study (MCS). <u>Quantitative.</u></p>	Sample drawn from MCS, 1 st 2 waves.	Assessments with child, maternal reports.	<p>Statistical analyses: Logistic regression analysis, multivariate analysis.</p>	<ol style="list-style-type: none"> Poverty associated with early child cognitive development and to a lesser degree their behavioural development. These outcomes are worse for persistent poverty. Maternal depression (especially persistent depression) is associated with children's behavioural problems.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 20: Mazza, J. R., Pingault, J. B., Booi, L., Boivin, M., Tremblay, R., Lambert, J., . . . Côté, S. (2017). Poverty and behavior problems during early childhood. <i>International Journal of Behavioral Development</i>, 41(6), 670-680. doi:10.1177/0165025416657615</p>	<p>N=1759 Age: 5months- 5 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1. <u>High trajectory of physical aggression & hyperactivity:</u> Mother's reported child's behaviour using the early childhood behaviour scale (a modified version of other behaviour scales). <u>Independent variable:</u> Poverty: relative poverty (Canada poverty line), or annual household income, level of urbanisation and number of children in the home. Also categorised as having 'chronic poverty' if experience 2-4 times during the ages child in the study (i.e. 5 months-5 years). <u>Potential Mediators:</u> Family dysfunction (maternal ratings), Maternal depression (Diagnostic Interview Schedule), Parenting constructs (using Parental Cognitions and Conduct towards the Infant Scale) including measures of self-esteem, parental impact, coercion & overprotection. <u>Control variables:</u> child's sex, low maternal education, family structure (e.g. separation).</p>	<p>Canada</p>	<p>Longitudinal – Quebec Longitudinal Study of Childhood Development. <u>Quantitative.</u></p>	<p>Sample of births from 1997-98, using a stratified procedure.</p>	<p>Home interviews and assessments.</p>	<p>Statistical analyses: Multiple logistic regression models.</p>	<p>1. Chronic poverty was associated with increased hyperactivity and increased levels of physical aggression in children. 2. Mediators included: maternal depression (with increases in both behaviours); and parental practice (overprotection) associated with increased hyperactivity, but lower physical aggression. The findings are consistent with previous research showing poverty is associated both directly and indirectly with children's mental health, and this is mediated through maternal mental health and parenting practices.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 21: Najman, J. M., Hayatbakhsh, M. R., Heron, M. A., Bor, W., O'Callaghan, M. J., & Williams, G. M. (2009). The impact of episodic and chronic poverty on child cognitive development. <i>Journal of Pediatrics</i>, 154(2), 284-289. doi:10.1016/j.jpeds.2008.08.052</p>	<p>N=7223 Age: birth-14 years <u>Study Aim:</u> To determine if changes in family poverty occurring at pregnancy, early childhood and adolescence determine cognitive outcomes at 14 years.</p>	<p><u>Measures:</u> 1. Economic status: gross annual family/household income, categories matching Australian poverty indices. Identifying persistent poverty (birth-14 years). 2. <u>Measurement of cognitive development:</u> Raven's Standard Progressive Metrics (SPM) – on-verbal reasoning abilities; and the Wide Range Achievement Test (WRAT) – reading skills. <u>Demographic information:</u> marital status, maternal education.</p>	Australia.	<p>Longitudinal-Mater-university of Queensland Study of Pregnancy. <u>Quantitative.</u></p>	<p>Sample drawn from mothers from a large publicly funded hospital in Brisbane, required obstetric care. Non-representative sample.</p>	<p>Reports from Mothers. Questionnaire with youth (follow-up at 14 years).</p>	<p>Statistical analyses: Univariate relations, and 1-way analysis of covariance (ANCOVA).</p>	<p>1. Poverty directly impacts on children's and adolescents cognitive outcomes. 2. Findings indicate that neither pregnancy, or a specific stage of childhood/adolescence are especially sensitive to the effects of poverty on cognitive outcomes, rather the degree of persistent poverty and its cumulative effect over the entire lifespan of childhood into adolescence is most pertinent.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 22: Nicholson, Jan M., Strazdins, Lyndall, Brown, Judith E., & Bittman, Michael. (2012). How parents' income, time and job quality affect children's health and development. <i>Australian Journal of Social Issues (Australian Council of Social Service)</i>, 47(4), 505-525. doi:10.1002/j.1839-4655.2012.tb00263.x</p>	<p>N=2280 Age: 4-9 years. <u>Study Aim:</u> How are the health consequences of socioeconomic disadvantage transferred to children and how parental employment influence this.</p>	<p><u>Measures:</u> 1.Socio-economic position (SEP): ranking families relative Sep based on parental income, education & occupations. 2.<u>Children's difficulties:</u> i. Physical health difficulties (subscale of Pediatric Quality of Life Scale-PedsQL), ii. Socioemotional difficulties (Strengths and Difficulties Questionnaire), iii. <u>Cognitive difficulties</u> (subscale of PedsQL). 3.<u>Time and money spent on children's healthy development:</u> parent-competed light time use diary. 4.Parent's employment patterns. 5.Parental job quality: The job quality index. 6.Parent's psychological distress (symptoms of anxiety or depression): Kessler K6 screening scale.</p>	<p>Australia. 2004-06.</p>	<p>Longitudinal – Longitudinal Study of Australian Children (LSAC). <u>Quantitative.</u></p>	<p>Sample drawn from waves 1 & 2. A two-stage clustered sampling design with random selection was used.</p>	<p>Face-to-face interview with child's main caregiver & self-completed questionnaires by both parents.</p>	<p>Statistical analyses: generalised linear model & regression modelling.</p>	<p>1.Children from lower SEP are more likely to experience at least one problem in the health dimensions measured (physical health, socioemotional or cognitive difficulties). Findings revealed a clear socioeconomic gradient for these health difficulties. 2.Parent's negative working conditions (e.g. low income, job insecurity, inflexible work hours, lack of family leave options) had an impact on children's health outcomes via parental time available, parental mental health & distress, irritability, conflict & withdrawal having 'spillover' effects on the children. 3.The findings provide insights and evidence of the intergenerational transmission of socioeconomic disadvantage.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 23: Noonan, K., Burns, R., & Violato, M. (2018). Family income, maternal psychological distress and child socio-emotional behaviour: Longitudinal findings from the UK Millennium Cohort Study. <i>SSM - Population Health, 4</i>, 280-290. doi:10.1016/j.ssmph.2018.03.002</p>	<p>N=8499 Age: 9months-14 years. <u>Study Aim:</u> To examine the mediating effect of maternal psychological distress on the association between family income and children's socio-emotional behaviour at age 11 years.</p>	<p><u>Measures:</u> 1. Family income & poverty persistence: equivalised household income, adjusted for inflation, and below UK poverty line (60% median), adjusted for number of people in home. Persistent poverty = since birth. 2. Child socio-emotional behaviour: SDQ measured at 11 years. Parental reported socio-emotional behavioural problems using 'total difficulty score' (TDS). The TDS also completed by teacher. <u>Covariates:</u> child's age at survey 5, sex, ethnicity, health at birth, chronic illnesses, breastfeeding; number of siblings, housing tenure, maternal education & age, smoking & drinking during pregnancy. Maternal psychological distress – Kessler-6 questionnaire) & Rutter Malaise Inventory; Parental investment, parental stress, parenting style; and current alcohol & smoking, & external factors such as sedentary screen time, child peer relationships, levels of physical activity.</p>	<p>UK 2016.</p>	<p>Longitudinal – Millennium Cohort Study (MCS). <u>Quantitative.</u></p>	<p>MCS used stratified cluster sample design. This study drew a sample from MCS, if inclusion/- exclusion criteria meet (all 5 surveys & interviews completed).</p>	<p>Interviews with mothers/carers.</p>	<p>Statistical analyses: descriptive, & multivariate logistic regression.</p>	<p>1. Poverty had a direct impact on children's socio-emotional behaviour. Low family income increased likelihood of behavioural problems at 11 years, but not emotional problems. Persistent poverty was associated with the greatest likelihood of behavioural problems at age 11 years. 2. Maternal distress as a significant mediating factor between family income and children's behaviour outcomes. 3. Family and external factors was strong mediating factors between family income and children's behaviour outcome. These findings led support for both the parental stress and parental investment theories.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 24: Oosterhoff, M., Joore, M. A., Bartelink, N. H. M., Winkens, B., Schayck, O. C. P., & Bosma, H. (2019). Longitudinal analysis of health disparities in childhood. <i>Archives of Disease in Childhood</i>. doi:10.1136/archdischild-2018-316482</p>	<p>N=1259 Age: 4-8 & 8-12 years</p>	<p><u>Health outcomes</u></p> <ol style="list-style-type: none"> <u>Physical health</u>: BMI <u>Health resources use</u>: parental questionnaire. <u>Health-related school absenteeism</u>: annual school days missed. <u>HRQL</u>: Vas & PedsQL – parents reported for 4-8 years & self-reported for 8-12 years (physical health, emotional, social & school functioning). <u>Psychological health</u>: parent reported SDQ (psychological & psychosocial functioning). <p><u>Main determinants</u></p> <ol style="list-style-type: none"> SES: parental educational level, household income. Health behaviours: physical activity(PA) using accelerometer, vegetable & fruit intake, sweetened beverages intake. 	<p>Holland 2016-2017</p>	<p>Quasiexperimental study – Healthy Primary School of the Future (HPSF) project. Experimental schools: HPSF & PAS compared with control schools. 2 years follow-up/-longitudinal. <u>Quantitative.</u></p>	<p>Subsample of longitudinal cohort, who completed all measurements.</p>	<p>Parent questionnaire, and self-reports from older children cohort.</p>	<p>Statistics: Mixed model analyses.</p>	<ol style="list-style-type: none"> Low socioeconomic background had a negative effect on the health outcomes for early childhood (4-12 years): BMI, school absenteeism, health resources use, HRQL & psychological health. Children from lower SES experience lower health in comparison to higher SES peers. Minimal support for proposition that lifestyle interventions alone can tackle these child health inequalities. Strategies should focus on upstream and community-based policies (access to quality services, financial support, supportive communities).

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 25: Park, Jung Min, Fertig, Angela R., & Allison, Paul D. (2011). Physical and mental health, cognitive development, and health care use by housing status of low-income young children in 20 American cities: a prospective cohort study. <i>American Journal Of Public Health, 101 Suppl 1</i>, S255-S261. doi:10.2105/AJPH.2010.300098</p>	<p>N=2631 Age:1, 3, 5 years. <u>Study Aim:</u> To determine the effect of homelessness, doubling-up occurrences on children's physical and mental health, health care and cognitive development.</p>	<p><u>Measures:</u> 1. <u>Physical health:</u> as rated by mother. 2. <u>Mental health:</u> Child Behaviour Checklist (CBCL). 3. <u>Cognitive development:</u> PPVT. 4. <u>Health care use:</u> emergency department visits in last 12 months, doctor visits, & inpatient hospitalisations. <u>Control variables:</u> 1. <u>Sociodemographic & family characteristics:</u> race/ethnicity, mother's age, marital status, cohabitating status, number of children in the home, immigrant status, educational level, income in household, receipt of assistance (food stamps & Temporary Assistance for Needy Families, Supplementary Security Income), enrolled under Medicaid, level of family support, overall health status of mother, domestic violence exposure, parental smoking & substance abuse, mother's mental health & first prenatal care visit. 2. <u>Children's health condition:</u> low birth weight, preterm birth, any serious abnormalities in health.</p>	<p>USA 1998-2000.</p>	<p>Longitudinal – Fragile Families and Child wellbeing Study (FFS). <u>Quantitative.</u></p>	<p>Stratified random sampling design. This study drew on cohort who meet criteria: families were homeless, doubled-up (living with others due to financial problems and/or not paying rent) & below federal poverty line, and where child lived with family & comparisons group who only reported being below poverty line/not homeless.</p>	<p>Survey/-interview with mother & father.</p>	<p>Statistical analyses: logistic regression model, multivariate analysis.</p>	<p>1. Amongst children who were from families in poverty, and those who were homeless or experienced episodes of double-up, the latter two housing contexts did not have significant effects, over and above poverty, on children's physical and mental health, and cognitive development. 2. Family and environmental factors common to living in poverty had significant effect on children's health and development. For example, mother's education and immigrant status were associated with children's physical and mental health, and cognitive development; Mother's poor health was associated with a child's health; and domestic violence was associated with children's delayed cognitive development.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 26: Reynolds, S. A., Andersen, C., Behrman, J., Singh, A., Stein, A. D., Benny, L., . . . Fernald, L. C. H. (2017). Disparities in children's vocabulary and height in relation to household wealth and parental schooling: A longitudinal study in four low- and middle-income countries. <i>SSM - Population Health, 3</i>, 767-786. doi:10.1016/j.ssmph.2017.08.008</p>	<p>N=6037 Age: 1,5,8, 12 years. <u>Study Aim:</u></p>	<p><u>Measures:</u> 1. Household wealth index: includes housing quality, ownership of consumer durables, access to services such as electricity, water, sanitation. 2. Parental schooling: according to country specific criterion. 3. <u>Child outcomes:</u> i. Height: supine length & height between 1, 5, 8, and 12 years. ii. Cognitive: PPTV-vocabulary. <u>Covariates:</u> mother's height, age, ethnicity, whether speaks region's official language.</p>	<p>India, Ethiopia, Vietnam & Peru. (Low-middle income countries.)</p>	<p>Longitudinal – part of Young Lives Survey Study. <u>Quantitative.</u></p>	<p>Multistage sampling process, with sists purposively selected and then participants randomly selected.</p>	<p>Child – assessments and tests. Interviews – mother/carer.</p>	<p>Statistical analyses: OLS regression, Multivariate normal regression.</p>	<p>1. Children from families with less material resources and with parents who have less education are shorter and perform lower in vocabulary tests than their peers who have higher levels of material wealth and who have parents of a higher educational level. 2. Other findings included: disparities in cognition can vary over time, lending support to theory of cognitive plasticity; disparities in height across age points indicate the impact of early life environments; macro and micro level factors effect child outcomes early in life; vocabulary disparities due to SES were generally larger than for disparities in height.</p>
<p>Study 27: Rolleston, C., & James, Z. (2014). Schooling and cognitive outcomes from childhood to youth: A longitudinal analysis. In M. Bourdillon & J. Boyden (Eds.), <i>Growing up in poverty: Findings from young lives.</i> (pp. 117-137). New York, NY: Palgrave Macmillan. doi:10.1057/9781137404039</p>	<p>N=Approx. 4000 Age: 8-15 years. <u>Study Aim:</u> To examine the factors that affect development of skills for children during the formative years (8-15 years of age).</p>	<p><u>Measures:</u> 1. <u>Cognitive skills:</u> assessments of literacy (reading & writing), numeracy, and vocabulary (using PPTV). 2. <u>Other variables:</u> child's gender, height-for-age, household wealth, caregiver literacy, and country specific factors (e.g. caste system in India, or language in Peru).</p>	<p>India, Ethiopia, Vietnam & Peru. (Low-middle income countries.) 2002-09</p>	<p>Longitudinal – part of Young Lives Survey Study. <u>Quantitative.</u></p>	<p>Multistage sampling process, with sists purposively selected and then participants randomly selected.</p>	<p>Child – assessments and tests. Interviews – mother/carer.</p>	<p>Statistical analyses: descriptive analysis & regression modelling.</p>	<p>1. Household advantage (wealth) and caregiver/-parental literacy were key predictors for skill acquisition (literacy and numeracy skills) for children. 2. Variations occurred across countries in part due to quality of schooling, and years spent in school.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 28: Russell, Abigail Emma, Ford, Tamsin, & Russell, Ginny. (2015). Socioeconomic Associations with ADHD: Findings from a Mediation Analysis. <i>PLoS One</i>, 10(6), e0128248-e0128248. doi:10.1371/journal.pone.0128248</p>	<p>N=8132 Age: <u>Study Aim:</u> To examine the relationships between socioeconomic circumstances and risk of attention hyperactive disorder (AFDHD) at age 7 years.</p>	<p><u>Measures:</u> 1. Socioeconomic status (SES): parental income (self-reported family income & financial difficulties), parental education (GCSEs), parental employment, marital status/family structure, maternal age at birth of study child, housing tenure, large family size. 2. <u>Outcome measure:</u> <i>ADHD</i> at 7 years. Use of DAWBA questionnaire (used to evaluate psychological disorders). <u>Mediators:</u> parental psychopathology (Edinburgh Postnatal Depression Scale), parenting activities at 6 years, fizzy drink/caffeine consumption at 3 years, family adversity at 2-4 years (family adversity index (FAI)).</p>	UK	<p>Longitudinal – Avon Longitudinal Study of Parents and Children (ALSPAC). <u>Quantitative.</u></p>	Target sample from Avon region, UK (recruited eligible women), using eligible and enrolled samples.	Assessments, interviews with mother/parents & child.	<p>Statistical analyses: descriptive statistics, univariate logistic regression, multivariate regression, multiple mediation analyses.</p>	<p>1. SES was significantly associated with risk of ADHD diagnosis at age 7 years, especially financial difficulties (e.g. challenges paying for heating, rent/mortgage, clothing, food etc.). Other SES factors associated with ADHD included: social housing tenure, younger maternal age, single parent status. 2. The association between SES and ADHD is mediated by the level of parental involvement with the child, and the level of family adversity.</p>
<p>Study 29: Shaefer, H. Luke, Lapidus, Adrienne, Wilson, Reid, & Danziger, Sandra. (2018). Association of Income and Adversity in Childhood with Adult Health and . <i>Social Service Review</i>, 92(1), 69-92. doi:10.1086/696891</p>	<p>N= 2687 Age: 30-64 years (at time of survey) but based on childhood experiences.</p>	<p><u>Aim of study:</u> to explore the relationship between Adverse Childhood Experiences (ACEs), childhood household income, and <u>adult health and socioeconomic</u>. <u>ACEs:</u> having a parent who abused drugs, was depressed, was victim/perpetrator of domestic violence, and physically abuse their child. <u>Average household income.</u> <u>Demographic controls:</u> Sex, race, Hispanic origin, age, number of siblings during childhood.</p>	USA 2014	<p>Data drawn from Panel Study of Income Dynamics - Childhood Retrospective Circumstances Study (PSID-CRCS). A nationally representative longitudinal household survey. <u>Quantitative.</u></p>	Data drawn from PSID-CRCS study.	Household interviews with adults.	<p>Statistical modelling analyses.</p>	<p><i>Examining adults who grew up with lowest incomes compared to those from highest incomes:</i> 1. Education: higher rates of failing to graduate from high school, and complete college. 2. Crimes: higher rates of being arrested. 3. Poverty: higher rates of adult poverty. 4. ACEs: higher rates. 5. Health: higher rates of smoking, lung or heart disease, & obesity.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 30: Schmitt, S. A., & Lipscomb, S. T. (2016). Longitudinal associations between residential mobility and early academic skills among low-income children. <i>Early Childhood Research Quarterly</i>, 36, 190-200. doi:10.1016/j.ecresq.2016.01.002</p>	<p>N=3627 Age:3-4 years. <u>Study Aim:</u> Examining the impact of residential mobility on academic skills in the early elementary years for children from low-income families.</p>	<p><u>Measures:</u> 1.Residential mobility: frequency of moving prior to child entering kindergarten. 2.<u>Academic achievement:</u> (numeracy & literacy) Woodcock-Johnson Psycho-Educational Battery-III Tests of Achievement (WJ-III) or Bateria III Woodcock-Munoz (Spanish speakers). <u>Covariates:</u> age, sex, home language, special needs status. <u>Family covariates:</u> household income, maternal education, parent-child reading, parenting style (Child-Rearing Practices Report (CRPR)).</p>	<p>USA</p>	<p>Longitudinal – Head Start Impact Study (HSIS). <u>Quantitative.</u></p>	<p>HSIS -Nationally representative sample; with 2 cohorts randomly assigned to head Start programme & to control comparison. This study sample limited to parents who reported frequency of moving.</p>	<p>Parents were interviewed and children assessed.</p>	<p>Statistical analyses: path analysis & covariate modelling (Plus software)</p>	<p>1.Residential mobility prior to enrolment in kindergarten is modestly associated with lower academic outcomes for children from low income families, but across a range of skills (e.g. numeracy, literacy). 2.This relationship (mobility and cognitive outcomes) was mediated by earlier academic skill acquisition.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 31: Schoon, Ingrid, Jones, Elizabeth, Cheng, Helen, & Maughan, Barbara. (2012). Family hardship, family instability, and cognitive development. <i>Journal of Epidemiology & Community Health</i>, 66(8), 716-722. doi:10.1136/jech.2010.121228</p>	<p>N=8874 Age: 3-5 years <u>Study Aim:</u> Examining the associations between persistent poverty, family transitions and a child's cognitive development.</p>	<p><u>Measures:</u> 1. Family poverty: equivalised net household income (where poverty= <60% UK median income). 2. Family transitions: mother's relationships status (e.g. single, cohabitating, married). 3. <u>Cognitive ability:</u> British Ability Scales(2 subscales-vocabulary & pattern construction reflecting verbal and non-verbal skills). <u>Family Demographics:</u> mother's age at birth, parental education, housing conditions (e.g. home ownership, crowding). <u>Control variables:</u> child's gender, age, birth weight, ethnicity, developmental delays (Denver developmental screening).</p>	<p>UK 2006.</p>	<p>Longitudinal – Millennium Cohort Study (MCS). <u>Quantitative.</u></p>	<p>MCS used stratified cluster sample design. This study draw on an analytical sample of children aged 5 years (2006), will required measures completed.</p>	<p>Parent interviews and self-competed questionnaires.</p>	<p>Statistical analyses: Series of regression models.</p>	<p>1. Poverty, in particular persistent poverty, had a significant influence over children's cognitive functioning at age 5 years. This was particularly pertinent in the early stages of the child's life, supporting the idea of a sensitive period during development. Additionally, poverty had slightly more effect on verbal compared to non-verbal skills. 2. Family structure and family instability showed no significant effect on cognitive functioning. 3. Other factors influencing cognitive outcomes include: mother's age, parental education; and child characteristics indicating role of biological influences.</p>

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 32: Segretin, M. Soledad, Hermida, M. Julia, Prats, Lucía M., Fracchia, Carolina S., Ruetti, Eliana, & Lipina, Sebastián J. (2016). Childhood Poverty and Cognitive Development in Latin America in the 21st Century. <i>New Directions For Child And Adolescent Development</i>, 2016(152), 9-29. doi:10.1002/cad.20162</p>	<p><u>N</u>= Initial search =343 – to final selection of 53 studies.</p> <p><u>Age:</u> Children under 18 years</p> <p><u>Study Aim:</u> To systematically review studies examining the relationships between poverty and children’s cognitive development in the Latin American and Caribbean countries.</p>	<p><u>Countries:</u> Latin America & Caribbean countries.</p> <p><u>Data-bases:</u> article published in PubMed & EBSCO.</p> <p><u>Search terms:</u> broadly -poverty, <u>cognitive development</u> (refer to article for details).</p> <p><u>Language:</u> English, Spanish, Portuguese.</p> <p><u>Excluded:</u> reports, dissertations, case reports, editorials, commentaries, letters to editor, books, congress abstracts, studies of interventions.</p>	Latin America & Caribbean countries.	Systematic Review of studies in Latin America and Caribbean countries. Between 2000-2015. <u>Quantitative.</u>	Sample – meeting inclusion/ exclusions criteria: relationships between poverty and cognitive development in children, restricted by date, countries and empirical studies.	---	Statistical analyses:	<ol style="list-style-type: none"> 1. Most studies provide evidence that poverty negatively impacts on children’s cognitive development, given a broad range of measures (i.e. executive functions and self-regulation, or information processing skills such as working memory, flexibility, inhibitory control and self-monitoring functions). 2. Four studies examined the mechanism through which poverty impacts on cognitive development such as impulsivity, family’s standard of living, parental level of linguistic and cognitive stimulation in the home, maternal education and mental health, nutrition, literacy activities and availability of computers. 3. Most poverty concepts used focused on a minimum needs or an income perspective. None utilised a rights-based concept.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 33: Seidler, A. L., & Ritchie, S. J. (2018). The Association Between Socioeconomic Status and Cognitive Development in Children Is Partly Mediated by a Chaotic Home Atmosphere. <i>Journal of Cognition and Development</i>, 19(5), 486-508. doi:10.1080/15248372.2018.1515077</p>	<p>N=18,818 Age:3-7 years. <u>Study Aim:</u> To determine whether a chaotic home environment is a mediating actor between the effect of SES on children's cognitive development.</p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> 1. Parental socioeconomic status (SES): equivalised household income (OECD scales), maternal & paternal education (academic & vocational qualifications), & occupation (National Statistics Socioeconomic Classification). 2. <u>Child's cognitive ability:</u> The British Ability Scales (BAS) – vocabulary, pattern construction. Bracken School Readiness Test. A version of the National Foundation for Educational Research Standard Progress in Mathematics Test. 3. Chaotic home atmosphere: Confusion, Hubbub, and Order Scale (CHAOS). 4. Parenting competence: self-reported. 	UK	<p>Longitudinal – Millennium Cohort Study (MCS). <u>Quantitative.</u></p>	<p>MCS used stratified cluster sample design. This study draw on an analytical sample of children aged 3-7 years, with completed cognitive testing.</p>	<p>Parent/carer interviews, assessments with child.</p>	<p>Statistical analyses: descriptive statistics, structural equation modelling analyses; Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), standardised root mean square residual (SRMR), Root Mean Square Error of Approximation (RMSEA).</p>	<ol style="list-style-type: none"> 1. SES had a direct association with children's cognitive outcomes, with lower SES associated with lower cognitive outcomes. 2. Home atmosphere, chaotic home environment, was a mediating factor in this relationship that may be acting through a range of possible mechanisms. E.g. inability to afford to live in a clam home, lower expectation of their children, less stimulating environment at home, and heightened stress levels.

Author(s) and publication year	Participants, Age & Study Aim	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 34: Taylor, Matthew, & Edwards, Ben. (2012). Housing and children's wellbeing and development. <i>Family Matters</i> , (91), 47-61.	N= 8717 Age: 4-5 & 8-9 years.	<u>Measures:</u> 1. Housing tenure: owner without a mortgage, owner with a mortgage, renter (private), renter (state), other landlord. 2. Residential mobility: house moves – 1-5 or more. 3. Housing stress: parental income and costs of housing combined = weekly household income use to create housing stress levels. <u>Child :</u> 1. PPVT: vocabulary. 2. SDQ: hyperactivity, emotional symptoms, peer problems, conduct problems.	Australia 2004-08	Part of a larger longitudinal study – Growing up in Australia: The Longitudinal Study of Australian Children (LSAC). <u>Quantitative.</u>	Sample from 3 rd wave and combines 2004 & 2008 B & K cohorts.	Survey of parents.	Descriptive statistics & OLS regression modelling.	1. Some very large differences were found for children's developmental outcomes based on the type of housing tenure. 2. Children living in public housing showed the lowest levels of vocabulary & highest levels of emotional & behavioural problems. 3. Residential mobility was associated with receptive vocabulary and emotional & behavioural problems for children aged 4-5 years, but not for those aged 8-9 years.

QUALITATIVE STUDIES

Author(s) and publication year	Participants, Age, Study Aim & location	Outcome measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 1: Heberle, A. E., Kaplan-Levy, S. A., Neuspiel, J. M., & Carter, A. S. (2018). Young children's reasoning about the effects of poverty on people experiencing it: A qualitative thematic analysis. <i>Children and Youth Services Review</i>, 86, 188-199. doi:10.1016/j.chidyout.2018.01.036</p>	<p>N=30 Age: 6-9 years. Participants were from low-income families.</p> <p><u>Aim of research:</u> To understand <i>how children perceive what it means to be poor and the effects it has on their lives</i> (functioning & behaviour).</p> <p>USA</p>	<p><u>1.Poverty:</u> Children were from families who had low income (<185% of the USA poverty line) & in receiving federal or state assistance/benefits.</p>	<p>Qualitative research approach. <u>Qualitative.</u></p>	<p>Sample of low income families. Include: meet age and poverty criteria, and consented. Excluded: if had parent report disability (e.g. autism spectrum disorder etc.)</p>	<p>Semi-structured interviews ('doll & puppet' interviews) - children. Study paperwork completed by parents (consent, demographic data & questionnaire about child's behaviour).</p>	<p>Analysis: Inductive approach, semantic coding, thematic analysis.</p>	<p><u>1.Material resource deprivation:</u> Showed an awareness about the differences in access to material resources for those who are poor, the negative impact this has on children's education, and a link between being poor and constrain vocational prospects.</p> <p><u>2.Emotional, social and academic consequences of lacking material resources:</u> children showed an awareness of the negative impacts of poverty such as sadness, strain and stress on families, being more aggressive; that success in school would be diminished (teased due to appearance, less items to play with, reduced access to good schools).</p> <p><u>3.Competence of the non-poor (and lack of competence among people in poverty):</u> Children reported stereotypical images of being poor such as not being as intelligent or lacking academic skill compare to wealthier peers/adults, not working hard enough or displaying inappropriate behaviours, children as hyperactive. Although, contrary to this a small group of children reported poor children as hard working.</p> <p><u>4.Honour and honest among people in poverty (versus non-poor):</u> In contrast to the above views, children also reported those living in poverty as honourable and poverty was a source of motivation. Wealthier people were seen as corrupted by their wealth.</p> <p><u>5.Beliefs about ending poverty:</u> responses included getting a good job, changing behaviour, saving and spending wisely, or donating money or material items. Children's responses reflected both external and internal attributions for the poverty that contrasted with and in other aspects aligned with dominant cultural narratives such as the 'Protestant work ethic.'</p>

Table: Updated 2020-2023 - Presenting an Overview of Primary Studies Included in the MMRS – Child Poverty and Potential**QUANTITATIVE STUDIES**

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 1: De France, K., Stack, D. M., & Serbin, L. A. (2022). Associations between early poverty exposure and adolescent : The role of childhood negative emotionality. <i>DEVELOPMENT AND PSYCHOPATHOLOGY</i> . https://doi.10.1017/S0954579422000487	Children aged from 1-16 years. N=164	Poverty: Family's income to household needs. The Parenting Quality Scale. Parenting relationship quality (the Dyadic Adjustment Scale). Maternal stress: The Parental Stress Index. Child negative emotionality: Buss and Plomin's Emotionality, Activity and Sociability Inventory. Adolescent Internalizing, Externalizing, and attention difficulties: Youth Self-Report. BMI.	Canada	Longitudinal – Long term program on childhood poverty, cumulative risk exposure, and wellbeing. <u>Quantitative</u>	Sampled from the larger cohort study.	Surveys completed by parent/s. Other child data completed by home visits (Youth Self-report, BMI)	Analysis by MPlus.	Family income to needs was not directly associated with child negative emotionality or adolescent externalizing symptoms. Family income to needs was <u>indirectly</u> associated with child negative emotionality through family-level and poverty related stress. Family income to needs was associated with adolescent BMI. Lends support to Family stress theory.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 2: Evans, G. W., & De France, K. (2022). Childhood poverty and psychological : The mediating role of cumulative risk exposure. <i>DEVELOPMENT AND PSYCHOPATHOLOGY</i>, 34(3), 911-921. https://doi.10.1017/S0954579420001947</p>	<p>Children 8-117 years and follow-up at 24 years. N=341</p>	<p>Internalizing and Externalising symptoms, using standardized measures.</p> <p>Learned helplessness, standardized behavioural protocol.</p> <p>Allostatic load: diastolic and systolic blood pressure, urinary epinephrine and norepinephrine, and creatinine.</p> <p><u>Cumulative risk measures</u>: Psychosocial (family turmoil, separation from family, exposure to violence) – Life Events and Circumstances Checklist & Adolescent Perceived Events Scale;, physical (crowding, noise, housing problems) – walk through evaluations.</p> <p>Federal poverty line – low income families.</p>	<p>USA</p>	<p>Longitudinal – Concordia Longitudinal Research Project.</p> <p><u>Quantitative</u></p>	<p>Sampled from the larger cohort study.</p>	<p>In Home visits: with parent and child.</p>	<p>Analysis by multilevel models in MPlus.</p>	<p>Poverty associated with behaviour problems, learned helplessness, and physiological stress.</p> <p>Maternal sensitivity did not mediate this association.</p> <p>Cumulative risks occur over the life course such as higher risks of internalizing and externalizing symptoms, and high allostatic load over time.</p>

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 3: Gibson-Davis, C., Keister, L. A., Gennetian, L. A., & Lowell, W. (2022). Net Worth Poverty and Child Development. <i>Socius</i>, 8, 1-18. https://doi.10.1177/23780231221111672</p>	<p>Children 3-17 years. N=7798</p>	<p>Cognitive measure: Woodcock Johnson Psychoeducational Battery-Revised. Behavioural measures: Behavioural Problem Index. Net Worth Poverty (NWP): Household wealth variable, total family income (based on federal poverty line). <u>Covariates:</u> gender, age, ethnicity, parental education, age and marital status.</p>	<p>USA</p>	<p>Longitudinal – PSI and the CDS. <u>Quantitative</u></p>	<p>Cohort sampling method from larger longitudinal studies.</p>	<p>Questionnaires.</p>	<p>Descriptive statistics and growth curve models.</p>	<p>NWP associated with adverse cognitive and behavioural outcomes for children and youth from 3-17 years. (Effects sizes larger for cognitive outcomes.) Lends greater support to Family Investment theory.</p>
<p>Study 4: Lee, K., & Zhang, L. (2022). Cumulative effects of poverty on children's social-emotional development: Absolute poverty and relative poverty. <i>Community Mental Health Journal</i>, 58(5), 930-943. https://doi.10.1007/s10597-021-00901-x</p>	<p>Children from 14-18 and follow-up at 18-24 years. N=11,512</p>	<p>Children's Socioeconomic Score: Behavioural Problem Index. Absolute Poverty Status (USA – federal level), & Relative Poverty Status (family income). Time – across the life span of cohort. Family support/parenting skills: Home Observation for Measurement of the Environment-Short For (HOME-SF). <u>Covariates:</u> child age, number of children in the household, maternal education, maternal cognitive test scores.</p>	<p>USA</p>	<p>Longitudinal – US National Longitudinal Survey (NLSY79-Public) and Child Supplement (NLSY-79-CS). <u>Quantitative</u></p>	<p>Cohort sampling method from larger longitudinal studies.</p>	<p>Data from cohort study.</p>	<p>Linear mixed model, Bonferroni method for multiple comparisons</p>	<p>Relative (but not absolute poverty) was associated with socio-emotional problems in children. Adverse impacts on children became worse as they aged, or overtime. A mediating factor s included parental support (nurturing, positive), higher parental education, and informal social supports, with culturally situated family support also helpful (i.e., amongst Hispanic families in particular).</p>

QUALITATIVE STUDIES – No qualitative studies.

Appendix E: Table Presenting an Overview of Primary Studies Included in the Literature Review – Child Poverty and Wellbeing (2009-2019) with updated table (2020-2023)

QUANTITATIVE STUDIES

Author(s) and publication year	Participants and Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 1: Bradshaw, J., Keung, A., Rees, G., & Goswami, H. (2011). Children's subjective : International comparative perspectives. <i>Children and Youth Services Review</i>, 33(4), 548-556. doi:10.1016/j.childyouth.2010.05.010</p>	<p><u>Macro level</u> N= 29 countries in Europe. <u>Micro level</u> (England) N=11,000</p>	<p><u>Macro level:</u> 1.<u>Subjective</u> : personal , at school, self-defined (subjective) health. 2.<u>Children's</u> : easy to talk to mother, agree that classmates are kind & helpful. 3. <u>Contextual factors</u>: country level deprivation, poor housing, family structure (%lone parent). <u>Micro level:</u> 1.<u>Personal</u> 2.<u>Family</u> 3.<u>Neighbourhood</u> . <i>Demographic & socioeconomic characteristics of respondents:</i> such as age, gender, ethnicity, family structure, economic status etc.</p>	<p><u>Macro level</u> = 29 European countries 2006 <u>Micro level</u> = England. 2005</p>	<p><u>Macro level:</u> Country level statistical data on income and living conditions; & Health Behaviour in School Aged Children (HBSC) international survey (2005/6). <u>Micro level:</u> <i>The Second National Survey of Young Runaways</i> (2005). <u>Quantitative.</u></p>	<p><u>Macro level:</u> data derived from country level statistical data and HBSC survey. <u>Micro level:</u> data derived from survey.</p>	<p><u>Macro level:</u> Country level income & living conditions statistics, & HBSC survey data. <u>Micro level:</u> data drawn from survey.</p>	<p><u>Macro level:</u> comparative analysis – country level. <u>Micro level:</u> Statistical analysis to p-value = 0.05, 0.01, 0.001. Multiple regression models.</p>	<p><u>Macro level:</u> 1.Strong negative associations between level of deprivation with life satisfaction for young people comparing for countries; and deprivation negatively associated with young people's relationships with classmates. 2. Deprivation/housing conditions associated with personal . <u>Micro level:</u> 1.Very weak associations between subjective and a number of socioeconomic characteristics (poverty, family structure) of young people. 2. Very weak associations between personal and age, gender, poverty, school, family structure, and neighbourhood (strongly with family). 3. Very weak associations between family and gender, poverty, school and neighbourhood (and strongly with personal). 3. Weak associations between school and gender, family structure, and</p>

Author(s) and publication year	Participants and Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
								poverty (and strongly with personal, family & neighbourhood).
Study 2: Dinisman, T., & Ben-Arieh, A. (2016). The Characteristics of Children's Subjective . <i>Social Indicators Research</i> , 126(2), 555-569. doi:10.1007/s11205-015-0921-x	Children: 8, 10, 12 years of age.	1. <u>Wellbeing</u> questionnaire measured using 3 scales: Overall life satisfaction, Overall satisfaction scale, Overall SWB. 2.Sociodemographic characteristics: child age, gender, whether born in the country, self-reported items (clothes in good condition to go to school, access to computer at home, access to internet; child country of residence.	14 countries: Algeria, Brazil, Canada, Child, England, Israel, Nepal, Romania, Rawanda, S.Africa, S.Korea, Spain, Uganda, US. 2011-12	Survey – questionnaire , translated in country's primary language. <u>Quantitative.</u>	Varied by country from randomised stratified cluster sampling to purposive sampling. Also varied by country in terms of survey of whole country of regions.	Self-administered surveys with children in school under supervision.	3 step multivariate linear regression.	1.SWB variance explained by countries, followed by socioeconomic items, and lastly by demographic variables (age, gender, country of birth). 2.While economic effects are relatively small, they have a significant effect on children's SWB, and may be reflected differently when SWB is defined by children.
Study 3: Main, Gill. (2014). Child Poverty and Children's Subjective , <i>Child Indicators Research</i> , 7, 451-472. doi:10.1007/s12187-014-9237-7	N= 1906 Age: 11-15 years	1. <i>Material deprivation:</i> Main & Bradshaw's (2012) child deprivation index. 2. <i>Living in a household likely to qualify for minimum income benefits:</i> children answered 2 questions – 'receiving free school meals', &'number of adults in household in paid employment'. 3. <u>Domains of subjective:</u> Rees et al (2010) ten-domain index of child subjective .	UK 2010	Survey – data taken from Children's Society 2010 survey of child . <u>Quantitative.</u>	Sample drawn from survey base on age, inclusion criteria, & answering all required questions.	Interviews with children.	Statistics: analysis using Cronbach's Alpha.	1.All domains of child subjective significantly associated with poverty indicators – universally stronger with material deprivation than indicators of very low income. 2.Poverty (low income & material deprivation) significantly associated to children's subjective , especially for domains of family & choice. 3.Happiness with time use, friends and school showed weaker associations with material deprivation.

Author(s) and publication year	Participants and Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 4: Plenty, Stephanie, & Mood, Carina. (2016). Money, Peers and Parents: Social and Economic Aspects of Inequality in Youth Wellbeing. <i>Journal of Youth & Adolescence</i>, 45(7), 1294-1308. doi:10.1007/s10964-016-0430-5</p>	<p>N=5025 Age: 14 years.</p>	<p><u>Aim of study:</u> broaden understandings of inequalities in <u>adolescent wellbeing</u>, by examining socioeconomic status of both parents and adolescents.</p> <p><u>Measures:</u></p> <ol style="list-style-type: none"> 1.Internalizing symptoms 2.Self-rated health 3.Family SES (household income, youth reported on parents' occupations, parental education. 4.Youth's own economy: missing out on social activities, cash margin. 5.Peer status: acceptance, perceived popularity. <p><u>Control variables:</u> gender, immigrant background.</p>	<p>Sweden. 2010-11</p>	<p>Part of a larger cross-national and longitudinal study: Youth in Europe (YES!), conducted in 4 European countries. This study draws on Swedish data. <u>Quantitative.</u></p>	<p>Sampling: used a two-step cluster sampling approach. First wave.</p>	<p>Students completed self-report questionnaires & test. Family-based SES data came from Swedish statistical data.</p>	<p>Stata 13. Regression models.</p>	<ol style="list-style-type: none"> 1.Family SES (decreased levels economic & material resources) associated with negative self-rated health. 2.Youth's own economic status: <ol style="list-style-type: none"> i. Relative deprivation more important than absolute deprivation for predicting internalizing symptoms. ii. Greater peer status associated with decreased internalizing symptoms & positive self-rated health. Indicating the importance of social support and peer affiliation for adolescent wellbeing. ii. Greater peer popularity is associated with positive self-rated health and higher levels of adolescent .
<p>Study 5: Saunders, Peter, & Chen, Ke-Mei. (2015). Deprivation and the of children and young people in Taiwan. <i>Asia Pacific Journal of Social Work & Development (Routledge)</i>, 25(2), 80-95. doi:10.1080/02185385.2015.1049650</p>	<p>N=4470 Age: children=7-12years & youth=13-24years</p>	<p><u>Aim of study:</u> Using a child centric approach to explore the relationship between deprivation, <u>subjective wellbeing (SWB)</u> and educational experiences for children and young people in Taiwan.</p> <p><u>Measures:</u></p> <ol style="list-style-type: none"> 1.Low income families. 2.SWB: life satisfaction, education contentment & performance. 	<p>Taiwan</p>	<p>Longitudinal survey, 2nd wave (total 3 waves) of The Taiwan Panel Study of Children and Youth (TPSCY) survey. <u>Quantitative.</u></p>	<p>Systematic, random sampling from among low income families.</p>	<p>Survey with children & youth, and cares and social workers of children/young people.</p>		<ol style="list-style-type: none"> 1.Children had a higher level of wellbeing than young people (reflective of cumulative effect of poverty, how services are targeted, or increased cognitive awareness for youth). 2.Children and young people who were receiving welfare serves were not happy with their lives and had lower educational performance (due to associated stigma).

Author(s) and publication year	Participants and Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 6: Walper, Sabine. (2009). Links of perceived economic deprivation to adolescents' six years later. <i>Journal of Family Research (Zeitschrift für Familienforschung)</i>, 21(2), 107-127.</p>	<p>N=358 Age:14, mean (9-19 years)</p>	<p><u>Measures:</u></p> <ol style="list-style-type: none"> <i>Family structure:</i> as reported by youth. <i>Parental education:</i> as reported by mothers. <i>Economic deprivation:</i> subjective experience - maternal economic pressures (reported by mother) & financial hardship (reported by adolescents). <p><u>Adolescent :</u> <i>Somatic complaints</i> (Giessener Complaint Questionnaire for Children and Adolescents); <i>General self-esteem:</i> Rosenberg scale; <i>Depressiveness:</i> German Adaptation of the CES-D scale.</p>	<p>Germany 2002</p>	<p>Longitudinal data – drawn from larger German longitudinal research project on “Family Development after Parental Separation”. <u>Quantitative.</u></p>	<p>Sub-sample of larger study, in final wave who completed questionnaire & maternal report on economic pressure.</p>	<p>Adolescents completed phone interviews & mailed questionnaires; and parental reports.</p>	<p>Multiple regression analyses.</p>	<ol style="list-style-type: none"> 1.Early life experience of financial hardship are associated with negative physical , self-esteem and depressiveness for young people, even later in life. Economic deprivation is not only a risk for children and young people, but has long lasting implications for their adult health. 2.The results showed small, but significant differences between gender, with females showing more detrimental, long-term outcomes. 3.Parental separation showed a weak but significant negative effect on young people's .

QUALITATIVE STUDIES

Author(s) and publication year	Participants, Age, & Location	Aim of Study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 1: Ho, K. Y., Li, W. H. C., Chung, J. O. K., Lam, K. K. W., Chan, S. S. C., & Xia, W. (2016). Factors contributing to the psychological for Hong Kong Chinese children from low-income families: A qualitative study. <i>International Journal of Mental Health Systems</i>, 10(1). doi:10.1186/s13033-016-0088-0</p> <p><u>Note: also included under participation.</u></p>	<p>N= 42 Age: 10-13 years Hong Kong 2012-13</p>	<p><u>Aim of the study:</u> To enhance understanding of how poverty and income disparity negatively affect the <u>psychological</u> of Hong Kong Chinese children.</p> <p><u>Participation in:</u> leisure/extracurricular (e.g. exercise, play, TV) education (e.g. homework), and social activities.</p>	<p>Methodology: Phenomenology <u>Qualitative.</u></p>	<p>Random sample of 42 children from high and low income districts in Hong Kong.</p>	<p>Semi-structured interviews with children. Covered 7 areas of children's lives: family background, living environment, usual diet, clothing, leisure activities, learning opportunities & personal feelings.</p>	<p>Coding and thematic analysis.</p>	<p><u>In reference to children from low income families:</u></p> <ol style="list-style-type: none"> <i>Living space for daily activities:</i> children reported not enough space for daily activities, and living conditions lead to health problems (e.g. back pain). <i>Physical activity:</i> children reported adopting a sedentary lifestyle with leisure time spent watching TV & playing computer games. They reported deprived of opportunity to join courses. Considered themselves to be physically active. <i>Usual diet:</i> children reported eating unhealth diets (high sodium & cholesterol content), not wasting food, eating expired food; and not understand disadvantages of unhealthy diet. <i>Material resources:</i> children reported could not afford material goods such as clothes (wear 2nd hand clothes from older siblings), toys (got 2nd hand toys from neighbours);prefer not to make friends with high income children as felt 'inferior'. <i>Opportunities for children to take part in various kinds of activities:</i> children reported deprive of opportunity for social activities, participate in extracurricular activities, asked by parents to cut down on expenses & stay home in weekends. NGOs offered activities, but some children prefer not to participate as felt 'stigmatized' by peers. <i>Stationary and educational resources:</i> children reported education resources generally insufficient (wear older uniforms, used textbooks, borrow older versions or photocopied textbooks0; reported uniforms did not fit or were too old and felt ridiculed by peers, lacked internet access and restricted in completing online assignments.

Author(s) and publication year	Participants, Age, & Location	Aim of Study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 2: Phiri, Tendai, & Abebe. (2016). Suffering and thriving: Children's perspectives and interpretations of poverty and in rural Zambia. <i>Childhood</i>, 23(3), 378-393. doi:10.1177/0907568216637654</p>	<p>N=24 Age:9-15 years Zambia 2012-13</p>	<p><u>Aim of study:</u> Gain insight into the subjective experiences and perspectives of poverty and of Zambian children. Questions included: meanings about poverty, ill-being & , manifestations of poverty, poverty identity (from children's view). And adults: perceptions of childhood, poverty & , & children's contributions to household livelihood activities.</p> <p><u>Survey questions:</u> individual biographic data, household assets, household productivity and livelihoods.</p>	<p>Ethnographic qualitative fieldwork : methodology. <u>Qualitative.</u></p>	<p>Sampling method not discussed.</p>	<p>Interviews & focus groups with children, & interviews and survey with parents. Participant observation.</p>	<p>Not discussed, but themes produced.</p>	<p><u>Material poverty:</u></p> <ol style="list-style-type: none"> 1.Appearance (worn clothing, no soap or lotion). 2.Resources (grass-thatched roof, lack of domestic (TV, beds),or facilities (toilets)). 3.Food (lack of food). <p><u>Productive and reproductive dimensions of poverty:</u></p> <ol style="list-style-type: none"> 1.Chidlren contribute to household livelihood/productivity. 2.Lack of money and resources are a primary concern. 3.Shortage of assets and resources create vulnerability. 4. Ganyu (local practice of working for wealthier families) can reduce or exacerbate poverty (i.e. unfavourable working terms, no time for own household). 4.Kaloba (local practice of money lending) can also perpetuate poverty (i.e. increase debt, unable to repay). 5.Children in work can have negative impacts (e.g. no rest, heavy work, impact education) and resultant impact on . <p><u>Social-relational manifestations of poverty and :</u></p> <ol style="list-style-type: none"> 1.Cyclical nature of poor family functioning/relations (e.g. disputes, not working well together, a child who doesn't listen well/not socialized) often resulting from poverty, which in turn reduces productivity and can lead to further entrenched deprivation and reduced . <p>This research reveals the complex dimensions of poverty as viewed by children and the relational, contextual and social facets of poverty & .</p>

Table: Updated 2020-2023 - Presenting an Overview of Primary Studies Included in the MMRS – Child Poverty and Wellbeing**QUANTITATIVE STUDIES**

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 1: Chen, K. M. (2020). Subjective poverty, deprivation, and the subjective of children and young people: A multilevel growth curve analysis in Taiwan. <i>Children and Youth Services Review</i> , 114. https://doi.10.1016/j.chilyouth.2020.105045	Children, 10-19 years N=1222	Wellbeing measures: Life satisfaction & School satisfaction. Subjective poverty – child rated. Deprivation measures– child. <u>Control variables:</u> sex, age, number of siblings, birth order, and receipt of public assistance.	Taiwan	Longitudinal – Taiwan database of Children and Youth in Poverty (TDCYP) (started 2009). <u>Quantitative</u>	Representative, random sample from TDCYP.	Questionnaires – children.	Multi-point time design, multi growth curve modelling.	Self-rated poverty is associated with lower subjective wellbeing, but not with school satisfaction. Higher deprivation is associated with lower subjective wellbeing and lower school satisfaction.

QUALITATIVE STUDIES – No qualitative studies.

Appendix F: Mixed Methods Research Synthesis (MMRS) – Child Poverty and Participation

Search Strategy: Inclusion and Exclusion criteria

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICo and the ‘children living in poverty and their participation’ component of the research question – *What is the consequence of poverty on tamariki/children’s patterns of participation in occupations, their potential and ?*

These include:

7. Population/Participants: children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
8. Phenomenon: Clear evidence that poverty is defined at least by material definitions (i.e., low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).
9. Context/outcome is met: Participation = “Involvement in a life situation [or occupations] (ICF, 2013, p.8). “The fact that you take part or become involved in something...the act of taking part in an event or activity” (Cambridge Dictionary, n.d). “Occupational participation defines what we do in the broadest sense...Participation describes our engagement in the broad categories of work (study), play, and the activities of daily living that undergird everyday life” (Kielhofner, 2008, as cited in Heras de Pablo et al., 2017, p. 107).
10. Study type: Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g., in a reputable journal publication).
11. Study publication period criterion is met (e.g., between 2009-2019).
12. Language limit is met (i.e., English language publication).

Exclusion criteria:

4. Articles are excluded if they **do not meet any of the above inclusion criterion**.
5. Conference proceedings, theses, dissertations, and unpublished (non-peer reviewed) studies are excluded.
6. Studies are excluded if after the *critical appraisal process the articles are assessed to be of a low quality study design*. E.g. After quality assessment using CASP appraisal checklists.

MMRS Search terms.

Children: Child*, OR adolescents OR youth OR teenager

AND

Poverty: Poverty OR low income OR socioeconomic OR disadvantaged

AND

Participation: Participation OR engagement OR involvement

Limiters:

Date range: 2009-2019

Language: English

Journals: peer reviewed/academic journals

Age groups: All child (0-18 years)

Databases searched: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar).

Search replicated for 2020-2023 period: N=1544, with initial review led to n=30, and after further review (match to PICo) led to n=9.

Appendix G: Table Presenting an Overview of Primary Studies Included in the MMRS – Child Poverty and Participation (2009-2019); and Updated Search Results Table (2020-2023)

QUANTITATIVE STUDIES

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 1: Andrabi, Nafeesa, Khoddam, Rubin, & Leventhal, Adam M. (2017). Socioeconomic disparities in adolescent substance use: Role of enjoyable alternative substance-free activities. <i>Social Science & Medicine</i> (1982), 176, 175-182. doi:10.1016/j.socscimed.2016.12.032</p>	<p>N=3396 Mean age = 14 years</p>	<p>1.SEP-parental education 2.Substance use 3.Alternative reinforcement-PES <u>Covariates:</u> gender, sex, ethnicity, living situation.</p>	<p>United States of America (USA) – Los Angeles.</p>	<p>Longitudinal – part of Happiness and Health Study. <u>Quantitative</u></p>	<p>Sampled from 10 high schools, representing diverse socio-demographic characteristic</p>	<p>Survey – students.</p>	<p>Descriptive statistics Linear & Logistic binary regression modelling</p>	<p>Lower SEP was associated with increase alcohol & marijuana use in adolescents.</p>
<p>Study 2: Aumètre, Florence, & Poulin, François. (2016). Trajectories of Breadth of Participation in Organized Activity During Childhood. <i>Social Development</i>, 25(2), 352-369. doi:10.1111/sode.12142</p>	<p>N=959 Mean age = 65.2 months</p>	<p><u>Instruments:</u> Breadth of participation in organized activities Calculating the breadth of participation score <u>Predictors:</u> Family structure (2 or 1 parent/s) Annual family income Mother’s & father’s education Teacher’s assessment of child’s behaviour (aggression, shyness, pro-sociality).</p>	<p>Canada</p>	<p>Longitudinal – part of a broader researcher project preventing violence & school dropout. <u>Quantitative</u></p>	<p>Recruited from larger study group.</p>	<p>Questionnaire – mothers/carers & teachers.</p>	<p>Non-parametric multilevel & semi-parametric group-based modelling.</p>	<p>1.Low family income associated with decreased breadth of participation in children’s activities. 2. Lower parental education associated with lower participation levels for children.</p>

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 3: Brophy, Sinead, Cooksey, Roxanne, Lyons, Ronan A., Thomas, Non E., Rodgers, Sarah E., & Gravenor, Michael B. (2011). Parental factors associated with walking to school and participation in organised activities at age 5: analysis of the Millennium Cohort Study. <i>BMC Public Health</i>, 11(1), 14-14. doi:10.1186/1471-2458-11-14</p>	<p>N=18552 Age= 9months, 3 & 5 years.</p>	<ol style="list-style-type: none"> 1.Transport to school (i.e. walk, cycle) 2.Structured activities (e.g. club, sport, physical play, TV etc.) 3.Demographic variables (sex, ethnicity). 4.Socio-economic variables (family income, academic qualification). 5.Housing/area 6. Parental factors (age, health, smoking) 7.Child factors (BMI, SDQ, Bracken score). 	<p>United Kingdom (UK).</p>	<p>Longitudinal – part of Millennium Cohort Study(MCS). <u>Quantitative</u></p>	<p>Stratified cluster sampling.</p>	<p>Survey/ interview-mothers/ carer. Data from MCS</p>	<p>Logistic Regressions.</p>	<ol style="list-style-type: none"> 1.Lower family income associated with higher levels of walking to/from school. 2.Lower family income associated with lower levels of participation in organised sports. 3. Activity levels generally higher for children from families of higher SES and living in affluent areas.
<p>Study 5: Dearing, Eric, Wimer, Christopher, Simpkins, Sandra D., Lund, Terese, Bouffard, Suzanne M., Caronongan, Pia, . . . Weiss, Heather. (2009). Do neighbourhood and home contexts help explain why low-income children miss opportunities to participate in activities outside of school? <i>Developmental Psychology</i>, 45(6), 1545-1562. doi:10.1037/a0017359</p>	<p>N=1420 Age =kindergarten-sixth grade. Nationally representative sample.</p>	<ol style="list-style-type: none"> 1.Demogrpahics (age, sex, birth weight, ethnicity, school, parent-education, employment & income) 2.Cognitive stimulation & emotional support (HOME-SF) 3.Neighbourhood affluence & safety/order 4. Activity participation 5. Additional child, parent & home characteristics (parent flexibility & self-efficacy, home order & cleanliness, child and caregiver cognitive abilities). <p>Controlled for: primary caregiver psychological distress, child behavioural problems, child health at birth, time lived in neighbourhood.</p>	<p>USA</p>	<p>Longitudinal – part of larger PSID study. <u>Quantitative</u></p>	<p>2 children in each eligible family randomly selected.</p>	<p>Questionnaire / Interview parents/ carers.</p>	<p>Ordinal logit and nonlinear modelling</p>	<p><u>Children:</u></p> <ol style="list-style-type: none"> 1. Lower income families associated with lower participation levels in range of out-of-school activities 2.Neighbourhood conditions (i.e. decreased safety, order & affluence) associated with lower participation levels. 3.Lower cognitive stimulation levels in the home was a mediating factor associated with lower participation levels.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 6: Godfrey, Erin B., & Cherng, Hua-Yu Sebastian. (2016). The Kids are All Right? Income Inequality and Civic Engagement among Our Nation's Youth. <i>Journal Of Youth And Adolescence</i> , 45(11), 2218-2232.	N=12,240 Youth Age: 15 years	1. <u>Country level income inequality</u> (Gini coefficient). 2. <u>Civic engagement</u> (voluntary work, importance or helping others & working to correct social and economic inequalities?) 3. <u>Socioeconomic status (SES)</u> – parents' education & paid occupations, & family income.	USA	Longitudinal – part of Educational Longitudinal Study of 2002 (and USA census data, 2000). Nationally representative data. <u>Quantitative</u>	<u>First stage sampling:</u> stratified probability sample of sample national high schools. <u>Second stage:</u> sample selection from schools.	Interviews with youth.	Statistic methods: Logistic regression.	1. Lower SES associated with increased civic engagement at county level. 2. Higher rates of civic engagement amongst Black & Asian America youth at county level. 3. Country level inequality slightly associated with high civic engagement I youth.
Study 8: Jones, A. P., van Sluijs, E. M. F., Ness, A. R., Haynes, R., & Riddoch, C. J. (2010). Physical activity in children: Does how we define neighbourhood matter? <i>Health and Place</i> , 16(2), 236-241. doi:10.1016/j.healthplace.2009.10.004	N=3935 Children Age: 11 years	1. Physical activity level: Accelerometer 2. Neighbourhood – level of residential material deprivation. Covariates: Child's BMI, age, parents/carers occupation-social class groups.	UK	Longitudinal – part of larger Avon Longitudinal Study of Parents and Children (ALSPAC). <u>Quantitative</u>	Recruit from ALSPAC sample N=14,541 resulting in N=11,952 & with N=3935 sample providing required physical activity data.	Clinic assessment interview & questionnaire – parents/carers.	Statistics: Multilevel regression models.	1. <i>Little difference by neighbourhood in PA levels for children.</i> And that area effects on health & related behaviours are generally relatively small. Individual perceptions of neighbourhood (area surrounding each home/school) & home environment have more influence on children's PA levels.
Study 10: Nelson, I. A., & Gastic, B. (2009). Street ball, swim team and the sour cream machine: a cluster analysis of out of school time participation portfolios. <i>Journal of Youth & Adolescence</i> , 38(9), 1172-1186. doi:10.1007/s10964-008-9372-x	N=6338 Age: School age/10 th grade	1. Out of school activities (18 items) 2. School climate 3. Victimization at school 4. Truancy & delinquency 5. Academic achievement & honours. Covariates: age, sex, ethnicity, SES (parental education, occupation & income), type of school.	USA	Longitudinal - part of Educational Longitudinal Study of 2002 (ELS:2002). Nationally representative data. <u>Quantitative</u>	<u>Two stage sampling:</u> randomly selected schools from ELS:2002. Then randomly selected students from school list.	Students complete cognitive test (maths & reading) & questionnaire.	Statistics: multiple regression models (ANOVA).	1. Low SES and minority ethnicities were associated with more time participating in unstructured recreation (videos, video games, non-school spots, hanging out), more time spent in paid work, negative attitudes about school, victimisation, lower academic achievement, increased time spent watching videos & using computers.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 11: Pabayo, R. A., Gauvin, L., Barnett, T. A., Morency, P., Nikiéma, B., & Séguin, L. (2012). Understanding the determinants of active transportation to school among children: Evidence of environmental injustice from the Quebec longitudinal study of child development. <i>Health & Place, 18</i>(2), 163-171.</p>	<p>N=2940 Age:6-8 years</p>	<ol style="list-style-type: none"> 1.How get to school (in/active transport). 2.Sociodemographic variables (sex, age, birth rank, immigrant status, family income). 3.Household income at 6 years of age. <p>Mother's perception of neighbourhood quality.</p> <ol style="list-style-type: none"> 5.Mother's perception of child's health. 6.Having an older sibling. 7.Mother's immigrant status. 8. Social cohesion: neighbourhood (parental views). 9.Neighbourhood decay. <p>Distance to school. Pedestrian-vehicle collisions. Car dependency.</p>	Canada	<p>Longitudinal - part of Quebec Longitudinal Study of Child Development (QLSCD). Nationally representative data.</p> <p><u>Quantitative</u></p>	Random sampling from QLSCD.	Parents interviewed.	<p>Statistics: bivariate analysis, regression analysis.</p>	<ol style="list-style-type: none"> 1.Children in deprived neighbourhoods/-poverty were more likely to walk to school, but were at increased risk of injuries from vehicles.
<p>Study 14: Schwartz, Kate, Cappella, Elise, & Seidman, Edward. (2015). Extracurricular Participation and Course Performance in the Middle Grades: A Study of Low-Income, Urban Youth. <i>American Journal Of Community Psychology, 56</i>(3-4), 307-320. doi:10.1007/s10464-015-9752-9</p>	<p>N=625 Age:11.3 years mean.</p>	<ol style="list-style-type: none"> 1.Extracurricular participation (school, community, religious and athletic settings) 2.School performance(self-reported GPA). <p>Covariates: ethnicity, family structure, family employment status, academic behavioural engagement.</p>	USA	<p>Longitudinal – part of larger Adolescent Pathways Project (APP) a longitudinal study of low-income, urban youth.</p> <p><u>Quantitative.</u></p>	Recruited from waves 1-3, subsample of APP.	Surveys administered with students at school.	<p>Statistics: descriptive, explorative factor analysis (EFA).</p>	<ol style="list-style-type: none"> 1.Low-income youth less likely to participate in extracurricular activities. 2.Comunity & athletic participation was associated with academic achievement and course performance. 3.Religious activity was negatively associated with course performance. 4.Participation across more than 1 settings was slightly associated with increased course performance.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 15: Steinberg, D. B., & Simon, V. A. (2019). A Comparison of Hobbies and Organized Activities among Low Income Urban Adolescents. <i>Journal of Child and Family Studies</i>, 28(5), 1182-1195. doi:10.1007/s10826-019-01365-0</p>	<p>N=91 female students Age:10-15 years</p>	<ol style="list-style-type: none"> 1. Activity engagement: (OAI). 2. Family disadvantage: (parental education, partner status, number children in house, family income, family disorganisation (CHAOS)). 3. Neighbourhood disadvantage: (Perception of Neighbourhood Scale). 4. Youths' peer functioning: (interpersonal competence, prosocial qualities). 5. Interpersonal competence (AICQ). 6. Quality of close friendships: (NRI). 7. Prosocial behaviour: (SDQ). 	USA	<p>Longitudinal – of psychosocial development in early adolescence. <u>Quantitative.</u></p>	Sample recruited from an urban community.	Interviews/ questionnaire - youth & parents/ carers.	Statistics: hierarchical regression.	<ol style="list-style-type: none"> 1. Hobbies are an important part of young girls' activity engagement, distinct from organised activities. 2. Organised activity participation was lower amongst more disadvantaged youth. 3. Hobbies was unrelated to family or neighbourhood background, meaning it might be more widely accessible to youth. 4. Organised activity associated with prosocial behaviour and positive interactions with same sex friends. 4. Hobby participation associated with less conflict & criticism in same sex friendships, particularly for girls from disadvantaged backgrounds, (including prosocial behaviour and interpersonal competence).
<p>Study 16: Vandermeerschen, Hanne, Vos, Steven, & Scheerder, Jeroen. (2015). Who's joining the club? Participation of socially vulnerable children and adolescents in club-organised sports. <i>Sport, Education & Society</i>, 20(8), 941-958. doi:10.1080/13573322.2013.856293</p>	<p>N=2016 Age: 6-12 & 13-18 years.</p>	<ol style="list-style-type: none"> 1. Sports participation: club, & frequency. 2. Highest educational achievement of parents. 3. Single parent family. 4. Income poverty (<60% median, adjusted family size). 5. Age. 6. Gender. 7. Parental sports involvement. 	Belgium	<p>Cross-sectional survey – <i>Study on Movement Activities in Flanders</i>, a repeated study, occurring every 10 years since 1969. <u>Quantitative.</u></p>	Two-stage sampling	Standardized surveys – children & parents.	Statistics – multilevel logistic regression.	<ol style="list-style-type: none"> 1. Lower parental income, lower parental education, single parent household, decreased parental support were all associated with reduced participation in club-based sports. 2. Gender/female associated with reduced participation in club-based sports. 3. Age: decline in participation in club-based sports as children grow older (above 12 years).

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 18: Weininger, Elliot B., Lareau, Annette, & Conley, Dalton. (2015). What Money Doesn't Buy: Class Resources and Children's Participation in Organized Extracurricular Activities. <i>Social Forces</i>, 94(2), 479-503. doi:10.1093/sf/sov071</p>	<p>2 samples N=1207 & N=1370 Age: 6-15 years</p>	<p><u>Outcomes Measures:</u></p> <ol style="list-style-type: none"> 1.Extracurricular organised activities: (sports, religious activities, community groups). 2.Time diary (CDS), indicating various organised activities 3. Participation in school-based activities. 4.Expenditure in extracurricular activities. <p><u>Predictors:</u></p> <ol style="list-style-type: none"> 1.Material resources (income & wealth). 2.Parental work hours. 3.Parental education. 4. Characteristics of community (e.g. social capital, type of community). <p><u>Other factors:</u> family composition, transportation, homeownership, school type, region of country; demographics: child's age, mother's age, ethnicity, child's health.</p>	USA	<p>Longitudinal – part of Panel Study of Income Dynamics (PSID) begun in 1968; Child Development Supplement (CDS) of the PSID. Nationally representative sample (collected 2002-03). <u>Quantitative.</u></p>	Sample subset from PSID - meeting criteria (between 6-15 years).	Interview with mother/ caregiver & time diaries with child.	Statistics: regression modelling, sensitivity analyses, multivariate imputation.	<p>1.Reduced income & wealth, lower levels of maternal education, increased hours worked by mother, and fathers who are self-employed are factors associated with reduced expenditure on, and participation in extracurricular activities for children.</p>

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 19: Wijtzes, Anne I., Jansen, Wilma, Bouthoorn, Selma H., Pot, Niek, Hofman, Albert, Jaddoe, Vincent W. V., & Raat, Hein. (2014). Social inequalities in young children's sports participation and outdoor play. <i>The International Journal Of Behavioral Nutrition And Physical Activity</i>, 11, 155-155. doi:10.1186/s12966-014-0155-3</p>	<p>N=4726 Age: 6 years</p>	<p>1.Socioeconomic position (SEP): parental education, employment and household income. 2.Children's participation in sport. 3.Children's participation in outdoor play. Confounders: age, sex, ethnicity, season at birth.</p>	<p>Holland</p>	<p>Cross-sectional study – part of larger longitudinal study: Generation R study. <u>Quantitative.</u></p>	<p>Sample subset of Generation R study.</p>	<p>Parental reported questionnaire.</p>	<p>Statistics: descriptive, multiple logistic regression models.</p>	<p>1.Lower SEP was associated with reduced participation in sports and outdoor play. 2. Variations by ethnicity were found with high levels of participation in sports and outdoor play amongst native born Dutch children.</p>

QUALITATIVE STUDIES

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 4: Day, R., & Wager, F. (2010). Parks, streets and "just empty space": The local environmental experiences of children and young people in a Scottish study. <i>Local Environment</i>, 15(6), 509-523. doi:10.1080/13549839.2010.487524</p>	<p>N=56 Age=10-11 & 13-14 years. Scotland</p>	<p>Research aim: Exploring voices and experiences of children and young people from three areas (estates, urban inner city & rural) of southern Scotland about the important spaces, places and places in their local environment, their activities within them & qualities and factors relevant to their use.</p> <ol style="list-style-type: none"> 1. Family socioeconomic circumstances 2. Neighbourhood deprivation. 	<p><u>Qualitative.</u></p>	<p>Recruitment from schools & later direct recruitment from community based programmes. Representative of low and high deprivation neighbourhoods.</p>	<p>Focus groups, Interviews, & photoelicitation – with children & young persons.</p>	<p>NVivo software – coding and thematic analysis.</p>	<p><u>Important spaces & places:</u></p> <ol style="list-style-type: none"> 1. <i>Parks</i> (important for all age groups and SES status). 2. <i>Streets</i> (primary leisure activity for children from lower income families – a classed leisure space). Low income children spent less time in organised activities. 3. <i>Other informal spaces</i> (alternative spaces, often poor in quality, such as derelict sites, used by children of lower SES). <p><u>Preferences & constraints in the use of local environments (low deprivation areas):</u></p> <ol style="list-style-type: none"> 1. <i>Cleanliness maintenance & order</i> (more issues with vandalism, graffiti, litter, & safety issues) 2. <i>Relational issues</i> (concerns about bullying, violence, drug-taking & safety for low dep areas) <p><u>Being out of place: spatial exclusion:</u> Young people in estates felt excluded from spaces by adults, belonged nowhere & felt stigmatised.</p>

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 7: Heidelberger, L., & Smith, C. (2018). Physical Activity Beliefs and Influences from Inner City, Low-Income Children's Perspectives: A Qualitative Study. <i>Journal of Hunger and Environmental Nutrition</i>, 13(1), 70-83. doi:10.1080/19320248.2016.1227745</p>	<p>N=52 Children Age:8-13 years 1.Children from families with low household income. USA</p>	<p><u>Aim of study:</u> information about external and internal elements affecting children's habits, beliefs, attitudes about physical activity who are from families with low income. <u>Demographic data:</u> BMI, age, sex, ethnicity, household characteristics, family income level. Focus group questions: Person- "Why do you think people exercise?"; Behaviour – "How often are you active with your family & what kinds of activities do you do with them?"; Environment – "Describe your activities in winter versus summer?"</p>	<p><u>Theory:</u> Bandura's Social Cognitive Theory (focus on how a person's perceptions and cognitions affect behaviour). <u>Qualitative.</u></p>	<p>Recruited through flyers and community programmes.</p>	<p>Focus groups. Field notes. Questionnaires for parent/caregiver – demographic data.</p>	<p>Coding, thematic analysis. SPSS software for quantitative data.</p>	<ol style="list-style-type: none"> 1.Community programmes and schools important for supporting/access to Physical activity (PA). 2.Physical environment affects participation in PA: Seasonal (winter), neighbourhood safety, and urban concrete spaces reduced participation in PA. 3.Social factors: Family-lack of parental interest & focus on sedentary activities (TV) reduced participation in PA. 4.Gender and cultural factors influenced participation in PA.

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 9: McEvoy, E., MacPhail, A., & Enright, E. (2016). Physical activity experiences of young people in an area of disadvantage: 'there's nothing there for big kids, like us'. <i>Sport, Education and Society</i>, 21(8), 1161-1175. doi:10.1080/13573322.2014.994176</p>	<p>N=40 Age: 15-19 years. Ireland</p>	<p><u>Aim of study:</u> the place physical activity (PA) has in lives of young persons in disadvantaged neighbourhood with a focus on factors that enable and restrain participation in physical activity and interplay between these factors and how youth exercise and experience agency.</p>	<p><u>Methodology:</u> Focus groups. <u>Paradigm:</u> Social constructivism <u>Qualitative.</u></p>	<p>Convenience sample – youth in mainstream post-primary school, and alternative educational setting – from the Limerick Regeneration Areas (an area with high crime, violence, safety issues (drugs) & deteriorated physical environment)</p>	<p>Focus groups and follow-up interviews with young persons.</p>	<p>Thematic, inductive analysis.</p>	<p>1. <u>Support and influence:</u> social structures (family, peers) have strong influence on youths' ability to exercise agency in terms of participating in PA. 2. <u>Family:</u> influence participation in PA in practical ways & through encouragement. 3. <u>Peers:</u> influence participation through involvement and valuing involvement in PA. 4. <u>Surveillance, control and staying out of trouble:</u> a primary reason for participation in PA was staying out of trouble. 5. <u>Hangin' around:</u> primary form of activity due to feeling disempowered/ constrained agency resulting from lack of opportunities matching preferences of youth. Potential negative consequences (crime). 6. <u>Youth voice in decision-making:</u> Important for youth to have active role in decision-making that will positively influence participation in PA.</p>

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 12: Rock, Amelia, Barrington, Clare, Abdoulayi, Sara, Tsoka, Maxton, Mvula, Peter, & Handa, Sudhanshu. (2016). Social networks, social participation, and health among youth living in extreme poverty in rural Malawi. <i>Social Science & Medicine</i> (1982), 170, 55-62. doi:10.1016/j.socscimed.2016.10.005</p>	<p>N=16 Age: 13-19 years Malawi</p>	<p><u>Aim of study:</u> How the economic context shapes youths' participation and networks, and how in turn these factors affect their health.</p>	<p>Part of a larger mixed methods longitudinal study in Malawi investigating the Government's Malawi Social Cash Transfer Program (MSCTP)- qualitative component. <u>Qualitative.</u></p>	<p>Purposive sampling.</p>	<p>In-depth interviews (semi-structured) with youth & caregivers.</p>	<p>Coding & thematic analysis (using Atlas.ti software).</p>	<p>1. <u>Experiences of extreme poverty:</u> poverty threatened youths' social, restricted their participation in in/formal institutions, poverty had direct (reduced material assets) & indirect effects (reduced time, emotional resources, increased stigma & isolation).</p> <p>2. <u>Peer and social networks:</u> girls less participation in in/formal institutions & less supportive networks than boys, soccer was important means for social & physical activity for boys, school (and religious schools) offered multiple benefits such as increased social wellbeing, build social networks, increased participation. But some negative aspects of schooling (bullying). Bidirectional relationships between social participation & networks.</p> <p>3. Poverty (food insecurity, household responsibilities, shame) threatened youths' physical and mental health.</p> <p>4. Social support/peer social networks buffered negative mental effects & encouraged positive physical behaviours.</p>

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 13: Rowe, Paula, & Savelsberg, Harry. (2010). How are young people's experiences of 'home' affecting their engagement with schooling and community? <i>Youth Studies Australia</i>, 29(3), 36-42.</p>	<p>N=8 Age: 18-23 years, 4 male & 4 female youths. Young people – from backgrounds of persistent social & economic disadvantage. 2 groups: 1. High housing mobility in/out of neighbourhood & high school mobility; 2.High housing mobility, but primarily remain in same neighbourhood & school. Australia</p>	<p>Aim of study: Young people's experiences of where they lived during high school years, effect of housing tenure on: family relationships, ability of families to provide stable, supportive and resourceful home contexts for young persons. Also to investigate effects of housing tenure on the connectedness of young persons to social contexts such as schooling.</p>	<p>Honours Project. Qualitative data collection methodology ('voiced research'). <u>Qualitative</u></p>	<p>Recruited from tenant register of Unity Housing Company (housing provider) after referral from Neighbourhood Development Officer.</p>	<p>Semi-structured interviews with young persons.</p>	<p>Thematic analysis</p>	<p>1. <u>School Context</u>: High mobility out of neighbourhood and school resulted in negatives effects on school (wagging, bullied, isolated, suspension, reduced completion of high school). 2. <u>Post-school</u>: High mobility out of neighbourhood and school resulted in negatives effects vocationally (limited tertiary education, employment and more problems with accommodation). 3. <u>Domestic & Community Context</u>: High neighbourhood and school mobility resulted in stressful relationships in home (felt anxious, abandoned), reduced parental support (felt 'homeless at home'), not engage in homework, and strained or non-existent relationships with peers, teachers & community (e.g. join sports groups or clubs) 4. <u>Future prospects</u>: High neighbourhood and school mobility resulted in belief they would never get work or a house they wanted.</p>

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 17: Veitch, J., Hume, C., Salmon, J., Crawford, D., & Ball, K. (2013). What helps children to be more active and less sedentary? Perceptions of mothers living in disadvantaged neighbourhoods. <i>Child: Care, Health And Development</i>, 39(1), 94-102. doi:10.1111/j.1365-2214.2011.01321.x</p>	<p>N=38 Age: 8-12 years Australia</p>	<p><u>Aim of the study:</u> Mothers' perceptions of the influences on their child's screen-based activities and physical activity (PA) levels.</p>	<p>A qualitative study design – part of a larger longitudinal study of women and their children living in socioeconomically disadvantaged neighbourhood: Resilience for Eating and Physical Activity Despite Inequality (READI) study. <u>Qualitative.</u></p>	<p>Purposive sampling.</p>	<p>Interviews with mothers in their homes.</p>	<p>Coding and thematic analysis (NVivo software).</p>	<p><u>Physical activity</u></p> <ol style="list-style-type: none"> 1. <i>Parental encouragement, support and modelling:</i> helped children participate in PA. 2. <i>Sport culture in a rural town:</i> helped children participate in PA. 3. <i>The physical home and neighbourhood:</i> having wide variety of play & sports equipment, living in a cul-de-sac, access to sporting facilities, parks and safe areas for walking & cycling helped children participate in PA. 4. <i>Child's individual preferences:</i> personality traits, enjoyment of PA & natural tendency, were important for children in participating in PA. 5. <i>Dog ownership:</i> dog ownership meant higher levels of walking as child. <p><u>Screen-time behaviours</u></p> <ol style="list-style-type: none"> 1. <i>Parental control:</i> rules and encouraging alternative outdoor activities; 2. <i>child's individual preferences;</i> were influenced a child's amount of screen time.

Table: Updated 2020-2023 - Presenting an Overview of Primary Studies Included in the MMRS – Child Poverty and Participation**QUANTITATIVE STUDIES**

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 1: Ahmed, S., Gomersall, S., & Khan, A. (2023). Trends and determinants of organised sports participation in immigrant and Australian children: A nine-year follow-up. <i>Journal of Science and Medicine in Sport</i> , 26(2), 125-131. https://doi.10.1016/j.jsams.2023.01.007	Children aged 6-15 years. N=3963 Children classified as Australian (born in the country), or migrant background (from low-middle-income-countries (LMIC) or high-income-countries (HIC), or mixed background).	<u>Independent variables:</u> age, sex, BMI, behavioural characteristics (Screen time, , sleep, psychological difficulties), family characteristics (numbers of siblings, TV rules, SEP, , school characteristics, peer relations (bullying), neighbourhood characteristics (parks, traffic, public transport access, lighting, footpaths etc.).	Australia.	<u>Quantitative.</u> Data drawn from Longitudinal Study of Australian Children (LSAC). Theoretical background: Brofenbrenner' s Social-Ecological Model	Stratified clustered sample design.	Data drawn from cohort study. Parent/s interviewed.	Descriptive statistics. Multiple imputations by chained equations (MICE). Multilevel binomial logit modelling.	Participation in team sports increased between 6-11 years, and declined between 11-15 years across all groups (Australian, LMIC, and HIC). Low SEP, being female, sleep difficulties, psychological difficulties, high screen time, and increased number of siblings were associated/determinants of less participation in organised sports.
Study 2: Hjalmarsson, S. (2023). Pay to play? Economic constraints and participation in extracurricular activities. <i>European Sociological Review</i> , 39(4), 586-600. https://doi.10.1093/esr/jcac061	Children, average age = 14.6 years. N=3457	Household disposable income and quintiles (Swedish). Parental education. Immigration background. Family structure (number of parents, and children in household). Type of municipality (availability and range of extracurricular activities, transport options available, urban, rural).Number	Sweden.	<u>Quantitative.</u> Panel data from nationally representative sample of Swedish children, from longitudinal study: Children of Immigrants longitudinal Survey in four European Countries (CILS4EU).	Sampling using stratified three-stage sampling approach.	Questionnaire	OLS-regression models. Linear probability models (LPM).	Changes in disposable household income not associated with differences in participation in extracurricular activities. (Although weak association for adolescents from lower income households to lower levels of participation in extracurricular activities.) Differences in participation better explained by cultural and parental logic (e.g. parental pretences for participation; shaped by prior experiences, lifestyle preferences and other cultural factors). Although

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
		of siblings. Extracurricular participation over the week – self-reported. Over a 1-year period (ranging from 14-16 years of age). Gender, age at interview.						other resource constraints could hinder participation.
Study 3: Männikkö, N., Ruotsalainen, H., Marttila-Tornio, K., Kääriäinen, M., & Miettunen, J. (2020). Parental socioeconomic status, adolescents' screen time and sports participation through externalizing and internalizing characteristics. <i>Heliyon</i> , 6(2). https://doi.10.1016/j.heliyon.2020.e03415	Children aged up to 16 years. N=5950	SES of parent/s, or guardians (educational level occupational status and employment status). Participation in physical activity and sports (self-reported). Internalising and externalising symptoms: Youth Self Report (YSR). Age, sex of child.	Finland.	<u>Quantitative</u> . Data drawn from Northern Finland Birth Cohort 1986 Study.	Representative sample from cohort study.	Sociodemographic data, YSR questionnaire, and self-reports on PA from children.	Statistical analysis: chi-square difference test, Comparative Fit Index (CFI), Tucker-Lewis Fit Index (TLI), Root Mean Square Error of Approximation (RMSEA).	Parental SES was a significant direct risk of later adverse SES for children (both genders). Parental low SES associated with lower participation in physical activity, sports (both genders). Externalising problems in adolescence associated with higher levels of screen time (both genders) and can restrain female participation in sports. High levels of internalising problems associated with reduced participation physical activity, especially amongst males.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 4: Owen, K. B., Nau, T., Reece, L. J., Bellew, W., Rose, C., Bauman, A., Halim, N. K., & Smith, B. J. (2022). Fair play? Participation equity in organised sport and physical activity among children and adolescents in high income countries: A systematic review and meta-analysis. <i>International Journal of Behavioral Nutrition and Physical Activity</i> , 19(1), 1-13. https://doi.10.1186/s12966-022-01263-7	Studies involving children aged 4-17 years (at school); multi-country.	Eligibility criteria: Children, Multiple countries but primarily western and European countries; published in English, Between 2010-2020; study designs (cross sectional, cohort or experimental); quantitatively assessed SES factors for sports, and physically active leisure & for SES.	Multi-country.	<u>Quantitative.</u> Systematic review/meta analysis (registered). PRIMSA. 2 researchers review search.	Extensive search strategy through databases (e.g. PubMed, Scopus etc.); search terms (sport, physical activity, equity, country limits). results.	-----	Risk of bias assessment. Effect measures (statistical analysis, Cohen's d, comparative analysis). Structural equation modelling approach to multi-level meta-analysis. Unconditional mixed effects models. Assessing certainty of assessment.	A small, but significant effect size showing that <u>SES is associated with reduced participation in sports and with physical activity</u> , but <u>not with physically-based leisure activities</u> . The effect size was higher for participation in sports. Not moderated by age.
Study 5: Perks, T. (2020). Trajectories of sport participation among children and adolescents across different socio-economic categories: Multilevel findings from the national longitudinal survey of children and youth. <i>Sociology of Sport Journal</i> , 37(3), 264-268. https://doi.10.1123/ssj.2018-0096	Children from 6-9 through to 14-17 years. N=4858	Control variables: gender, age, region in country. Socioeconomic level: household income, educational level, working status, partner status. Measures of un/organised sports: self-report from parent how often participated in unorganised (without a coach/lessons) organised sports (with a coach, with lessons).	Canada.	<u>Quantitative.</u> National Longitudinal Survey of Children and Youth (NLSCY).	A working sample drawn from the NLSCY.	Self-reports from parent/s. Socio-demographic data.	Descriptive statistics. Multilevel growth curve modelling. Bayesian Information Criterion (BIC)-model fit.	Low SE level is associated with reduced participation in unorganised and organised sports and this persists as the children age.

Author(s) and publication year	Participants & Age	Outcome measures	Location and setting	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 6: Rittsteiger, L., Hinz, T., Oriwol, D., Wäsche, H., Santos-Hövenner, C., & Woll, A. (2021). Sports participation of children and adolescents in Germany: Disentangling the influence of parental socioeconomic status. <i>BMC Public Health</i>, 21(1), 1-17. https://doi.10.1186/s12889-021-11284-9</p>	<p>Children between ages 6-7 years. N= 5977</p>	<p>Measures everyday physical activity (PA), sport in and outside of school, and organized clubs – against PA guidelines.</p> <p>SES – parental: educational qualification, occupational status, and net income.</p> <p>Measure opportunities in residential areas and family & peer support – combined. PA and sports levels reported in minutes/week.</p>	<p>Germany.</p>	<p><u>Quantitative</u>. Longitudinal study – MoMo, KIGGS. Representative of German children and adolescents.</p>	<p>Use data from the Motorik-Modul study (MoMo), a subsample of the German Health Interview and Examination Survey for Children and Adolescents (KIGGS). Oversample from the study, randomly selected.</p>	<p>Data from larger Cohort study – questionnaire used in KIGGS study.</p>	<p>Wilcoxon rank-sum test for statistical significance, and Craggs's double-hurdle model.</p>	<p>Lower SES, lower supports, lower opportunities associated with reduced participation in organised sports (boys show higher participation than girls, and higher participation for adolescence vs younger children, with peak at 11-13 years period). Some differences noted for children of migrant backgrounds (more time spent in organised and unorganised physical activity).</p> <p>However, SES only marginally correlates with participation in unorganised sports.</p>

QUALITATIVE STUDIES

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
Study 1: Hernandez, M. I., Miller, E. C., Prieto, L. A., Columna, L., Biese, K. M., & Bell, D. R. (2023). The current youth sport culture and its impact on sport participation experiences of low socioeconomic status families. <i>Internet Journal of Allied Health Sciences & Practice</i> , 21(2), 1-12. https://doi.org/10.46743/1540-580X/2023.2297	Parent/s of children who are aged between 8-18 years. N = 12 USA	Understanding experiences of low SES parent/s of youth athletes. Understand their experiences of participation in organised sports and youth sport culture and specialization. And to interpret and elucidate upon these experiences.	<u>Qualitative.</u> IPA – Interpretative phenomenological analysis. Theory – phenomenology, hermeneutics, and idiography.	Recruited by social media and email. Eligibility criteria: Consent, parent/s of children (8-18 years) participating in sports (last 12 months), low SES (below US federal poverty line).	Semi-structured interviews with parent/s of children (in person). Sports participation survey. Demographic data.	Audio recorded, transcribed verbatim. Reviewed by panel of experts in IPA and athletic training. Data analysed using IPA analytical protocol, using NVivo software – emerging themes. Applied Yardley's principles to access quality of IPA research.	<p><u>Theme 1: Benefits of Youth Sport Participation:</u> generally seen by parent/s that participation in sports was beneficial for their children in multiple ways. This involved 3 sub-themes.</p> <p><u>Subtheme 1: Child Health</u> – benefits such as being physically active, good for mental health, socialise with friends, and learn life skills. <u>Subtheme 2: Parent values</u> – focus on sports participation (socializing, being a team member, discipline) based on parental experiences and values, as opposed to achieving sports specialization /scholarships. <u>Subtheme 3: Breaking the cycle SES cycle</u> – added to health benefits were future life benefits such as stay out of trouble and life changing, possible sports scholarships, and related educational opportunities.</p> <p><u>Theme 2: Negatives and/or Barriers to Youth Sport Participation:</u> many barriers to sports participation for low SE children. 3 subthemes. <u>Subtheme 1: Costs of Sports (fees, equipment, travel)</u> – high cost of membership, equipment, travel, team travel, and not option for all of the family. <u>Subtheme 2: Time</u> – logistical barrier with multiple children, or single parent, or single income in household with several jobs, and avoid sports teams with travel obligations. <u>Subtheme 3: The Youth Sport Culture</u> – Viewed the 'pay to play' culture as negative as incurred expenses that inhibited children from low SES from participating.</p> <p><u>Theme 3: Strategies for Youth Participation in Sports:</u> Parents employed active strategies, grouped into 3 subthemes. <u>Subtheme 1: Kinship</u> - other members of community or extended family provided logistical or financial support and this was helpful for their children's participation in sports. <u>Subtheme 2: Planning ahead</u> – Need to plan finances ahead for the sports year, set aside other expenses, profile their children for sports scholarships. <u>Subtheme 3: Sports Selection</u> – Depended on costs and time (location, travel, family schedules, and being familiar with the sport were factors).</p> <p><u>Theme 4: Facilitators for Youth Sport Facilitation:</u> external supports such as sports coaches and structured programs.</p>

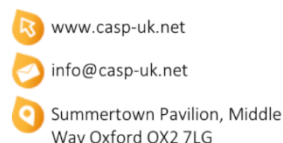
Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
							Grouped into 3 subthemes. <i>Subtheme 1: Affordable. Competitive teams, Leagues, or Programs, and Youth Sport Scholarships</i> – Structural facilitators for sports such as accessible programs (YMCA, schools, coaches and parent/s volunteering their time). <i>Subtheme 2 Athletic trainers (AT)</i> – ATs facilitated their children’s participation in sports and kept them safe from sports injuries which they fear due to the added costs to family. <i>Subtheme 3 Supportive coaches</i> – supportive for child with multiple sports, no pressure, and affordable fun options.
Study 2: Leadley, S., Hocking, C., & Jones, M. (2020). The ways poverty influences a tamaiti/child's patterns of participation. <i>Journal of Occupational Science</i> , 27(3), 297-310. https://doi.10.1080/14427591.2020.1738263	1 Child, 3 other adult participants (N=4). Aotearoa New Zealand.	Understand the child’s, parent/s and other adults perspectives on how poverty influences a child’s patterns of participation in occupations (activities of daily living, school/education, play/leisure and family activities). Family poverty (below NZ poverty line, living in high deprivation neighbourhood and attending low decile/SES school).	<u>Qualitative.</u> Theoretical underpinnings: Transactionism, Occupational Science, Life course, and Interpretivism. Qualitative Case study research methodology – single (instrumental) case study design.	Purposive sampling. Recruitment through local community organisations (e.g. Information sheets, study poster for self-selection).	Semi-structured interview, photo-elicitation, Family mapping activity, observations, documents review. NZiDep questionnaire.	Interpretative: direct and categorical data analysis strategies (Stake, 1995). Rigour: triangulation, member checking, thick description, participant’s quotes, peer review, researcher’s reflexivity. Ethical and cultural review.	<u>Coco’s patterns of occupation:</u> (habits, routines, roles, family rituals) - impacted by poverty such as more time spent in bedroom in recuperative activities, higher sedentary activities (e.g. TV), constraints on homework and computer use and on social activities in and out of home with friends, restricted quality and time spent in family activities. <u>Missing out on tamariki/children’s occupations:</u> Restricted participation in school trips, competitive or regionally representative sports teams, clubs, music groups, family activities, visiting extended family, holidays as a family, going to the movies or shopping at malls. Restricted distance travelled to occupations, occupations primarily located in close proximity to child’s home, frequent access by walking, or parental car. These restrictions were balanced with <u>child’s own agency and coping strategies</u> along with those of <u>parent/s and community</u> supported Coco’s participation occupations. Study provided evidence of that child poverty is <u>occupationally unjust</u> , <u>breaches children’s rights</u> to participate in occupations and is a form of <u>occupational deprivation</u> (an inability to participate in occupations due to social factors such as poverty). This has <u>implications</u> for the child’s and other children in poverty, for their <u>health, and future health and social outcomes</u> .

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
<p>Study 3: van Leeuwen, L., Jambroes, M., Annink, A., & Visser, K. (2022). Facilitating children's club-organized sports participation: Person-environment misfits experienced by parents from low-income families. <i>Children</i>, 9(11), 1-14. https://doi.10.3390/children9111746</p>	<p>Parent/s of children. N=24 Netherlands.</p>	<p>Identify and describe PE misfits, and associated individual and environmental factors – related to children's participation in sports, whose families have low income (based on Dutch minimum income). Part of a larger transdisciplinary study: Vital@2040; about increasing sports participation and physical activity for children at risk of decreased participation and physical activity.</p>	<p><u>Qualitative.</u> A naturalistic research model; Person-environment (mis)fit.</p>	<p>Sample recruited through recruitment at local organisations supporting children's sports participation.</p>	<p>Interviews with parent/s of children (in person). Demographic questionnaires</p>	<p>NVivo software. Interviews audio recorded and transcribed verbatim. Naturalism research model focuses on explaining the constructing and sustaining of social realities.</p>	<p><u>Financing Sports participation</u>: costs of sports participation was prohibitive and a struggle to afford (membership, travel costs, purchase and replacing equipment, and other costs such as food), budgeting to meet these costs required substantial planning. Made more difficult if a sole parent. <u>Strategies included</u>: buying cheaper items or borrowing, seeking financial support, gifting sports items for birthdays, seeking extended family support, strict budgeting. <u>General misfit between misfit</u> between demands of participating in sports and financial resources available. <u>Planning for, and Investing Time in, Children's Sports Participation</u>: Difficult to manage time for children's sports, time to travel and competing with other occupations (work, household activities, care of younger/multiple children, children's health issues). Being a sole parent increased time demands. <u>Strategies included</u>: strict time management, reallocating priorities (e.g. dinner prep first, children's sports timetable came first), support from other parent, careful planning and preparation. <u>Transporting Children between the Home and the Sports Club</u>: Difficult due to distance to sports activity, time of travel, not safe for child's independent travel (bike), or if family had no vehicle. <u>Strategies included</u>: borrow a vehicle, public transport (but time consuming), accept support, and select a local sports. A social network was supportive re: transport to sports. <u>Acquiring, Processing, and Providing Information</u>: Experience difficulties in acquiring and processing information required about sports options, and funding/supports available. Lack of information about the sports and supports was evident. Some parent/s lacked computer, online or literacy skills to support their access of related information. <u>Arranging and Accepting Support</u>: Some parent/s arranged and accepted support to reduce the misfit between their children's sports demands and barriers to this. But some found it difficult to arrange or accept support, experienced rejection of their requests, or were treated disrespectfully, or feared rejection and were hesitant about requests for support.</p>

Author(s) and publication year	Participants, Age, & Location	Aim of study & measures	Study design	Sampling technique	Data collection methods	Data analysis methods	Results
							<p>Strategies included: placing child's sports interests above their concerns, or belief in asking for support was acceptable.</p>

Appendix H: Examples of Completed CASP Quality Appraisals.

Longitudinal Study: CASP Quality Appraisal



CASP Checklist: 12 questions to help you make sense of a [Cohort Study](#)

How to use this appraisal tool: Three broad issues need to be considered when appraising a cohort study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 12 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Cohort Study) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Paper for appraisal and reference: **1. Little difference by neighborhood in PA levels for children**

Section A: Are the results of the study valid?

1. Did the study address a clearly focused issue?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: A question can be 'focused' in terms of

- the population studied
- the risk factors studied
- is it clear whether the study tried to detect a beneficial or harmful effect
- the outcomes considered

Comments: Research aim: Explore association between breakfast consumption patterns for adolescent and young adulthood and comparing between white and African-American youth. Included measures for community disadvantage, family poverty, and parental presence in the morning at home.

2. Was the cohort recruited in an acceptable way?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for selection bias which might compromise the generalisability of the findings:

- was the cohort representative of a defined population
- was there something special about the cohort
- was everybody included who should have been

Comments: Part of National Longitudinal Study of Adolescent Health. Complex cluster sampling. Waves 1, 2, 3 (1995-2001). Wave 1 = 11-18 years and Wave 3= 18-26 years. n = 20,745. In this study - only 5,823 white & 1,965 black.

Is it worth continuing?

3. Was the exposure accurately measured to minimise bias?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for measurement or classification bias:

- did they use subjective or objective measurements
- do the measurements truly reflect what you want them to (have they been validated)
- were all the subjects classified into exposure groups using the same procedure

Comments: Measures for obesity, parental presence at home in the morning and regular breakfast consumption were self-reported. However, obesity (BMI) CDCP guidelines were followed, and previous studies have successfully and accurately used the other 2 measures. Community disadvantage from 1990 US census. BMI defined as over 95th percentile for age & gender. Race dichotomised (self-report).

4. Was the outcome accurately measured to minimise bias?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: Look for measurement or classification bias:

- did they use subjective or objective measurements
- do the measurements truly reflect what you want them to (have they been validated)
 - has a reliable system been established for detecting all the cases (for measuring disease occurrence)
 - were the measurement methods similar in the different groups
 - were the subjects and/or the outcome assessor blinded to exposure (does this matter)

Comments: See above. Measurements methods same across sample. Blinding not relevant. Data from a sample of those with complete data across the first three waves of Add Health data collection were included in the study analyses - not clarified by authors if there were systematic differences in those without data across 3 time points? (sample from Wave 1). BMI based on self-report but obese people under-report/thin people over-report weight.

5. (a) Have the authors identified all important confounding factors?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT:
• list the ones you think might be important, and ones the author missed

Comments: **Not clearly reported by study, but accounted for individual demographic characteristics such as race/ethnicity and gender. Quality of breakfast and parental influences on food choice etc not assessed.**

5. (b) Have they taken account of the confounding factors in the design and/or analysis?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT:
• look for restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control or adjust for confounding factors

Comments: **See above. Used multilevel random intercept regression models during analysis of results.**

6. (a) Was the follow up of subjects complete enough?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider
• the good or bad effects should have had long enough to reveal themselves
• the persons that are lost to follow-up may have different outcomes than those available for assessment
• in an open or dynamic cohort, was there anything special about the outcome of the people leaving, or the exposure of the people entering the cohort

6. (b) Was the follow up of subjects long enough?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

Comments: Follow-up from cohort waves 1, 2, 3, over the adolescent to young adult period or approx. 7 years.

Section B: What are the results?

7. What are the results of this study?

HINT: Consider

- what are the bottom line results
- have they reported the rate or the proportion between the exposed/unexposed, the ratio/rate difference
- how strong is the association between exposure and outcome (RR)
- what is the absolute risk reduction (ARR)

Comments: 1. Poverty and being of African-American ethnicity (in childhood-adolescence) is associated with decreased likelihood of breakfast consumption and increased risk of obesity.

8. How precise are the results?

HINT:

- look for the range of the confidence intervals, if given

Comments: Community disadvantage during adolescence and breakfast consumption: OR (odds ratio) = 0.85 and CI 95% (0.74 to 0.94). P <0.01
Family poverty during adolescence and breakfast consumption: OR=0.96 & CI 95%(0.94 to 0.99). P <0.05. Some confidence intervals lower - 0.55-0.87; 0.59 - 0.78 - but some over 1.

9. Do you believe the results?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- big effect is hard to ignore
 - can it be due to bias, chance or confounding
 - are the design and methods of this study sufficiently flawed to make the results unreliable
 - Bradford Hills criteria (e.g. time sequence, dose-response gradient, biological plausibility, consistency)

Comments: Large sample size, ethnically diverse sample, statistically significant results. However, limitations authors discuss include not enough information on family routines in mornings at breakfast time, not able to assess quality of breakfasts consumed, bias from self-report of BMI.

Section C: Will the results help locally?

10. Can the results be applied to the local population?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider whether
- a cohort study was the appropriate method to answer this question
 - the subjects covered in this study could be sufficiently different from your population to cause concern
 - your local setting is likely to differ much from that of the study
 - you can quantify the local benefits and harms

Comments: While conducted in USA and not Aotearoa NZ, there are some comparable facets of US as a western society and NZ re social and health systems, barring some differences as well.

11. Do the results of this study fit with other available evidence?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

Comments: Authors compare their results to that of other related published literature. Although future research is recommended.

12. What are the implications of this study for practice?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- one observational study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making
 - for certain questions, observational studies provide the only evidence
 - recommendations from observational studies are always stronger when supported by other evidence

Comments: Breakfast consumption patterns are effected by SES and ethnicity/race in adolescence and this has implications for their health such as increased risk of obesity (for those of low SES and African-American ethnicity). The disadvantages experienced by African-American youth maybe comparable to Maori and Pacific youth in NZ who also experience ethnic disparities.

Qualitative Study: CASP Quality Appraisal



CASP Checklist: 10 questions to help you make sense of a **Qualitative** research

How to use this appraisal tool: Three broad issues need to be considered when appraising a qualitative study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Qualitative) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Paper for appraisal and reference: Ho, K. Y., Li, W. H. C., Chung, J. O. K., Lam, K. K. W., Ch

Section A: Are the results valid?

1. Was there a clear statement of the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- what was the goal of the research
 - why it was thought important
 - its relevance

Comments: Research aim: To enhance understanding of how poverty and income disparity negatively affects the psychological well-being of Hong Kong Chinese children. This is a follow-up study from a previous quantitative-based study, by the same authors, published in 2015. The methodology is qualitative, phenomenological approach. (This study was conducted 2012-2013).

2. Is a qualitative methodology appropriate?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
 - Is qualitative research the right methodology for addressing the research goal

Comments: The aim is to gain a broader understanding of the phenomenon (poverty) and its affect on children and their lived experiences (p. 2). This would lend itself well to a qualitative method that explored the participant's perspectives on the issue (comparing the daily lives of children's from low to high SES backgrounds).

Is it worth continuing?

3. Was the research design appropriate to address the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)

Comments: Semi-structured interviews match to the phenomenological methodology used, as the aim is to understand the participant's lived experiences about the phenomenon. The views were those of children and thus the participants involved were the children themselves, in keeping with the broader aims of including children and child research. A guide was developed for the interviews related to the research questions. Two trained research nurses were employed to conduct the interview. Examples of the questions are provided in this article. e.g. "How do you feel about your lived environment?"

4. Was the recruitment strategy appropriate to the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
 - If there are any discussions around recruitment (e.g. why some people chose not to take part)

Comments: Random sample of N=42 children from high and low income districts in Hong Kong. Aim was to make comparisons between children from range of SES backgrounds. The participants meeting the inclusion (e.g. speak Chinese, live in same area as where go to school) and exclusion criteria (e.g. learning/behavioural problems) were randomly chosen from the previous (2015) study's cohort. The participants all provided their informed, voluntary consent to join this study, with written consent provided by the parent/s.

5. Was the data collected in a way that addressed the research issue?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If the setting for the data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
 - If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide)
 - If methods were modified during the study. If so, has the researcher explained how and why
 - If the form of data is clear (e.g. tape recordings, video material, notes etc.)
 - If the researcher has discussed saturation of data

Comments: See above. Semi-formal interviews conducted with all the participants/children. All interviews were audio-recorded, and transcribed verbatim, (in Cantonese and translated into English) and conducted in a safe and familiar environment for the children (e.g. in a counseling room after school). Saturation of data was not discussed by the researchers, and may be argued as not being an aim of phenomenological methodology. Alternatively, it could be argued that 42 participants is a high number when using phenomenological methodology.

6. Has the relationship between researcher and participants been adequately considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

Comments: The relationships between researcher and participants and potential influence over research findings/outcomes not clearly discussed by authors. Sampling was based on random selection from larger study, and on a voluntary basis. Independent, trained interviewers were used.

Section B: What are the results?

7. Have ethical issues been taken into consideration?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

Comments: Ethical approval was provided by University of Hong Kong and the local Hospital Authority. Researchers have maintained a child-focused stance throughout, they claim by including the children as participants, keeping their perspective at the forefront of the study (e.g. comparing the data and analysis to the interview guide/focus). Consent processes were followed. Participant anonymity has been maintained.

8. Was the data analysis sufficiently rigorous?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
 - To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

Comments: Researchers used verbatim transcriptions from interviews. 2 researchers not involved in the data gathering process were employed in the analysis stage to provide alternate/independent perspectives. Regular meetings were used to help resolve disagreements and clarity amongst researchers in the analysis phase. Coding and thematic analysis was used. Not clear if member checking was used.

9. Is there a clear statement of findings?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researcher's arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original research question

Comments: Yes, findings are clearly detailed and themed. e.g. living arrangement, physical health, usual diet, social life, opportunity of activities, ability to function at school. Findings discussed in relation to other relevant research on the topics. e.g. restricted living arrangements impact on children's psychological health and evidence/theory supporting the impact of a chaotic home environment on their wellbeing. Also, how unhealthy eating habits and a sedentary lifestyle can contribute to poor mental and physical health. Rigour in findings discussed above. Authors of article do not discuss any contradictory evidence in relation to their findings.

Section C: Will the results help locally?

10. How valuable is the research?

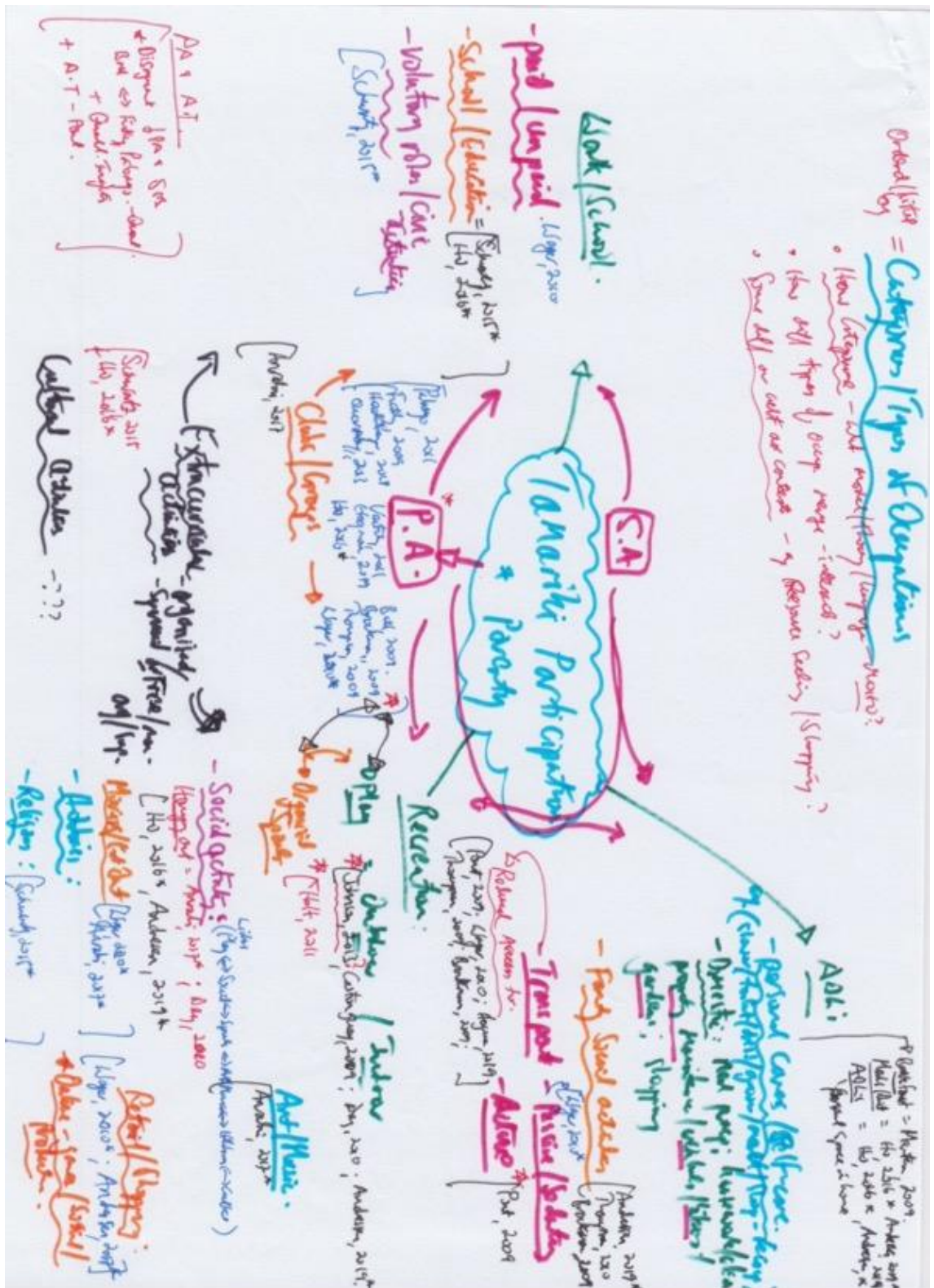
HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature)
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

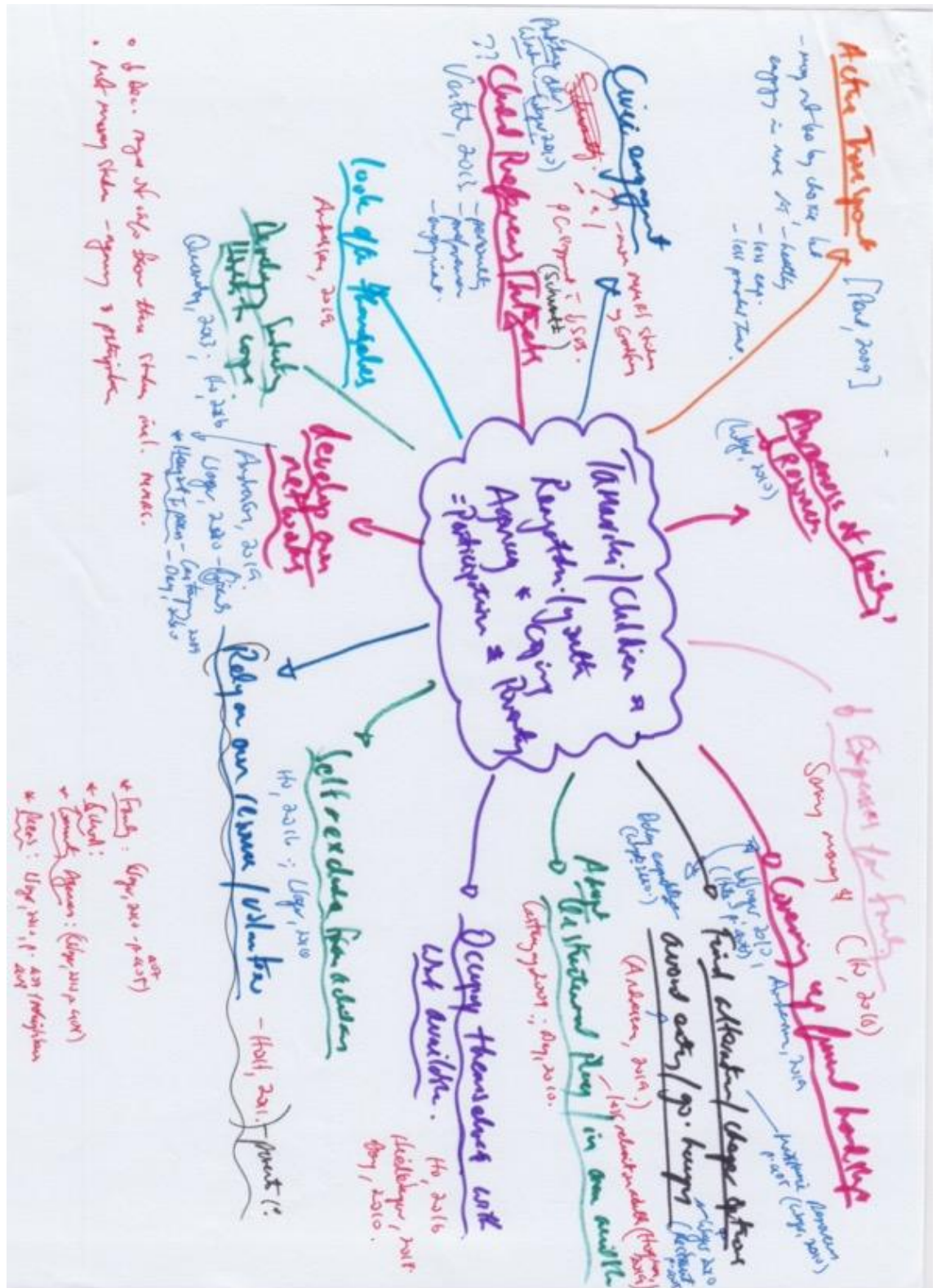
Comments: While Hong Kong and Aotearoa NZ are quite different countries, there are some commonalities such as Hong Kong's history of western development and systems. However, there are obvious ethnic and cultural differences, with its history of Chinese heritage. The findings may be comparable to NZ context in relation to children from SES backgrounds and the effects on their daily lives, and how this affects their participation in occupations which appear to be similar to a NZ context. e.g. school work, homework, watching TV/digital devices, engaging in sports/recreations etc. Authors acknowledge the study's limitations and encourage further research on the topic.

Appendix I: Complete Range of MMRS Mind Maps Used in MMRS.

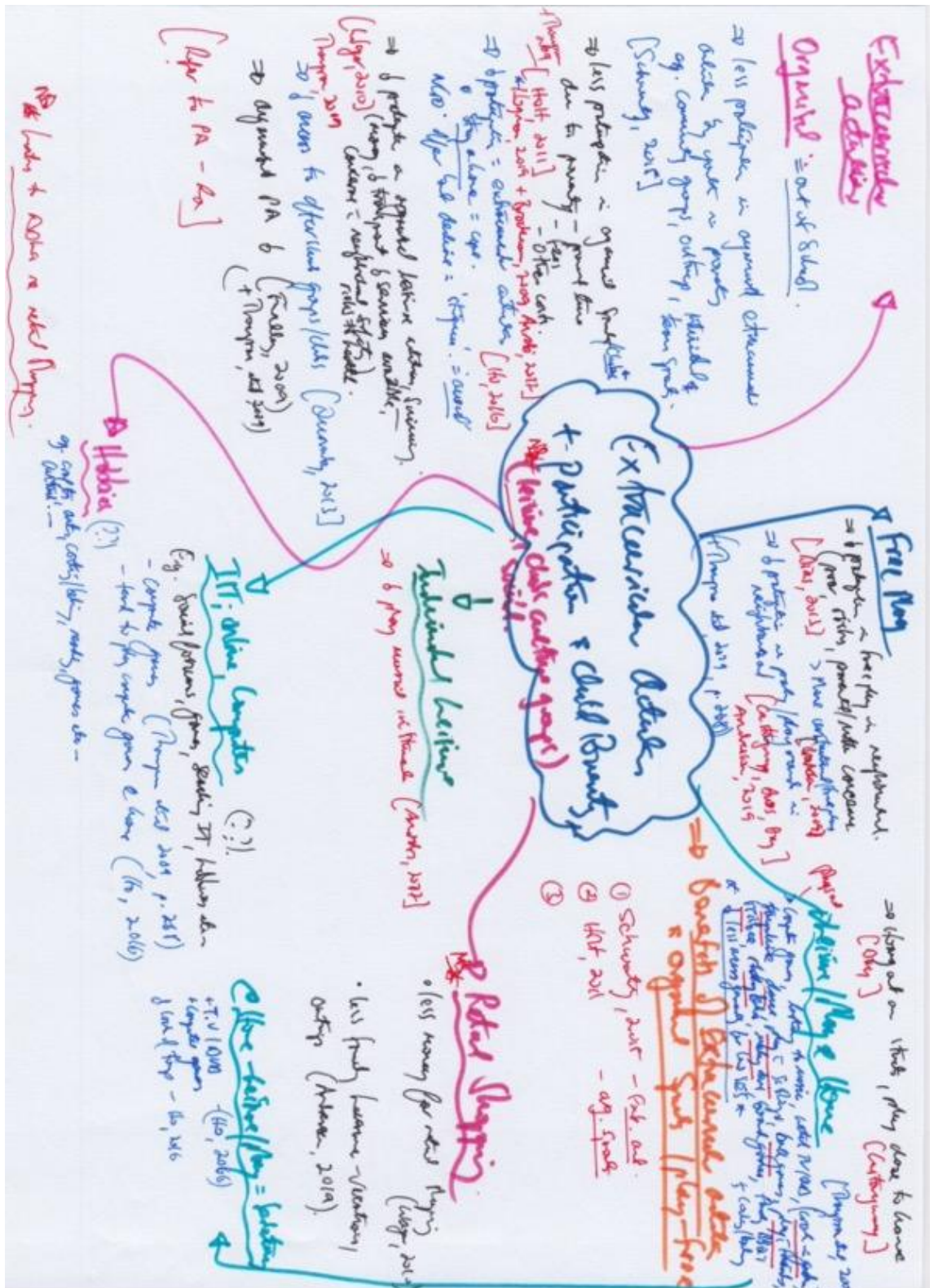
Tamariki/Children's Participation in Occupations and Poverty Mind Map



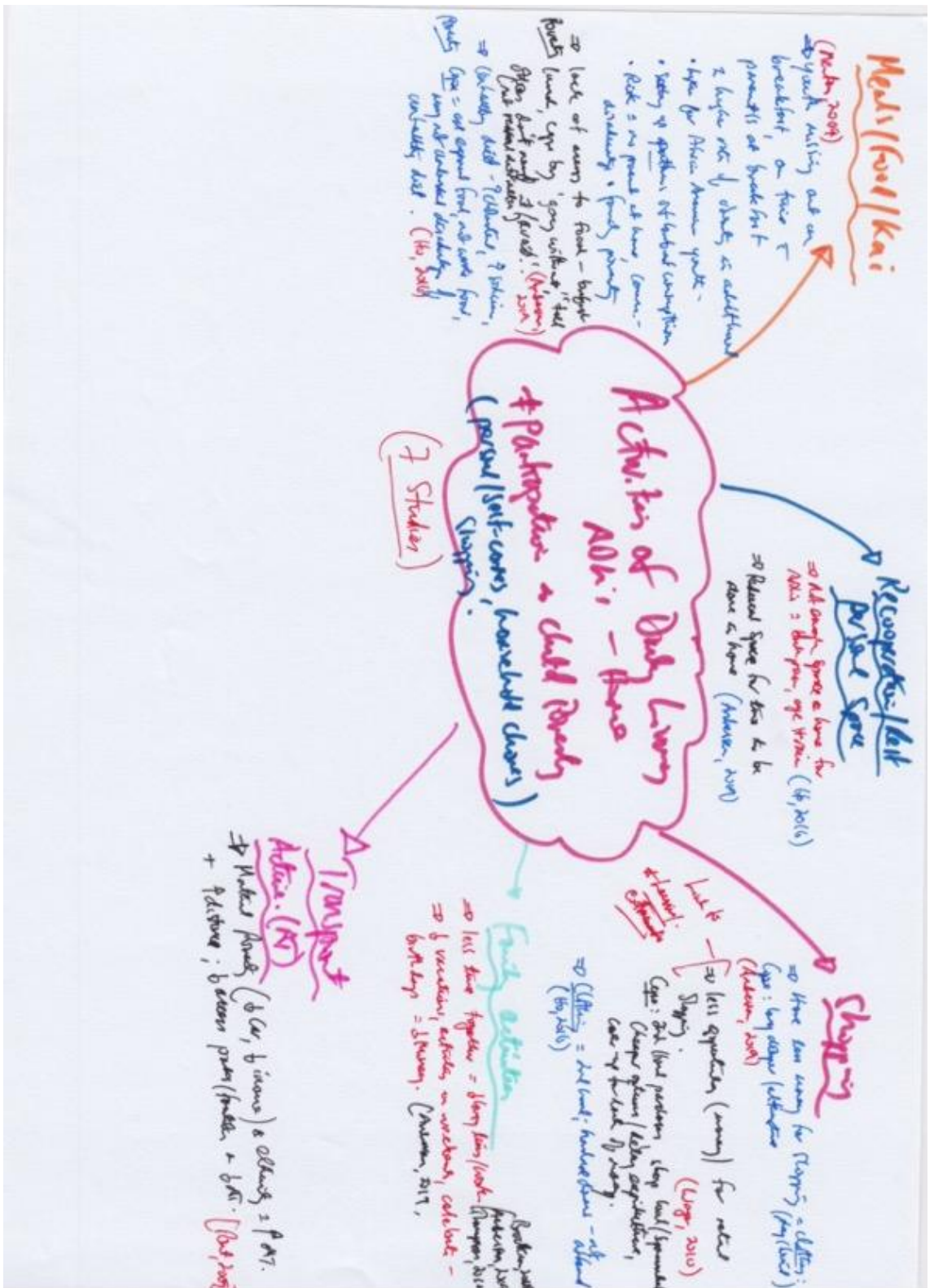
Poverty, Tamariki/Children's Agency, Coping and Participation in Occupations Mind Map



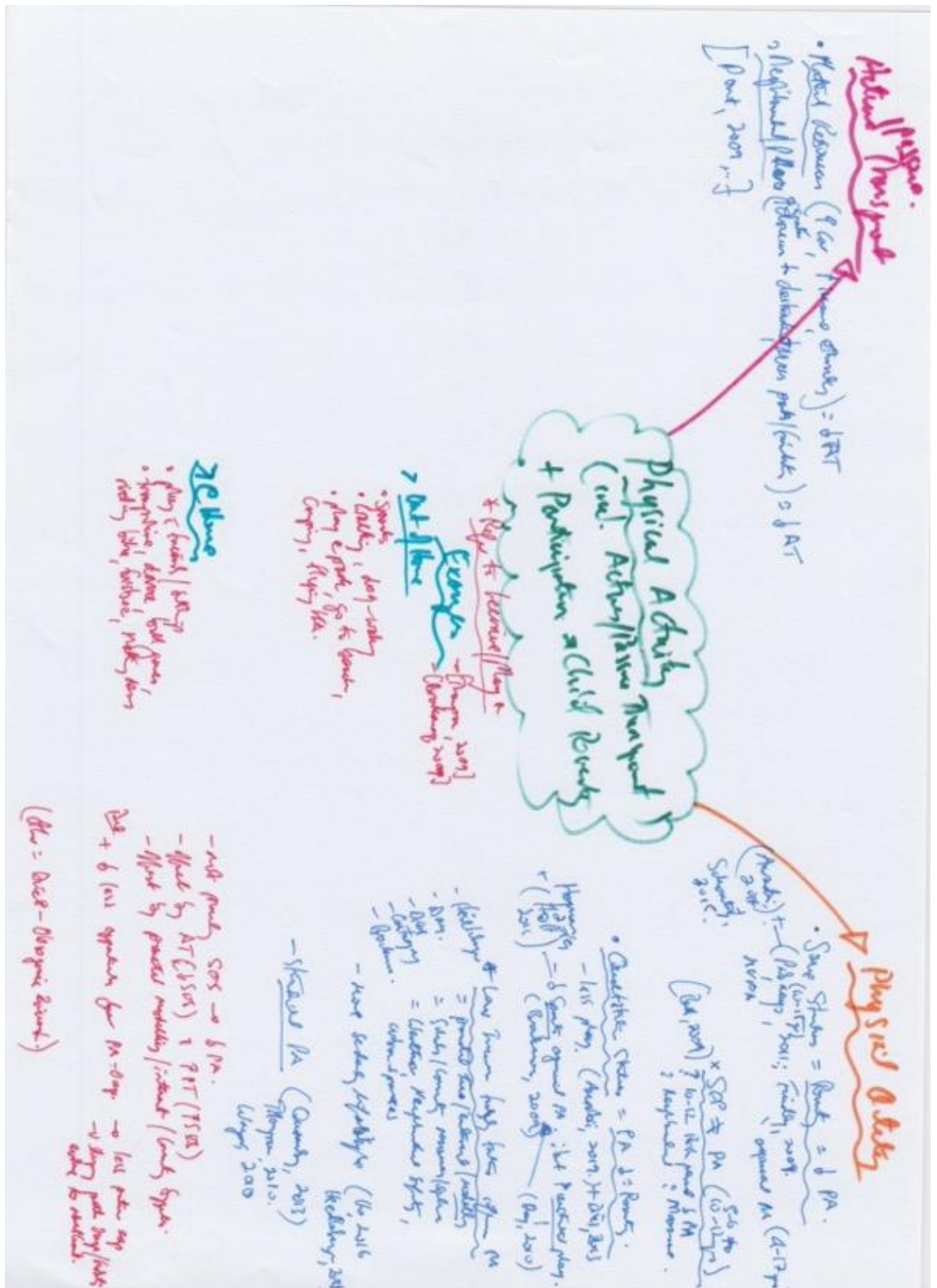
Tamariki/Children's Participation in Extracurricular Occupations Mind Map



Tamariki/Children's Participation in ADLs Mind Map



Tamariki/Children's Participation in Physical Activity Mind Map



Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

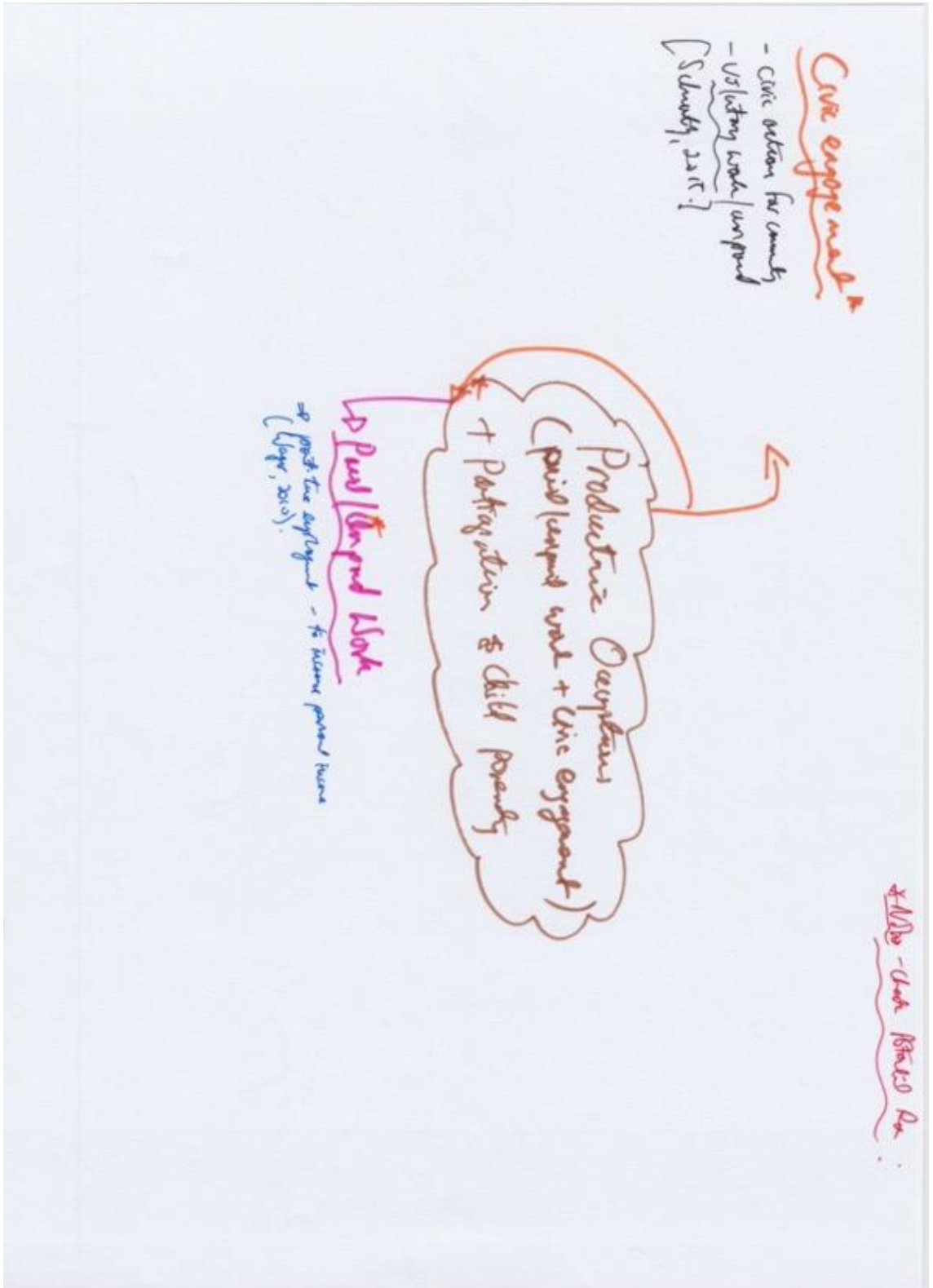
Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

Physical Activity

- Physical Resources (9 Gov, 1000, 2000) = 8 PRT
- Regional Physical Resources + distribution problem (factors) 2 of AT
- Post, 2007

Tamariki/Children's Participation in Productive Occupations Mind Map



Tamariki/Children's Participation in School/Education Based Occupations Mind Map



Tamariki/Children's Participation in Social and Cultural Based Occupations Mind Map



Appendix J: Search Strategy for NZ Published and Grey Literature.

Literature Review Protocol and Search Results New Zealand – Child Poverty & Participation.

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICo and the ‘children living in poverty and their participation’ component of the research question – *What is the consequence of poverty on tamariki/children’s patterns of participation in occupations?*

And limited to Aotearoa New Zealand literature only.

These include:

13. **Population/Participants:** children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
14. **Phenomenon:** Clear evidence that poverty is defined at least by material definitions (i.e., low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).
15. **Context/outcome is meet:** Participation = “Involvement in a life situation [or occupations] (ICF, 2013, p.8). “The fact that you take part or become involved in something...the act of taking part in an event or activity” (Cambridge Dictionary, n.d). “Occupational participation defines what we do in the broadest sense...Participation describes our engagement in the broad categories of work (study), play, and the activities of daily living that undergird everyday life” (Kielhofner, 2008, as cited in Heras de Pablo et al., 2017, p. 107).
16. **Study type:** Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies, cross sectional and large scale nationally representative surveys) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g., in a reputable journal publication).
17. Study publication period criterion is meet (between 2016-2023).
18. Country limit: Aotearoa New Zealand.
19. Language limit is meet (i.e., English language publication).

Exclusion criteria:

7. Articles are excluded if they **do not meet any of the above inclusion criterion.**
8. Conference proceedings, theses, dissertations, and unpublished (non-peer reviewed) studies are excluded.

Search terms.

Children: Child*, OR adolescents OR youth OR teenager (All text)

AND

Poverty: poverty OR low income OR socioeconomic OR disadvantaged (Subject terms)

AND

Participation: participation OR engagement OR involvement (All text)

AND

New Zealand (Source or Subject – 2 x searches combined)

Limiters:

Date range: 2016-2023

Language: English

Journals: peer reviewed/academic journals

Search results (databases: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar). Initial total N=138. After review by researcher (i.e., full texts, check reference lists, match to PICO) led to n=25.

Literature Review Protocol and Search Results New Zealand – Child Poverty & Potential.

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICO and the ‘children living in poverty and their participation’ component of the research question – *What is the consequence of poverty on tamariki/children’s potential?* And limited to Aotearoa New Zealand literature only.

These include:

20. Population/Participants: children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
21. Phenomenon: Clear evidence that poverty is defined at least by material definitions (i.e., low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).

22. Context/outcome is meet: *Potential* = can be understood to mean the capacity a person/child has to achieve what they value in their life, from childhood and into adulthood, and is dependent on their development, growth, health, and participation in occupations (Humphry & Womack, 2019; Mandich & Cronin, 2016; Rodger & Kennedy-Behr, 2017).
23. Study type: Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies, cross sectional and large scale nationally representative surveys) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g., in a reputable journal publication).
24. Study publication period criterion is meet (between 2016-2023).
25. Country limit: Aotearoa New Zealand.
26. Language limit is meet (i.e., English language publication).

Exclusion criteria:

9. Articles are excluded if they **do not meet any of the above inclusion criterion.**
10. Conference proceedings, theses, dissertations, and unpublished (non-peer reviewed) studies are excluded.

Search terms.

Children: Child*, OR adolescents OR youth OR teenager (All text)

AND

Poverty: poverty OR low income OR socioeconomic OR disadvantaged (Subject terms)

AND

Potential: potential OR development (All text)

AND

New Zealand (Source or Subject – 2 x searches combined)

Limiters:

Date range: 2016-2023

Language: English

Journals: peer reviewed/academic journals

Search results (databases: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar). Initial total N=227. After review by researcher (i.e., full texts, check reference lists, match to PICO) led to n=31.

Literature Review Protocol and Search Results New Zealand – Child Poverty & Wellbeing.

Inclusion criteria:

Primary inclusion criterion is ‘fitness for purpose’ or meeting the requirements of PICO and the ‘children living in poverty and their participation’ component of the research question – *What is the consequence of poverty on tamariki/children’s ?* And limited to Aotearoa New Zealand literature only.

These include:

27. Population/Participants: children (aged 10-15 years) and living in poverty; children as the primary participants/focus of the research.
28. Phenomenon: Clear evidence that poverty is defined at least by material definitions (i.e., low parental income, material deprivation, low SES (socioeconomic status) or an equivalent term: includes one/more of the following - low parental education, unemployment or low skilled work roles/equivalent, low income; living in an area classed as socioeconomically deprived); and persistent poverty = 1-2 years or more in poverty).
29. Context/outcome is met: *Wellbeing* = wellbeing related to measurable material living conditions (e.g., income, health, housing), subjective stance such as a person’s self-rated view of their health and quality of life, different cultural perspectives, from an occupational perspective, and children’s views on wellbeing.
30. Study type: Meta-analyses, systematic reviews or primary-level studies: quantitative study design (i.e., systematic reviews, randomised control trials (RCTs)/experimental studies, and cohort/longitudinal studies, cross sectional and large scale nationally representative surveys) & qualitative study design (i.e., qualitative SRs, or qualitative studies). Need to be peer-reviewed and published (e.g., in a reputable journal publication).
31. Study publication period criterion is met (between 2016-2023).
32. Country limit: Aotearoa New Zealand.
33. Language limit is met (i.e., English language publication).

Exclusion criteria:

11. Articles are excluded if they **do not meet any of the above inclusion criterion**.
12. Conference proceedings, theses, dissertations, and unpublished (non-peer reviewed) studies are excluded.

Search terms.

Children: Child*, OR adolescents OR youth OR teenager (All text)

AND

Poverty: poverty OR low income OR socioeconomic OR disadvantaged (Subject terms)

AND

Wellbeing: wellbeing or or well being (All text)

AND

New Zealand (Source or Subject – 2 x searches combined)

Limiters:

Date range: 2016-2023

Language: English

Journals: peer reviewed/academic journals

Search results (databases: EBSCO - MEDLINE, CINAHL, SocIndex, SCOPUS, Google Scholar). Initial total N=121. After review by researcher (i.e., full texts, check reference lists, match to PICO) led to n=10.

Appendix K: Table Detailing the Number, Type and Location of Participants in the Study.

Type of Participants	Total Number	Case Study One: Fernlee	Case Study Two: Riverfield
Total number of participants	25	11	14
Community workers	6	4	2
Tamariki/children in Stage One: Focus groups	9	5	4
Tamariki/children in Stage Two (drawn from each focus group)	4	1	3
Parent/s of tamariki in Stage Two	5	1	4
Other adults in Stage Two	5	1	4

Appendix L: Information Sheet – Community Organisation: Recruitment.



Information Sheet – Community organisation: Recruitment

Date Information Sheet Produced:

01/06/2021

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

Background purpose of this research

This research project aims to examine the multiple effects of material poverty (i.e., low income and material deprivation/hardship) on a tamaiti/child's daily activities and how whānau/family and their tamariki/children cope. For example, how does not having enough money/resources as a whānau/family affect how a tamaiti/child participates in school activities, sports, recreational, social, and cultural activities? Or how is a tamaiti/child's day-to-day life and routines affected by financial hardship? Or what are the supports and personal strengths that the tamaiti/child and his/her whānau/family have to help them cope with these circumstances.

For tamariki/children, occupations involve daily activities like household tasks, play, school, sports, social activities, recreation and cultural activities. Patterns of daily activities/occupations mean the everyday habits, routines, roles and rituals we perform such as getting ready for school/work, mealtimes, spending time together as a whānau/family, or the types of leisure and social activities we participate in.

All participation in this research is entirely voluntary. Participants can choose to withdraw from the research at any time. It is hoped that the information gained from this study will help in the mahi/work with other tamariki/children and their whānau/families who live with material poverty.

The report of the findings will be written up as a thesis for my PhD study at Auckland University of Technology (AUT). I also hope to publish the results of the study in health or social research journals and to present these findings at relevant conferences. All personal information which could identify participants will be kept confidential to the researchers and the typist. No participants will be identified in any of the reports or presentations. No photographs will be used without participant's explicit permission.

Please note I have received modest funding towards costs of the study, from DV Bryant Trust & OTNZ-WNA.

How is a participant identified and invited to participate in this research?

The tamaiti/child and their whānau/family might either self-select to participate in this study after reading the poster advertising the research project or with their consent you can refer them to this study. If the tamaiti/child and their whānau/family choose to participate then they can contact me/the researcher directly or with the whānau/family's consent, you/community worker can forward their contact details to me.

The choice of the whānau/family as to whether they decide to participate in the study or not will be kept confidential to them and the researcher, unless they explicitly consent to informing you/the community recruiter.

Selection criteria for participants

The participants are: a tamaiti/child (aged 11-13 years), and their parent/s or whānau/family. Also included are 2-3 adults who are important and close to the tamaiti/child and her/his whānau/family and support engagement in activities in some way. E.g. school teacher, extended whānau/family member, sports coach etc.

The whānau/family needs to meet the following selection criteria: combined household income (after tax/net) of below 60% of the median NZ income (Refer to recruiter selection criteria information sheet for more details), their home address needs to be in a high deprivation location (I can confirm this with you using the NZiDep Index/NZIMD and matching with the whānau/family's home address), and the tamaiti/child needs to be attending a low decile school (e.g. deciles 1-4).

What will happen in this research?

This project has two (2) stages.

1st Stage – Focus Group: This involves 5-6 tamariki/children meeting with me/researcher and another adult support person at a community centre/school. This will take approximately 1 ½-2 hours and involve mihimihi/introductions, karakia, explaining the purpose of the group, a fun activity, the main group activity (participants will be given a

choice of activities to use to answer the questions such as creative methods, e.g. drawing, writing, collage) and informal conversations. I will guide the questions about the study that the tamariki/children will answer. E.g. what activities they participate in, what ones they can't access, what supports they need. The parent/s will be asked to complete a few demographic and health questions about their tamaiti/child prior to the group (e.g., address, level of income, school they attend, their general health). There will be a brief follow-up focus group (i.e., 30-60mins) 1 week later to provide the tamariki an opportunity to review the initial results. The focus group will be audio-recorded primarily for my further analysis. 1-2 tamariki/children from this group will be invited to join the 2nd stage of the study (based on their assent and parental consent).

2nd stage Research in the home: This project involves me spending pre-agreed time of whānau/family's choosing during the course of approximately 2 weeks with the tamaiti/child or participant and the whānau/family. If the tamaiti/child chooses to participate, then the parent/s will need to complete an interview (i.e., semi-structured interview style and up to 60-90 minutes duration), about the project topic and complete the NZIDep questionnaire (e.g., 8 questions, takes approx. 2 minutes) to further understand the level of their material hardship (Refer to recruiter selection criteria information sheet for more details). The tamaiti/child will spend time talking to me/the researcher, taking photographs¹ of activities important to them in their home/neighbourhood, making drawings, or writing poems or stories (e.g., 2-3 sessions of 30-60 minutes/each), complete a weekly activity schedule, and an interactive time/area mapping activity to learn about activities the tamaiti/child-participant participates in, the activities available in their neighbourhood and the impacts of material hardship on her/his participation in activities. All material collected will be kept secure and confidential. Interviews will be audio-taped. With participants' agreement, I will also spend time observing the tamaiti/child in their home/neighbourhood and taking notes (e.g., 2-3 visits of 60-90 minutes/time). Taking in total approximately 7-8 hours, over the 2 weeks. This is to help me better understand the effect of limited resources on the tamaiti/child's daily activities.

Also, with the whānau/family's consent and their tamaiti/child's assent I would interview 1-2 other adult/s that are important to the tamaiti/child's participation in their daily occupations (e.g., school teacher, sports coach, club leader, whānau/family member). The whānau/family and their tamaiti/child will decide who she/he wants to invite to be interviewed for the study and how to contact them.

All participants will have an opportunity to review and revise the transcripts of their interviews.

What are the discomforts and risks?

Living with material hardship can be a difficult experience and talking about this during the study may make participants feel uncomfortable or distressed. The tamariki/children and their whānau/family can choose what to talk about and what to keep private. They are welcome to decline to answer any questions they are not completely comfortable with. I do not anticipate any other risks from participating in this study.

How will these discomforts and risks be alleviated?

Participants can choose not to talk about subjects that they find distressing, or do not want to talk about, or they may choose to withdraw from the interview, and/or the study at any time, for any reason and do not need to say why. The tape recorder will be turned off during the interview if time is required for a break or to regain composure. In addition, if participants would like it, a referral can be made to a suitable counselling service in their geographic region to discuss any concerns following the interview.

The referral can be made by speaking with their whānau/family GP service and they can refer participants to a suitable counselling service, that they ought to be able to access free of cost. If there is a cost the researcher will pay for these counselling costs for up to three counselling sessions. For this support participants need to speak to the Project supervisor (Professor Clare Hocking).

What are the benefits?

There are no immediate benefits for the tamaiti/child and their whānau/family from taking part in this study. However, they will be contributing to information that could help to better support other tamariki/children and their whānau/families who have limited resources. There has been minimal published research about tamariki/children's daily activities and the impact of limited resources. This study may help kaiwhakaora ngāhau/occupational therapists and others who work with tamariki/children and their whānau/families, and help shape policy on the issue.

¹ Any photos and images taken and stored by the tamaiti/child involving places or objects of importance to them will only be used for analysis purposes (i.e., to help the tamaiti/child tell their story through photos). No photographic images captured in the study will be used for any presentation of findings without explicit, written consent of the participants, maintaining confidentiality of participants (e.g., with people or private property and identification of locality captured in the photos obscured), and all AUTECH guidelines on the recording of images and photographs will be followed.

Additionally, the tamaiti/child and her/his whānau/family may discuss with the researcher ideas that they find helpful. For example, learning about supportive agencies, or interesting clubs, and groups that the tamaiti/child may be interested in joining. In addition, some people find that being interviewed is an enjoyable and/or interesting experience. All participants will receive a gift/koha for their part in the study.

How will participants privacy be protected?

Participants in the study will not be anonymous to each other, but they have an opportunity to withdraw information. No identifying or sensitive information will be published in any reports or publications. Interview recordings and transcripts will only be available to the research team. No information identifying participants in this project will be included in any of the project reports or publications. Transcripts will be kept securely at AUT for six years, following the completion of the research and then destroyed. The typist transcribing the interviews and any other advisors or assistants, will have signed a confidentiality clause and will type onto a computer which is password protected. A code/pseudonym will be allocated to participant's file and their name will not appear on any of the transcripts. Participants' names and contact details will be kept separate from the transcripts.

What are the costs of participating in this research?

There is no cost to the participant whānau/family. If they choose to take part, either in the initial stage (focus group) this will involve 1 group session (1 ½-2 hours) and 1 follow session (30-60 minutes); and/or in the 2nd stage of the study, parent/s or guardians will need to complete the interview (e.g., 60-90 minutes), and 7-8 hours in total with their tamaiti/child (e.g. interviews, art activities including time spent in home & community observations over approximately a 2 week period) completing research activities. This study will not interfere with their school or work. There will be no payment for participating in this research, but should participants incur any reasonable travel costs, then this will be reimbursed to them in the form of petrol vouchers (i.e., up to \$20-). I will also provide a gift/koha for the participants' time spent in this study.

How do I recruit a whānau/family for this project?

Firstly, consider if the tamaiti/child and her/his whānau/family meet the selection criteria. Please discuss this with me as required. Discuss the project with the tamaiti/child and her/his whānau/family and provide them with the relevant information sheets (I will provide these for you). Within two weeks of receiving this information sheet the whānau/family is asked to indicate if they would like to take part in this research. After the whānau/family have read through all the information they can contact me/the researcher directly or with their consent you can forward their details to me. I will contact the whānau/family by phone within 1-2 days and answer any questions they may have. They will then be given at least a week to think further about this offer before I organise a meeting with them to initially spend time building rapport/whanaungatanga and getting to know each other, before signing the consent/assent forms, and before starting the data gathering process (e.g., interviews). The tamaiti/child and her/his whānau/family are able to withdraw from the research at any stage and they do not need to give a reason for doing this.

Will I receive feedback on the results of this research?

You and the participants can choose to receive a summary of the findings of this research. Once these are available, you can choose to have them sent to you at an address or an email that you provide, or attend an information meeting I will organise. You will get details of these options once the study has been completed (approximately 12 months after the interview).

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz
Concerns regarding the conduct of the research should be notified to the Dr Carina Meares, Executive Secretary of AUTECH, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09 921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTECH Reference number 20/210.

Appendix M: Community Recruitment Sheet – Participation Selection Criteria.

Community Recruitment Sheet: Participant Selection Criteria.

Study title: Financial hardship and tamariki/children's participation, potential and well-being¹.

Participant Selection Criteria – Whānau/family's level of material poverty.

Researcher: S.Leadley. Em: simlea71@gmail.com ph. 07-8560342.

This is information/data relevant to both the 1st (Focus group) and 2nd (Individual and whānau/family) stages of the study.

1.) **Whānau/family Income information** – Whānau/family combined income needs to be at or below the NZ poverty line. The NZ poverty line is 60% of the NZ median equivalised disposable household income (e.g., 60% of approx. \$39,900 at 2018/19, adjusted for household composition), or all income/net disposable income from all sources: paid work, benefits or any other income combined, and before housing costs (BHC). Example, 60% of median NZ household income is approximately \$50,000/year or \$965/week = NZ poverty line (for a household of 2 parents and 2 children). As household income needs to be adjusted for household composition/make up (e.g., 1 parent, 3 children etc.), incomes will be sought from Low income thresholds/Poverty line tables in Perry's latest NZ incomes report (2019). N.B. As it can be difficult to calculate exactly a whānau/family's weekly/yearly income, a close approximate is adequate. *Copy of table is attached below.*

2.) **Deprivation level** – The family/whānau need to live in a high deprivation area, according to NZDep (New Zealand Index of Deprivation) and NZIMD (New Zealand Index of Multiple Deprivation) data. I will need the whānau/family's physical location/address of their home/house and then I will check this against the NZDep & NZIMD maps/tables.

Refer to this link to see the maps and tables. Website

- http://cphronline.massey.ac.nz/maps/maps_nz_dep_index.html

http://www.imd.ac.nz/NZIMD_Single_animation_w_logos/atlas.html

3.) **School decile** – The tamaiti/child needs to be attending a low decile school (i.e., deciles 1-4). So, we also need the name of the school the tamaiti/child attends.

Refer:- <https://education.govt.nz/school/running-a-school/resourcing/operational-funding/school-decile-ratings/#Find>

or (searchable map with school data and decile) - <http://nzschools.tki.org.nz/>

¹ Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Income Tables from Perry's (2019, p. 120)² Income report. N.B. Use CV, 60% column.

Table E.2
50% and 60% low-income thresholds or 'poverty lines' for various household types (BHC)
(\$2018, per week)

Household type	Equiv ratio	REL ('moving')		CV ('anchored' /'fixed')	
		50% of 2018 median	60% of 2018 median	50% of 2007 median in \$2018	60% of 2018 median in \$2018
One-person HH	1.0	385	460	310	460
SP, 1 child <14	1.3	500	595	405	595
SP, 2 children <14	1.6	610	735	500	735
SP, 3 children <14	1.9	725	875	590	875
Couple only	1.5	575	690	465	690
2P, 1 child <14	1.8	690	825	560	825
2P, 2 children <14	2.1	805	965	655	965
2P, 3 children <14	2.4	920	1100	750	1100
2P, 4 children <14	2.7	1035	1240	840	1240
3 adults	2.0	765	920	625	920

² Perry, B. (2019). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2018*. Retrieved from Ministry of Social Development website: <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/index.html>

Appendix N: Information Sheet for Tamariki/Children Discussion Group.

What do I do if I have concerns about this research?

If you are worried about this project you can contact the Project Supervisor:

Professor Clare Hocking

Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142

Phone: 09 921 9162

Email: clare.hocking@aut.ac.nz

Another person you or your parents can contact if you are worried about this project is:

Executive Secretary of AUTECH

Phone: 921 9999 ext 6038

Email: ethics@aut.ac.nz

Contact

For more information about this project, speak to your parents and they can contact me and I can answer any of your questions you might have about this project.

To know more about this study, or to receive an Information Sheet, please contact me/the researcher:

Simon Leadley

Phone: (07) 856 0342

Email: simlea71@gmail.com



This document was produced on 01/06/2021.
Approved by the Auckland University of Technology Ethics Committee on 01/07/2021. AUTECH Reference Number: 20/210.



Information Sheet for Tamariki/Children Discussion Group.

(Parent/caregivers please read to tamariki/children).



Financial hardship and tamariki/children's participation, potential and wellbeing.



Kia Ora/Hello.

My name is Simon Leadley and I would like to invite you to join a project I am organising.

This discussion group involves meeting together at a community centre in your neighbourhood (for about 1½–2 hours), that 5–6 tamariki/children your age (11–13 years) can join. We will talk together about the activities you like doing and about what you do in your neighbourhood. This will occur in the weekend and take about a couple of hours.

You can tell me about this by:

- Making drawings, or paintings.
- Completing a weekly activity timetable.
- Writing stories or poems.
- Or just talk to me about what you like doing.

What is the purpose of this project?

The aim of my project is to understand how living in neighbourhoods with less money, equipment or places to play and do stuff you enjoy can affect your everyday activities.

The results will be used to assist community/health workers like me and others make life better for tamariki/children and their whānau/families. Also, this project will help me to finish my studies at Auckland University of Technology (AUT). I hope to write and talk about this project with others. All information that might identify you and your whānau/family will be kept private.



How were you chosen to participate in this project?

You and your whānau/family may have seen the poster advertising this project, or someone from your local school or organisations working in your area may have suggested that your whānau/family might like to join this project.



Who else will I talk to?

I will also talk to your parents to make sure this discussion group is suitable for you to join, about the name of your school, your age, gender, ethnicity, if you have a disability, and about your family income. If they do not want you to be in the study, I cannot include you.

How will you be kept safe?

You might find that talking about your neighbourhood, the activities you do and can't do may make you feel uncomfortable. You can choose not to answer some of my questions, if you don't want to talk about that, or you can choose to stop at any time.

Also if you wish, I can get a counsellor for you to talk to about any worries you may have after taking part in the discussion group/study.



Participant Information Sheet (Focus/Discussion Group)– Parent/s

Date Information Sheet Produced:

01/06/2021

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

An Invitation

You and your tamaiti/child are invited to take part in this research project examining the effects of financial hardship on a tamaiti/child's daily activities and how whānau/family and their tamariki/children cope. For tamariki/children, daily activities involve everything they do including household tasks, contributing to the whānau/family, playing, school, sports, social activities, recreation and cultural activities.

You and your tamaiti/child's participation in this research are entirely voluntary. You and your tamaiti/child can choose to withdraw from the research at any time.

What is the purpose of this research?

The purpose of this research project is to gain a better understanding of how a lack of available money/resources (i.e., material hardship) affects a tamaiti/child's everyday activities, including the strengths and supports you have to help your tamariki/children do the things that are important to them.

It is hoped that the information gained from this study will help in the work with other tamariki/children and their whānau/families who live on low incomes.

This research project is part of my PhD study at Auckland University of Technology (AUT). Findings from this research may be used in academic publications and presentations.

Please note I have received modest funding towards costs of the study, from DV Bryant Trust & OTNZ-WNA.

How was I identified and why am I being invited to participate in this research?

You and your tamaiti/child may have seen the poster advertising the research project or you may have been referred to this study when I asked local schools and organisations working in your area to invite a whānau/family to participate. Tamaiti/children (aged between 11-13 years) who participate in this study will be part of whānau/families that have a household income below a defined threshold, live in a neighbourhood where there is high material hardship, and attend a low decile school. While only your tamaiti/child needs to participate, please read through the tamaiti/child information sheet with your son/daughter. If your tamaiti/child prefers not to participate, they will not be able to take part.

If you know other whānau/families who might like to join the study, you are welcome to tell them about it and either give them my contact details or send them to the person who asked you if you'd like to participate.

How do I agree to participate in this research?

To participate, please contact me (Simon Leadley) using the contact details at the bottom of this information sheet or, with your consent, your local contact person can forward your contact details to me. Your participation in this research is voluntary (it is your tamaiti/child's and your choice). Whether or not they choose to participate will neither advantage nor disadvantage your tamaiti/child or you. Your tamaiti/child is able to withdraw from the study at any time. If they choose to withdraw, they/you will be offered the choice between having any information that is identifiable as belonging to your tamaiti/child removed or allowing it to continue to be used. However, once the findings have been produced, removal of their information may not be possible.

You will need to complete the consent form and your tamaiti/child will need to complete the assent form to take part in this research. I can provide these for you when we meet together.

What will happen in this research?

This project has two (2) stages. All the tamariki/children will join the first stage, but only some will go on to the second stage, which will also involve you as parents or guardians and 1 – 2 other people you nominate.

1st Stage – Focus/Discussion Group: This involves a discussion group with 5-6 tamariki/children from within your neighbourhood meeting with me/researcher and another adult support person at a community centre. This will take approximately 1 ½-2 hours and involve mihimihi/introductions, karakia, explaining the purpose of the group, a fun activity, the main group activity (participants will be given a choice of activities to use to answer the questions such as creative methods, e.g. drawing, writing, collage) and informal conversations. I will guide the questions about the study that the tamariki/children will answer. E.g. what activities they participate in, what ones they can't access, what supports they need. You will be asked to complete a few demographic and health questions about your tamaiti/child prior to the group (e.g., you address, level of income, school they attend, their general health). There will be a brief follow-up focus/discussion group (i.e., 30-60mins) 1 or 2 weeks later to provide the tamariki an opportunity to review the initial results. 1-2 tamariki/children from this group will be invited to join the 2nd stage of the study (based on their assent and your consent). The focus group will be audio-recorded for analysis.

What are the discomforts and risks?

Living with material hardship can be a difficult experience and talking about this during the study may make your tamaiti/child feel uncomfortable or distressed. If your tamaiti/child tells me about something that could be putting them in danger, I would need to remind them to be safe, or stop doing anything unsafe, and/or ask them to talk to you as parent/s or someone in authority.

There is a level of risk due to Covid-19 and the presence of the researcher. A Covid-19 safety protocol has been developed to manage the risk and can be provided to you. I do not anticipate any other risks from participating in this study.

How will these discomforts and risks be alleviated?

Your tamaiti/child can choose not to talk about subjects that they find distressing, or do not want to talk about, or they may choose to withdraw from the discussion group, and/or the study at any time, for any reason and do not need to say why. They can choose to take a break at any time during the group. If any notifiable risks to your child's safety are raised by them in the group, I am obligated to report these to you and to the appropriate authority (we can discuss this before you choose to sign the consent form). In addition, if you would like it, a referral can be made to a suitable counselling service in your geographic region to discuss any concerns following the interview.

The referral can be made by speaking with your whānau/family GP service and they can refer you to a suitable counselling service, that you ought to be able to access free of cost to you. If there is a cost the researcher will pay for up to three counselling sessions. Please contact the Project supervisor (Professor Clare Hocking) if you require this support.

What are the benefits?

There are no immediate benefits to you or your tamaiti/child from taking part in this study. However, you will be contributing to information that could help to better support other tamariki/children and their whānau/families who have limited resources. There has been minimal published research about tamariki/children's daily activities and the impact of limited resources. This study may help kaiwhakaora ngangahau/occupational therapists and others who work with tamariki/children and their whānau/families, and help shape policy on the issue.

Additionally, you and your tamaiti/child may discuss with the researcher helpful ideas. For example, learning about supportive agencies, or interesting clubs, and groups that your tamaiti/child may be interested in joining. In addition, some people find that participating in discussion groups about what they have been through is an enjoyable and/or interesting experience.

How will my privacy be protected?

No information identifying you or your tamaiti/child as a participant in this project will be included in any of the project reports or publications. Transcripts will be kept securely at AUT for six years, following the completion of the research and then destroyed. The typist transcribing the interviews and the person who assists with running the focus group will have signed a confidentiality agreement and the typist will use a computer which is password protected. A code/pseudonym will be allocated to your file and your name will not appear on any of the transcripts. Participants' names and contact details will be kept separate from the transcribed transcripts. *No*

information that you provide that is sensitive to any others in the research will be included in any reports or publications.

What are the costs of participating in this research?

There is no cost to you. If you choose to take part, your tamaiti/child will need to complete: the 1st stage of the study: the discussion group and brief follow-up group session. This study will not interfere with your tamaiti/child's time at school.

There will be no payment for participating in this research, but should you incur any reasonable travel costs, then this will be reimbursed to you in the form of petrol vouchers (e.g., \$20-). Each tamaiti/child participating in the discussion group will be provided with a simple gift/koha once they have completed the discussion group and follow-up group (e.g., a \$20- voucher).

What opportunity do I have to consider this invitation?

Within two weeks of receiving this information sheet, please inform me if you and your tamaiti/child would like to take part in this research, or if you are happy to, your local contact person can forward your contact details to me. After I receive your contact details, I will contact you by phone within 1-2 days and answer any questions you may have. You will then be given at least one week to think further about this offer before I contact you again and arrange to meet with you to sign the consent/assent forms, complete demographic data, before your tamaiti/child can join the discussion group. You are able to withdraw from the research at any stage and you do not need to give a reason for doing this.

Will I receive feedback on the results of this research?

You can choose to receive a summary of the findings of this research. Once these are available, you can choose to have them sent to you at an address or an email that you provide, or pick up a written copy from the local organisation that gave you this information sheet, or attend an information meeting I will organise. You will get details of these options once the study has been completed (approximately 12 months after the interview).

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz
Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Would you like to be a part of a research project?

The goal is to learn how limited whānau/family and neighbourhood resources affect tamariki/children's activities at home and in the community.

Are you a whānau/family with the following?

- At least one (1) tamaiti/child aged between 11–13 years of age.
- Living in Kirikiriroa/Hamilton city.
- Experiencing difficulty affording daily items and activities for you and your whānau/family.
- English is one of the primary languages spoken in your home.



Contact

To know more about this study, or to receive an Information Sheet, please contact me/the researcher:

Simon Leadley

Phone: (07) 856 0342

Email: simlea71@gmail.com



Appendix Q: Information Sheet for Tamariki/Children Second Stage of Study.

What do I do if I have concerns about this research?

If you are worried about this project you can contact the Project Supervisor:

Professor Clare Hocking

Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142

Phone: 09 921 9162

Email: clare.hocking@aut.ac.nz

Another person you or your parents can contact if you are worried about this project is:

Executive Secretary of AUTEK

Phone: 921 9999 ext 6038

Email: ethics@aut.ac.nz

Contact

For more information about this project, speak to your parents and they can contact me and I can answer any of your questions you might have about this project.

To know more about this study, or to receive an Information Sheet, please contact me/the researcher:

Simon Leadley

Phone: (07) 856 0342

Email: simlea71@gmail.com



This document was produced on 01/06/2021.
Approved by the Auckland University of Technology Ethics Committee on 01/07/2021. AUTEK Reference Number: 20/210.



Information Sheet for Tamariki/Children Second Stage of Study.

(Parent/caregivers please read to tamariki/children).



Financial hardship and tamariki/children's participation, potential and wellbeing.



Kia Ora/Hello.

My name is Simon Leadley and I would like to invite you to join a project I am organising.

This study involves tamariki/children spending time telling me about the activities you like doing and about what you do in your neighbourhood. This will include several visits to your home and in your neighbourhood over about 1–2 weeks.

You can tell me about this by:

- Taking photos of the activities you like doing.
- Making drawings, or paintings.
- Completing an activity diary.
- Writing stories or poems.
- A whānau/family mapping activity of how and where you do the activities you enjoy doing.
- Or just talk to me about what you like doing.

I would also like to spend a few hours over the 2 weeks with you and your whānau/family joining in with you for some activities at home (like meal times, or getting ready for school) and in your neighbourhood, (like visiting your sports games, or where you go after school).



What is the purpose of this project?

The aim of my project is to understand how living in neighbourhoods with less money, equipment or places to play and do stuff you enjoy can affect your everyday activities.

The results will be used to assist community/health workers like me and others make life better for tamariki/children and their whānau/families. Also, this project will help me to finish my studies at Auckland University of Technology (AUT). I hope to write and talk about this project with others. All information that might identify you and your whānau/family will be kept private and no photos will be used without your agreement. However, the people that take part will know one another. Because of this, only things that are safe to say will be mentioned when I write about it.

How were you chosen to participate in this project?

You and your whānau/family may have seen the poster advertising this project, or someone from your local school or organisations working in your area may have suggested that your whānau/family might like to join this project.

Who else will I talk to?

I also want to talk to your parent/s about your daily activities. I will also talk to your parents about the name of your school, your age, gender, ethnicity, if you have a disability, and your family income. If they do not want you to be in the study, I cannot include you. I would also like to talk to 2 people who know you and your whānau/family, such as your teacher, sports coach or other whānau/family.

How will you be kept safe?

You might find that talking about your neighbourhood, the activities you do and can't do may make you feel uncomfortable. You can choose not to answer some of my questions, if you don't want to talk about that, or you can choose to stop at any time.

Also if you wish, I can get a counsellor for you to talk to about any worries you may have after taking part in the interview/study.



Participant Information Sheet (Focus/Discussion Group)– Parent/s

Date Information Sheet Produced:

01/06/2021

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

An Invitation

You and your tamaiti/child are invited to take part in this research project examining the effects of financial hardship on a tamaiti/child's daily activities and how whānau/family and their tamariki/children cope. For tamariki/children, daily activities involve everything they do including household tasks, contributing to the whānau/family, playing, school, sports, social activities, recreation and cultural activities.

You and your tamaiti/child's participation in this research are entirely voluntary. You and your tamaiti/child can choose to withdraw from the research at any time.

What is the purpose of this research?

The purpose of this research project is to gain a better understanding of how a lack of available money/resources (i.e., material hardship) affects a tamaiti/child's everyday activities, including the strengths and supports you have to help your tamariki/children do the things that are important to them.

It is hoped that the information gained from this study will help in the work with other tamariki/children and their whānau/families who live on low incomes.

This research project is part of my PhD study at Auckland University of Technology (AUT). Findings from this research may be used in academic publications and presentations.

Please note I have received modest funding towards costs of the study, from DV Bryant Trust & OTNZ-WNA.

How was I identified and why am I being invited to participate in this research?

You and your tamaiti/child may have seen the poster advertising the research project or you may have been referred to this study when I asked local schools and organisations working in your area to invite a whānau/family to participate. Tamaiti/children (aged between 11-13 years) who participate in this study will be part of whānau/families that have a household income below a defined threshold, live in a neighbourhood where there is high material hardship, and attend a low decile school. While only your tamaiti/child needs to participate, please read through the tamaiti/child information sheet with your son/daughter. If your tamaiti/child prefers not to participate, they will not be able to take part.

If you know other whānau/families who might like to join the study, you are welcome to tell them about it and either give them my contact details or send them to the person who asked you if you'd like to participate.

How do I agree to participate in this research?

To participate, please contact me (Simon Leadley) using the contact details at the bottom of this information sheet or, with your consent, your local contact person can forward your contact details to me. Your participation in this research is voluntary (it is your tamaiti/child's and your choice). Whether or not they choose to participate will neither advantage nor disadvantage your tamaiti/child or you. Your tamaiti/child is able to withdraw from the study at any time. If they choose to withdraw, they/you will be offered the choice between having any information that is identifiable as belonging to your tamaiti/child removed or allowing it to continue to be used. However, once the findings have been produced, removal of their information may not be possible.

You will need to complete the consent form and your tamaiti/child will need to complete the assent form to take part in this research. I can provide these for you when we meet together.

What will happen in this research?

This project has two (2) stages. All the tamariki/children will join the first stage, but only some will go on to the second stage, which will also involve you as parents or guardians and 1 – 2 other people you nominate.

1st Stage – Focus/Discussion Group: This involves a discussion group with 5-6 tamariki/children from within your neighbourhood meeting with me/researcher and another adult support person at a community centre. This will take approximately 1 ½-2 hours and involve mihiwhakia/introductions, karakia, explaining the purpose of the group, a fun activity, the main group activity (participants will be given a choice of activities to use to answer the questions such as creative methods, e.g. drawing, writing, collage) and informal conversations. I will guide the questions about the study that the tamariki/children will answer. E.g. what activities they participate in, what ones they can't access, what supports they need. You will be asked to complete a few demographic and health questions about your tamaiti/child prior to the group (e.g., you address, level of income, school they attend, their general health). There will be a brief follow-up focus/discussion group (i.e., 30-60mins) 1 or 2 weeks later to provide the tamariki an opportunity to review the initial results. 1-2 tamariki/children from this group will be invited to join the 2nd stage of the study (based on their assent and your consent). The focus group will be audio-recorded for analysis.

What are the discomforts and risks?

Living with material hardship can be a difficult experience and talking about this during the study may make your tamaiti/child feel uncomfortable or distressed. If your tamaiti/child tells me about something that could be putting them in danger, I would need to remind them to be safe, or stop doing anything unsafe, and/or ask them to talk to you as parent/s or someone in authority.

There is a level of risk due to Covid-19 and the presence of the researcher. A Covid-19 safety protocol has been developed to manage the risk and can be provided to you. I do not anticipate any other risks from participating in this study.

How will these discomforts and risks be alleviated?

Your tamaiti/child can choose not to talk about subjects that they find distressing, or do not want to talk about, or they may choose to withdraw from the discussion group, and/or the study at any time, for any reason and do not need to say why. They can choose to take a break at any time during the group. If any notifiable risks to your child's safety are raised by them in the group, I am obligated to report these to you and to the appropriate authority (we can discuss this before you choose to sign the consent form). In addition, if you would like it, a referral can be made to a suitable counselling service in your geographic region to discuss any concerns following the interview.

The referral can be made by speaking with your whānau/family GP service and they can refer you to a suitable counselling service, that you ought to be able to access free of cost to you. If there is a cost the researcher will pay for up to three counselling sessions. Please contact the Project supervisor (Professor Clare Hocking) if you require this support.

What are the benefits?

There are no immediate benefits to you or your tamaiti/child from taking part in this study. However, you will be contributing to information that could help to better support other tamariki/children and their whānau/families who have limited resources. There has been minimal published research about tamariki/children's daily activities and the impact of limited resources. This study may help kaiwhakaora ngangahau/occupational therapists and others who work with tamariki/children and their whānau/families, and help shape policy on the issue.

Additionally, you and your tamaiti/child may discuss with the researcher helpful ideas. For example, learning about supportive agencies, or interesting clubs, and groups that your tamaiti/child may be interested in joining. In addition, some people find that participating in discussion groups about what they have been through is an enjoyable and/or interesting experience.

How will my privacy be protected?

No information identifying you or your tamaiti/child as a participant in this project will be included in any of the project reports or publications. Transcripts will be kept securely at AUT for six years, following the completion of the research and then destroyed. The typist transcribing the interviews and the person who assists with running the focus group will have signed a confidentiality agreement and the typist will use a computer which is password protected. A code/pseudonym will be allocated to your file and your name will not appear on any of the transcripts. Participants' names and contact details will be kept separate from the transcribed transcripts. *No*

information that you provide that is sensitive to any others in the research will be included in any reports or publications.

What are the costs of participating in this research?

There is no cost to you. If you choose to take part, your tamaiti/child will need to complete: the 1st stage of the study: the discussion group and brief follow-up group session. This study will not interfere with your tamaiti/child's time at school.

There will be no payment for participating in this research, but should you incur any reasonable travel costs, then this will be reimbursed to you in the form of petrol vouchers (e.g., \$20-). Each tamaiti/child participating in the discussion group will be provided with a simple gift/koha once they have completed the discussion group and follow-up group (e.g., a \$20- voucher).

What opportunity do I have to consider this invitation?

Within two weeks of receiving this information sheet, please inform me if you and your tamaiti/child would like to take part in this research, or if you are happy to, your local contact person can forward your contact details to me. After I receive your contact details, I will contact you by phone within 1-2 days and answer any questions you may have. You will then be given at least one week to think further about this offer before I contact you again and arrange to meet with you to sign the consent/assent forms, complete demographic data, before your tamaiti/child can join the discussion group. *You are able to withdraw from the research at any stage and you do not need to give a reason for doing this.*

Will I receive feedback on the results of this research?

You can choose to receive a summary of the findings of this research. Once these are available, you can choose to have them sent to you at an address or an email that you provide, or pick up a written copy from the local organisation that gave you this information sheet, or attend an information meeting I will organise. You will get details of these options once the study has been completed (approximately 12 months after the interview).

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz
Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTECH, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTECH Reference number 20/210.



Participant Information Sheet – Other adults

Date Information Sheet Produced:

01/06/2021

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

An Invitation

You are invited to take part in this research project examining the effects of poverty or financial hardship on a tamaiti/child's daily activities and how whānau/family and their tamariki/children cope. For tamariki/children, daily activities involve household tasks, play, school, sports, social activities, recreation and cultural activities. Patterns of participation in daily activities mean the everyday habits, routines, roles and rituals we perform. For example, getting ourselves ready for school/work, spending time together as a whānau/family, or the types of leisure and social activities we participate in.

Your participation in this research is entirely voluntary. You can choose to withdraw from the research at any time.

What is the purpose of this research?

The purpose of this research project is to gain a better understanding of how a lack of available money/resources (i.e., material poverty/hardship) affects a tamaiti/child's everyday activities. For example, how does not having enough money/resources as a whānau/family affect how a tamaiti/child participates in school activities, sports, recreational, social, and cultural activities? Or how is a tamaiti/child's day-to-day life and routines affected by financial hardship? Or what are the supports and personal strengths that the tamaiti/child and her/his whānau/family have to help them cope with these circumstances.

It is hoped that the information gained from this study will help in the work with other tamariki/children and their whānau/families who live in material hardship.

This research project is part of my PhD study at Auckland University of Technology (AUT). Findings from this research may be used in academic publications and presentations.

Please note I have received modest funding towards costs of the study, from DV Bryant Trust & OTNZ-WNA.

How was I identified and why am I being invited to participate in this research?

You have been identified by the participant-tamaiti/child and their whānau/family as an adult who supports their tamaiti/child's participation in occupations (school, sport, club, whānau/family activities) and they invited you to participate in this study. If you choose to participate, you can contact me (Simon Leadley) using my contact details at the bottom of this information sheet.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

You will need to complete the consent form in order to be interviewed for this research. I will provide this for you.

What will happen in this research?

This project involves me interviewing you at a pre-agreed time and location of your choosing for up to 60-90 minutes. This will include asking you questions relating to the tamaiti/child-participant, about how you think growing up in their neighbourhood and with their material resources has affected her/his daily occupations (e.g., schooling, sports/recreation, cultural activities, social activities, or whānau/family activities), and your role and

support for the tamaiti/child. All material collected will be kept secure and confidential. Interviews will be audio-taped.

You will have an opportunity to review and revise the transcript of your interview, approximately 1-2 weeks after the interview.

What are the discomforts and risks?

I do not anticipate any risks from participating in this study. However, if you should feel uncomfortable at any time during the interview, we can take a break, or you can stop the interview for any reason.

There is a level of risk due to Covid-19 and the presence of the researcher. A Covid-19 safety protocol has been developed to manage the risk and can be provided to you. I do not anticipate any other risks from participating in this study.

How will these discomforts and risks be alleviated?

You can choose not to talk about subjects that you find distressing, and you can choose what to talk about and what to keep private. You are welcome to decline to answer any questions you are not completely comfortable with. You may choose to withdraw from the interview and/or the study at any time. The tape recorder will be turned off during the interview if time is required to regain composure or if a break is required. In addition, if you would like it, a referral can be made to a suitable counselling service in your geographic region to discuss any concerns following the interview.

The referral can be made by speaking with your whānau/family GP service and they can refer you to a suitable counselling service, that you ought to be able to access free of cost to you. If there is a cost the researcher will pay for these counselling costs for up to three counselling sessions. Please speak to the Project supervisor (Professor Clare Hocking) if you require this support.

What are the benefits?

There are no immediate benefits to you from taking part in this study. However, you will be contributing to information that could help to better support other tamariki/children and their whānau/families who have limited resources. There has been minimal published research about tamariki/children's daily activities and the impact of limited family resources. This study may help kaiwhakaora ngangahau/occupational therapists and others who work with tamariki/children and their whānau/families, and help shape policy on the issue.

In addition, some people find that being interviewed is an enjoyable and/or interesting experience.

How will my privacy be protected?

Interview recordings and transcripts will only be available to the research team. No information identifying you or other participants in this project will be included in any of the project reports or publications. Transcripts will be kept securely at AUT for six years, following the completion of the research and then destroyed. The typist transcribing the interviews and any advisors, will have signed a confidentiality clause and will type onto a computer which is password protected. A code/pseudonym will be allocated to your file and your name will not appear on any of the transcripts. Participants' names and contact details will be kept separate from the transcribed transcripts.

Please note that as the whānau/family have nominated you for participation in this study, you will not remain anonymous to the whānau/family. No information that you provide that is sensitive to any others in the research will be included in any reports or publications.

What are the costs of participating in this research?

There is no cost to you. If you choose to take part, you will need to complete the interview. This study will not interfere with your work. There will be no payment for participating in this research, but should you incur any reasonable travel costs, then this will be reimbursed to you in the form of petrol vouchers (e.g., \$20). I will also give you a gift/koha for your time spent in this study.

What opportunity do I have to consider this invitation?

Within two weeks of receiving this information sheet you are asked to indicate if you would like to take part in this research by advising me. After you contact me I will phone you within 1-2 days and discuss any questions you may have. You will then have at least one week to think further about this offer before I make a time with you to sign the consent form and for the interview. *You are able to withdraw from the research at any stage and you do not need to give a reason for doing this.*

Will I receive feedback on the results of this research?

You can choose to receive a summary of the findings of this research. Once these are available, you can choose to have them sent to you at an address or an email that you provide, or pick up a written copy from the local organisation that gave you this information sheet, or attend an information meeting I will organise. You will get details of these options once the study has been completed (approximately 12 months after the interview).

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz
Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix T: Permission for Researchers to Access Organisations, School and Staff.



Permission for researchers to access organisations, school and staff.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I give permission for the researcher to undertake research within _____
- I give permission for the researcher to access the staff / employee of _____

Principal’s/ CEO’s/Manager’s signature:

Principal’s CEO’s/Manager’s name:

Principal’s CEO’s/Manager’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEC Reference number 20/210.



Participant Information Sheet – Organisational Representatives

Date Information Sheet Produced:

01/06/2021

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

An Invitation

You are invited to take part in this research project examining the effects of poverty or financial hardship on a tamaiti/child's daily activities and how whānau/family and their tamariki/children cope. For tamariki/children, daily activities involve household tasks, play, school, sports, social activities, recreation and cultural activities. Patterns of participation in daily activities mean the everyday habits, routines, roles and rituals we perform. For example, getting ourselves ready for school/work, spending time together as a whānau/family, or the types of leisure and social activities we participate in.

Your participation in this research is entirely voluntary. You can choose to withdraw from the research at any time.

What is the purpose of this research?

The purpose of this research project is to gain a better understanding of how a lack of available money/resources (i.e., material poverty/hardship) affects a tamaiti/child's everyday activities. For example, how does not having enough money/resources as a whānau/family affect how a tamaiti/child participates in school activities, sports, recreational, social, and cultural activities? Or how is a tamaiti/child's day-to-day life and routines affected by financial hardship? Or what are the supports and personal strengths that the tamaiti/child and her/his whānau/family have to help them cope with these circumstances.

It is hoped that the information gained from this study will help in the work with other tamariki/children and their whānau/families who live in material hardship.

This research project is part of my PhD study at Auckland University of Technology (AUT). Findings from this research may be used in academic publications and presentations.

Please note I have received modest funding towards costs of the study, from DV Bryant Trust & OTNZ-WNA.

How was I identified and why am I being invited to participate in this research?

You have been identified by the me/another local agency as a representative in a local community organisation who works with tamariki/children supporting them to participate in occupations (school, sport, club, whānau/family activities), therefore able to inform the study, and thus are invited to participate in this study. If you choose to participate, you can contact me (Simon Leadley) using my contact details at the bottom of this information sheet.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

You will need to complete the consent form in order to be interviewed for this research. I will provide this for you.

What will happen in this research?

This project involves me interviewing you at a pre-agreed time and location of your choosing for up to 60-90 minutes. This will include asking you questions relating to the mahi/work you and your organisation do to support tamariki/children and their whānau/family in your community, about how you think growing up in this neighbourhood and with limited material resources affects tamariki/children's daily occupations (e.g., schooling, sports/recreation, cultural activities, social activities, or whānau/family activities), and your role and support for

these tamariki/children. All material collected will be kept secure and confidential. Interviews will be audio-taped.

You will have an opportunity to review and revise the transcript of your interview, approximately 1-2 weeks after the interview.

What are the discomforts and risks?

I do not anticipate any risks from participating in this study. However, if you should feel uncomfortable at any time during the interview, we can take a break, or you can stop the interview for any reason.

There is a level of risk due to Covid-19 and the presence of the researcher. A Covid-19 safety protocol has been developed to manage the risk and can be provided to you. I do not anticipate any other risks from participating in this study.

How will these discomforts and risks be alleviated?

You can choose not to talk about subjects that you find distressing, and you can choose what to talk about and what to keep private. You are welcome to decline to answer any questions you are not completely comfortable with. You may choose to withdraw from the interview and/or the study at any time. The tape recorder will be turned off during the interview if time is required to regain composure or if a break is required. In addition, if you would like it, a referral can be made to a suitable counselling service in your geographic region to discuss any concerns following the interview.

The referral can be made by speaking with your whānau/family GP service and they can refer you to a suitable counselling service, that you ought to be able to access free of cost to you. If there is a cost the researcher will pay for these counselling costs for up to three counselling sessions. Please speak to the Project supervisor (Professor Clare Hocking) if you require this support.

What are the benefits?

There are no immediate benefits to you from taking part in this study. However, you will be contributing to information that could help to better support other tamariki/children and their whānau/families who have limited resources. There has been minimal published research about tamariki/children's daily activities and the impact of limited whānau/family resources. This study may help kaiwhakaora ngangahau/occupational therapists and others who work with tamariki/children and their whānau/families, and help shape policy on the issue.

In addition, some people find that being interviewed is an enjoyable and/or interesting experience.

How will my privacy be protected?

Interview recordings and transcripts will only be available to the research team. No information identifying you or other participants in this project will be included in any of the project reports or publications. Transcripts will be kept securely at AUT for six years, following the completion of the research and then destroyed. The typist transcribing the interviews, will have signed a confidentiality clause and will type onto a computer which is password protected. A code/pseudonym will be allocated to your file and your name will not appear on any of the transcripts. Participants' names and contact details will be kept separate from the transcribed transcripts.

What are the costs of participating in this research?

There is no cost to you. If you choose to take part, you will need to complete the interview. This study will not interfere with your work. There will be no payment for participating in this research, but should you incur any reasonable travel costs, then this will be reimbursed to you in the form of petrol vouchers (e.g., \$20). I will also give you a gift/koha for your time spent in this study.

What opportunity do I have to consider this invitation?

Within two weeks of receiving this information sheet you are asked to indicate if you would like to take part in this research by advising me. After you contact me I will phone you within 1-2 days and discuss any questions you may have. You will then have at least one week to think further about this offer before I make a time with you to sign the consent form and for the interview. *You are able to withdraw from the research at any stage and you do not need to give a reason for doing this.*

Will I receive feedback on the results of this research?

You can choose to receive a summary of the findings of this research. Once these are available, you can choose to have them sent to you at an address or an email that you provide, or pick up a written copy from the local organisation that gave you this information sheet, or attend an information meeting I will organise. You will get details of these options once the study has been completed (approximately 12 months after the interview).

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, AUT, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEC Reference number 20/210.

Appendix V: Consent Form – Organisational Representative.



Consent Form – Organisational Representative

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand I will complete an interview (60-90mins) in an agreed location of my choice, that this time will be negotiated with me and will not impact on my work.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- My organisation has read through relevant information about this study and agreed to my participation in it. (please tick one): Yes No
- I wish to receive a copy of my interview transcript and revise it if I want (please tick one): Yes No
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant’s signature:

Participant’s name:

Participant’s Contact Details (if appropriate):

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Parent/Guardian Consent Form – Focus/Discussion Group: 1st Stage of Study.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of the other participants and their discussions in the discussion group my tamaiti/child is participating in is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- I understand the focus group will take approximately 2 hours to complete and there will be a follow-up session in 1-2 weeks of up to 60 minutes.
- I understand that taking part in this study is voluntary (mine and my tamaiti/child’s choice) and that she/he and I may withdraw them from the study at any time without being disadvantaged in any way.
- I understand that if my tamaiti/child withdraws from the study then, while it may not be possible to destroy all records of the discussion group of which she/he was part, I will be offered the choice between having any data that is identifiable as belonging to them removed or allowing it to continue to be used. However, once the findings have been produced, removal of this data may not be possible.
- I understand that the drawings, poems, or stories created by the tamariki/children attending the discussion group will be used for research purposes only and will not be used for any other purpose without my written permission and my tamaiti/child’s consent.
- I agree to my tamaiti/child taking part in this research.
- I agree to the researcher contacting me about the 2nd Stage of the study (please tick one): Yes No
- I wish to receive a summary of the research findings (please tick one): Yes No

Tamaiti/child’s name :

.....

Parent/Guardian’s signature:

Parent/Guardian’s name:

Parent/Guardian’s Contact Details (if appropriate):

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Consent Form: Release of creative works and images (Focus/Discussion Group: 1st Stage of Study).

For use of creative works, photographs, videos or other image recordings generated by research participants for educational or reporting purposes

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about in the Information Sheet, discussing use of images for educational or reporting purposes dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that agreeing to the use of the creative works, photographs, videos or other image recordings my tamaiti/child generated or contributed to is voluntary (mine and my tamaiti/child’s choice) and that withholding permission will not disadvantage us in any way.
- I understand that the identity of my tamaiti/child and our whānau/family will be protected when creative works, photographs, videos or other image recordings my tamaiti/child generated or contributed to are used in educational contexts or research reports.
- I permit the researcher to use the creative works, photographs, videos or other image recordings that are part of this project and/or any drawings from them and any other reproductions or adaptations from them, either complete or in part, alone or in conjunction with any wording and/or drawings for educational, reporting and examination purposes.

Participant’s (tamaiti) & Parent/s signature:

Participants’ name:

Participant’s Contact Details (if appropriate):

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



DEMOGRAPHIC AND HEALTH QUESTIONS – TAMAITI/CHILD: FOCUS/DISCUSSION GROUP

PROJECT TITLE: Financial hardship and tamariki/children’s participation, potential and well-being.

INSTRCTIONS: To be completed by parent/s of tamaiti/child who is to attend the Focus/Discussion group, prior to the group occurring. Please hand this in to the researcher before/at the time of the focus/discussion group (in the sealed envelope provided). This information is intended to provide basic demographic information about your tamaiti/child to help inform the focus group results and this study. This information will be stored securely by the researcher and your confidentiality will be ensured. (Please refer to consent forms.)

DEMOGRAPHIC DATA

1. Please indicate your combined whānau/family income (approximate, from all sources and before rent/mortgage payments – circle your income range):

\$0-30,000/annum; \$30,000-40,000/annum; \$40,000-50,000/annum; \$50,000-60,000/annum; Greater than \$60,000/annum.
2. Please state the number of household members (adults & tamariki/children) in your home:
3. Please write the name of the school your tamaiti/child attends:
4. Please state your tamaiti/child’s age and gender:
5. Please state your tamaiti/child’s ethnicity:
6. Does your tamaiti/child have a diagnosed disability?
7. Does your tamaiti/child have any kai/food allergies and if so can you state them here please?

Thank you for providing this information. I will inform you about your tamaiti/child’s eligibility to join the focus/discussion group within 1-2 days of receiving this information sheet.

Researcher name: S.Leadley
Postal address: c/o S.Leadley, CHASP, WINTEC,
Private Bag 3036, Waikato Mail Centre,
Hamilton 3240.
Ph. 07-8560342
Em: simlea71@gmail.com

Note: The parent/s or guardians should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Assent Form: Tamaiti/Child – Focus/Discussion Group: 1st Stage of Study.

Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the sheet dated 01/06/2021 telling me what will happen in this study and why it is important.
- I have been able to ask questions and to have them answered.
- I understand that notes will be taken when the researcher/Simon talks with me and other tamariki/children in the discussion group and that these will also be audio-taped and written out.
- I understand that the identity of the other participants and what they say in the discussion group is private to the group and I agree to keep this information private.
- I understand it will take about 2 hours for the discussion group and that I will also complete a brief follow-up session of about 60 minutes 1-2 weeks later.
- I understand that the creative work (drawings, art-work, poems, stories) I make during the discussion group are to help the researcher know about my view of activities. No places or people in the creative work will be identified. An electronic copy of the creative work will be kept to help the researcher write the study and will be stored safely at the university for 6 years.
- I agree to Simon using my creative work in reports or presentations about this study but my name will be kept private.
- I understand that I can stop being part of this study whenever I want and that it is ok for me to do this.
- If I stop being part of the study, I understand that I will be offered the choice between having any of my information removed or letting the researcher keep using it. I also understand that sometimes, if the results of the research have been written, some information about me may not be able to be removed.
- I agree to take part in this research.
- I agree to the Simon contacting me & my whānau/family about the 2nd Stage of the study (please tick one):
Yes No

Participant's signature:

Participant's (tamaiti) name:

Participant Contact Details (if appropriate):

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix Z: Confidentiality Form-Focus Group Assistant.



Confidentiality Agreement

For focus group assistant.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I understand that all meetings or material and information discussed with the researcher is confidential, including the tamariki/children’s identities.
- I understand that the content of the focus group or material can only be discussed with the researcher.
- I will not keep any copies of the research material nor allow third parties access to them.

Intermediary’s signature:

Intermediary’s name:

Intermediary’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Project Supervisor’s Contact Details:

Project Supervisor Clare Hocking.
 School of Rehabilitation and Occupational Studies,
 Private Bag 92006, Auckland 1142.
 Phone: 09 921 9162
 Email: clare.hocking@aut.ac.nz

Note: The assistant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix AA: Parent/Guardian Consent for Tamaiti/Child Participation, and Consent Form:
Release of Creative works and Images - Stage 2 of Study.



Parent/Guardian Consent for Tamaiti/Child Participation: Stage 2 of Study.

Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during interviews with my tamaiti/child and that they will also be audio-taped and transcribed. I also understand that notes will be taken based on the researcher's observations made during the time the researcher spends in my home/neighbourhood with myself and our whānau/family, and that my tamaiti/child may take photographs, or make drawings, or write stories or poems for the purposes of this study.
- I understand that the photographs, and drawings, poems, or stories are to help the researcher better understand my tamaiti/child's view of the activities they do in and around our home, and that locations or people that are identifiable will be obscured and will not be named. None of these photos or artwork will be published without my written consent and my tamaiti/child's consent. An electronic copy of images will be kept, for analysis purposes, securely for 6 years as with all other research data.
- I understand my tamaiti/child and I/we as parent/s will complete research activities that will take approximately 8 – 9 hours in total over 2 weeks, including the researcher spending a few hours in our home and in our neighbourhood observing my tamaiti/child in their daily activities. And that these times will be negotiated with my tamaiti/child and us and will not impact on our work or their school.
- I understand that taking part in this study is voluntary (my tamaiti/child's choice) and that my tamaiti/child may withdraw or I may withdraw my tamaiti/child from the study at any time without being disadvantaged in any way.
- I understand that if my tamaiti/child withdraws from the study then we will be offered the choice between having any data that is identifiable as belonging to my tamaiti/child removed or allowing it to continue to be used. However, once the findings have been produced, removal of our data may not be possible.
- I agree to my tamaiti/child taking part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes No

Tamaiti/child's name:

Parent/Guardian's signature:

Parent/Guardian's name:

Parent/Guardian's Contact Details (if appropriate):

.....

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Consent Form: Release of creative works and images (2nd Stage of Study).

For use of creative works, photographs, videos or other image recordings generated by research participants for educational or reporting purposes

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about in the Information Sheet, discussing use of images for educational or reporting purposes dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that agreeing to the use of the creative works, photographs, videos or other image recordings my child generated or contributed to is voluntary (mine and my tamaiti/child’s choice) and that withholding permission will not disadvantage us in any way.
- I understand that the identity of my tamaiti/child and our whānau/family will be protected when creative works, photographs, videos or other image recordings my tamaiti/child generated or contributed to are used in educational contexts or research reports.
- I permit the researcher to use the creative works, photographs, videos or other image recordings that are part of this project and/or any drawings from them and any other reproductions or adaptations from them, either complete or in part, alone or in conjunction with any wording and/or drawings for educational, reporting and examination purposes.

Participant’s (tamaiti) & Parent/s’ signature:.....

Participants’ names:

Participant’s Contact Details (if appropriate):

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix BB: Assent Form – Tamaiti/Child: Stage 2 of Study.



Assent Form – Tamaiti/Child: Stage 2 of Study.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the sheet dated 01/06/2021 telling me what will happen in this study and why it is important.
- I have been able to ask questions and to have them answered.
- I understand that notes will be taken when the researcher talks with me in an interview and that these will also be audio-taped and written out.
- I understand that notes will be taken when the researcher spends time with me and our whānau/family in our home/neighbourhood, or when I take photos/create art-work for this study.
- I understand I will spend about 7 – 8 hours over 2 weeks with my parent/s and the researcher talking to them about what I like doing. And also the researcher spending a few hours in our home and neighbourhood observing some of my daily activities like getting ready for school, preparing meals, or playing.
- I understand that the creative work (drawings, art-work, poems, stories) I make during this study are to help the researcher know about my view of activities. No places or people in the creative work will be identified. An electronic copy of the creative work will be kept to help the researcher write the study and will be stored safely at the university for 6 years.
- I agree to the researcher having an interview with my parent/s for this study.
- I agree to the researcher having an interview with 1 – 2 other grown-ups that I choose and who are important to me and my whānau/family (e.g., school teacher, sports coach etc.) for this study.
- I understand that I can stop being part of this study whenever I want and that it is ok for me to do this.
- I wish to receive a copy of the notes taken from my interview and revise it if I want (please tick one):
Yes No
- If I stop being part of the study, I understand that I will be offered the choice between having any of my information removed or letting the researcher keep using it. I also understand that sometimes, if the results of the research have been written, some information about me may not be able to be removed.
- I agree to take part in this research.

Participant’s signature:

Participant’s (tamaiti/young person) name:

Participant Contact Details (if appropriate):
.....
.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix CC: Consent Form – Parent/Guardians: Stage 2 of Study.



Consent Form – Parents/ Guardians: Stage 2 of Study.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken when I am being interviewed or during data gathering and this will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand I will complete an interview (60-90mins), that this time will be negotiated with me and will not impact on my work.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I agree to being contacted in the future (6 years) about the study (please tick one): Yes No
- I wish to receive a copy of my interview transcript and revise it if I want (please tick one): Yes No
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant’s signature:

Participant’s name:

Participant’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix DD: Consent Form – Other Adults: Stage 2 of Study.



Consent Form – Other Adult/s: Stage 2 of Study

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I have read and understood the information provided about this research project in the Information Sheet dated 01/06/2021.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand I will complete an interview (60-90mins) in an agreed location of my choice, that this time will be negotiated with me and will not impact on my work.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a copy of my interview transcript and revise it if I want (please tick one): Yes No
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant’s signature:

Participant’s name:

Participant’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Note: The Participant should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEC Reference number 20/210.

Appendix EE: Focus Group H&S Protocol.

S. Leadley Research activities, Focus group, community, PhD, AUT. Health & Safety Hazard plan

Event: Research in community organisation building, neighbourhood. **Event Type:** Community research PhD. **Location:** XX city.

Start Date: Early 2022. **End date:** Mid 2021. **Event Start time:** TBC. **Event end time:** TBC 90-120 minutes& FU session 30-60 mins.

Researcher: S.J. Leadley. Ph. 0225-xxxxxx Em: simon.leadley@op.ac.nz

Third party support personal: TBC

Project/ Primary supervisor: Professor Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz

Key/code: Risk Category: Low (L), Medium(M) High (H) risk level.

Hazard Identification and Analysis						Action			
Hazard and potential harm	Risk category	Significant hazard? Yes/No	Practicable to			Controls required (including existing)	Person responsible	Date of action	Completed by
			Eliminate?	Isolate?	Minimise?				
			Yes/No	Yes/No	Yes/No				
Covid-19 risk	M-H	Y			Y	Covid-19 & Health of participants: Any participant who is unwell will be asked to stay at home. All appropriate infection control/safety advice will be followed based on Covid-19 NZ government advice, for AUT researchers, and as per the community centre's procedures (e.g. hand washing, all sign QR code tracer app in community centre, keep record of attendees, keeping appropriate physical distance indoors (e.g. 1 metre), wear masks, use room ventilation, use of hand sanitiser, cleaning work areas after use).	Researcher - Simon	July 2021 (up-dated Jan, 2022)	Simon

1

Physical risk of injury (e.g., slips, trips, falls, MVA), health, or other harms (e.g. conflict) violence to participants, researcher or assistant.	L	Y			Y	<p>Follow researcher safety protocol. E.g. use age-appropriate communication skills, conflict management skills as required, support from assistant/organisation, and/or phone emergency service/s as required.</p> <p>Transport/mobilising: Ensure own safety on the roads when traveling by car, or when walking in an around the building/grounds and during the focus group activity. Identify any hazards in community location and address accordingly.</p> <p>Communication: Use age-appropriate communication strategies with participants at all times and utilise effective de-escalation strategies if a conflict situation arises. (Refer communication and de-escalation plan.)</p> <p>Health of researcher: If researcher is unwell he will postpone any planned researcher activities and notify all those concerned with a new date/time. All appropriate infection control/safety advice will be followed (e.g. hand washing, cleaning). Follow all Covid-19 requirements.</p> <p>Ensure third party personal and supervisor are aware of researcher's itinerary/schedule at all times.</p>	Researcher – Simon Third party – TBC Primary supervisor	July 2021	Simon
Risk of harm for tamariki/children or participants.	L	Y			Y	<p>Follow all AUTEK code of conduct and procedures as outlined in EA1 application.</p> <p>Risk assessment of materials to be used (e.g., avoid inflammatory questions, methods), ensure child friendly methods/activities, fun/interesting and age appropriate language, and assessing participants' ongoing assent.</p> <p>Professional & cultural conduct: Show respect, courtesy, confidentiality, autonomy for tamariki/children participants and use personal reflexivity to ensure no harm for participants. E.g. adhere to any cultural considerations, address power-imbalance by giving control to tamariki/children where-ever possible re decision-making; prepare visit in advance, complete group process (introduction/mihimihi, karakia, group rules, activity, conclusions) establish rapport with participants (fun activity, kai/food shared); maintain professional boundaries with participants; ensure additional adult support person (assistant) in group at all times; complete reflection about group activity afterwards, and document in researcher diary and discuss with supervisors.</p> <p>Safety/harm: Refer participants to appropriate professional services if required (e.g. GP, Oranga Tamariki, Police etc.). Counselling is offered as necessary – accessed by GP. Costs of GP or counselling visits covered by ACC if applicable or by primary researcher if required (e.g., up to 3 counselling sessions). Or costs up to 1-2 session met by Researcher (local Maori counsellor is available).</p> <p>Allergy/food: Ensure awareness of any kai/food allergies for</p>	Researcher - Simon	July 2021 (up-dated Sept, 2021)	Simon

2

					tamariki and avoid any of this food contact (e.g. via demographic pre-group data form).			
Emotional risk – researcher.	L	Y		Y	Plan for visits carefully. Write reflections in researcher diary and use reflexive practice. De-brief with supervisors after visits. Consult with a counsellor/professional advisor, as required.	Researcher - Simon	July/2021	Simon
General emergency/disaster evacuation.	L	Y		Y	Follow XX City Council, government, and specific organisation's (location of Focus group) disaster or emergency evacuation procedures (e.g. earthquakes, fires etc.) and emergency exit plans.	Researcher - Simon	July/2021	Simon

In-Home Observation Protocol



Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: *Professor Clare Hocking*

Researcher: *Simon J. Leadley*

- Confirm (e.g. face-to-face or by phone call, or email) with tamaiti/child or participant and her/his parent/s that they agree that the observation takes place, the location, agreed time and duration of observation.
- **To help ensure safety for the child:** Ensure parent/s are available to supervise time spent in whānau/family home for purposes of the research observation (or that other adults, as approved by parents), will be in the home during observations if the parent/s are absent. *Locations at the home where observations by researcher can take place, with agreement of tamaiti and parent/s include:* kitchen, living room, outside yard. As an accompanying adult, the researcher will intervene to ensure that tamaiti/child or participant is safe as required, e.g. exposure to any hazards in or around the home.
- **To help ensure privacy for the child & whānau/family:** A summary of the observations notes can be reviewed by the parent/s and no overly sensitive details will be documented. Researcher notes will be peer reviewed by his supervisors & cultural advisor.
- **To help ensure cultural safety:** The researcher will seek advice from the tamaiti and whānau/family about cultural and whānau/family customs and that these will be observed by the researcher during visits to the home. e.g. mihimihi, karakia, tikanga/common courtesies such as removing shoes at the door, not sitting on tables etc. The researcher will use reflexivity at all times, and consult throughout the period with his cultural advisor and supervisors.
- Ensure no additional costs are incurred during the time the researcher spends with whānau/family in their whare/home or contribute where necessary through koha.
- Ensure the Research Safety Protocol is followed.

Observe for:

Occupation: its nature (e.g. preparing for school, meal times, housework, social/family activities, homework), performance demands (e.g. level of fitness or skill-base), follow-up tasks (e.g. cleaning up in the home after activity).

Developmental opportunities: skill development/self-expression, opportunities for advancement (e.g. increased responsibility, or activity grading), recognition of accomplishment (e.g. praise from parent or siblings/other whānau, signs of pride).

Social network/whakawhanaungatanga: opportunities for social activity, nature of relationships/connections.

Resource requirements and provision: kai/food, types and quality of household equipment/physical supports of activities (recreational items, computer/IT), transport options, uniforms, fees/funds provided by parent/s.

Child response: flow/engagement in activity, familiarity/sense of belonging, excitement, pride, enjoyment, boredom, dissatisfaction.

Resource implications: dependence on others to attend (e.g. with transport, fees subsidy, support from other adults/peers), complexity of arrangements (e.g. arranging shared transport, multiple activities occurring - space/place & temporal, pressure of increased complexity for tamaiti, siblings and/or parent/s).

Wellbeing implications: physical or psychological benefits, spiritual or cultural identity; Taha wairua, Taha hinegaro, Taha tinana, Taha whānau (Te Whare Tapa Wha model of wellbeing).

- Record detailed observations as soon as practical. Review of field notes by supervisors and cultural advisor. Summary of notes provided to participants.

Community Observation Protocol



Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: *Professor Clare Hocking*

Researcher: *Simon J. Leadley*

- Confirm (e.g. face-to-face or by phone call, or email) with tamaiti/child participant and her/his parent/s that they agree that the observation takes place, the nature of the event, its location, agreed time and duration of observation, entry fee (if required) and appropriate koha (if relevant).
- **To help ensure safety for the child:** Ensure there is agreement with the tamaiti/child and parent/s about who will be present, start and finish times, meeting point, and area to be visited. *Locations in the community where observations by researcher can take place, with agreement of tamaiti and parent/s include:* activity/event of child & family's choice in their local area/neighbourhood. As an accompanying adult, the researcher will intervene to ensure that tamaiti/child or participant is safe as required, e.g. street/traffic safety, exposure to any hazards.
- **To help ensure privacy for the child & whānau/family:** A summary of the observations notes can be reviewed by the parent/s and no overly sensitive details will be documented. Researcher notes will be peer reviewed by his supervisors & cultural advisor.
- **To help ensure cultural safety:** The researcher will seek advice from the tamaiti and whānau/family about cultural and whānau/family customs and that these will be observed by the researcher during a community visit. e.g. mihimihī, karakia, tikanga/common courtesies etc. The researcher will use reflexivity at all times, and consult throughout the period with his cultural advisor and supervisors.
- Ensure no additional costs are incurred during the time the researcher spends with whānau/family in the community or contribute where necessary through koha.
- Ensure the Research Safety Protocol is followed.
- **Observe for:**
 - Occupation:** its nature (e.g. sport, cultural performance), performance demands (e.g. level of fitness), follow-up tasks (e.g. wash uniform, put away equipment).
 - Developmental opportunities:** skill development/self-expression, opportunities for advancement (e.g. move to next grade, choice of activities), recognition of accomplishment (e.g. badge/certificate/praise).
 - Social network/whakawhanaungatanga:** age range of participants and audience, quality and nature of relationships/connections, supports.
 - Resource requirements and provision:** e.g. uniform, equipment, fees, transport.
 - Child response:** e.g. familiarity/sense of belonging, excitement, pride/mana, enjoyment.
 - Resource implications:** dependence on others to attend (e.g. with transport, fees subsidy), complexity of arrangements (e.g. arranging shared transport).
 - Wellbeing implications:** exercise, psychological benefits, cultural identity; Taha wairua, Taha hinegaro, Taha tinana, Taha whānau (Te Whare Tapa Wha model of wellbeing).
- Record detailed observations as soon as practical. Review of field notes by supervisors and cultural advisor. Summary of notes provided to participants.

Photoelicitation and Creative Media Protocols



Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

- If the researcher provides the camera, use a disposable camera/loan digital camera. Provide all necessary creative media resources required (e.g., paper and pens for drawing). No photoelicitation will be used in focus groups.
- Discuss with tamaiti/child and parent/s the purpose of the photoelicitation (i.e., photos) and creative media (e.g., writing stories, poems or drawings). For example, to help the tamaiti/child or participant tell their story of participation in their occupations (e.g., places of objects of importance to her/him) through the use of photos, around their home and local neighbourhood.
- Reiterate that no photographic images or creative media captured in the study will be used for any presentation of findings without explicit, written consent of the participants (provided in their assent and consent forms), maintaining confidentiality of participants (e.g., with people or private property and identification of locality captured in the photos obscured), and all AUTEK guidelines on the recording of images and photographs will be followed. Following this and before use of camera, ensure parent/s have provided their verbal consent to use of camera with their tamaiti/child and the tamaiti/child has provided their verbal assent to use the camera for the purposes of the study.
- Discuss instructions on camera use with the tamaiti/child and her/his parents. E.g. safe and appropriate use of camera including:
 - Parents knowing the tamaiti/child's whereabouts
 - Positioning him/herself while taking photos, e.g. street/traffic safety.
 - Avoid taking pictures of people who are not part of the study without that person's agreement.
- Any identifiable objects or persons will be obscured when stored on the researcher's computer for analysis purposes, and all printed images will be destroyed after completion of analysis.
- Ensure no additional costs are incurred by tamaiti/child and her/his whānau/family during photoelicitation, or use of creative media. Tamaiti/child will be provided with a copy of all photos, and the disposable camera (where applicable), to keep.



AUCKLAND UNIVERSITY OF TECHNOLOGY ETHICS COMMITTEE (AUTEC)

Researcher Safety Protocol

Project title and brief description:

Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

This project aims to better understand the impact of growing up in poverty/socioeconomic deprivation on tamariki/children's occupations (i.e., their daily occupations – personal/domestic and recuperative activities in the home; schooling/homework, recreations, un/paid and/or resource seeking activities). The study utilises qualitative case study methodology to gain the perspectives of tamariki/children and others who support them such as their parent/s, other adults, agencies in the community. The study is conducted in two stages: 1st stage involves focus groups with tamariki/children; and 2nd stage: individual research with tamariki/children and their whānau/family.

Applicant

Project Supervisor: Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz

Primary Researcher

Researcher: Simon Leadley. Em: simon.leadley@op.ac.nz Ph. 0225-312830

Where is the research being undertaken?

- Kirikiriroa/Hamilton city, Waikato, NZ.
- Location: specifically in high deprivation neighbourhoods in the city.
- In the participants' homes and their local community.
- The researcher is familiar with the city and locations he is likely to be working in. e.g. the local neighbourhoods.
- If necessary: The researcher will use his extensive skills developed over the past twenty years in a range of in-patient and community physical rehabilitation and mental health rehabilitation settings to diffuse potentially dangerous situations while exiting the interview setting.
- The researcher will be using his own vehicle/public transport for travel to and from the participants' homes. He will negotiate to park his vehicle in a discrete location close to the participants' homes.

Who will be collecting the data and interacting with participants?

- The only person collecting data in the focus groups or the participants' homes will be the primary researcher.
- Those present at the participant's homes are likely to include the primary participants, e.g., the tamaiti/child and their parent/s or other members of their whānau/family such as siblings.

How familiar is the researcher with the social or cultural context of the research ?

- The research is familiar with the city and the neighbourhoods where he will be conducting the research. E.g. based on previous master's study, role with NGOs (community centre trustees in a deprived neighbourhood), community development teaching role with OT School students in the city working alongside a range of community agencies.

- The researcher will consult and liaise with staff within relevant organisations (e.g. community centres, community police) prior to conducting the research to help ensure familiarity with the community.

How safe are the activities in which the researcher is taking part?

- The research data gathering methods are safe and there are no serious hazards identified with the process of carrying out these activities. (Refer to Hazard Identification plan.)
- *Some level of risk is anticipated with undertaking the focus group and in-home or community visits due to Covid-19.*
- *If visiting the home, the researcher/assistant will make arrangements with the family first, and can ascertain any risks such as dogs, or safe parking, and how this can be managed.*
- *Contact will be made with the participating family shortly before the visit. If a family member is unwell, the visit will not take place, but can be rescheduled.*
- *If Covid restrictions are in place, then the assessment will be postponed.*

As of 10-02-2022, Covid lockdown restrictions have not been implemented and tamariki/children are attending schools, and the community centres (where the focus groups are to be conducted) under the Red level of the Covid Protection Framework. In line with university requirements, a Risk Assessment has been undertaken. Additions to the Safety Protocol have been included to manage risk associated with Covid-19 (refer to lower part of this document). A copy of this portion of the Safety Protocol will be provided to schools and to parents.

What level of access to support is available?

- The primary researcher will have a third party support person aware of his research activities in the community and participants' homes at all times and be available to respond and assist as required. His supervisors, will also be fully aware of dates, times and locations of the primary researcher during all planned research activities (i.e. a schedule of planned research activities, email and cell phone contact of primary researcher and third party contact).

What emergency plans are in place? Who can help?

- A third party will be advised of the time and venue of the research activities (e.g. focus groups, interviews, observation in home/community) and expected length of the activities (i.e. schedule of planned research activities). This person will be sent a text message before the planned research activity starts, once it is completed and the researcher has left the building safely.
- If the text on completion is delayed by more than half an hour the third party person will make contact by text, and then phone. If more than an hour elapses without making contact, the person will come to the address, and if necessary contact the Police for support and contact the primary supervisors as necessary (i.e. phone/email).
- The primary researcher has conducted similar research during his master's level study completed in 2018-2019 (e.g. visiting a whānau/family in their home and community, in a high deprivation neighbourhood).
- The researcher will have been in contact with representatives from within the local community prior to starting the research, as required (e.g. community centres, schools, churches, community police etc.)
- Potential participants will have had full access to research information sheets and been provided an opportunity to discuss their participation with the researcher and/or a community organisation representative they know and trust.
- Only the researcher and the participants', the researcher's supervisors and a third party person will know about the researcher's itinerary and research schedule. The third party personnel will have signed a confidentiality form. Support personnel/third party will be kept informed by text/phone, and supervisors by email.
- If in any event the protocols are not followed, third party will follow emergency process as stated above.

Don't forget to update your safety protocol regularly:

Date for next review: July, 2022

Covid-19 Safety Protocol: 10th February 2022

Covid Protection Framework: Red Level

Data collection (focus groups and community visits) for this research project involves some physical proximity to 11-13-year-old intermediate aged school tamariki/children who may not be fully vaccinated or boosted. A risk assessment and mitigation strategy has been undertaken in line with AUT University policy. As a result, the following strategies will be implemented by research staff to manage risk when gathering data:

- They will comply with the community centre policy relating to working with tamariki/children when on site.
- They will provide their name and contact details on arriving at and on leaving the community centre.
- They will be double-vaccinated and boosted, and will provide evidence verifying their vaccination status to the community centre (My Vaccine Pass) along with photographic ID.
- They will undertake an appropriate Covid test, as required, prior to attending the community centre and provide evidence of a clear result.
- They will carry a mobile device with sufficient battery, switched on and working for the duration of time on the community centre grounds. They will provide the number of their mobile device to the community centre.
- They will comply with contact tracing requirements at the school using the NZ Tracer app to scan the government QR codes or, if QR codes are not available, by manually entering visit details in their NZ Tracer app diary.
- They will wear an appropriate mask when on site at the community centre and when gathering data. Tamariki/children will not be required to wear masks during data collection but may do so if they/their parents wish. Should a parent wish to attend their child's focus group they will be requested to wear a mask.
- The researcher and tamariki/children will wash and dry their hands and/or use hand sanitiser before and after the focus group.
- Items used for the focus group and surfaces will be cleaned before and after, by the researcher/research assistant using an appropriate cleaning solution and wipes. The wipes will be disposed of in a closed container.
- Physical distancing will not be possible throughout data collection due to the nature of the assessment and the need to demonstrate and observe some tasks in close proximity to (sitting beside) the children. However physical distancing of at least 1 metre will be used whenever possible.
- Assessments will be conducted in a room with windows are open to optimise ventilation.
- If the researcher/research assistant feels ill or has any symptoms of COVID-19, has been at a location of interest, or is awaiting the outcome of a Covid test, they will not attend the community centre/focus group.

- Records will be maintained of the time, date and who attended the focus group/s, including contact details of those present.

A copy of this protocol will be provided to parents who provide informed consent for their child to take part in the study.

Any concerns regarding the nature of this project should be notified in the first instance to the Principal Researcher: *Simon Leadley, PhD student, AUT. Based at Otago Polytechnic/WINTEC, Hamilton, simon.leadley@op.ac.nz, phone 0225-312830.*

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEK, *ethics@aut.ac.nz*, (+649) 921 9999 ext 6038.

RESEARCHER CONTACT DETAILS:

Simon Leadley (principal researcher), simon.leadley@op.ac.nz, phone 0225-312830.

Supervisors:

Primary:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz

Secondary:

Dr Margaret Jones, Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. margaret.jones@aut.ac.nz, phone 09 921 9999 ext 7781

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



AUCKLAND UNIVERSITY OF TECHNOLOGY ETHICS COMMITTEE (AUTEC)

Guide for drafting a Sensitive Data Safety Management Protocol

Project title and brief description:

Financial hardship and tamariki/children's participation, potential and well-being.

This project aims to better understand the impact of growing up in poverty/socioeconomic deprivation on tamariki/children's occupations (i.e., their daily occupations – personal/domestic and recuperative activities in the home; schooling/homework, recreations, un/paid and/or resource seeking activities). The study utilises qualitative case study methodology to gain the perspectives of tamariki/children and others who support them such as their parent/s, other adults, agencies in the community. The study is conducted in two stages: 1st stage involves focus groups with tamariki/children; and 2nd stage: individual research with tamariki/children and their whānau/family.

Primary Researcher

Researcher: Simon Leadley. Em: simlea71@gmail.com Ph. 0225-312830

Supervisor/s

Project Supervisor: Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz

Secondary supervisor: Dr Margaret Jones, ph. 9-921 9999 Em: margaret.jones@aut.ac.nz

What data will be produced?

Physical data: 1st stage: Demographic/health information from parent/s (for focus group), audio-recording, written material and creative media from focus groups (tamariki/children), de-brief notes post-groups; 2nd stage: adult completed NZIDep questionnaires and demographic/health data, interview transcripts (tamariki/children & adults), creative media (e.g. photo images, art/drawings, stories/poems) from tamariki/children, city maps with whānau/family travel information; researcher's diary (hard copy & computer based).

Digital data: photos and other creative media in e-copy (tamariki/children); field notes (computer based); audio recording from focus groups and interviews.

What file formats and software will you use? Microsoft Word software; audio file software. A secure Gmail account.

How will data be structured and stored? Stored in labelled files in a folder entitled: 'Confidential data PhD', S.Leadley. This will be stored under another file labelled: 'PhD Simon Leadley'. This is stored on my hard drive, desk top on my work computer. This is only accessible via my account on this computer and is password protected. Based in my office at home. My work laptop if used will be set up in the same way (same file format) and is password protected. So too is my secure memory stick, if used for temporary file storage.

How much data will you produce over time – do you have enough storage? Yes enough storage on my home/office computer. Including a Hard drive back up in my office that is also password protected.

Are you making full use of University provided, fully backed-up storage? N/A, no.

How will data generated in the field be saved to safe University storage? When will this occur? All confidential data will be transferred to a secure (password protected) memory stick/hard drive and handed over to my Primary supervisor once this has been collected/PhD completed. Hard copies of consent and assent forms will be scanned/copied and stored securely on electronic backup in the researcher's computer file: 'Confidential

15 October 2023

page 2 of 3

data PhD'. All hard copies and e-copy forms and data will be handed over to my Primary supervisor for secure storage in her AUT office.

Do you have a logical file naming convention and directory structure? 'Confidential data PhD'- 'PhD Simon Leadley'-desktop-home/office computer.

What quality assurance and back-up procedures are planned? I will inform my supervisors of all these procedures and they can physically inspect this at any time throughout the study (i.e. have list of my passwords and ability to physically access these files on my computer). All primary research data files (hard copy & electronic) will be handed over to my Primary supervisor before the study is completed for safe storage at AUT office.

What raw data is being collected and how will it be managed?

How will the raw data be collected? Focus groups, interviews, observations, photo-elicitation, whānau/family mapping activity, daily occupations diary, and audio recording.

Will any raw data be stored on portable devices (e.g. audio files on a mobile phone)? Audio recording and video recording will be on two work dictaphones. Once gathered this will be transferred to main home/office computer and then erased from these portable devices. The audio recordings will be sent via secure email/One Drive (researcher's PhD Gmail account: simlea71@gmail.com) to transcriber. Once transcriptions recorded and checked, these electronic records will be deleted from the private/secure research Gmail account before the end of the study is completed.

How will the security of the temporary storage be assured? In-person checks by supervisors as required, personal responsibility by the primary researcher (i.e., password protection for computer/laptop, hard drive, memory sticks, secure research Gmail account).

Will the raw data be securely stored or transferred to a secure data repository? No.

Will the raw data be destroyed and if so, when and how? Raw data will be kept for the required time by Primary supervisor at secure office at AUT (i.e. 6 years) before being destroyed. All confidential data and files will be deleted or securely destroyed (secure document destruction facility at his workplace – WINTEC) by primary researcher from his computer and office once the study is completed.

What are the ethical requirements for your data?

In what way is the data sensitive? It reveals tamariki/children and adults home address, name, contact details and is linked to their responses about their experiences of living in poverty and how this impacts on their occupations for themselves as tamariki/children or as parent/s or as other adults supporting them.

How and where is physical data (physical data/papers/records) stored? Is digitised data encrypted appropriately? Physical data and digital data storage has been described above. i.e. secured safely, appropriately and password protected by Primary researcher.

Will you anonymise / de-identify your data? How? When? What will happen to the identifiable information? All data will be anonymised and pseudonyms will be used. The code/record to identify participants pseudonyms will be kept by the Primary researcher on his password protected computer, in a confidential file ('Confidential data PhD') and by the Primary supervisor (AUT computer/office). This will be destroyed from Primary researcher's home/office computer after the completion of the study and by the Primary supervisors after the required 6 year period.

Does your research funder have specific data management and sharing requirements? N/A

Should some data be destroyed? When and how? By whom? Only be destroyed in the specified time, by Primary supervisor, AUT (e.g. after 6 year period).

How will the undertakings about consent, confidentiality, anonymisation and other ethical considerations given to participants be assured? This is a requirement of EA1 application. Primary researcher will take full responsibility for these actions and have this checked by his supervisors. i.e. informed assent and consent forms, confidentiality forms (e.g. transcriber, advisors), signed and all procedures to be abided by/checked by primary researcher.

What are the plans for data sharing and access?

Have you discussed data sharing with your research collaborators/ supervisor? No data will be shared beyond myself and my supervisors.

What are your main data challenges? Who can help?

Do you need training or support? What is available? Support from supervisors.

What University policies are relevant to your project? Have you read and understood them? All relevant AUTECH and AUT PhD student policies.

Who is responsible for managing the data? What resources will you need? Primary researcher and supported by two experienced supervisors.

Who is responsible for data at different stages in its lifecycle? As stated above, primary researcher initially and then longer-term by primary supervisor, AUT.

Are sufficient resources (skills, people, storage, technology) available to deliver your plan? Yes. As described above. (i.e., primary research has gained experience from completing similar research for master's level qualification, support from supervisors, password protected electronic data, a secure, lockable filing cabinet in home/office). His property is alarm protected (self-monitored).

What will happen to the data if the Primary Researcher leaves mid-project? Will be held by Primary supervisor and she will have full access to Primary researcher's home/office computer as required. (e.g., provided with appropriate passwords for computer/laptop, Hard drive, Gmail account, keys for filing cabinet).

Don't forget to update your data management plan regularly:

Date for next review

A.1.1. July 2021

Appendix KK: Type, Location and Duration of Data Gathering.

**Table detailing the Type, Location and Duration of Data Gathering in Research Project:
Financial hardship and tamariki/children's participation, potential and well-being.**

Type of Data Gathering	Focus	Location/s	Duration
Focus group	Tamaiti/child's occupations in context of financial hardship (diverse view from a purposive sample).	Local Community Centre	2 hours
Interview – child	Child perspective on how financial hardship influences patterns of participation in occupations, their potential and wellbeing.	At a location of their choice (e.g. Community center, church, school, whānau home etc.).	60-90 mins in total (over 1-2 interviews) child.
Interview – parent/s	Parental perspective on how financial hardship influences their tamaiti/child's patterns of participation in occupations, their potential and wellbeing.	At a location of their choice.	60-90 mins approx.
Photo-elicitation	A tamaiti/child-friendly data gathering method – tamaiti perspective on occupations in their community that are important to them.	Brief on Photo-activity At a location of their choice.	10-15 minutes 45-60 mins approx.
Diary of occupations over 1 week – child/tamaiti	Regular occupations: range, regularity, location, duration, who with etc. To inform discussion of choice/preferences, talents and abilities, transport options, resource requirements, support to attend (individual, NGO, church based, community centre etc), size of social network involved.	Briefing of how to complete diary. Discussion of diary. At a location of their choice.	10-15 minutes approx. 30-45 mins approx.
Whānau/Family mapping activity	Type, distance to and frequency of participating in occupations outside the whānau home.	At a location of their choice.	45-60 mins approx.
Observation – weekday morning routine (or alternative, as nominated by the whānau)	How tamaiti/child's routine is influenced by space and layout of the kitchen/dining area in the home, resources available and their location, presence of other people and pets, any delegated responsibilities (e.g. assisting a sibling), prior routines (e.g. packing school bag), deadlines related to travel time/distance to destinations/start of school day, requirements such as school dress codes etc.	By invitation, in the kitchen/dining area of the whānau home.	60 mins approx. (morning visit)
Observation - evening routine (or alternative, as nominated by the whānau)	How the tamaiti/child's routine and occupational preferences articulate with the space and layout of the living area in the home and availability of alternate spaces (e.g. living room, garden, garage), competing occupations occurring in the same space (e.g. siblings playing, TV), preparation for occupations that follow (e.g. evening meal), expectations from outside the home (e.g. homework), regular chores, interruptions, noise levels.	By invitation, in the living area of the whānau home.	60-90 mins approx. (evening/meal visit)
Community event - observation	Method to increase ways of understanding the influence of financial hardship on tamaiti patterns of participation in the community (habits, routines, roles, rituals).	By invitation, accompany the tamaiti & whānau at a community-based activity	60-90 mins approx.

Indicative Questions for Interviews – Organisational Representatives



Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: *Professor Clare Hocking*

Researcher: *Simon J. Leadley*

1. Can you please tell me about what your role is with tamariki/children and whānau/families in the community who live with financial hardship and in this neighbourhood with a high level of socioeconomic deprivation/poverty? How do you or your organisation support these tamariki/children to engage in their day-to-day activities?
2. Can you please tell me where this support/input occurs that you provide, and when it occurs, how often, what times of the day and for how long, and how they get to and from the activity? Are there any influences from the physical environment that supports or restricts these tamariki/children's access to this activity?
3. Do you observe any difficulties in the tamariki/children being able to perform the activities that you support them with that you relate to their social circumstances (e.g., material hardship) or to other factors? (e.g., Health or disability related issues, other environmental or socio-cultural factors etc.)
4. Can you please tell me if there are any activities that these tamariki/children are not able to participate in and why? Do you have ways to help support these tamariki/children to overcome these barriers (e.g. extra resources/funding provided etc.)? Are any of these barriers due to material hardship (i.e., lack of resources or due to low income).
5. Can you please tell me about the skills and strengths you observe in these tamariki/children that helps them to participate in their day-to-day activities? (Prompts: such as asking for help, experience in previous activities, or specific learnt skills, or learning to go without, or talking/sharing about their problems or worries, or finding creative ways to overcome the barriers to doing activities or other strengths they have?)
6. Can you please tell me about the neighbourhood/community that these tamariki/children live in and what aspects of this area either support or constrain their participation in their day-to-day activities?
7. Can you please tell me what you think is important to helping maintain tamariki/children's wellbeing/hauora. Tell me what you think is important to helping tamariki/children grow and be able to do what they want to, or become who they want to be? (*Potential*).

Project Supervisor's Contact Details: Professor Clare Hocking Em: clare.hocking@aut.ac.nz, 921 9162

Appendix MM: Confidentiality Agreement: Transcriber.



Confidentiality Agreement

For someone transcribing data, e.g. audio-tapes of interviews.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: *Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz*

Researcher: *Simon Leadley. Em: simlea71@gmail.com*

- I understand that all the material I will be asked to transcribe is confidential including the tamariki/children’s identities.
- I understand that the contents of the tapes or recordings can only be discussed with the researchers.
- I will not keep any copies of the transcripts nor allow third parties access to them.

Transcriber’s signature:

Transcriber’s name:

Transcriber’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Project Supervisor’s Contact Details:

Project Supervisor Clare Hocking.
 School of Rehabilitation and Occupational Studies,
 Private Bag 92006, Auckland 1142.
 Phone: 09 921 9162
 Email: clare.hocking@aut.ac.nz

Note: The Transcriber should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/2010.

Appendix NN: Facilitator's Focus Group Pack.

Facilitator's Focus group pack – with prompts and instructions

DISCUSSION GROUP – FINANCIAL HARDSHIP AND TAMARIKI/CHILDREN'S PARTICIPATION, POTENTIAL AND WELLBEING.



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 Researcher: Simon Leadley Ph. 07-8560342 Em: simlea71@gmail.com

Welcome to all focus/discussion group participants. (10 mins, including group rules.)

Karakia



Karakia

Kia hora te marino

May peace be wide-spread

Kia whakapapa pounamu te moana

May the sea be like greenstone

Hei huarahi mā tātou i te rangi nei

A pathway for us all this day

Aroha atu, aroha mai

Give love, receive love

Tātou i a tātou katoa

Let us show respect for each other.

Start with Mihimihi or Pepeha – Simon & focus group assistant/s.

Purpose of the group:

In this discussion/focus group, I'll ask you questions about what things you do at home, at school, and in your neighbourhood, if that's OK.

Remember, you only have to tell me what you want, or you might think of things to tell me that I didn't ask about. I am here to listen to you and make sure everyone has a chance to have their say.

Today we will have a few different activities you can use to answer the questions.

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 Researcher: Simon Leadley Ph. 07-8560342 Em: simlea71@gmail.com

Tikanga/Group rules:

1. **There are no wrong answers.** We expect that you will have different ways of thinking about the questions we ask. Please share your thoughts even if this is different from what someone else says.
2. **Please speak one at a time.** We are recording the session, so we don't miss anything you say.
3. **The group is private.** Please don't tell anyone else who was in the group and what they said. But you can talk with you whānau/family about the questions I asked and what you said, if you want to.
4. **Listen to others.** We want to make sure you all have an opportunity to share your ideas.
5. **It's OK to ask questions and talk to each other.** If you want to ask a question or discuss what someone else has said, feel free to do that.

I also need to remind you that if you tell me about something that could be putting you in danger, I would need to remind you to be safe, or stop doing anything unsafe, and/or talk to your parent/s or someone in authority. Otherwise, I really want to hear about everything you do, where you do the things you do and who you do activities with.

We will start the group with a fun activity (10 mins), move to the main discussion activities, and then finish with any questions, and close with karakia. We can have more kai/food during the break or when you finish. If you need to take a short break (whare paku/toilet), just let us know and return afterwards.

Also, you can stop answering questions or doing the activities for this study for any reason without having to tell me why. Our assistant can call your parent/s to come and pick you up if you change your mind about joining in.

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Icebreaker – Conversation Cube: (10 mins). The conversation cube has each question/activity on one side of the colour coded cube (seated at a table, taking turns with the conversation cube):

Each tamaiti/child takes a turn to introduce themselves. 1st they say their name. (Option for a tamaiti to say their Pepeha to introduce themselves.) **Then each tamaiti/child takes a turn to throw the cube. Where it lands is the thing they talk about -**

1. What is your most favourite thing to do?;
2. What is your most favourite band/music?;
3. What TV/internet shows do you like the most?;
4. What online games do you play?;
5. What is your most favourite sports team?;
6. What type of food/kai do you like the most?



3. Conversation Cubes

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Types of activities that tamariki are engaged in: Part 1.

Thinking about all your activities you do each week, like at home, school or in your neighbourhood...

Instructions: Please write your activities onto the paper provided for you (or you can draw pictures of these activities/places). Then stick these onto the whiteboard. After that, we can korero/discuss these things you do. You don't need to worry about spelling, and we can help you.

Facilitator Prompts: Encourage group discussion and to talk about all the activities they do and how often. (10 mins)

Can you tell me what are your favourite activities?	And how often you do them?

Divide and cut these into individual pieces

Can you tell me what are your most important activities?	And how often you do them?

Types of activities that tamariki are engaged in: Part 2.

Instructions: For this activity, I will share with you an example of my weekly timetable of the things I do in my typical week. Then we will show you how to complete your timetable. So...

Here is a large weekly timetable. We will complete this together.

Can you write into it all the activities you typically do each day and when you do them. Remember this is like your 'normal' week.

Large weekly timetable on whiteboard/wall.

Facilitator Prompts: Encourage group discussions, and active participation on the shared weekly timetable, and to talk about all the activities they do and how often. (15 mins)

First task: On the weekly timetable write down in Kakariki/Green, all the activities you do for fun. **Prompts:** Both at home, school, and in the neighbourhood, or away from home/city etc.

Second task: On the weekly timetable write down in Kikorangi/Blue, all the activities you need to do or are important to you and your whānau/family, at home or outside of the home. **Prompts:** self-care (eating, rest/sleeping, dressing/grooming etc.), whanau/family time together, special family activities (church, whanau or sports/school/cultural events etc.)

Third task: On the weekly timetable write down in Papura/purple, all the activities you do together as a whānau/family, or would like to do together. **Prompts:** mealtimes together, TV, whanau/family activities – church, going for drives, going to parks/mall etc.

Fourth task: On the weekly timetable write down in Whera/Red, any chores/jobs you do or special responsibilities at home such as cleaning up the house, baby-sitting, caring for members of your whānau/family. Or jobs outside the home like at school, or in a club or team. **Prompts:** clean your room/housework, shopping, caregiver or other mahi at home. Community or School duties (traffic crossing or library monitors, gardens or other) etc.

Finally, let us korero about what you wrote on the weekly timetable.

Location for activities.

Next we have a **large map of the city**. We will complete this together...

Instructions: But first, I have a map I have drawn on showing the places I go to do my weekly activities, how I get there and how often I do these activities.... Now I will show you how to complete your map.

Can you please tell me about the places in your neighbourhood that you like to visit and go to play, or do any other activities, or meet with your friends? Please draw onto the map with the coloured felts.

Large map of city on whiteboard/wall.

Facilitator Prompts: Encourage group discussions, and active participation on the shared map, and to talk about all locations for activities they do, & ways to get there. (15 mins)

First task: Please write on the map **where you go for the things you do**, (like playing or sports/fun activities, or clubs, school, places you go with your family or friends or to hang out). And **how often** you do these activities. (I will give you each a different coloured felt pen to use.)

Second task: Please use the stick-it-notes to write about **the ways you get to these places** to do your activities, like walking, biking, scooter/skate, car, bus etc.



Finally, let us korero about what you wrote on the map of the city.

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Restrictions in activities and supports for tamariki.

Instructions: We will korero/discuss these questions together, and use **the large sheet of paper (A1)**, to write or draw your answers

Facilitator Prompts: Encourage group discussion, and active participation using the A1 sheet of paper, and to talk about constraints on participating in activities, what resources & supports they do have/don't have. E.g. equipment, gear/clothing, transport, money, lack of facilities, safety concerns, adult support. (15 mins)

1. Can you tell me about any activities you would like to do but can't?

2. Can you tell me if there are any things you do that help you to do the activities you like? (Like equipment, transport, people who support you.)

3. Can you tell me about the people that support you to do these activities that you like?

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Potential & Wellbeing/Hauora.

Instructions: We will korero/discuss these questions together, and use the large sheet of paper (A1), to write or draw your answers

Facilitator Prompts: Encourage group discussion, and active participation using the A1 sheet of paper, and to talk about their wellbeing, happiness and what they need to be healthy and develop. Encourage discussions about their hopes, dreams, goals in life and who/how they are supported to realise this/or any barriers to this. (15 mins)

1. What do you think is important to helping you stay healthy and happy?

2. What do you think is important to helping you grow and become who you want to be?

3. What are some of your dreams or goals in your life?

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Closing instructions & Karakia (5 mins):

Kia ora and thank you for joining us in this discussion group. We have really appreciated your korero/discussion today. It has really helped me to better understand the activities you do in your neighbourhood. This information will help me in my study I am conducting, that can support tamariki to do the things they want to do in life.

You are all invited back in 2 weeks to review the answers you provided today in this group and tell me if the way I write about what you told me today, sounds correct to you. We can change anything you are not happy with. This will take about 30-45 minutes."

Karakia whakamutunga

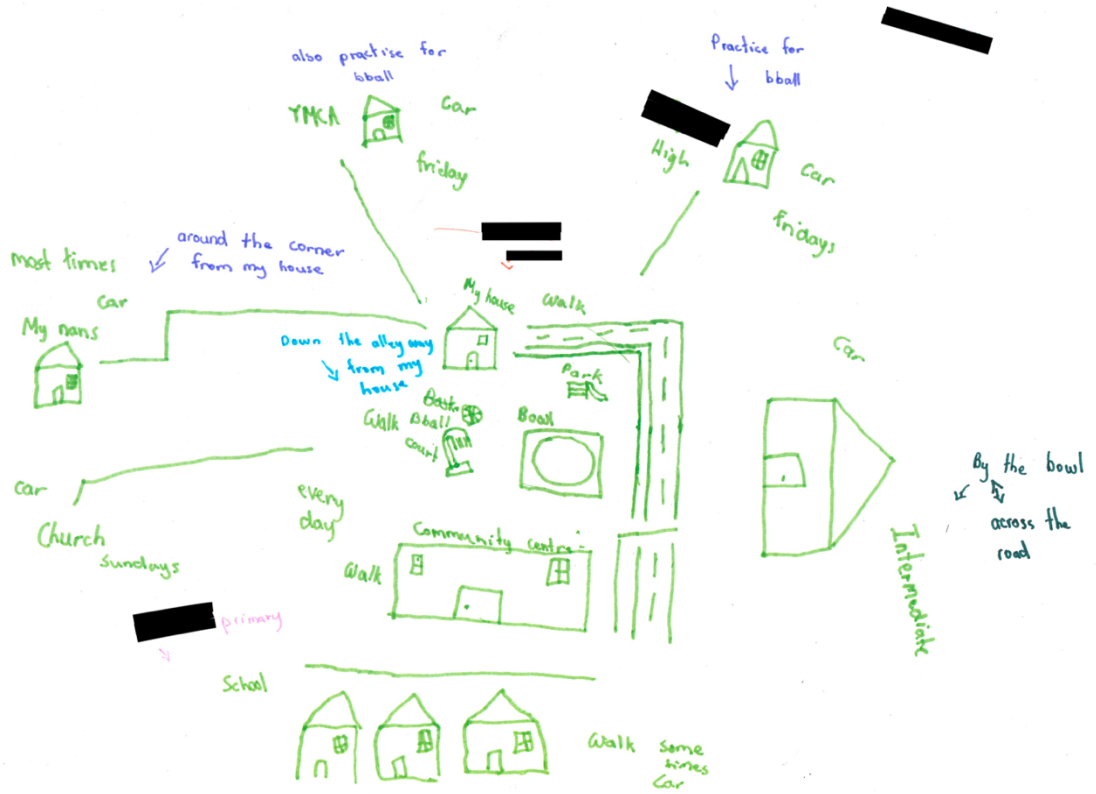
Closing incantation

Kua mutu a mātou mahi
 Mō tēnei wā
 Manaakitia mai mātou katoa
 O mātou hoa
 O mātou whānau
 Āio ki te aorangi.

Our work has finished
 For the moment
 Bless us all
 Our colleagues
 Our families
 Peace to the universe

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Appendix OO: Example of Anonymised Hand Drawn Map by Participant in Focus Group Two.



Appendix PP: AUT HSW Risk Assessment Data Collection Plan: COVID-19.

HS9001G03 - HSW Risk Assessment Guidance Delete this text before saving		Save as New Tab	Clear Parts 1&2	Clear Part 3	AUT																																																					
Part 1 - Risk Assessment Details RA Title: <u>Financial hardship and tamariki/children</u> RA Ref No: <u>20/210</u> Campus: <u>North</u> Faculty/Directorate: <u>Health_and_Environmental_Sciences</u> Assessed by: <u>Simon Leadley PHD Student/n</u>		Part 4 - Additional Safety Information Details of related safety information and protocols, others people that may be exposed to these risks, PPE requirements and specifications, etc. This research involves AUT PHD researcher/student gaining informed consent/assent and conducting focus groups at community centres (x 2) in XXcity. Participants: school-aged children (11-13 years). Family members may also be present before the focus groups start. 1-2 focus group assistants from the community centres will also be present. Each focus group will take 120 minutes including time to share kai/food. The assessment involves some items that require physical proximity to (sitting beside) the tamariki/children who may not be fully vaccinated or boosted. Study safety protocols have been developed to ensure processes are consistent with RED level under the Covid Protection Framework. I will monitor procedures regularly through the focus group and follow-up focus group member check (2 weeks following the 1st focus group, time = 30 minutes) and in response to any changes in the Framework level setting.																																																								
Part 2 - Review History All Risk Assessments must as a minimum be reviewed annually. Once reviewed the updated document must be communicated to all those who use it. Once a document has been reviewed twice (or three years since it was created) it must be rewritten. Date Created: <u>Tuesday, 15 February 2022</u> First Review - Name: _____ Second Review - Name: _____		Risk Rating Matrix <table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Likelihood</th> <th colspan="5">Consequence</th> <th rowspan="2">Score</th> <th rowspan="2">Action</th> </tr> <tr> <th>Insignificant</th> <th>Minor</th> <th>Moderate</th> <th>Major</th> <th>Extreme</th> </tr> </thead> <tbody> <tr> <td>Almost certain</td> <td>High</td> <td>High</td> <td>Very High</td> <td>Very High</td> <td>Very High</td> <td>Very High</td> <td>DO NOT PROCEED. Requires immediate attention. Introduce further controls to lower the risk level. Re-assess before proceeding.</td> </tr> <tr> <td>Likely</td> <td>Medium</td> <td>High</td> <td>High</td> <td>Very High</td> <td>Very High</td> <td>High</td> <td>Review before starting. Introduce additional controls to lower risk levels. Monitor frequently to ensure controls are working.</td> </tr> <tr> <td>Possible</td> <td>Low</td> <td>Medium</td> <td>High</td> <td>Very High</td> <td>Very High</td> <td>Medium</td> <td>Maintain controls. Proceed with work. Monitor regularly. Review if any equipment/people/materials/procedures change.</td> </tr> <tr> <td>Unlikely</td> <td>Low</td> <td>Low</td> <td>Medium</td> <td>High</td> <td>High</td> <td>Low</td> <td>Record and monitor. Proceed with work. Review regularly, and if any equipment/people/materials/procedures change.</td> </tr> <tr> <td>Rare</td> <td>Low</td> <td>Low</td> <td>Medium</td> <td>High</td> <td>High</td> <td></td> <td></td> </tr> </tbody> </table> <p>• The Risk Rating must be defined using the matrix above. • Assess the hazards before and after identifying control measures. • The rules (control measures) must be used once a final Risk Rating is agreed.</p>				Likelihood	Consequence					Score	Action	Insignificant	Minor	Moderate	Major	Extreme	Almost certain	High	High	Very High	Very High	Very High	Very High	DO NOT PROCEED. Requires immediate attention. Introduce further controls to lower the risk level. Re-assess before proceeding.	Likely	Medium	High	High	Very High	Very High	High	Review before starting. Introduce additional controls to lower risk levels. Monitor frequently to ensure controls are working.	Possible	Low	Medium	High	Very High	Very High	Medium	Maintain controls. Proceed with work. Monitor regularly. Review if any equipment/people/materials/procedures change.	Unlikely	Low	Low	Medium	High	High	Low	Record and monitor. Proceed with work. Review regularly, and if any equipment/people/materials/procedures change.	Rare	Low	Low	Medium	High	High		
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Part 3 - Hazards & Risks An additional dynamic Risk Assessment may be required for activities taking place in multiple locations																																																										
Hazard What might go wrong? Biological hazards	Risk Outcome or consequence Ill health or injury caused by biological agents.	Who could be affected? Select all relevant options. Staff Public Contractor Other (specify in Part 4)	To what extent? Inherent Risk - See Risk Rating Matrix. (Very High) Red	Control Measures How we will stop this activity from going wrong? Control measures should always seek to eliminate the hazards that are described. Researcher will comply with the community centres policy relating to working with tamariki/children when on site. Researcher will provide their name and contact details on arriving at and on leaving the community centres. Researcher is double-vaccinated and boosted, and will provide evidence verifying their vaccination status to the community centres (My Vaccine Pass) along with photographic ID. Researcher will undertake an appropriate Covid test prior to attending the community centre and provide evidence of a clear result, if necessary. Researcher will carry a mobile device with sufficient battery, switched on and working for the duration of time on the community centre grounds. They will provide the number of their mobile device to the centres. Researcher will comply with contact tracing requirements at the community centre/s using the NZ Tracer app to scan the government QR codes or, if QR codes are not available, by manually entering visit details in their NZ Tracer app diary. Researcher will wear an appropriate mask when on site at the school. Children will not be required to wear masks during data collection but may do so if they/their parents wish. Should a parent wish to attend the focus group they will be requested to wear a mask. The researcher and children will wash and dry their hands and/or use hand sanitiser before and after the focus group. Items used for the focus group and surfaces will be cleaned before and after the group is conducted by the researcher/research assistant using an appropriate cleaning solution and wipes. The wipes will be disposed of in a closed container. Physical distancing of at least 1 metres will be used whenever possible. Ventilation will be used in the room, e.g. open windows. Focus group will be conducted in a room with windows open to optimise ventilation. If the researcher/research assistant feels ill or has any symptoms of COVID-19, have been at a location of interest, or is awaiting the outcome of a Covid test, they will not attend the focus group. Records will be maintained of the time, date and who was at the focus group, including contact details of those present. Instruction/training will be provided for known risks.	How safe is it now? Residual Risk - See Risk Rating Matrix. (Medium) Amber																																																					



Information Sheet – Community organisation: Covid precautions

Date Information Sheet Produced:

10/02/2022

Project Title

Financial hardship and tamariki/children's participation, potential and well-being.

Covid-19 Protocol: 10th February 2022 - Covid Protection Framework: Red Level

Data collection (focus groups and community visits) for this research project involves some physical proximity to 11-13-year-old intermediate aged school tamariki/children who may not be fully vaccinated or boosted. A risk assessment and mitigation strategy has been undertaken in line with AUT University policy. As a result, the following strategies will be implemented by research staff to manage risk when gathering data:

- They will comply with the community centre policy relating to working with tamariki/children when on site.
- They will provide their name and contact details on arriving at and on leaving the community centre.
- They will be double-vaccinated and boosted, and will provide evidence verifying their vaccination status to the community centre (My Vaccine Pass) along with photographic ID. They will undertake an appropriate Covid test, as required, prior to attending the community centre and provide evidence of a clear result.
- They will carry a mobile device with sufficient battery, switched on and working for the duration of time on the community centre grounds. They will provide the number of their mobile device to the community centre.
- They will comply with contact tracing requirements at the school using the NZ Tracer app to scan the government QR codes or, if QR codes are not available, by manually entering visit details in their NZ Tracer app diary.
- They will wear an appropriate mask when on site at the community centre and when gathering data. Tamariki/children will not be required to wear masks during data collection but may do so if they/their parents wish. Should a parent wish to attend their child's focus group they will be requested to wear a mask. The researcher and tamariki/children will wash and dry their hands and/or use hand sanitiser before and after the focus group.
- Items used for the focus group and surfaces will be cleaned before and after, by the researcher/research assistant using an appropriate cleaning solution and wipes. The wipes will be disposed of in a closed container.
- Physical distancing will not be possible throughout data collection due to the nature of the assessment and the need to demonstrate and observe some tasks in close proximity to (sitting beside) the children. However physical distancing of at least 1 metre will be used whenever possible. Assessments will be conducted in a room with windows are open to optimise ventilation.
- If the researcher/research assistant feels ill or has any symptoms of COVID-19, has been at a location of interest, or is awaiting the outcome of a Covid test, they will not attend the community centre/focus group.
- Records will be maintained of the time, date and who attended the focus group/s, including contact details of those present.

A copy of this protocol will be provided to parents who provide informed consent for their child to take part in the study.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09-921 9162 and email: clare.hocking@aut.ac.nz
Concerns regarding the conduct of the research should be notified to the Dr Carina Meares, Executive Secretary of AUTEK, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Researcher Contact Details:

Simon Leadley. Postal address: c/o S.Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-8560342. Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the Department of Occupational Science and Therapy, Auckland University of Technology, Private Bag 92006, Auckland 1142. Phone: 09 921 9162 and email: clare.hocking@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Interview questions for tamaiti/child/participant

Project title: Financial hardship and tamariki/children's participation, potential and well-being.

This semi-formal interview is likely to be conducted in 2 parts of approximately 45-50 mins each. The option to write down or draw onto paper with coloured pens any answers the tamaiti/child does not want to answer directly in the interview will be available.

Opening statement:

In the interview/when I go along with you to, I'll ask you all about what you're doing, if that's OK. Remember, you only have to tell me what you want, or you might think of things to tell me that I didn't ask about.

You can also choose to use a drawing or write a story or a poem, or take pictures on the camera¹ I can loan to you, to tell me about activities you like doing and where this happens around your home, or neighbourhood.

If there is anything that happens around your neighbourhood that isn't proper/or legal, then it is better that we don't visit those places. I also need to remind you that if there is anything that could be putting you in danger, then I would need to keep you safe by: reminding you to be safe, or stop doing anything unsafe, and/or talk to your parent/s or someone in authority. Otherwise, I really want to hear about everything you do, where you do the things you do and who you do activities with.

Remember, that you can take a break from the interview or the activities we are doing for this study at any time, if you need a break or if you get tired. Then we can start again when you are ready.

Also you can stop doing this interview or activities for this study completely for any reason without having to tell me why.

¹ Before using camera as part of photoelicitation method, specific instructions will be given. Refer to Photoelicitation method instruction sheet and Confidentiality agreement.

Activities

1. Types of activities that you/child are engaged in: Can you please tell me about....

- a. your favourite activities that you like doing?
- b. your interests?
- c. What activities do you spend the most time doing, and where do you do these activities – home, neighbourhood/school/mix? Is that every-day or just some days? Can you explain that to me?
- d. What else do you do? Can you tell me about that? (prompt: school, home, with friends/peers & siblings, older kids, with whānau/family, pets and plants, after school, at the weekends, school holidays, doing things for other people).
- e. Do you go to other people's homes sometimes? What happens there? (Prompt: how long for, who else is there, how often.)

2. Transport for activities:

Can you please tell me about....

- a. Thinking of all the things you do away from home, how do you get there and back? (Prompt: school related, with peers, with family.)

3. Equipment/gear for activities:

Can you please tell me about....

- a. Do any of the things you do require a uniform or equipment/gear, like a school or sports uniform? Can you tell me about that? (Prompt: where you got it from, how long you've had it, will you need a new one at some time, what the equipment/gear is used for?)

4. Support to participate in activities (Heading):

Can you please tell me about....

- a. Does anyone help you do the activities that you need to or enjoy doing? Can you tell me about that? (Prompt: who supports you, their relationship to your whānau/family, what kinds of help).

HAVE A BREAK – 5 mins

5. Roles (Heading):

Can you please tell me about.....

- a. what sort of jobs or chores do you do around the home and when do you do them?
- b. Are there any other special duties you have at home? (prompt: self-initiated or assigned tasks, how did you learn to do that).
- c. Are there any other special duties you have outside of your home? (Prompt: at school like library monitor, lunch duties; or team captain; organizing activities with your friends etc?)

6. Values and occupational links (Heading):

Can you please tell me about.....

- a. what is most important (values) to you? (Prompt: like being with your family, or with your friends, playing sports etc...)

7. Potential & Wellbeing/hauora (Heading):

Can you please tell me about.....

- a. what you think is important to helping you stay well, happy? (*Wellbeing/hauora*)
- b. Tell me what you think is important to helping you grow and do what you want to or become who you want to be? (*Potential*)
- c. Tell me what some of your dreams or goals are in your life? (*Aspirations*)

8. Whānau/family related activities (Heading):

Can you please tell me about.....

- a. what sorts of activities you do with your whānau/family (parent/s/guardians/sisters/brothers) that are special for you, or are fun, or interesting, or that are important to you and your whānau/family? What do you think about them?

9. Restricted access to occupations (Heading):

Can you please tell me about.....

- a. if there are any activities you would like to do, but can't, or like to do more often?
- b. Are there things you'd like to do in the future?
- c. Is there anything that makes it a bit difficult for you to do the things you want to? If this happens how do you cope/get around that/or who helps you? (parent/s, school, other whānau/family, friends etc.)

10. Safety issues when participating in occupations in the neighbourhood (Heading):

Can you please tell me about.....

- a. When you think of all the things you do, are there things you need to be careful/safe about, or to look after other people or things? (Prompt: traffic safety in the street, condition of play/park environment, times of the day, places in the neighbourhood.)
- b. Are there things you do that are a bit risky? (Prompt: climbing trees, skateboarding, going fast biking)

Thank you/tena koe.

FINISH 1ST PART OF TAMAITI/CHILD INTERVIEW
(10-15 minutes break and the start part 2 or make another time)

START 2ND PART OF TAMAITI/CHILD INTERVIEW

Patterns of Activities/Occupations

1. Activity patterns before school:

Can you please tell me about.....

- a. What happens on school days? Start from when you wake up. What happens next? (Prompts: does someone wake you or do you use an alarm clock, getting dressed, having breakfast, brushing your teeth, getting your bag ready for school; travel to school, variations due to weather, running late for school.)

2. Activity patterns at school:

Can you please tell me about.....

- a. what you do at school?
- b. What is a typical school day like for you? (Prompts: favourite things/activities, things/activities you least like about school, activities that you miss out on at school for any reason? Summer/winter variations, classroom/-library/playground, technical training.)

3. After-school activity patterns:

Can you please tell me about.....

- a. what you usually do on the way home from school and after school? (Prompts: destination, transport, after school responsibilities, access to house, homework, where everything happens, who with, what time)

HAVE A BREAK – 5 mins

4. Activity patterns in evenings (Heading):

Can you please tell me about.....

- a. what usually happens in the evenings at home, during the week? (Prompt: What chores or jobs do you have to do to help out at home? What happens around dinner time, when do you have dinner, where do you usually have dinner, and get ready for bed etc.)

5. Activity patterns in weekends (Heading):

Can you please tell me about.....

- a. what happens in a typical weekend for you and your family? (Prompt: organised activities, whānau/family, friends, transport, what times, where?)

6. Activity patterns – rest, rejuvenation, leisure (Heading):

Can you please tell me about.....

- a. if you have any downtime or time just spent relaxing/taking it easy? (like sleeping, or resting, or watching TV, listening to music, using the computer, playing computer games (PS3/X-Box), hanging out with your friends etc?)

Thank you/tena koe for your participation. Your answer will really help me in this study.

FINISH 2nd PART OF TAMAITI/CHILD INTERVIEW

Appendix SS: Questions for Interviews with Parent/s.

Questions for Interview with parent/s

Project title: Financial hardship and tamariki/children's participation, potential and well-being.

Opening statement:

In the interview, I'll ask you about what activities your daughter/son/NAME participates in, what she/he is not able to do and why, about NAME's daily and weekly routines, about her/his access to occupations within your neighbourhood/community, the skills and strengths you and NAME have to cope with your circumstances, and the types of supports that help NAME to engage in occupations. Remember, you only have to tell me what you are comfortable talking about.

Remember, that you can take a break from the interview at any time, if you need a break or if you get tired, before we start again when you are ready.

Also, you can stop doing this interview or activities for this study completely for any reason without having to tell me why.

Occupations (*but inclusive of potential environmental influences): Can you please tell me about.....

1. Household/whānau/family demographic questions:

- a. age, gender, ethnicity of whānau/family members,
- b. Your employment status as parent/s and for any other whānau/family members,
- c. Your educational background as parent/s,
- d. The household make-up (e.g. number living in the house, number of tamariki/children etc.),
- e. The health status of members of the household,
- f. The whānau/family income (e.g. level of and sources of), level of material resource constraints (e.g. by completing **NZiDep questionnaire** and through discussion – housing tenure, access to food/resources, transport, IT, medical).

- g. Can you tell me about some of your whānau/family interests, recreational activities you like doing together?

HAVE A BREAK – 5 mins

2. Tamaiti/child's occupational interests (Heading): Can you please tell me about.....

- h. what NAME's interests are? What she/he enjoys doing, around the home, at school, out of school (cultural, sporting activities, hobbies etc.)
- i. In what sorts of activities do you think NAME spends the most time, or the least amount of time?
- j. Where do these activities mainly take place – home, neighbourhood, school somewhere else, or a mixture etc..?
- k. Are there other activities available for tamariki/children her/his age? Can you tell me about those? *(Prompt: why their tamaiti/child does not currently participate).*

3. Parental involvement in tamaiti/child's occupations (heading): Can you please tell me about.....

- a. if there are other things you want or tell NAME to do?
- b. Do you place any limits what NAME does, or check what she/he is doing? Are there rules for the children? Can you tell me about those?

4. Whānau/family activities (heading): Can you please tell me about.....

- a. what sorts of activities your whānau/family do together, that are special for you, or are fun, or that are important to you and your whānau/family? (like going on holidays, going out for dinner, going to special whānau/family events, sporting or cultural events etc...).

HAVE A BREAK – 5 mins

5. Occupational roles (heading): Can you please tell me about.....

- a. what sort of jobs or chores you expect NAME to do around the home and when does she/he do them?
- b. Are there any other special duties/roles/responsibilities that NAME has in the home?
- c. Are there any other special duties/roles/responsibilities that NAME has outside the home? (*Prompt: at school, sports or other recreational or cultural or social activities etc.?*)

6. Values (heading): Can you please tell me about.....

- a. what the most important values are for your whānau/family and your daughter/son? (such as whānau/family, education, being healthy or playing sports/being active, or other values etc...)

7. Supports for tamaiti/child's occupation participation (heading): Can you please tell me about.....

- a. If there are people who support NAME to participate in the activities that she/he needs to do or enjoys doing? (*Prompt: relationship, how it came about, duration*)
- b. Does NAME's school support her/him to engage in her/his schooling (e.g. learning, school activities) and can they access all the school activities that they want to?
- c. Do you receive any support for you and your daughter/son NAME to help with their schooling, or activities they are involved in? If so can you tell me about what forms of support you receive?

8. Potential & Wellbeing/hauora (Heading): Can you please tell me about.....

- a. What you think is important to helping support your tamaiti/child's wellbeing/hauora? (*Wellbeing/hauora*)
- b. What you think is important to helping your tamaiti/child grow and be able to do what they want to, or become who they want to be? (*Potential*)

- c. What you think some of your tamaiti/child's dreams or goals are in their life?
(Aspirations)

HAVE A BREAK – 5 mins

9. Restrictions in access to occupations (Heading): Can you please tell me about.....

- a. if there are any activities/sports that NAME is not able to do?
- b. And can you tell me what gets in the way/hinders this participation? *(Prompts: like lack of transport or being too busy and having other important priorities, not having the money or resources for the activity, or not having the areas/parks for your tamaiti/child to play freely/safely, health problems, or some other reasons?)*
- c. How do you think material/financial hardship (i.e. low income or lack of resources) affects NAME's ability to participate in activities? *(Prompt: Does it restrict or prevent her/him from engaging in any activities or hinder her/his performance in activities in anyway?).*

10. Skills, strengths, coping strategies to participate in occupations (Heading): Can you please tell me about.....

- a. in what ways you think NAME is able to cope or the skills or strengths they have to overcome her/his circumstances (i.e., your whānau/family's material hardship) that enable her/him to overcome challenges that might otherwise restrict her/him from accessing/participating in occupations? *(Prompts: such as asking for help from you as parent/s or from other whānau/family or adults they know, experience in previous occupations, or specific learnt skills, or learning to go without, or talking/sharing about their problems or worries, or finding creative ways to overcome the barriers to doing activities they need or want to do or other strengths they have?).*

11. Neighbourhood's effect on tamaiti/child's occupational participation (Heading): Can you please tell me about....

- a. How you think the neighbourhood/community (i.e., physical social, cultural, institutional) you live in either supports and/or does not support (restricts) what NAME can or can't do? *(Prompts: are there enough parks or playgrounds, or quiet cul-de-sac/street to play in, are they suitable and of a good standard, are their sports*

facilities for your child to play in, do you feel the local area is safe for your tamaiti/child to play in or walk around in, or social supports, agencies in the community?)

HAVE A BREAK – 5 mins

Patterns of Activities/Occupations (*)

1. Activity patterns before school (Heading): Can you please tell me about.....

- a. what happens on school days? Start from when NAME wakes up. What happens next? *(Prompts: does someone wake her/him or does she/he use an alarm clock, getting dressed, having breakfast, brushing their teeth, getting their bag ready for school; travel to school, variations due to weather, running late for school.)*

2. After-school activity patterns (Heading): Can you please tell me about.....

- a. what does NAME usually do on the way home from school and after school? *(Prompts: destination, transport, after school responsibilities, access to house, homework, where everything happens, who with, what time).*

3. Activity patterns in evenings (Heading): Can you please tell me about.....

- a. what usually happens in the evenings at home, during the week? (What chores or jobs does NAME have to do to help out at home? What happens around dinner time, when do you have dinner, get NAME ready for bed etc.)

4. Activity patterns in weekends (Heading): Can you please tell me about.....

- a. what happens in a typical weekend for NAME and your family? *(Prompt: organised activities, family, friends, transport, what times, where?)*

5. Activity patterns – rest, rejuvenation, leisure (Heading): Can you please tell me about.....

- a. how you and NAME and your other tamariki/children get your downtime or time just spent relaxing/taking it easy? *(Prompt: like sleeping, or resting, or watching TV, listening to music, using the computer, playing games, hanging out with your friends/social activities etc?)*

FINISH INTERVIEW – Thank you/tena koe.

Appendix TT: Questions for Other Adult Interviews.

Questions for other adult interviews

Project title: Financial hardship and tamariki/children's participation, potential and well-being.

In the interview, I'll ask you about what your role is with NAME, the occupations you support her/him in, how your relationship with NAME and her/his whānau/family came about, what supports you provide for NAME, and the skills and strengths you see in NAME that enable her/him and the whānau/family to cope with their circumstances. Remember, you only have to tell me what you are comfortable talking about.

Remember, that you can take a break from the interview at any time, if you need a break or if you get tired, before we start again when you are ready.

Also, you can stop doing this interview or activities for this study completely for any reason without having to tell me why.

Activities/Occupations (*but inclusive of potential environmental influences):

1. Adult's role with tamaiti/child/participant (Heading):

Can you please tell me about.....

- a. what your role with NAME and how your involvement began?

2. Adult's support for with tamaiti/child/participant to engage in occupations (Heading):

Can you please tell me about.....

- a. how you support NAME to engage in the activities you work with them on (Prompt: school, sports, music, cultural activities etc?) Does this activity involve anyone else (peers/friends, team mates, school etc.)?
- b. Do you provide NAME with extra support, transport, any financial assistance or something else?

3. Restrictions, or missed occupational opportunities for tamaiti/child participant

(Heading):

Can you please tell me about.....

- a. if there are any activities/occupations or opportunities that NAME may be missing out on and if so why this occurs? (i.e., is this due to financial hardship or for some other reasons?)
- b. Tell me how you think material/financial hardship affects NAME's ability to participate in activities? *(Prompt: financial hardship, lack of transport, not having other resources such as appropriate equipment, necessary supports etc?).*
- c. Does this restrict or prevent her from engaging in any activities or hinder her/his performance in activities in anyway?

4. Skills, or strengths that enable access to/participation in

tamaiti/child/participant's occupations:

Can you please tell me about.....

- a. The ways you think NAME is able to cope or the skills or strengths they have to overcome her/his circumstances (i.e., the whānau/family's material hardship) that enable her/him to overcome challenges that might otherwise restrict her from accessing/participating in occupations? *(Prompts: such as asking for help from you, or the parent/s or from other whānau/family or adults they know, experience in previous occupations, or specific learnt skills, or learning to go without, or talking/sharing about their problems or worries, or finding creative ways to overcome the barriers to doing activities they need or want to do or other strengths they have?).*

5. Neighbourhood's effect on tamaiti/child's occupational participation (Heading):

Can you please tell me about....

- a. how you think the neighbourhood/community (i.e., physical social, cultural, institutional) in which NAME and their whānau/family live affects her/his level of activity? *(Prompts: are their aspects of the neighbourhood that support his/her participation in activities such as playgrounds, or quiet cul-de-sac/street to play in, or parks to walk in, is the area safe or are there issues with tamariki/children being in areas of the neighbourhood, or is there a lack of facilities for the tamaiti/child to be active such as parks, playgrounds, clubs, sports facilities, what types of social services/supports are there etc?)*

6. Potential & Wellbeing/hauora (Heading):

- a. Tell me what you think is important to helping support tamaiti/child 'x's' wellbeing/hauora? (*Wellbeing/hauora*)
- b. Tell me what you think is important to helping tamaiti/child 'x' grow and be able to do what they want to, or become who they want to be? (*Potential*)
- c. Tell me what you think some of tamaiti/child 'x's' dreams or goals are in their life? (*Aspirations*)

Patterns of Activities/Occupations (*)

1. Spatial or transport patterns to access occupations:

Can you please tell me about.....

- a. where the activity occurs that NAME participates in with you?
- b. Are there any influences from the physical environment (e.g., that supports or restricts) NAME's access in this activity?
- c. Tell me how NAME gets to and from the activities that you support them with?

2. Temporal patterns of activity (heading):

Can you please tell me about....

- a. when and how often NAME attends the activity (times/days of week)?
- b. Tell me about NAME's attendance patterns? (Prompt: arrive early or on time/punctual, late, or missing events, or struggling to stay engaged?).

3. Occupational performance for child 'x' (Heading):

Can you please tell me about....

- a. the level of performance NAME demonstrates in the activity you support them with? (*Prompt: how well they perform it, are they still learning/novice or are they excelling/experienced, how often they attend or engage, what level of supports do they require to achieve in it, or are they helping others in it?*)
- b. Do you observe any difficulties (*Prompt: not able to attend, not make it on time, don't stay in engaged throughout activity*) for NAME in being able to perform the activities that you support them with that you relate to their social

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circumstances (e.g. material hardship) or other factors? (health or disability related issues, other environmental or socio-cultural factors etc?).

FINISH INTERVIEW – Thank you/tena koe.

Appendix UU: Photoelicitation Interview Questions: Tamaiti/Child-Participant.

***Photoelicitation interview questions guide:
tamaiti/child/participant.***

Project title: Financial hardship and tamariki/children's participation, potential and well-being.

This semi-formal interview for approximately 30-45 minutes.

Opening statement:

So,...NAME TAMAITI/CHILD you have had a chance to use the disposable camera¹ that I loaned to you, to take pictures to tell me about activities you like doing and where this happens around your home, or neighbourhood. I have the pictures you took, printed, here for you to look at.

Shall we talk about each picture and you can tell me what you or your whānau/family were doing at the time in the picture, or what the picture or activity is about, why it is special for you, and why you chose to take this picture? You can also use the coloured stick-it-notes to write something briefly about the picture you took and why it is important to you.

Remember, that you can take a break from the interview we are doing for this study at any time, if you need a break or if you get tired. Then we can start again when you are ready. I will turn on the Dictaphone to record our interview, when you are ready. Remember we can turn this off at any time that you say so.

Also, you can stop doing this interview or activities for this study completely for any reason without having to tell me why.

Start the Discussion

Korero/discussion about each picture with tamaiti/child. Interview is audio-recorded. Also, the tamaiti can write down notes onto coloured stick-it-notes on the pictures. The researcher is also making brief notes during the discussion.

Thank the participant and end the interview.

¹ Before using camera as part of photoelicitation method, specific instructions will be given. Refer to Photoelicitation method instruction sheet and Confidentiality agreement.

Appendix VV: A Young Person’s Weekly Activity Diary.



**A YOUNG PERSON’S WEEKLY ACTIVITY
DIARY – per day**



DAY OF THE WEEK:

TIME	ACTIVITY	LOCATION	WITH WHO?
6:00am			
7:00am			
8:00am			
9:00am			
10:00am			
11:00am			
12:00pm			
1:00pm			
2:00pm			
3:00pm			
4:00pm			
5:00pm			
6:00pm			
7:00pm			
8:00pm			
9:00pm			
10:00pm			
11:00pm			

A TAMAITI/CHILD/YOUNG PERSON'S DAILY & WEEKLY ACTIVITY DIARY - INSTRUCTIONS

INSTRUCTIONS

- ❖ Please complete the diary for each day of the week (Monday-Sunday, 7 days) – for 1 week only.
- ❖ You can do this during the day, or at end of each day, or whenever you choose.
- ❖ This information will be kept private/confidential.
- ❖ This weekly diary will help in this study to better understand your daily and weekly routine.

KEY TO ACTIVITY DIARY

TIME – This is the time of the day (e.g. within a 24-hour day) when the activity started and when it finished/duration).

ACTIVITY – This is the name of the activity that you were doing.

LOCATION – This the place where you were doing the activity.

WITH WHO?/SOCIAL – This is who you were doing the activity with, or who was supporting you to do the activity.

Appendix WW: Interview Questions for Tamaiti/Child-Participant and Whanau: Interactive Mapping Activity.

***Interview questions for tamaiti/child-participant & whanau:
Interactive mapping activity.***

Project title: Financial hardship and tamariki/children's participation, potential and well-being.

Opening statement:

In the interview I'll ask you and/or your parent/s all about the ways you get to the things you do and how often you use these forms of transport, if that's OK. Remember, you only have to tell me what you want.

Remember, that you can take a break from the interview/this activity we are doing for this study at any time, if you need a break or if you get tired. Then we can start again when you are ready.

Also, you can stop doing this interview or activities for this study completely for any reason without having to tell me why.

Location for participation in activities - Interactive mapping activity/locating areas of occupational participation:

- a. I've got a map of Kirikiriroa/Hamilton here. Can you show me by drawing onto the map with the coloured felt pens I provide you, the places you know about and where you go to do the things you need to (like school) and like doing (like your interests)? (Prompt: have you been there? Who with? How often? How do you get there/Transport.)
- b. Are there other places that you and your friends/brothers and sisters, or whānau/family go to? (e.g. church, shops, entertainment centres, community & health services, natural environment – parks, the bush, beaches, river, lakes). Can you draw these onto the map?
- c. Are you allowed to go there with your friends or by yourself?
- d. What sorts of things do you do when you go there?
- e. What does it cost for the activities or are they free?

FINISH TAMAITI/CHILD & WHAANAU/FAMILY INTERVIEW

Appendix XX: Example of time use data table used to create individual pie graphs.

Time use data Whanau#2/Case Study#2 – Miriama

Time use data

	Weekdays	Weekends	Total weekly (168H)
ADLs			
Active: Showering/bathing, grooming, personal/dental hygiene	60 minutes/day T=5H/weekdays	60 minutes/day, T = 2H/weekends	7H
Passive: Eating (Meals/kai/food)	1.25 hours/day, T=6.25H/weekdays (added 0.25/day - lunch at school)	1.5 hours/day, T=3H/weekends	9.25H
Active: Chores: Cleaning the house, tidy room, dishes	T=1H	1H/weekends	2.5H
Active: Shopping/groceries	1 hours/week (weekdays typically)	0	1H
Passive: Sleep	T = 42H; (equations: bed 10/11pm & wake 7+am (Sun-Thurs), average)	22 hours (total weekends (equations: Bed – late on Friday & Sat. nights 12pm/1am – wakes 12pm)	64H
Passive: Recuperative/Rest	Total = 4H/weekdays; 1 hour/day	0 hour/weekends	4H
Active: Family/whanau activities (excl. mealtimes, TV/movies)	N.B. Not counted here, as incl. in mealtimes, TV/movies.	1 hour/day (weekends - spend time together at home) (N.B. visits to extended whanau under social).	1H
Transport (active & passive)	T= 2.25H Active: Total = 1.25hours/weekdays. Passive: T=1H (equations: 20mins/day walking to/from school; 1 hour drive in car – bball, shops – groceries and whanau visits already included)	T= 1.5H Active: 0.5hours/weekends (walk to shops, park) Passive: 1hour/weekends (drive to shops, to visit whanau etc. Exceptions occur if drive out of city in limited cases/times)	T=3.75H Active =1.75H Passive=2H
Leisure/Recreations			
Active: Play (play - Indoor/Outdoor, not online)	Total = 0 hour/weekdays. (Incl under active social-with friends in park)	0 hours/weekend (including family/siblings)	0H
Active: Social occupations (non & organised, clubs/groups)	0 Hours (non-school, non-incident) T= 1.5H/weekdays, incidental. (Equation: Possible - 0.25H/day at school in breaks, 0.5H 1-2days/week incidental afterschool – averaged – less in winter)	0 Hours/weekend (Time with extended family. Cultural social activity incl, under cultural activity)	1.5H
Passive: Social occupations (non & organised, clubs/groups)	0 Hours (non-school, non-incident) T= 1.31H/weekdays,	1 H/weekend (extended whanau)	2.31H

	(Equation: Possible - 0.25H/day at school in breaks)		
Active: Retail shopping	0H/week	0H/Weekends (sometimes)	0H
Active: Sports-based occupations (Organised)	0.25 hour/week , (school-based included in school; Also limited to 1 term/year)	0 H/weekend	0.25H
Active: Recreational occupations (including physical-based activities)	0.35 H/week (bball in park with father – less in winter)	0.4 H/weekend (0.5H 1days/week bball in park with father, pets-walk – less in winter)	0.75H
Active: Extracurricular activities (organised – include cultural below*)	0 H/week	0-0.1 H/weekend (Pasifika dance group included in School – once every few months)	<0.1H
Passive: Hobbies	1H/week (e-dairy, chromebook; TikTok/cell ph. incl in online activity, pets incl in play)	1.6 hour/weekend	2.6H
Passive: Art/music (outside of school)	0 H/week (other than above)	0 H/weekend (other than above)	0
Passive: Online occupations (gaming, social activities and explorative, TV/movies/videos/shows)	Total = 27.25H/weekdays (Equations: IT/TV 4+h/day M-Th, 6-7h increase Friday night (by 2+ hours) – subtract 2H time: shops etc.).	Total 14.5H/weekends; (Equation: 6-7h/day Saturday & Sunday; subtract 2H time – family, chores etc.)	41.75H
Passive: Religious Occupations	0 H/week	0 H/weekend	0
Active: Cultural occupations* (outside of school)	0 H/week	0 <1 Hour (Infrequent events with Pasifika Dance group)	0
Productive/Education			
School (active and passive)	T = 26.25/week; 5.25 hours/day (subtracted 0.75 hours/day for lunch and social time/breaks) Active: T=2 H/week; PE 1 hour/day x 2, play in breaks under social. Passive: 24.25h/week , meals under mealtime	0 H/weekend	26.25H
Passive: Homework (out of school education)	0 H/week	0 H/weekend	0
Active: Civic engagement occupations/Voluntary occupations (out of school)	0 H/week	0 H/weekend	0H
Passive: Online activities (productive/information)	0 H/week	0 H/weekend	0
Active: Paid work	0 H/week	0 H/weekend	0
	Weekdays	Weekends	Total time in week
Total times	120	48	168H

Appendix YY: Time use data table used to construct the cross-case focus group pie graph.

Focus Group combined occupational time use data

Time use data – Combined Focus groups (n=9 children)

	Weekdays	Weekends	Total weekly (168H)
ADLs			
Active: Showering/bathing, grooming, personal/dental hygiene	60 minutes/day T=5H/weekdays	60 minutes/day, T = 2H/weekends	7H
Passive: Eating (Meals/kai/food)	1.25 hours/day, T=6.25H/weekdays (added 0.25/day - lunch at school)	1.5 hours/day, T=3H/weekends	9.25H
Active - Chores: Cleaning the house, tidy room, dishes	T=2H ; up to 30minutes daily (weekdays)	2H/weekends	4H
Active: Shopping/groceries	1H (2 children, 1 family had 2 nd groceries in week)	2 hours/week (weekends typically)	3H
Passive: Sleep	T = 42.5H ; 8-10 hours/day (weekdays), (equations: bed 10pm (9-11pm range) & wake 6:30-7am, average, late on Friday nights added 1.5H =11/12pm. N.B. some variation between children.)	18.5 hours (total weekends (equations: 9-12 hours. Bed – Sat- 11/12pm (Sun 10pm) & wake 10/11am, average. N.B. some variation between children.)	61H
Passive: Recuperative/Rest	Total = 3H/weekdays ; 1 hour/day (weekdays)	1 hour/weekends	4H
Active: Family/whanau activities (incl. mealtimes, TV/movies, games, play at parks, church)	2 hours/day (weekdays)	3 hours/day (weekends)	5H
Transport (active & passive)	Total = 3.5H AT=2H/weekdays – averaged (equation: 10-30mins/day, 4-5 days/week. 2 children on PT; reduced if dropped off/picked somedays or on wet days, some involves less distance, some stop to hang out; or catch bus) Passive: T=1.5H/week approx. , (equations: 2 children PT school, 2-3 for sprots sometimes in week 15-20mins/day drives in car to/from school/sports – take average of all)	Total=1.5H AT= 0.5H/weekends (walk to church, or shops, park) Passive: 1H/weekends (drive to shops, to visit whanau etc. Exceptions occur if drive out of city in limited cases/times)	5H AT=2.5H PT=2.5H
Leisure/Recreations			
Active: Play (play - Indoor/Outdoor, not online)	Total = 1H/weekdays. (0.5H/day x 2/weekends Intermittent with online play)	3.5 hours/weekend (including play as together as family/siblings)	4.5H

Active: Social occupations (non & organised, clubs/groups)	0 Hours (non-school, non-incidenta) T= 3.375H/day, incidental. (Equation: 0.25H at school in breaks, 0.125H before school; 0.3H/day incidental afterschool – *N.B. some children in car and not with peers afterschool)	0 Hours. (Except through church, or with family)	3.375H
Passive: Social occupations (non & organised, clubs/groups)	0 Hours (non-school, non-incidenta) T= 2.75H/weekdays, (Equation: 0.25H/day at school in breaks, 0.3H/day incidental afterschool. N.B.* A/A).	0 H/weekend (time with cousins on PC under online)	2.75H
Active: Retail shopping	0.5H/week	0.3H/Weekends (averaged-for some children if get to Mall)	0.8H
Active: Sports-based occupations (Organised)	0.25 hours/week - Overall average approx. 0.3 (2 children have 1-2 x 1 H trainings/week, limited to winter season only, 1 child plays Bball, 1x/week, school terms)	Overall average approx. 0.2 (Rugby games 2 children, winter only)	0.5H
Active: Recreational occupations (including physical-based activities)	0 hours/week (incl above.)	0 Hours	0H
Active: Extracurricular activities (organised – include cultural below*)	0.4 Hours Overall average approx. 0.4 (except Pacifica dance/activities below; afterschool programme incl average 2 children occ.)	0 Hours	0.4H
Passive: Hobbies	0.525H/week (Averaged: 1 child has arts/crafts 1/weekdays; 1 child has e-dairy/storybook)	1 hours (averaged- 1 child has arts/crafts 1/weekends)	1.525H
Passive: Art/music (outside of school)	0 (other than above)	0 (other than above)	0
Passive: Online occupations (gaming, social activities and explorative, TV/movies/videos/shows)	Total = 18H approx./week; 3-3.5 hours/day (Varies intermittent with other play in afternoons (0.5H). Equation: 0.5 3 x afternoons/week, 3 hours/evening, plus 2 hours extra Friday evenings (evenings subtract ADLs, Meals, Chores, family time (5-10pm) N.B. for 2 children (1 family) they spend less times in online activity.	Total 9H/week; (Equation: 1H Saturday, 5H Sat evening; 3H Sunday evening)	27H
Passive: Religious Occupations	0 Hours	Overall average approx. 0.5 (0-2/3 hour/ Sunday, but not in all cases – 3 children)	0.5H
Active: Cultural occupations* (outside of school)	0.3 hours/week Overall average approx. 0.3 (1 child has Pacifica dance group at school, and 2 children involved in Pacifica cultural activities)	0 Hours	0.3H

Productive/Education			
School	T = 27.5/week; 5.15H/day (subtracted 0.75 hours/day for lunch and social time/breaks) Active: T=2/week; PE 2 hours/week, play in breaks under social. Passive: 25.5H/week, meals under mealtime	0 Hours	27.5H
Passive: Homework (out of school education)	0-5 hours/week Overall average approx. 0.3 (0-2 hours/ on some days, but only in a few cases 2-3 children. Most no homework.)	School preparation = Overall average approx. 0.1	0.4H
Active: Civic engagement occupations/Voluntary occupations (out of school)	0-3 hours/week Overall average approx. 0.3 (0-1 hour/ some days, but only in a few cases 2-3 children, e.g. afterschool programme some days, church Sundays)	0 Hours	0.3H
Passive: Online activities (productive/information)	0 Hours	0 Hours	0
Paid work	0 Hours	0 Hours	0
	Weekdays	Weekends	Total time in week
Total times	120 approx.	48	168H

Templates of Worksheets for Multicase case studies – reproduced from Stake
www.guilford.com/p/stake)

Worksheet 2 Themes or research questions

<p>1. Theme/Key Assumptions/Issues Statements: Tamariki/children's patterns of participation in occupations, their potential and wellbeing/hauora are shaped by their parent/s and whānau/family they live with (E.g. their cultural understandings, their values, their habits, their own participation experiences).</p>
<p>2. Theme/Key Assumptions/Issues Statements: Tamariki/children participate in occupations according to their age, gender and culture. These types of occupations include activities of daily living (ADLs), productivity (school/work) and play/leisure.</p>
<p>3. Theme/Key Assumptions/Issues Statements: Tamariki/children's potential is relevant to their age, gender, culture and occurs dynamically across the lifespan.</p>
<p>4. Theme/Key Assumptions/Issues Statements: Wellbeing/hauora can be defined differently according to age (e.g., tamariki/children), an adult, or by culture.</p>
<p>5. Theme/Key Assumptions/Issues Statements: Tamariki/children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical (e.g., physical features of neighbourhood, home or school; weather), environmental (e.g., school curriculum, community social capital, governmental supports), societal patterns of time use (e.g., school hours, cultural norms) and other people in their environment (e.g. tautoko/support and increased access to resources that support a tamaiti/child's participation in occupations, guidance/mentoring, manaakitanga, whanaungatanga).</p>
<p>6. Theme/Key Assumptions/Issues Statements: Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain or afford) a tamaiti/child's patterns of participation in occupations, their potential (e.g. what is tamaiti/child good at and enjoys, their aptitudes, diversity of social networks) and wellbeing/hauora.</p>
<p>7. Theme/Key Assumptions/Issues Statements: Poverty constrains tamariki/children's patterns of participation in occupations, their potential and their wellbeing/hauora both directly (i.e., resources and environment available such as house, transport, school, facilities for recreations in the community) and indirectly (i.e., income available for food, transport, recreations etc.).</p>
<p>8. Theme/Key Assumptions/Issues Statements: Tamariki/children and their parent/s and whānau/family exert agency in relation to their patterns of participation in occupations, potential and their wellbeing/hauora.</p>

Worksheet 3 Case Study One (1) Fernlee

Synopsis of Case	Case study 1: Fernlee – Focus Group #1 & Whānau#1 (Mateo & Maria)
Uniqueness of case situation for programme/phenomenon:	High deprivation neighbourhood. All whānau below poverty line (<60% median income, AHC). Most tamariki low-medium decile schools. Intermediate, with 1 just started year 9 high school, and 1 home schooled. Child/participant aged: 12-13 years. Range ethnicities: Māori, Māori/European, Indian/Asian/Kiwi. Genders: 2 x female, 3 x male. T=5 participants. Health – no reported health or disability issues. Except URTI recurrent and social anxiety - Mateo
Relevance of case for cross-case Themes:	As above.
General influences (optional):	Fairly recent improvements to supporting whānau/family's in poverty (Child Poverty Act and relevant measures). E.g. changes being implemented over last 3 years. COVID-19 in NZ was into its 3 rd year at time of data collection. Recently left lock-down in NZ at time that conducted Focus Group, May 2022.
Situational Factors (optional)	Also, most tamariki & whānau connected to the Fernlee Community Centre through afterschool programme, or staff working there, or other services.
Case Findings:	<ol style="list-style-type: none"> I. All tamariki in the focus group showed <i>positive relationships with their whānau</i>, were <i>independent in their ADLs</i>, to levels expected of their age, development (e.g., dressing, grooming, eating, getting ready for school, walking to/from school, socialising/play, helping with chores at home). II. All tamariki showed regular, consistent <i>weekly routines</i> at home and in their neighbourhood (e.g. ADLs, school, leisure (gaming, TV), productive (chores)). The tamariki had a <i>range of roles</i> (e.g., son/daughter, whānau member, student, role at kura (Mateo – cleaning and setting up sports gear) and for 2 tamariki as volunteers), and <i>whānau rituals</i> were important and a consistent feature in their lives (e.g., time together as whānau on Friday nights). III. <i>Important occupations</i>: time with whānau and friends and having fun, leisure (e.g. gaming, music, arts/crafts, sports and physical activities (PA)), kai related activities (e.g., cooking, eating), restorative activities (e.g. resting), learning at school. For 1-2 tamariki religion was an important feature in their lives. Cultural activities mainly occurred at kura/school. IV. <i>No tamariki were engaged in homework</i>, and this was also the case in the FU interviews with Mateo. V. No tamariki were involved in <i>caregiving, or in paid roles</i>, but two were <i>engaged in voluntary roles</i>. VI. The <i>range of hobbies</i> these tamariki participated in were limited to those at home, free/low cost, and their choices were limited by material hardships (e.g. no groups/in-person social hobbies). VII. Most tamariki were not engaging in <i>anti-social occupations</i>, but two reported afterschool activities with peers they did not report to their parent/s or were not allowed to do. For example, <i>hanging out with peers in the neighbourhood</i>

Worksheet 4. Estimates of Ordinariness of the Situation of Each Case and Estimates of Manifestation of Multicase Themes in Each Case¹

W = highly unusual situation, u = somewhat unusual situation, blank = ordinary situation

M = high manifestation, m = some manifestation, blank = almost no manifestation

Red font – differences between cases.

Blue, underline font – highly unusual situation occurring/different from ordinary situation (W)

	Case 1 - Fernlee	Case 2 - Riverfield
Ordinariness of this Case's situation:	A typical urban neighbourhood in a large NZ city. Population numbers, and percentage of youth are comparable, but ethnicity is different (i.e., less Māori and Pacifica peoples) along with other demographic features of a low SES neighbourhood when compared with other higher SES parts of the city.	A typical urban neighbourhood in a large NZ city. Population numbers, and percentage of youth are comparable, but ethnicity is different (i.e., less Māori and Pacifica peoples) along with other demographic features of a low SES neighbourhood when compared with other higher SES parts of the city.
Original Multicase Themes		
Theme 1 - Tamariki/children's patterns of participation in occupations, their potential and wellbeing/hauora are shaped by their parent/s and whānau/family they live with	M, u- what might be expected of a low SES neighbourhood. E.g. low income, restricted transport, lowered housing quality/size, neighbourhood safety concerns. Whānau were Māori, Māori/Pakeha, Asian. Most tamariki had access to transport (family car) and expected occupations at home(ADLs, family time) and kura/school, and in some cases church, Community Centre.	M, u- what might be expected of a low SES neighbourhood. E.g. low income, restricted transport, lowered housing quality/size/overcrowding, neighbourhood safety concerns. Whānau were Māori, Pacifica. Most tamariki had access to transport (family car, <i>one child did not have access to car</i>) and expected occupations at home(ADLs, family time) and kura/school, and in some cases church.
Theme 2 - Tamariki/children participate in occupations according to their age, gender and culture. These types of occupations include activities of daily living (ADLs), productivity (school/work) and play/leisure.	M, u - Tamariki development and performance of self-care, kura activities was as expected for their age (10-13 yrs), but they were missing out on some occupations (e.g. leisure-sports, clubs/groups, play, social, travel/holidays); high level of sedentary (online, TV) activities in home; most occupations occurred at/close to home, with siblings/whānau, or peers at kura or in incidental ways before/after kura (e.g. on way home). There were some health conditions affecting participation.	M, u - Tamariki development and performance of self-care, kura activities was as expected for their age (10-13 yrs), but they were missing out on/limited some occupations (e.g. leisure-sports, clubs/groups, play, social, travel/holidays); high level of sedentary (online, TV) activities in home; most occupations occurred at/close to home, with siblings/whānau, or peers at kura or in incidental ways before/after kura (e.g. on way home). There were some health conditions affecting participation.
Theme 3 - Tamariki/children's potential is relevant to their age, gender, culture and occurs dynamically across the lifespan.	M, W - Occupations were mostly age appropriate (e.g. ADLs, Kura, family-time, play with siblings & peers); there were some health conditions affecting participation; whānau & community support key to tamariki participation; but <u>household material poverty, neighbourhood risks, and lack of free/low-cost,</u>	M, W - e.g. occupations were mostly age appropriate (e.g. ADLs, Kura, family-time, play with siblings & peers); there were some health conditions affecting participation; whānau & community support key to tamariki participation; but <u>household material poverty, neighbourhood risks, and lack of free, supervised children's</u>

¹ Templates of Worksheets for Multicase case studies – reproduced from Stake

Refer: <https://www.guilford.com/books/Multiple-Case-Study-Analysis/Robert-Stake/9781593852481>
<https://www.guilford.com/add/forms/stake.pdf?t=1>

Worksheet 5. A Map on which to make Assertions for the Final Report¹

Case 1	Themes							
	1	2	3	4	5	6	7	8
<p>Finding I</p> <p>Participation in occupations are constrained by material poverty (e.g. low income & constrained resources and physical features of the home, lack of low-cost/free occupational opportunities (e.g. play, social activities, groups/clubs, kura/school) and presence of risks in (e.g. crime, violence) and features of the neighbourhood (e.g. degraded or absence of facilities for children's occupations).</p>	✓				✓	✓	✓	✓
<p>Finding II</p> <p>Tamariki/children's patterns of occupation are modified by material poverty (e.g. primarily increased sedentary habits/routines, high screen time, lowered physical activity habits/routines, modified sleep routines (disrupted), restricted routinised social activity with peers, reduced out-of-school education routines (homework), constrained role development).</p>	✓	✓	✓		✓	✓	✓	✓
<p>Finding III</p> <p>Tamariki hauora/well-being may be affected by material poverty (e.g. through constrained social activity, play, and physical activity).</p>	✓			✓	✓	✓	✓	✓
<p>Finding IV</p> <p>Tamariki potential (development, health, future life outcomes) may be affected by material poverty (e.g. lack of out-of-school education, constrained social activity, play, high sedentary and low physical activity levels).</p>	✓		✓			✓		✓
<p>Finding V</p>								
Case 2								
<p>Finding I</p> <p>Participation in occupations are constrained by material poverty (e.g. low income & constrained resources and physical features of the home, lack of low-cost/free occupational opportunities (e.g. play, social activities, groups/clubs, kura/school) and presence of risks in (e.g. crime, violence) and features of the neighbourhood (e.g. degraded or absence of facilities for children's occupations).</p>	✓				✓	✓	✓	✓
<p>Finding II</p> <p>Tamariki/children's patterns of occupation are modified by material poverty (e.g. primarily increased sedentary habits/routines, high screen time, lowered physical activity habits/routines, routine of adult responsibilities, modified breakfast routines (skipping), reduced oral hygiene habits, modified sleep routines (disrupted), modified family mealtimes (reduced/absent), restricted routinised social activity with peers, reduced out-of-school education routines (homework), constrained role development).</p>	✓	✓	✓		✓	✓	✓	✓

¹ Templates of Worksheets for Multicase case studies – reproduced from Stake

Refer: <https://www.guilford.com/books/Multiple-Case-Study-Analysis/Robert-Stake/9781593852481>
<https://www.guilford.com/add/forms/stake.pdf?t=1>

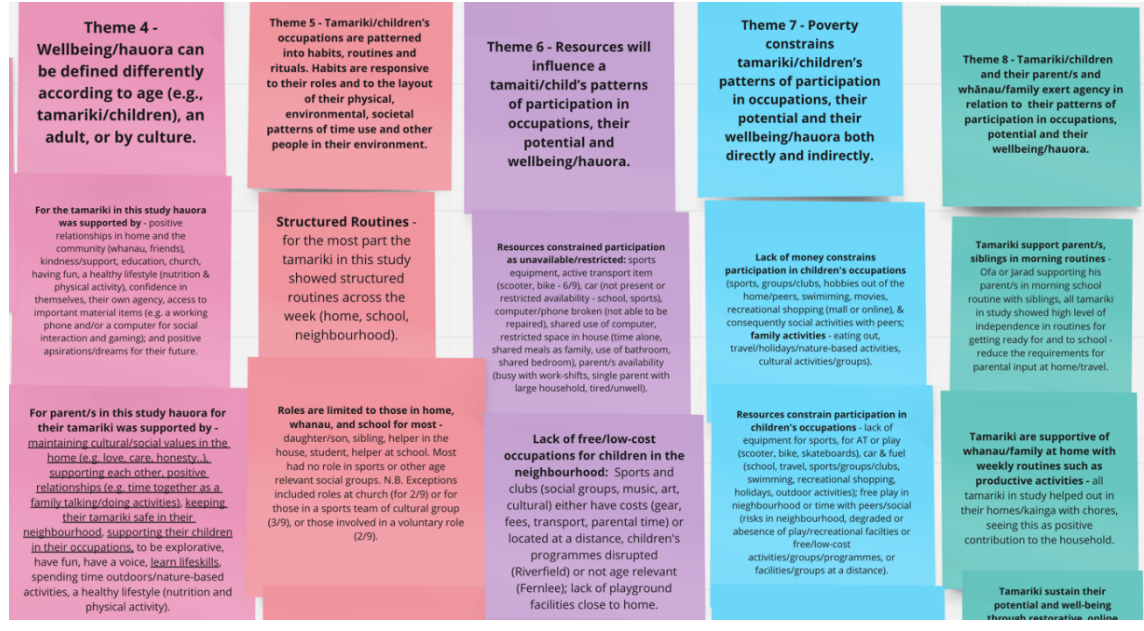
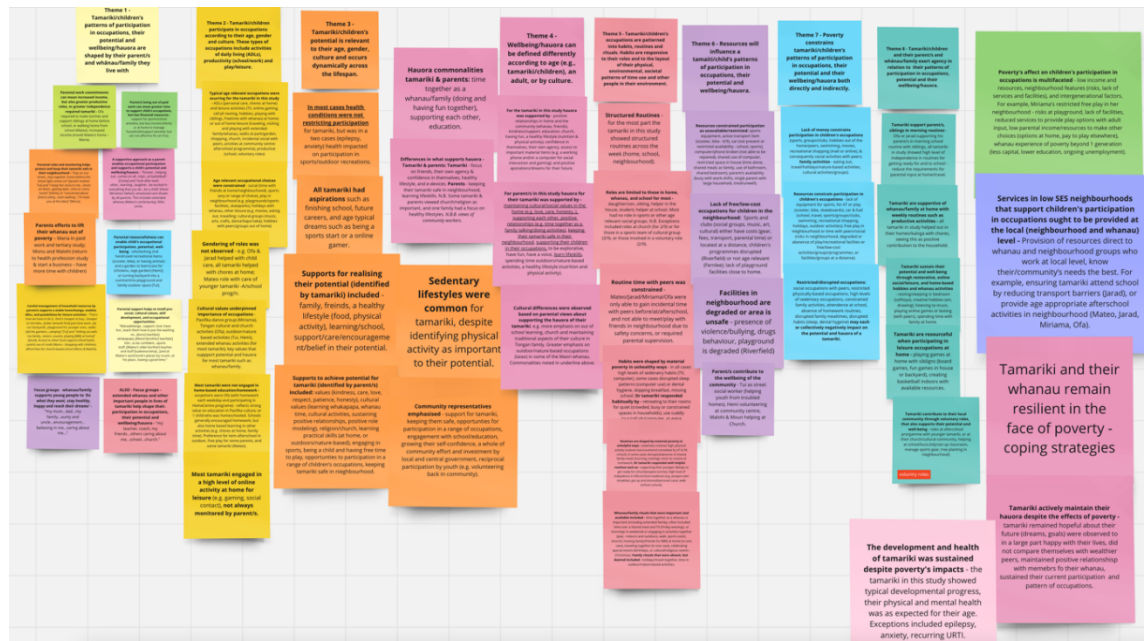
Worksheet 6. Multi-case Assertions for the Final Report¹

#	Assertion	Related to which Themes or Factors?	Evidenced in which case/s?
1	Tamariki living in poverty in Aotearoa New Zealand generally participate in occupations that are age relevant, not gender specific, and are underpinned by cultural values. However, the range of age relevant occupations available to them are constrained, and for some they are required to perform occupations atypical for their age.	Theme 2	Case 1 & 2
2	Poverty disrupts and negatively influences tamariki/children's patterns of occupation (habits, routines, roles, family rituals).	Theme 5	Case 1 & 2
3	**Poverty constrains occupational opportunities and choice for tamariki and thus their participation in occupations, their potential and hauora, both in/directly, or in a multifaceted way.	Themes 6 & 7	Case 1 & 2
4	**Provision of resources direct to whānau and neighbourhood groups who work at a local level and know their/community's needs the best, will most effectively support tamariki participation in their occupations, their potential and hauora.	Themes 6 & 7	Case 1 & 2
5	The potential (development and health) of tamariki is largely sustained, whilst also being challenged by living in poverty.	Theme 3	Case 1 & 2
6	Tamariki actively maintain their hauora/well-being, whilst experiencing the negative effects of poverty.	Theme 4	Case 1 & 2
7	Tamariki exert agency that helps to counter the effects of poverty in their lives.	Theme 8	Case 1 & 2
8	A supportive approach as a parent/s enables occupational participation and supports a child's potential and wellbeing/hauora.	Theme 1	Case 1 & 2
9	Parent/s efforts to lift their whānau out of poverty has both short and long-term effects on their tamariki and their participation in occupations, their potential and well-being.	Theme 1	Case 1 & 2

¹ Templates of Worksheets for Multicase case studies – reproduced from Stake

Refer: <https://www.guilford.com/books/Multiple-Case-Study-Analysis/Robert-Stake/9781593852481>
<https://www.guilford.com/add/forms/stake.pdf?t=1>

Appendix AAA: Example of Miro Board Platform used in final Stages of Cross Case Analysis.



Appendix BBB: Table of Member Checking Process and Responses

Transcripts	Responses	Draft Case Study Reports	Responses
Whānau #1 and other adult/s	No changes suggested by parent, and other adult.	Whānau #1 and other adult.	Met briefly with mother (Maria) to deliver report. Maria later reported (in cell phone text): "Letting you know that I am content with what you have written in the case study. Thank you for giving Mateo and I an opportunity to preview your findings. Appreciate it."
Whānau #2 and other adult/s	No changes suggested by parent, and other adult.	Whānau #2 and other adult.	Met briefly with the father (Malohi) to deliver the report. However, no feedback received.
Whānau #3 and other adult/s	No changes suggested by parent. Minor wording change suggested by other adult.	Whānau #3 and other adult.	Dropped report off to whānau. In follow-up phone call, not able to contact parent (Tui). Cell phone no longer valid. No further follow-up.
Whānau #4 and other adult/s	No changes suggested by parent, and other adult.	Whānau #4 and other adult.	Dropped report off to whanau. Parent (Hemi in follow-up phone call) reported: "I found reading the report to be long and a bit challenging...I needed to read it a couple of times...But I'm happy with the report and I enjoyed the chance to be in the study. Thank you."
Community staff CS1	No changes by three participants, and one change suggested by one participant: 'Minor changes to wording in Fernlee community case report reflecting tamariki who are unsupervised in neighbourhood during school holidays'.	Community staff CS1	Participant#1 – 'No changes. Happy with report.' Participant#2 – "No changes. Happy with report.' Participant #3 – 'No changes. Happy with report.' Participant #4 – 'No changes. Happy with report.'

Transcripts	Responses	Draft Case Study Reports	Responses
Community staff CS1	No changes by one participant, no response from one participant, and one change suggested by one participant: 'Minor changes to wording about school-based supports in Riverfield community report.'	Community staff CS1	Participant#1 – 'No reply'. Participant#2 – 'Thought the report highlighted accurately key issues for the community. Planned to share results with their centre's Governance Board.' Participant #3 – 'No changes. Happy with report.'
	Initial feedback from Māori cultural advisor about case reports – "Preference for the Reo Māori terms related to case study, increase emphasis on Māori aspirations. Overall, a sound use of Te Reo Māori, and representation of Māori worldview on the issue". Initial feedback about case report from Pasifika advisor – "Suitable use of Tongan language and cultural terms. A fair representation of Pasifika worldview."	Further cultural feedback – Integrated Fundings reports and assertions.	Māori cultural advisor: Emphasis on correct use of and spelling of Te Reo Māori terms, and need to clarify terms from Tongan language (footnotes added where necessary). Advice on adding culturally normative Māori terms into the report, and clarity on role of whakapapa for tamariki Māori and their whānau in this study. Emphasis on some policy issues that are inequitable and appear 'racist'. Clarify how interventions/resources can be meaningfully consulted on by all groups Māori, and Pasifika, in local communities, or where tamariki may not be engaged with religious organisations. Pasifika cultural advisor: Feedback included nuanced views from a Pasifika perspective about family values (re expectations for their future, engagement in paid work by parent/s), emphasise the lack of availability of cultural activities that support children's wellbeing, highlight the role of children in Pasifika families where household productive occupations are expected and important to the family.



Confidentiality Agreement

For third party support person.

Project title: *Financial hardship and tamariki/children’s participation, potential and well-being.*

Project Supervisor: Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz

Researcher: Simon Leadley. Em: simlea71@gmail.com

-
- I understand that all meetings or material and information discussed with the researcher is confidential, including the tamariki/children’s identities.
 - I understand that all details of participants shared with me as a third party will remain confidential to me and the researcher (Simon). E.g. names, address, contact details (phone, emails).
 - I will not keep any copies of the research material/participants contact details, nor allow third parties access to them.

Intermediary’s signature:

Intermediary’s name:

Intermediary’s Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Project Supervisor’s Contact Details:

Project Supervisor Clare Hocking.
 School of Rehabilitation and Occupational Studies,
 Private Bag 92006, Auckland 1142.
 Phone: 09 921 9162
 Email: clare.hocking@aut.ac.nz

Note: The support person should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.



Confidentiality Agreement

For cultural advisor.

Project title: *Financial hardship and tamariki/children's participation, potential and well-being.*

Project Supervisor: Dr Clare Hocking, Ph. 9-921 9162. Em: clare.hocking@aut.ac.nz

Researcher: Simon Leadley. Em: simlea71@gmail.com

- I understand that all meetings or material and information discussed with the researcher is confidential, including the tamariki/children's identities.
- I understand that the content of the interviews meetings or material can only be discussed with the researcher.
- I will not keep any copies of the research material nor allow third parties access to them.

Intermediary's signature:

Intermediary's name:

Intermediary's Contact Details (if appropriate):

.....

.....

.....

.....

Date:

Project Supervisor's Contact Details:

Project Supervisor Clare Hocking.

School of Rehabilitation and Occupational Studies,

Private Bag 92006, Auckland 1142.

Phone: 09 921 9162

Email: clare.hocking@aut.ac.nz

Note: The support person should retain a copy of this form.

Approved by the Auckland University of Technology Ethics Committee on 01/07/2021, AUTEK Reference number 20/210.

Appendix EEE: Consultation Table – Feedback.

CONSULTATION TABLE – FEEDBACK**Case study research exploring the effect of whānau/family and neighbourhood resources on tamariki/children’s participation in activities at home and in their community, their potential and well-being.**

Simon J. Leadley, PhD taurira/student, Auckland University of Technology (AUT).
Em: simon.leadley@op.ac.nz Ph. 0225-312830

DATE	GROUP/INDIVIDUAL PROVIDING FEEDBACK	FEEDBACK/KORERO
	Māori colleagues, Whakaora Ngangahau/Occupational Therapy.	Engaged Māori cultural advisor, S.Bryant. Unfortunately the national Whakaora Ngangahau ropu was not available for consultation on this project.
	Māori colleges, working in academic field – Researcher’s workplace, a Tertiary teaching institution.	Meet/hui with Māori colleagues (22/06/2020) and received verbal and email feedback from several other Māori colleagues. Essentially the feedback was supportive of the project and included: <i>providing counselling as required for tamariki after the focus groups if they are upset by anything they hear or say; listening carefully to the oral stories told especially from Māori participants; being sensitive to the needs and emotions of participants; ensuring tamariki participating in the focus groups respect the privacy of each other and do not discuss information shared by other participants; considering the structural and historic inequities in the motu that perpetuate poverty (e.g., colonisation by The British Crown etc.), that ideally consultation with Māori should have started before the study was designed.</i>
	Community organisations: in the city where the research is taking pace, who work with whānau/families	Meet with governance boards and managers (including Māori and Pakeha staff/trustees) from Riverfield East Community Centre (30/06/2020 – Zoom Hui), Riverfield West Community Centre (20/06/20 Hui), and Fernlee Community Centre (CC) - (24/06/20 Hui). Also meet with staff from Pasifika health and social centre (hui

	in poverty (e.g. Community centres, health service providers).	July, 2020). Discussed the outline of the study aims/kaupapa, approach/methods etc. Received support from all three organisations for the study and for the pilot Focus group to be conducted at Riverfield West CC and case study 1 at Fernlee CC and case study 2 to be conducted at Riverfield East CC. Feedback about the study design included: <i>Essentially feedback from all sources was positive in supporting the PhD Project. Key aspects of feedback included – thinking holistically about the circumstances of whānau/families (e.g., single parent with a child with disability, parents busy working to support their tamariki, the wider structural issues perpetuating poverty, intergenerational poverty); being sensitive to the needs and emotions of participants; ensuring tamariki participating in the focus groups respect the privacy of each other and do not discuss information shared by other participants; ensuring activities are fun and include kai/food in the focus groups; presenting PhD findings back to community organisations working with tamariki/rangatahi and whānau/families living in poverty, not assuming that all Pasifika families have the same cultural values/norms (e.g., there are differences between peoples’ from each Pasifika country), considering the effects of historic events in Aotearoa such as Dawn raids, be aware of the differences for Pasifika young people who have migrated here to NZ as opposed to those who were born here.</i>
	AUT School of Clinical Sciences Mātauranga Māori Committee.	MMC Application completed. Meet with MMC staff at AUT, online – 1/9/202. Written feedback received from MMC summarised included: <i>there are clear protocols in place in the study design to keep the tamariki and whānau involved safe, (e.g., use of a strengths-based approach, sensitive use of language, addressing need for ongoing assent with tamariki and whānau, reflective about power dynamics between researcher-participant, excellent strategies in place to protect the participants anonymity); ensure participation is adequately acknowledged (e.g., koha and that reflects participant choice/need and level of involvement), there is provision for kai in the focus groups, there has adequate prior consultation with local Māori, Pasifika and community groups who work with whānau in these communities, that there is cultural and place-based community organisation support for the study. The MMC suggested that the researcher should: report back to the communities on the study’s findings, that future research should consider conducting this study with rural communities,</i>

		<p><i>provision of adequate koha and acknowledgement for cultural support (e.g., written acknowledgement in publications), that valuative/judgements and views are avoided, to be mindful of varying worldviews when interpreting and communicating findings, and to keep Māori aspirations and expectations at the forefront in the study.</i></p>
	<p>How this informed my study design.</p>	<ol style="list-style-type: none"> 1. Engaged Māori cultural advisor for the study (S. Bryant), and later engaged a Pasifika cultural advisor (S.Tokolahi). 2. Organised for a Māori counsellor to be available for focus groups. 3. Adjusted tikanga through data gathering to reflect feedback. E.g. sensitivity with language, approach, use of Te Reo, mihimihi, karakia, manaakitanga, whakawhānaungatanga etc. 4. Reflexive about my communications/interactions with tamariki and their whānau involved in the study (e.g., professional, sensitive and non-judgemental use of language verbally and in written forms, sensitive to the needs of whānau in the study, appropriate koha/re-imburement for participants and providing them choice in the koha they choose and that meets ethical guidelines), and ensuring all appropriate ethical protocols (e.g., informed consent, protecting participant anonymity, addressing researcher-child/participant power dynamics). 5. Checking for ongoing assent from tamariki and whānau throughout the study. 6. To provide feedback on study findings to community organisations involved in the study. 7. Considering structural and historic reasons for poverty in Aotearoa, using a strengths-based approach, avoiding judgemental viewpoints, and keeping Māori aspirations and expectations at the forefront, including cultural advice throughout the research process, of research analysis, findings and all written reports. 8. To adequately acknowledged the role of cultural advisors (e.g., in thesis write-up, future publications, and through koha).

Appendix FFF: AUTECH approval letter/s.



Auckland University of Technology Ethics Committee (AUTECH)

Auckland University of Technology
 D-88, Private Bag 92006, Auckland 1142, NZ
 T: +64 9 921 9999 ext. 8316
 E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

25 September 2020

Clare Hocking
 Faculty of Health and Environmental Sciences

Dear Clare

Ethics Application: 20/210 The impact of growing up in financial hardship on tamariki/children's participation, potential and well-being.

Thank you for resubmitting your application for ethical review. We are pleased to advise that the Auckland University of Technology Ethics Committee (AUTECH) approved your ethics application in stages at their meeting on 21 September 2020, subject to the following conditions:

1. Provision of further justification for the Home Observations of the tamariki/children given the intensity, intimacy and time commitment being asked of whānau/families;
2. Provision of a revised plan about how the data and Consent Forms will be stored. The researcher and applicant are referred to AUTECH's revised guidelines for the storage of data and Consent Forms and the data storage matrix in section 18 of AUTECH's Applying for Ethics Approval: Guidelines and Procedures, which is available on the Research Ethics website at <http://aut.ac.nz/researchethics>;
3. Clarification of whether the focus group demographic sheet requires the full postal address of the tamaiti/child, given the sensitivity of this information and the regularity with which tamariki/children misplace notices sent home to parents/guardians;
4. Thank you for acknowledging the risks around the disclosure of criminal activity or other aspects that may place the participants or the researcher in unsafe circumstances. While AUTECH understands that these occurrences are rare and not necessarily associated with whānau/families experiencing financial hardship, please explain how disclosures of this kind will be managed, given your role as both researcher and clinician. Please update the Information Sheet for the focus groups as appropriate;
5. Justification of the first pilot focus group at which no data will be collected;
6. Inclusion in the Information Sheet of the funding provided by the DV Bryant Trust;
7. Confirmation that the researcher and the adult assistant have up-to-date documentation relating to the Vulnerable Children's Act, including a police check.

This approval is only for the first stage of the research. Full information about phase two needs to be provided to and approved by AUTECH before participants are recruited and data collected for those phases. AUTECH thanks the researchers for the changes made to the revised application, however, significant ethical concerns about the in-home observations of tamariki/children and their whānau/families have not yet been resolved.

Please provide us with a response to the points raised in these conditions, indicating either how you have satisfied these points or proposing an alternative approach. AUTECH also requires copies of any altered documents, such as Information Sheets, surveys etc. You are not required to resubmit the application form again. Any changes to responses in the form required by the committee in their conditions may be included in a supporting memorandum.

Please note that the Committee is always willing to discuss with applicants the points that have been made. There may be information that has not been made available to the Committee, or aspects of the research may not have been fully understood.

Once your response is received and confirmed as satisfying the Committee's points, you will be notified of the full approval of your ethics application. Full approval is not effective until all the conditions have been met. Data collection may not commence until full approval has been confirmed. If these conditions are not met within six months, your application may be closed and a new application will be required if you wish to continue with this research.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

We look forward to hearing from you,

(This is a computer-generated letter for which no signature is required)

The AUTECH Secretariat
 Auckland University of Technology Ethics Committee

Cc: simon.leadley@op.ac.nz; Margaret Anne Jones



Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
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1 July 2021

Clare Hocking
 Faculty of Health and Environmental Sciences

Dear Clare

Ethics Application: **20/210 The impact of growing up in financial hardship on tamariki/children's participation, potential and well-being.**

We advise you that a **subcommittee** of the Auckland University of Technology Ethics Committee (AUTEC) has **approved** the phase of the research being carried out in homes at its meeting of 1 July 2021.

This approval is for three years, expiring 1 July 2024.

The committee appreciates the care with which the researcher has addressed their concerns about this application and they wish him well in his doctoral studies.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project.

For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through <http://www.aut.ac.nz/research/researchethics>

(This is a computer-generated letter for which no signature is required)

The AUTEC Secretariat
Auckland University of Technology Ethics Committee

Cc: simon.leadley@op.ac.nz; Margaret Anne Jones

Appendix GGG: Miriama's Weekly Timetable

Tamariki/Children's Weekly Activity Timetable – Collated from Case Study Data¹

Tamaaiti/Child: Miriama

Weekdays	
Time	Activities
7:00-8:30am	Get up & get ready for school (brush teeth, wash face, grooming (brush hair), get on school clothes/shoes on, get school bag ready, no breakfast). (Home)
7:30-7:45am	Walk to school, alone. (Neighbourhood)
7:45-8:40am	Wait for friends and hang out/play together. (School)
8:40am-2:30pm	School activities (Classroom, PE, cultural activities, breaks spent with peers). (School)
2:30-3:00pm	Walk home via Community Centre – meet my dad, and might play with friends in skatepark. (Neighbourhood)
3:00-4:00pm	Spend time on Tik Tok (Chromebook) or TV, on my own. (Home)
4:00-4:30pm	Eating kai/food after school, on my own. (Home)
4:30pm-9:00pm	Spend time on Tik Tok (Chromebook), on my own. (Home). [Or sometimes go to the shops with dad to buy treats-kai/food; or sometimes play basketball with my dad at the park.] Go grocery shopping with dad Wednesday/Thursday. (Neighbourhood)
9:00-9:30pm	Dinner/kai, on my own, or with my dad and Maraea. (Home)
9:30-11:00pm	Spend time on Tik Tok (Chromebook), on my own. (Home)
11:00pm	Go to sleep. Friday nights: Stay up late (1:00am+). (Home)
Weekends	
Time	Activities
12:00pm	Sleeping in for ½ a day. (Home)
12:00-12:30pm	Doing my daily personal activities (dressing, showering). (Home)
12:30-1:00pm	Eating kai/meal, with my dad, Maraea and my sister. (Home)
1:00-5:00pm	Spending time on Tik Tok; or I might do some chores, or spend time with our pets (rabbits, chickens, dog), or spend more time sleeping. (Home) [Or go to BK to play basketball and eat out (with my whānau); or visit my whānau – aunty (locally, walking), (Neighbourhood). Or my Nan (out of town, with dad in the car).]
7:00-11:00pm	Tik Tok or watching movies on TV/computer, with dad, Maraea, or my sister. (Home)
11:00pm-1:00am	Go to sleep Saturday. (Sunday 11:00pm).

¹ Weekly timetable compiled from: Miriama's weekly activities diary, based on interview data from Hemi and Miriama, and cross referenced with observations and mapping activity data.

Appendix HHH: Jarad's Weekly Timetable

Tamariki/Children's Weekly Activity Timetable – Collated from Case Study Data¹

Tamaiti/Child: Jarad

Weekdays	
Time	Activities
6:45-7:00am	Get up & get ready for school (shower/wash every 2 nd day), get on school clothes/shoes on, get school bag ready, sometimes have breakfast, help my younger sisters get ready for school. (Home)
8:00-8:20am	Walk to school (or get a ride in van or with mum sometimes). (Neighbourhood)
8:20-8:45am	Hang out with my friends. (School)
8:45am-3:00pm	School activities (Classroom, PE, breaks spent with peers). (School)
3:00-3:15pm	Hang out with my friends. (Front of school ground's)
3:15-3:45pm	Walk home, by myself. (Neighbourhood)
3:45-5:00pm	Get out of my school uniform, eat snacks, on my own, or play outside with my younger sisters (Home).
5:00-7:00pm	Relax playing on cell phone texting friends, on my own, or watch TV with my younger sisters, or playing on computer (alone), or maybe play board or card games inside with my siblings. (Home)
7:00-7:30pm	Dinner/kai, on my own or with my younger sisters. (Home)
7:30-10/11:00pm	More time on computer/ph/watching TV, on my own, or on Friday nights with whānau. Time on phone while in bed. (Home)
10/11:00pm	Go to sleep. Friday nights: Stay up late (11:00pm+). (Home)
Weekends	
Time	Activities
7:00-8:00am	Wake up in weekends and wash/shower, and eat breakfast, on my own. (Home)
8:00-10:00am	Relax playing on phone texting friends, on my own. (Home)
10:00am-1:00pm	Playing on computer, or watching TV, on my own. Complete chores. (Home)
1:00-1:30pm	Lunch, on my own or with my siblings. [Might have extended whānau & friends over for BBQ in summer and play in backyard with younger siblings]. (Home)
1:30-5:00pm	Playing on computer/ph/watching TV, on my own. (Home)
5:00-7:00pm	Have an early evening sleep, on my own. (Home)
7:00-7:30pm	Dinner/evening meal, with whānau. (Home)
7:30-11:00pm	Playing on computer/ph/watching TV, on my own. (Home)
11:00pm+	Go to sleep, Saturday nights. (10/11:00pm - Sundays). (Home)

¹ Weekly timetable compiled from: Jarad's weekly activities dairy, based on interview data from Tui and Jarad, and cross referenced with observations and mapping activity data.

Appendix III: Ofa's Weekly Timetable

Tamariki/Children's Weekly Activity Timetable – Collated from Case Study Data¹

Tamaiti/Child: Ofa

Weekdays	
Time	Activities
6:30/45-7:50am	Get up & get ready for school (brush teeth, *shower sometimes), get on school uniform, get school bag ready, make and eat breakfast, help my younger siblings get ready for school, make their lunches. (Home)
7:50-8:00am	Drive to school with my siblings and mum. (Neighbourhood)
8:00-8:45am	Play with my friends. (School)
8:45am-2:45pm	School activities (Classroom, PE, breaks spent with friends). (School)
3:00-3:30pm	Walk to the shops with my siblings and get a ride home with my mum. (Neighbourhood)
3:30-5:00pm	Relax, sleep, online games/TV, and eat food. Sometimes shower* (Home).
5:00-7:00pm	Mondays (5-6pm): Home Centre – learning, with siblings, friends and mum. (Church). Tuesday-Thursday: relax, eat food, online homework. Or play with siblings. (Home). Grocery shopping with mum and siblings, 1/week. (Neighbourhood) N.B. During winter months Ofa is attending rugby training. (Monday & Wednesday 6:30-7:30pm with uncle; & training at rugby club Tuesday & Thursday 6:00-7:00pm)
7:00-7:30pm	Dinner, with my family. (Home)
7:30-8:00pm	Free time, with my siblings. (Home)
8:00pm	Go to sleep, bedtime. Friday nights: 'movie night', watch movies with my family on TV until 10:00pm. Wake up at 11:00-12:00pm to play online games – myself, in my room. (Home)
Weekends	
Time	Activities
6:00-7:00am	Wake up, brush teeth, wash/shower, make and eat breakfast, on my own. Free time. Sundays – get ready for church by 11am. (Home)
8:00-11:00am	Saturday - Completing household chores (clean the house, sweep leaves and mow lawns in yard), with my family. (Home) N.B. During winter months Ofa and his younger brother, Tui, play rugby games.
11:00am-12:00pm	Free time – online gaming, by myself. Or play with siblings. (Home) Sundays 11am-2:00pm – walk to church with family, attend service, Sunday school, lunch. (Church)
12:00-12:30pm	Lunch, with my siblings, family. (Home)
12:30-2:00pm	Saturday - Free time – online gaming, by myself. (Home)
2:00-2:30pm	Saturday - Family meet-up. (Home)
3:00-6:00pm	Get ready and set up for dinner/cooking, family. (Home)
6:00-7:00pm	Dinner, family. (Home)
7:00-9:00pm	Free time – online gaming, by myself in my room. (Home)
9:00pm	Go to sleep, bedtime, (early to bed for church). Sunday 7-8pm getting ready for school. Bedtime 8pm. (Home)

¹ Weekly timetable compiled from: Ofa's weekly activities diary, based on interview data from Monū, Malohi, and Ofa, and cross referenced with observations and mapping activity data.