

**Case study research
exploring the impact of material poverty
on a child's patterns of occupation**

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Thesis Abstract

Poverty breaches tamariki/children's rights and is socially unjust, as it has negative effects on their health and well-being that could be prevented. Growing up in poverty is associated with a sense of loss, feelings of shame, and restricted participation in occupations that may amount to occupational deprivation. However, despite the wealth of literature about the ways poverty impacts children's health and well-being, an occupational perspective is lacking. In particular, little consideration has been given to its effects on a child's patterns of occupation (i.e., habits, roles, family routines), which is important as habits learned in childhood may carry through to adult life, helping to explain the long-term health and socio-economic implications. To address this gap, this thesis attempts to answer the question: *How does material poverty affect a child's patterns of occupation?*

To gain an in-depth and contextualised understanding of the phenomenon, the study utilised case study research methodology guided by Stake, with a single case design. The case comprised a child and her parents, living in material poverty in a city in New Zealand, who were recruited through an organisation providing support services. Two additional adults who supported the child's occupations were recruited by the family. A range of data gathering methods were used (i.e., interviews, observations, document review), including child friendly approaches such as photo elicitation, a weekly activity diary and physically mapping the location, frequency and transport options used to access regular occupations. Interpretive data analysis strategies developed by Stake (1995) and Merriam (1998) included direct interpretation (i.e., deriving meaning from a specific instance in the case) and categorical aggregation (i.e., creating categories or codes that develop from a case). Through this process meanings emerged, which lead to naturalistic generalisations that helped to answer the research question.

The results of the study show the way in which the *whānau/family's* limited and insecure income, lack of material resources to support occupational choices, cramped housing, the father's shift work, and reliance on school breakfasts disrupted and impoverished the child's patterns of occupation. These included habits and routines that created an unhealthy lifestyle (e.g., a predominance of sedentary occupations, impeded study habits). Parental safety concerns and lack of space in the home

restricted participation in social occupations (e.g., time spent with friends). Despite considerable support from community agencies (school, church, social services), constraints on choices of and opportunities for participation in tamariki/children's occupations also involved limitations in free play, school trips, clubs, competitive sports teams, shopping and organised entertainment, time spent together as a whānau/family, and access to digital technology. Whilst the study has limitations (e.g., a single case study), the results provide emerging evidence that child poverty is occupationally unjust and creates occupational deprivation. The findings contribute clarity to the potential for occupational therapy practice in this field (i.e., help focus interventions) and brings an occupational perspective to the discourse about child poverty that has implications for policy to address the issue.

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A completed application for Ethics Approval for Research Projects form (EA1) was submitted to Auckland University of Technology Ethics Committee (AUTEC) and the guidelines, procedures, and exemplars of the AUTEC were adhered to.

AUTEC number: 17/281. Date of approval: 5th October, 2017

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."

Signed:

Simon J. Leadley

23rd January, 2019

Chapter 1 Introduction

This case study explores the research topic of *how poverty affects a child's occupations*. The subject of this enquiry was chosen after an extensive literature review on the issue revealed there was a dearth of published literature. Additionally, I had a strong commitment to exploring how occupational therapy can contribute to addressing the problem of poverty and its effects on children's everyday occupations. An interpretative, qualitative and naturalistic case study research methodology was used in the study to examine the topic. The participants were an Aotearoa¹ New Zealand school aged child, the parents and two other adults that support the child in their daily occupations. In keeping with the choice of methodology, a range of data gathering methods such as interviews, observations and review of documents was used in order to help understand both the child's and the other participants' perspectives on the topic and to help answer the research question.

The Issue of Child Poverty

Child poverty is a pervasive problem that results in significant harm to many children and is both resolvable and preventable (United Nations International Children's Emergency Fund [UNICEF], 2016; World Health Organization [WHO], 2008). More than 3 billion people are vulnerable to poverty, living on less than \$5-/day. In 2012 close to 1 billion people lived in absolute/extreme poverty (i.e., less than US\$1.90/day) and approximately a third of these were children (i.e., under 18 years). The percentage of children out of the total population of those living in extreme poverty was even higher, or 46% (UNICEF, 2016) (see Figure 1.1).

¹ The equivalent Māori terms will be used alongside the English where necessary and in particular in relation to the research question. Definitions of Māori terms will be footnoted and also contained in the Glossary.

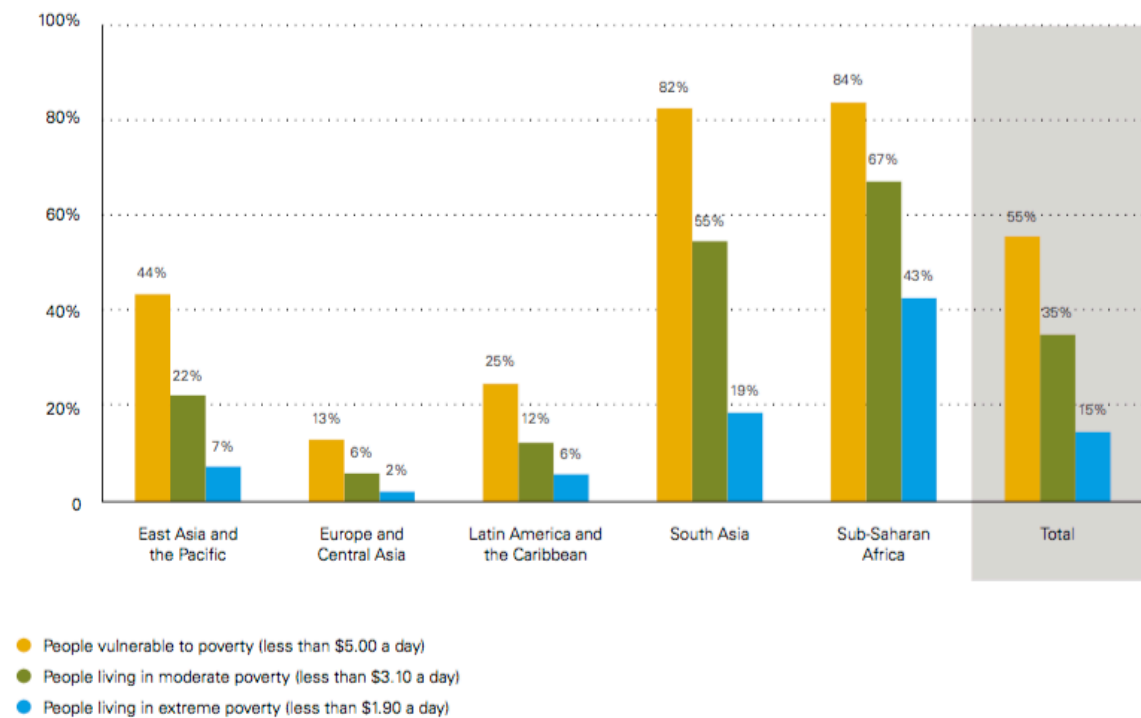


Figure 1.1. Statistics showing the percentage of the world's population, and by regions, who live in poverty, based on three income poverty lines. Reprinted from *The state of the world's children 2016: A fair chance for every child* (p. 76), by UNICEF, 2016, New York, NY: UNICEF. Copyright 2016 by United Nations Children's Fund (UNICEF). Reprinted with permission.

However, poverty levels have been declining over the last 20-30 years (see Figure 1.2). For example, the numbers of children and adults living in income-based poverty were projected to fall to approximately 700 million in 2015 (Cruz, Foster, Quillin, & Schellekens, 2015). Global efforts to achieve the United Nations' Millennium Development Goals and economic growth especially amongst low resource (developing) countries, is attributed for this decline in income-based poverty rates globally (Cruz et al., 2015). While levels of income-based and multidimensional types of poverty are declining, these people remain vulnerable to returning to poverty. This is because they are often close to the poverty thresholds and events such as job losses, ill health, war, economic downturns or climate change can easily return them to

poverty (United Nations [UN], 2014; UNICEF, 2016).

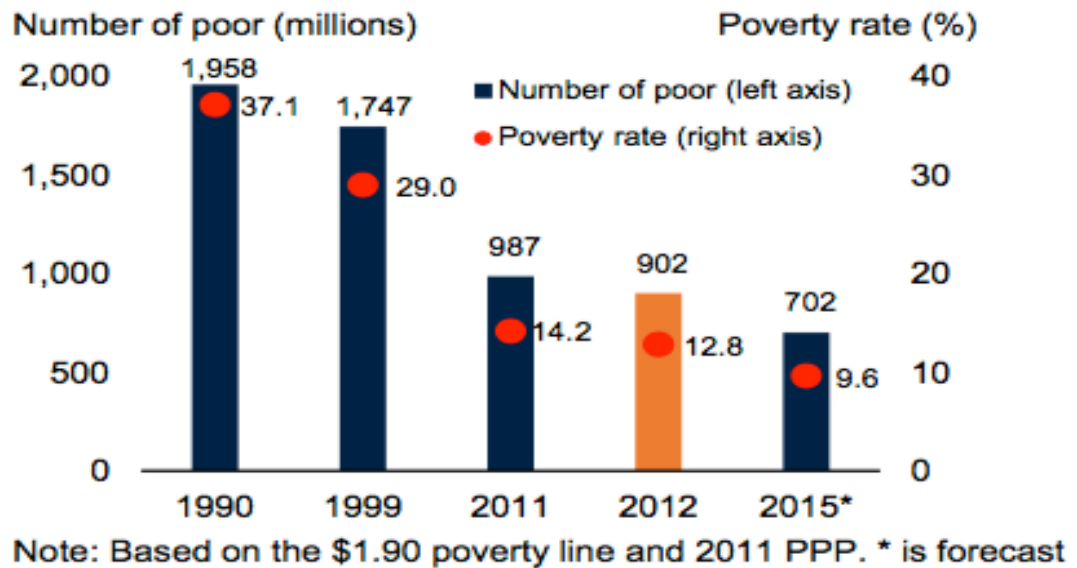


Figure 1.2. Shows the declining level of the world's population who live in absolute poverty, but with 2015 figures remaining high. Reprinted from *Ending extreme poverty and sharing prosperity: Progress and policies* (p. 2), by Cruz, M., Foster, J., Quillin, B., and Schellekens, P., 2015, The World Bank Group. Copyright 2015 by World Bank Group. Reprinted with permission.

The Concept of Poverty

Although globally poverty is often defined as a level of income below what is necessary for survival (e.g., US\$1.90/day), in the context of this study it is better understood as a level of income and resources below what society deems to be acceptable (Hick, 2015; Wisor, 2017). Poverty can also be understood in terms of an absolute or a minimum level of living standards (e.g., the World Bank's Global Poverty Line of US\$1.90/day), or in relative terms such as in comparison with others (e.g., the NZ Index of Deprivation) (Perry, 2017b; Salmond & Crampton, 2012; Wisor, 2017). However, there are other ways of conceptualising poverty. For example, poverty can be understood as a threat to people's choices, freedoms and capabilities, their basic human rights or "all the things a person can do or be" (UN, 2014, p. 23) with children being more vulnerable to these threats. It could also be understood from the subjective experience of those who live in poverty (Hick, 2012; Pemberton, Gordon, Nandy, Pantazis, & Townsend, 2007; Ridge, 2011). In the context of this study, people are considered to live in poverty if they experience material deprivation, that is, they have restricted income and resources below the threshold for poverty as measured in their context. While other, more complex and multidimensional definitions are gaining acceptance, material

poverty remains the dominant way of understanding the concept (Bourdillon, 2012; Perry, 2017a; UN, 2014).

The Effects of Child Poverty

The harm that poverty causes for children is clear and includes reduced access to resources that support life (e.g., food, water, clothing, housing, medical care), increased violence, crime, physical and mental ill health, stigma, social exclusion, and diminished opportunities to engage in daily occupations (e.g., missing out on educational and recreational occupations) (Bourdillon, 2012; Egan-Birtan, 2010; Ridge, 2011). *Tamariki*²/children in Aotearoa New Zealand have reported how detrimental and pervasive poverty is to their lives.

Cold – got hardly no clothes, looking for some... No money, no clothes! Desperate.... Poor health... Sick easily... Can't afford doctor's fees... Poverty is... moving houses, always moving – stressful.... Get picked on at school... Stress... Shame... Lonely... Sad... Feelings of worthlessness.... not getting proper opportunities like going on school trips, hard to take part in things like sports and other activities. (Egan-Birtan, 2010, pp. 11-15)

The long-term consequences associated with persistent childhood poverty are numerous and include risks to health as well as reduced prospects to lead a full life (Marmot & Bell, 2013; Rosenbaum & Johnson, 2013; UNICEF, 2016). For example, children who grow up in poverty are at higher risk of obesity, diabetes, respiratory problems, cancer, cardiovascular disease, mental health problems, suicide, accidental deaths, homicide, are more likely to achieve lower educational outcomes, and to end up unemployed (Duncan, Kalil, & Ziol-Guest, 2013; Ladd, 2012; Reiss, 2013; Singh, Azuine, Siahpush, & Kogan, 2013; Spencer, Thanh, & Louise, 2013). For many of these children and their families there are minimal prospects of rising out of poverty and it becomes an intergenerational problem (Bourdillon, 2012; Marmot & Bell, 2013).

In Aotearoa New Zealand the number of *tamariki*/children living in long-term relative income-based poverty (i.e., at or less than 60% of the country's median income) is estimated to be up to a third of all children or approximately 290,000 (Duncanson et al., 2017). A greater proportion of children living in poverty are of Māori and Pacific

² *Tamariki* is a Māori term meaning children (Moorfield, n.d.-c).

ethnicities, tamariki/children from refugee families and those with disabilities, resulting in further disparity for these groups (Ministry of Health, 2017a; New Zealand College of Public Health Medicine [NZCPHM], 2017; Simpson, Duncanson, Oben, Wicken, & Gallagher, 2016). While New Zealand tamariki/children are less likely to experience absolute income-based poverty (i.e., living on less than US\$1.90/day), the harm caused is still serious. For example, the evidence shows many New Zealand tamariki/children go without basic daily items such as adequate clothing, food, or medical care, live in sub-standard housing, report social and emotional harm, and grow up missing out on important occupations such as educational experiences and recreational and social opportunities (Egan-Birtan, 2010; Maddison et al., 2016). Furthermore, later in life these tamariki/children are at increased risk for significant negative health and wellbeing outcomes such as unemployment, criminal activity and incarceration (Boston & Chapple, 2014; Ministry of Health, 2005, 2016a; Simpson et al., 2016). Additionally, the costs to the country in terms of the effects of child poverty (e.g., health, crime and lost productivity) have been estimated to be up to \$8.5 billion per year (Boston & Chapple, 2014). Consequently, the serious personal and societal costs of child poverty justify careful attention, and evidence-based social policy and action.

Poverty as a Social Determinant of Health

A wealth of evidence shows that social rather than biological factors are the primary determinants of health. In other words where you are born, live, work or play are the most important factors in predicting your health and wellbeing with poverty being a significant determinant of health (Marmot, Allen, Bell, Bloomer, & Goldblatt, 2012). The inequity between people's lives caused by factors such as poverty creates health inequity on a social gradient where the lower a person's socioeconomic position (e.g., level of income, education and employment) the worse their health is likely to be (Marmot & Bell, 2013). The WHO's Conceptual Framework of the Social Determinants of Health describes the structural (e.g., socioeconomic position, social and political context) and intermediary determinants (e.g., biological and psychosocial factors, the health system) that create health inequity (Solar & Irwin, 2010).

NZ's Response to the Problem of Child Poverty

Over the last 30 years, NZ governments have failed to effectively address the issue of child poverty. For example, NZ's level of child poverty is relatively high when compared to other Western countries and, since rising in the 1980s, child poverty levels have remained at around 25-30% (Egan-Birtan, 2010; Perry, 2017b). This is despite having pledged to international treaties such as the *United Nations Convention on the Rights of Children* (UNCRC) and targets such the UN Millennium Development Goal (MDG) to end poverty by 2030 (Boston & Chapple, 2014; Simpson et al., 2016; UNICEF Office of Research, 2017).

The reasons for this are likely complex, but due in part to a lack of social and political will to tackle the problem, neoliberal policy and a worsening level of inequality (Boston & Chapple, 2015; UNICEF, 2013). For example, New Zealand now ranks 26th amongst 41 countries surveyed in terms of the level of inequality, worse than both United Kingdom (UK) and Australia (UNICEF Office of Research, 2017) (see Figure 1.3). This is a drop in ranking from the 2016 UNICEF report card where New Zealand ranked 17th out of 41 countries (UNICEF Office of Research, 2016). Additionally, the majority of New Zealand's wealth is owned by a small percentage of the population or those at the highest end of the socioeconomic spectrum, reflecting this growing and high level of inequality (Rashbrooke, Rashbrooke, & Molano, 2017) (see Figure 1.4). While inequality is not the same concept as poverty, they are related. For example, high levels of inequality in a country are related to growing levels of poverty, worsening health and wellbeing statistics, lower social cohesion and more segregation, have negative effects on the economy and result in a more unfair society (Rashbrooke, 2013b).

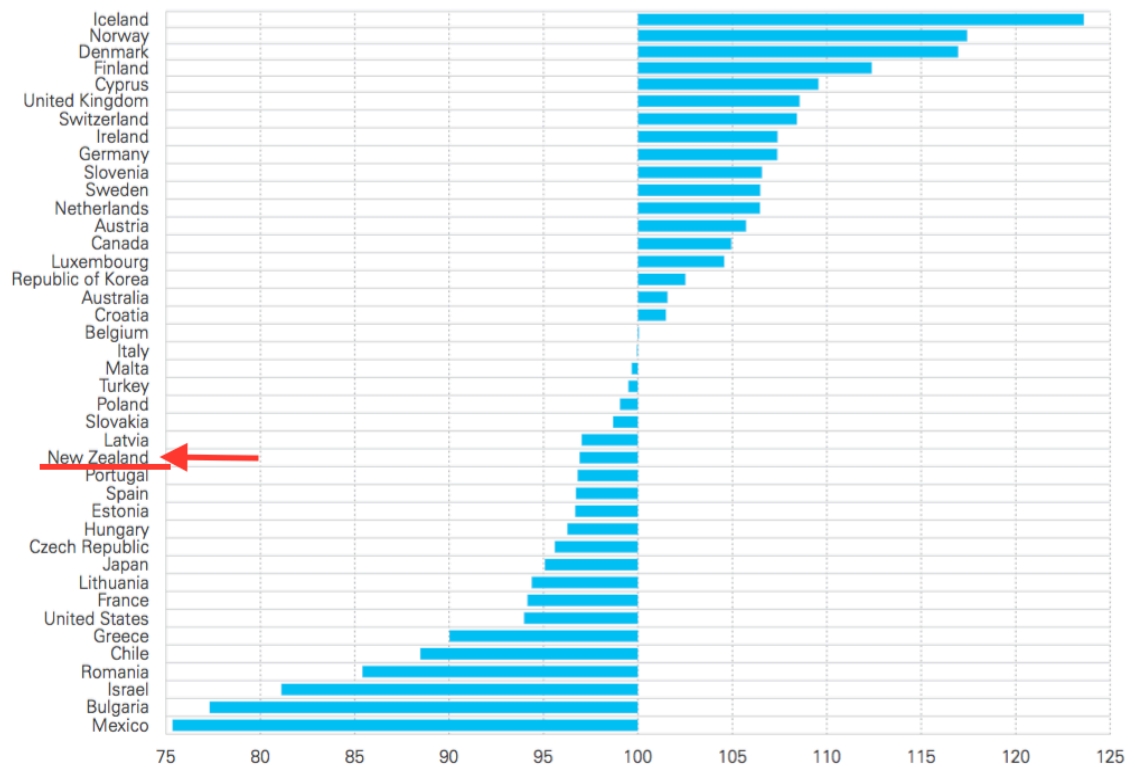


Figure 1.3. Country specific performance in addressing inequality based on 2014 data. Reprinted from *Building the future: Children and the Sustainable Development Goals in rich countries. Innocenti Report Card 14* (p. 38), by UNICEF Office of Research, 2017, Florence, Italy: UNICEF Office of Research. Copyright 2017 by UNICEF. Reprinted with permission.

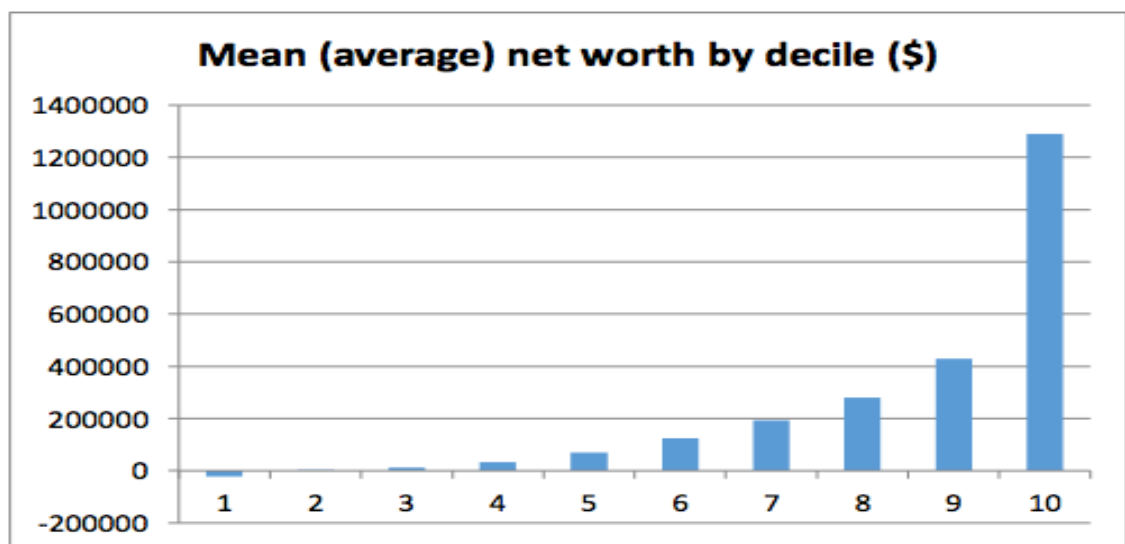


Figure 1.4. Bar graph showing the highest level of wealth is concentrated with those living in the highest decile (i.e., 10) in New Zealand. Reprinted from *Wealth disparities in New Zealand: Final report* (p. 19), by Rashbrooke, G., Rashbrooke, M, Molano, W., 2017, Wellington, NZ: Victoria University of Wellington. Copyright 2017 by Victoria University of Wellington. Reprinted with permission.

So while Aotearoa New Zealand society promotes the rights of tamariki/children to engage freely and fully in the daily occupations of life such as education, play,

recreation and cultural occupations, previous New Zealand governments have not protected the rights of all tamariki/children as a third of them remain in poverty (Boston & Chapple, 2014; UNICEF NZ, 2013). Poverty breaches tamariki/children's rights as it poses risks to their health and restricts their ability to fully participate in daily occupations (Boston & Chapple, 2014; Leadley & Hocking, 2017; UNICEF NZ, 2013). Additionally, the problem is resolvable through a more equal distribution of resources and power (Boston & Chapple, 2014; Marmot & Bell, 2012) and better protection of tamariki/children's rights (Expert Advisory Group on Solutions to Child Poverty [EAG], 2012; UNICEF NZ, 2013). Consequently, a lack of effective action to address the issue of child poverty is a social and an occupational injustice.

The recent change of government in New Zealand has brought optimism amongst advocates who work to reduce child poverty in this country. Nonetheless, some advocate for more action to be taken on the issue, such as supporting a living wage, raising welfare payments, stopping punitive benefit sanctions and reducing ethnic disparity and inequality (Aotearoa New Zealand Association of Social Workers [ANZASW], n.d.; Child Poverty Action Group [CPAG], 2018, June 18). To date, the current Government (a coalition of the Labour, Green and New Zealand First parties) has created a new ministerial portfolio, Minister for Child Poverty Reduction, headed by the new Prime Minister Jacinda Ardern ("Jacinda Ardern reveals ministers of new government," 2017). Recent initiatives implemented by this department include drafting legislation for The Child Poverty Reduction Bill and establishing a Child Poverty Unit (Department of the Prime Minister and Cabinet [DPMC], n.d). While these positive changes are new and require further development (e.g., passing legislation) and have not yet been shown to reduce child poverty numbers, they are a step in the right direction.

Poverty, Health and Children's Occupations

The relationships between poverty, occupation and health are complex (Leadley & Hocking, 2017). For example, the literature shows that poverty places a child at increased risk of poor health (e.g., impaired development), which in turn is likely to impede participation in occupations such as school attendance and activities (Engle, 2012; Lysack & Adamo, 2014). Also, childhood poverty appears to impede participation in sports and physically-based recreations, which in turn may undermine a child's

health (e.g., lead to obesity) (Atay & Bereket, 2016; Ministry of Health, 2017b).

However, poverty can result in unexpected health benefits such as restricted access to transport (e.g., no car) leading to a child walking more often (Turrell, Haynes, Wilson, & Giles-Corti, 2013). While there appears to be bi-directional relationships between poverty, health and occupation, the evidence that demonstrates this association is lacking. What is required is further research that explores the nexus between social issues such as poverty and its impact on tamariki/children's occupations.

Therefore, a key focus of this thesis is to consider the issue of childhood poverty from an occupational perspective. Notwithstanding the in-depth level of understanding that is documented in the literature about the effects of poverty on tamariki/children's health, including its causes and solutions, this perspective is lacking in the discourse about child poverty (Leadley & Hocking, 2017). For example, taking an occupational perspective of poverty might prompt consideration of the impact that being poor has on a child's access to and performance of daily occupations, the factors that restrict or disrupt their choice of occupations, or how their circumstances shape their patterns of occupation (i.e., daily habits, routines, roles, rituals, lifestyle).

Given that tamariki/children are more likely to experience restricted access to occupations as a result of poverty (Cahill & Suarez-Balcazar, 2009; Lysack & Adamo, 2014), it can be concluded that child poverty is a matter of occupational injustice and that these children are more likely to experience occupational deprivation.

Occupational injustice means the restriction in the ability to engage in occupations that are meaningful for a person or community (Wilcock & Townsend, 2014). *Occupational deprivation* is defined as being prevented from doing necessary and meaningful occupations by external restrictions (Whiteford, 2000). However, the assumption that tamariki/children living in poverty are more likely than others to experience occupational injustice and occupational deprivation is not yet backed by research findings (Leadley & Hocking, 2017; Wilcock & Townsend, 2004).

However, tamariki/children who live in poverty do not always face long-term negative health and occupational outcomes. Some of them grow up to live healthy and productive lives despite their childhood circumstances. This can occur through the development of coping strategies via education and mentoring, effective parenting,

government support, and positive social capital (Egan-Birtan, 2012; Kawachi, Takao, & Subramanian, 2013; Marmot & Bell, 2013; Wadsworth & Butterworth, 2005). *Positive social capital* refers to the “features of the social structure...which facilitate the actions of individuals within that structure” (Kawachi et al., 2013, p. 4) such as the community supports that enable a child, from a family with low income, to participate in occupations. This study may help to highlight the supports available or the skills that tamariki/children learn through occupations that help to act as a buffer for them against the hardships they face in growing up poor.

Key Theoretical Perspectives in this Study

A key theoretical underpinning of this study is *occupational science*, which is the study of occupations or everything we do in our lives, and the scientific process of generating new knowledge in a reliable way. In other words, it is the study of occupations in all their complexity (Hocking & Wright-St. Clair, 2011). Clark et al. (1991) defined the term as “the substrates, form, function, meaning, and sociocultural and historical contexts of occupations” (p. 302). Key assumptions in occupational science include that occupation is framed as a fundamental human right and a significant determinant of health (Wilcock & Townsend, 2014). For tamariki/children, being able to engage in daily occupations is necessary and vital for their health and well-being (Bazyk & Bazyk, 2009; Lysack & Adamo, 2014; Rosenbaum & Johnson, 2013).

Patterns of occupation, or the ordinary actions of our everyday life (i.e., habits, roles) give our daily lives structure, predictability and a sense of familiarity (Kielhofner, 2008; Wilcock & Hocking, 2015). They can both promote or hinder our health and occur within the context of everyday or routine temporal, physical, cultural, social and institutional environments (Kielhofner, 2008; Matuska & Barrett, 2014). However, the ways in which a child’s patterns of occupation are affected by social factors such as material poverty has not been the subject of a published study (Leadley & Hocking, 2017). As a consequence, evidence that supports and informs occupational therapy practice that aims to help mitigate the impact of poverty on tamariki/children’s daily occupations, is lacking.

This gap in the current literature is a primary reason for undertaking this study and a key aim of this thesis. The purpose of this research is to better understand this issue

and develop an evidence-based occupational perspective of child poverty (i.e., poverty's effect on tamariki/children's occupations). The research question, *how does living in material poverty affect a child's patterns of occupation*, has been developed to most effectively inform the research problem and lead to future practical outcomes (e.g., occupational solutions to the problem of child poverty).

Other important theories informing this study include the theory of transactionalism, and the life course perspective. *Transactionalism* is a theory of action stemming from the philosophy of pragmatism and focuses on the interconnectedness of phenomena and the context in which humans experience them (Bacon, 2012; Nyman, Josephsson, & Isaksson, 2014). The theory of transactionalism can help to develop an understanding of the complex interplay between poverty, a child's daily occupations, and the context in which they live. The *life course perspective* is a theory of human development, that while being inclusive of other developmental theories, also considers the contextualized and dynamic processes that occur throughout life (e.g., societal events or constraints on a child's occupational choices) as being important in shaping people's lives and affecting their occupations (Humphry & Womack, 2014). The life course perspective theory can help frame how material constraints present in a child's life may affect their development and future prospects.

Why I Chose to Study the Effects of Poverty on Children's Occupations

My personal interest in the topic of child poverty grew out of a genuine concern for the plight of many Aotearoa New Zealand tamariki/children who grow up in poverty, and a desire to effect change in their lives through occupational therapy. This desire emerged from working as an occupational therapist with young people and their *whānau*³/families who were experiencing the long-term consequences of poverty such as disrupted education, long-term unemployment, stressed and chaotic lives, and physical and mental health problems (EAG, 2012). When examining the literature relating to occupational therapy's role in addressing child poverty and discussing this with my colleagues, the absence of published evidence about our profession's role in this field was apparent (Leadley & Hocking, 2017). Together, these factors have shaped my desire to complete research about this topic.

³ Whānau is a Māori term meaning family or extended family (Moorfield, n.d.-c).

The Aim of the Study

This study's aim is to address the gap in the literature relating to an occupational perspective of childhood poverty. This will be accomplished by completing a research project utilising the qualitative case study research approach and involving a single case, of a *tamaiti*⁴/child and her/his whānau/family who live in poverty and other adults who support the child's occupations. The single case design enables depth and detail, befitting a masters level qualification and can shed light on the research topic where little is known (Simons, 2009; Stake, 1995).

The knowledge gained from this study is expected to inform our understanding of the complex relationship between poverty, a child's occupations, their health and potential life prospects. This can in turn help to develop an occupational perspective of child poverty. Furthermore, this might also frame the issue as an occupational injustice or provide evidence for the premise that tamariki/children in these circumstances experience occupational deprivation. As a result, this study can contribute to understanding how to address the impact of poverty on tamariki/children's occupations and inform occupational therapy practice and social policy in this field.

The Research Question

The primary research question to be answered in this study is: *how does living in material poverty affect a child's patterns of occupation?* For the purposes of this study *relative material poverty* is defined as a lack of income and resources based on an agreed standard for a country (Hick, 2015; Wisor, 2017). This includes being both below the poverty line or a combined family income that falls below 60% of the country's median household income and where the child lives in a state of relative deprivation (e.g., missing out on essential basic needs such as food, clothing, housing, health care and education) (Boston & Chapple, 2014; Perry, 2017a). However, this material understanding of poverty should not limit a more complex view of poverty such as a deprivation in human capabilities, or a multidimensional perspective (Hick, 2012; Perry, 2017b). In this study, tamariki/children includes anyone under the age of 18 (UN General Assembly, 1989). The age range of the child/participant in this study (i.e., 10-13 years) was chosen based on the evidence that tamariki/children at this

⁴ Tamaiti means a child and taitamariki means youth in Māori (Moorfield, n.d.-c). These terms will be used in this thesis accordingly, based on advice from AUT Clinical School of Sciences Mātaraunga Māori Committee.

stage of life are usually actively engaged in occupations and settings outside of the home (Case-Smith, 2010; Davies, 2011) and this may allow for consideration of typical types of occupation for a child of this age. *Occupations* mean all the things people do in their everyday life and for tamariki/children daily occupations include play, schooling, recreation and cultural activities (Bazyk & Bazyk, 2009; Hocking, 2014).

The Methodological Approach

The approach taken to answer the research question in this study is the interpretative or naturalistic case study research approach (Stake, 1995). Case study research involves the in-depth, holistic study of a particular case/s, examining its individual, complex nature within a real life setting (Flyvbjerg, 2011; Stake, 1995). i.e., the occupations of a tamaiti/child and their whānau/family who live in poverty. Case study methodology enables multiple perspectives to be examined and uses a range of data gathering methods (Simons, 2009; Stake, 1995). For example, the perspectives of the child and adults who support her/him in their occupations are gained by using interviews, observations and document review. The chosen methodology enables the complex and context specific nature of the research question to be explored (i.e., poverty's impact on a child's patterns of occupation).

The interpretive data analysis strategies developed by Stake (1995) and Merriam (1998) were used in this study. These included direct interpretation (i.e., deriving meaning from a specific instance in the case) and categorical aggregation (i.e., creating categories or codes that develop from a case). Through this process meanings emerged that helped to answer the research question, leading to *naturalistic generalisations* through which the case becomes understandable to its audience (Stake, 1995). In this way, the case study supports theory development (Merriam, 1998).

Rigour

Rigour and trustworthiness are important concepts in research if findings are to be trusted and used as evidence in practice (Nicolls, 2014; Ramsbotham, 2014). Case study research often uses strategies such as triangulation and member checking as ways to ensure rigour (Creswell & Poth, 2018; Simons, 2009). In addition, this study provides detailed descriptions of the context, use of participants' words, an auditable

trail of decision making, a peer review process and reflexivity to ensure rigour (Creswell & Poth, 2018).

Ethical and Cultural Considerations

Ensuring that this study meets agreed ethical standards and is conducted in an ethically appropriate and culturally responsive way is imperative (NEAC, 2012; Water & Godbold, 2014). In preparation for the study, I consulted with community agencies who work with tamariki/children and whānau/families who live in poverty. In designing the study particular attention was paid to the level of care and reflexivity required when working with tamariki/children and the potential for creating stigma when conducting research with participants who experience poverty (Graham, Powell, Taylor, Anderson, & Fitzgerald, 2013; Willumsen, Hugaas, & Studsrød, 2014). The study proposal was peer reviewed and advice was received from the Auckland University of Technology (AUT) Clinical Sciences School's Mātauranga Māori Research Committee⁵. Additionally, a Māori cultural advisor was recruited to provide advice throughout the duration of the study on Māori cultural considerations (e.g., if a Māori whānau was recruited to the study). Before proceeding, the study was submitted for ethical approval by the Auckland University of Technology Ethics Committee (AUTEC). Following feedback and minor changes to the study design (e.g., language used, increased use of a self-recruitment process) the study was granted ethical approval.

Summary

Child poverty is a serious problem that negatively affects tamariki/children's health. It is a resolvable problem, but left unchecked it perpetuates social injustice and breaches tamariki/children's fundamental rights. While much is known about child poverty, there is a dearth of published literature pertaining to poverty and its effect on tamariki/children's occupations. This study will help to address this knowledge gap, generating evidence to inform practice and social policy in the fields of child poverty and occupational therapy. The next chapter discusses the concept of poverty and its relationship to health and occupation. Chapter three is based on a critical review of the child poverty literature, the effect of poverty on tamariki/children's rights, their health

⁵ AUT Clinical Sciences School's Mātauranga Māori Research Committee, consists of a panel of Māori and other professional staff from the relevant faculty and external Māori advisor/s, who provide advice on a proposed study from the perspective of a Māori worldview and research matters relating to Te Tiriti o Waitangi.

and their participation in daily occupations. Chapter four outlines the philosophical stance and underpinning theories, the methodology and methods used in the study, rigour, ethical and cultural considerations and the expected outcomes. Chapter five provides an overview of the key findings as these relate to the research question. The final chapter, six, discusses the implications of the study's findings and how the study contributes to the subject of child poverty.

Chapter 2 Poverty

Background

Research that is well constructed starts with a clear purpose for the inquiry and a genuine curiosity to explore it. Careful thought and consideration can lead to specific research problems and consequently research question/s. The aim of this chapter is to address the gap in the literature relating to an occupational perspective about child poverty. Whilst the evidence pertaining to the effects of poverty is extensive and there is a growing body of literature concerning a child's perspective of living in poverty, little is known about how poverty affects a child's patterns of occupation. Thus, the associated research question is, *how does living in material poverty affect a child's patterns of occupation?* To address this, a review of poverty, examining a range of authoritative literature on the topic, was completed in order to understand how it is currently conceptualised.

Through a careful examination of what is known and not known about the topic, an informed understanding of the relevant gap in the knowledge base and its importance can be discerned (Merriam & Tisdell, 2016). The discussion in this chapter includes poverty's causal factors such as societal structures that lead to inequality. The review draws from both international and New Zealand (NZ) literature, but with a particular focus on the NZ context. The issue is examined from an occupational perspective, with theoretical underpinnings from the field of occupational science, as outlined in chapter one. The discussion is informed by literature located through a systematic search focused on childhood poverty.

For the literature search process, I used three databases that provided sufficient access to a range of study designs and subject areas to capture a wide range of published, peer reviewed literature, namely; EBSCO (MEDLINE and CINAHL), and SCOPUS. MeSH headings and 'Boolean Operators' were used throughout the search. The search was divided into nine more refined sub-searches, each relating to child poverty. The search terms (truncated where relevant) of "child", "teen", "youth", "poverty", "income", and "socioeconomic" were used in each search. The nine search areas with specific terms used included: one = "physical health"; two = "mental health"; three = "child development"; four = "education"; five = "work" and "chores"; six = "play", "sport",

“recreation”, and “occupation”; seven = “neighbourhood” and “environment”; eight = “occupational therapy”; and nine = “experience” and “qualitative research”. The following limits: language (English), dates (2010-2017), peer reviewed journals, age (all child), and a further limit of country (New Zealand) were applied to each search to separate out articles published about the topic in NZ. As the searches resulted in large numbers of articles, further refinement of the searches was made with the following inclusion criteria: relevance to my research question (e.g., children, poverty, occupations), quality of the study design (i.e., original research, systematic or literature-based reviews or longitudinal studies) and recent publication in a peer reviewed journal (e.g., within the last 7-10 years). This resulted in a final list of articles resulting from the searches: Physical health and child development = 51 (combined as these two topics often appeared in same articles), mental health = 26, education and work = 24 (combined as these two topics often appeared in same articles), children’s occupations = 21, neighbourhoods = 31, occupational therapy = 11, qualitative research = 19. I also completed a search about tamariki/children’s patterns of occupation. Firstly, through the Journal of Occupational Science (search terms = “patterns of occupation” AND children) resulting in 170 articles. A further search was completed using the EBSCO databases (search terms “child”, truncated, and “patterns of occupation”) resulting in 83 articles. With further review (i.e., relevance to research question) the final list included 7 articles (Refer to Appendix A: Results of database search).

A common grading strategy in literature reviews is to grade studies according to a hierarchy where those considered to provide stronger evidence are preferred (e.g., systematic reviews, RCTs, longitudinal studies), whilst continuing to examine the quality of evidence the studies provide (Nicolls, 2014; Webb & Bain, 2011).

Accordingly, this grading process contributed to further refinement and organisation of the articles chosen for continued reading and critique. This process was used where applicable to grade and organise quantitative articles (e.g., systematic and literature-based reviews). The CASP (critical appraisal skills programme) checklists were used as a guide to critique studies of a systematic review and cohort/longitudinal design (CASP, n.d.). The CASP qualitative checklist was used for qualitative studies, with a more thorough and relevant critiquing tool, the ENTREQ (enhancing transparency in

reporting the synthesis of qualitative research) used for qualitative-based systematic and literature-based reviews (Tong, Flemming, McInnes, Oliver, & Craig, 2012).

As the published literature about child poverty is vast, I sought authoritative sources, systematic reviews and longitudinal studies. Further searching on relevant international and New Zealand organisations' websites (e.g., Child Poverty Action Group NZ, UNICEF NZ, Children's Commissioner (NZ), WHO etc.) was conducted revealing a range of relevant documents and resources. Also, continued reading and re-reading of relevant journal articles and books/e-books (e.g., relating to occupational therapy (OT), child development, occupational science, OT and public health, child poverty and NZ child poverty) and investigating the reference lists of the journal articles and books led to further relevant articles and books. The findings of the search were separated into understandings of poverty, presented in this chapter, and more specific understandings of the impact of poverty on tamariki/children, which is presented in the following chapter.

Poverty: Concepts, Definitions and Measurement

Poverty means different things to different people, whether on the basis of their age, culture, or the country in which they live. For example, consider how this New Zealand family (i.e., from a developed country) described their lives living on a low income.

It is very, very tight....there are definitely some things I'd like to do that we can't do. I'd love my kids to be doing swimming, but I can't afford it. Going to the movies is very rare....I'd also like to be able to see my family more often than we do. You have to save up for ages to get up to Auckland. (Rashbrooke, 2013a, p. 36)

However, we hear quite a different story from this family living in absolute poverty in a low resources country:

Rexona doesn't have to coax her children to eat. They clear their plates, and when the meal is finished, Moriom dutifully heads over to the moss-covered pond adjacent to their mud home to wash her dish[her children were recently] diagnosed...with malnutrition....Part of the problem is that the family doesn't have easy access to clean water....Rexona does her best to provide for her children....Still, many basic necessities are beyond her reach....she cannot afford to purchase essentials, like meat, fish or eggs. (UNICEF, n.d., para. 6-10)

How then can poverty be conceptualised in a standard way that helps to resolve the gap between these contrasting views of poverty? Additionally, how can poverty be defined and measured in an agreed and reliable manner? To answer some of these questions it is important to firstly examine the concept of poverty, its varying definitions and measures.

Poverty is a complex and problematic term, as conceptually there are a number of ways to understand and measure it (Bossert, Chakravarty, & D'Ambrosio, 2013; Hick, 2015; Saunders & Naidoo, 2009; Sen, 2006) and depending on the subject area or discourse the term 'poverty' can take on a range of corresponding meanings (Gordon, 2006). Like any concept, poverty is constructed and is therefore contingent on the philosophical, moral, ontological and epistemological approach taken to examining it (Wisor, 2017). For example, is poverty about a lack of money, or a deprivation of resources, and is there an absolute level of poverty or are all states of poverty only ever relative to others in our country or between countries? Furthermore, can poverty be understood objectively (i.e., from a Positivist paradigm), or is it best understood from the perspective of those who experience it (i.e., an Interpretivist paradigm), or from a critique of social and economic structures?

Considering these different ways of understanding poverty, it is more than an objective view or a lack of income or resources in that it also relates to "participation and membership within a society" (Gordon, 2006, p. 32) and from a critical perspective to the freedom and capabilities a person has to live well (Sen, 1999). Additionally, the subjective view of poverty has become an important way of understanding the issue and method of examining the affect it has on people's lives (Bourdillon & Boyden, 2014; Chase & Bantebya-Kyomuhendo, 2014; Kura, 2012). Given these competing concepts of poverty, a more contemporary perspective is to view them as complimentary, acknowledge the strengths and weaknesses of each of these perspectives, and with more recent approaches using integrated or multidimensional ways of conceptualising and measuring poverty (Bossert et al., 2013; Bourdillon & Boyden, 2014; Kura, 2012; Perry, 2014).

A further problem in defining poverty lies in the interchangeable use of the terms poverty, low socioeconomic status, inequity and inequality (Hick, 2015; Perry, 2014).

Essentially, poverty is about having less than a socially acceptable level of income or resources (Perry, 2014). Socioeconomic status (SES) can be defined as the “position of persons in society, based on a combination of occupational, economic, and educational criteria, usually expressed in ordered categories” (Last, 2007e, para. 1) and where low SES is often equated with poverty (Marmot & Bell, 2013). Equity means “fairness, evenhandedness, impartiality in dealing with others” (Last, 2007b, para. 1), with inequity occurring when a person/s are “unfairly deprived of the basic rights and opportunities available to others” (UNICEF, 2016, p. 7). Inequality refers to unequal levels or having less or more than someone else (Perry, 2014).

Although inequality is not the same concept as poverty, a worsening level of inequality in society is linked to increased levels of poverty (Duncanson et al., 2017; Nana, 2013). For example, the growing divide between the wealthy elite (i.e., the top 1% whose combined wealth equals approximately \$6.5 trillion, or as much wealth as the bottom 70% of humanity) and the rest of the world’s population is increasing global inequality and is hindering efforts to end poverty worldwide (OXFAM, 2017). Evidence also shows that NZ has a growing level of inequality (Perry, 2017b; Rashbrooke et al., 2017; UNICEF Office of Research, 2017). Internationally there has been concern about the growing levels of global inequality and the United Nations (UN) Millennium Development Goals (MDGs) focused on a range of global targets that, amongst other goals, aim to reduce poverty and social inequalities (UN, 2015a, n.d.) (see Figure 2.1, goals 1 and 10).



Figure 2.1. The 17 UN sustainable development goals. Reprinted from *Sustainable development goals: 17 goals to transform the world*, by United Nations, n.d., Retrieved from <http://www.un.org/sustainabledevelopment/sustainable-development-goals/> Copyright n.d. by United Nations. Reprinted with permission.

While there is much support for the aims of the UN MDGs, there has also been criticism (Fehlinga, Nelson, & Venkatapuramd, 2013; Wisor, 2017; Woodward, 2010). One critique includes challenging the idea of minimal living requirements or levels of subsistence, as these notions are open to interpretation. For example, does subsistence include education and employment, and what is meant by adequate or basic food, shelter or clothing (Perry, 2014; World Bank, 2015). Further critique of the MDGs include that these were created largely without the involvement of developing nations, that the goals are “too simplistic, unachievable...[do not identify] who is accountable....[and are] worldwide goals [that have] overlooked individual national and regional needs” (Fehlinga et al., 2013, p. 1118).

The MDGs have also been criticised for not adequately addressing the issue of human rights, primarily relying on nationally derived data and overlooking regional progress and disparities. In the case of the goal of eliminating poverty, the focus is not inclusive of issues such as inequality and inequity (Fehlinga et al., 2013). The structural (i.e., political and institutional) and social determinants (i.e., where we are born, live or work) that underpin poverty and other forms of inequality and inequity need to be addressed if meaningful change is to be made in the lives of those who suffer from these inequalities (UNICEF, 2016; Wisor, 2017).

The leading concepts and methods of measuring poverty will now be discussed, including a critique of each.

Absolute and relative poverty. The notion of absolute versus relative poverty is pertinent to the study of most poverty concepts in that it is typically considered from one of these two perspectives (Wisor, 2017). *Absolute poverty* means a minimum level of income or standard of living irrespective of the income or living standards of others. Whereas *relative poverty* occurs when a person is poor by comparison with others in her/his society (Wisor, 2017) and may be conceptualised on a continuum (i.e., mild to severe) (Gordon & Nandy, 2012). It may be useful to note that one of the few internationally agreed definitions of poverty was the UN's definition of absolute poverty: "a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to social services" (as cited in, Gordon & Nandy, 2012, p. 58).

Material poverty. *Material poverty* has been defined as "the condition of having insufficient resources to obtain or provide the necessities of life" (Last, 2007c, para. 1). Material poverty includes notions of both income and deprivation, or the level of resources to which a person has access (Hick, 2015). Indirect indicators (i.e., income or consumption) and direct indicators (i.e., standard of living) are used to measure poverty from a material perspective (Gordon, 2006). *Indirect indicators* measure the level of income a person or household earns in a given period of time (e.g., over a year), or the consumption-expenditure method that estimates the cost of food and other basic necessities required to live when items are not paid for in monetary terms (Wisor, 2017). *Direct indicators* measure the standard of living of a person or a household (Gordon, 2006). The four leading materially-based concepts of poverty will be discussed below.

Absolute poverty (income based). The concept of absolute income-based poverty defines poverty in terms of the minimum level of income, over a given period of time (e.g., day, week, year), in order to pay for the essential items required for survival such as food, water, clothing. The most commonly used international income-based poverty measure (based on an absolute poverty concept) is the World Bank's

International Poverty Line (IPL) (Wisor, 2017). It uses income as the basis for measuring “poverty in relation to the amount of money necessary to meet basic needs such as food, clothing, and shelter” (United Nations Educational Scientific and Cultural Organization [UNESCO], n.d., para. 3). The current monetary measure of absolute poverty is set where a person’s level of income is equal to or less than US\$1.90/day, which has been increased from \$1.25/day (World Bank, 2015).

Advocates for this concept of poverty assert that it is a more objective way of understanding poverty with its attempt to define minimal living needs (Perry, 2014) and that it can be used internationally to measure poverty whilst recognising its limitations (United Nations Development Programme [UNDP], 2013; World Bank, 2015). Based on this concept of poverty the United Nations MDGs, which aim to “resolve, between now and 2030, to end poverty and hunger everywhere” (UN, 2015b, p. 3), appears realistic. For example, world poverty levels have fallen dramatically over the last 10-15 years with extreme poverty dropping by more than 50%, from 1.9 billion to 836 million (UN, 2015a) (see Figure 2.2).

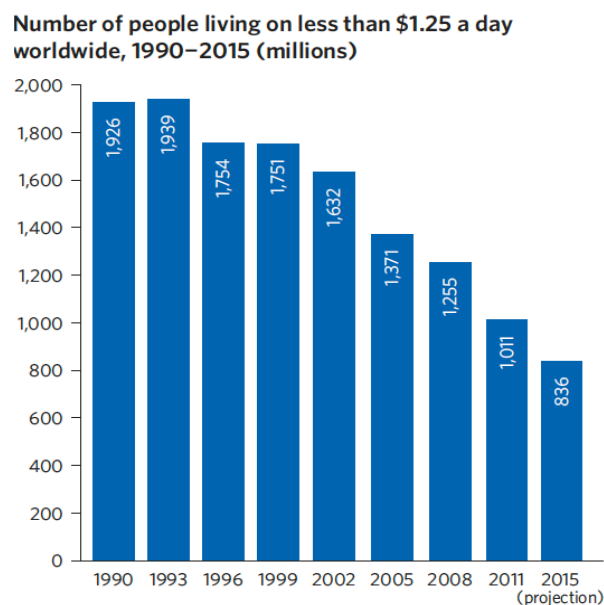


Figure 2.2. Showing the number of people living in absolute poverty (set at the previous level of \$1.25/day) worldwide has reduced by more than half since 1990. Reprinted from *The Millennium Development Goals Report 2015* (p. 15), by United Nations, 2015, New York, NY: United Nations. Copyright 2015 by United Nations. Reprinted with permission.

However, the World Bank’s International Poverty Line (IPL) has been criticised for not revealing the true depth of global poverty, for concentrating solely on monetary poverty and, as a result, not capturing other deprivations such as being free of

violence, or an ability to access healthcare or receive a suitable level of education (Wisor, 2017). The World Bank is currently considering ways to incorporate non-monetary measures into their measure of global poverty through the Commission on Global Poverty (Wisor, 2017; World Bank, n.d.).

Clearly, for many people in more developed countries, this absolute poverty measure is too crude and is not representative of the relatively higher level of income and resources available to people (Marmot & Bell, 2013; UNDP, n.d.; UNESCO, n.d.). However, in relation to the UN target to reduce childhood poverty by 2030, the recently updated UN Social Development Goals (SDG) that are based on the UN MDGs, specified that childhood poverty is to be defined according to nation specific definitions (UN, 2015b), therefore allowing for a relative poverty approach.

Relative poverty (income based). The concept of relative poverty is an attempt to address some of the issues associated with the use of the term absolute poverty. “Relative poverty defines poverty in relation to the economic status of other members of society: people are poor if they fall below prevailing standards of living in a given societal context” (UNESCO, n.d., para. 3). Or in other words “it is about a state of relative disadvantage that is deemed to not meet minimum acceptable community standards” (Perry, 2014, p. 113). The relative poverty line is used as the measure of poverty relative “to the overall distribution of income in a country...set as a share (usually between 40 and 60 percent) of the country’s mean income” (UNDP, n.d., para. 7). In some cases where regular income is absent, a consumer-expenditure approach is taken, where an estimate of the costs of goods consumed without monetary payments made is used as a proxy measure (Wisor, 2017).

A problem, however, with the concept of relative income-based poverty is that as incomes increase over time and as notions of material needs versus wants change, it becomes harder to distinguish between relative poverty (i.e., not having enough) and inequality (i.e., having less than) (Perry, 2014). Furthermore, the relative income-based poverty concept focuses on income as a measure of poverty and therefore tends not to include other factors such as an absence of resources and other causes such as disability, isolation or social exclusion (Hick, 2015; Wisor, 2017).

Subjective material poverty (income-based). A third way to measure and conceptualise poverty is subjective poverty (PSE, n.d.; UNESCO, n.d.). The *subjective poverty line* has been defined as “the basis of what people perceive is the minimum income (or consumption) that a person, or household, needs in a specific society to not be considered poor” (UNDP, n.d., para. 9). Advantages of measuring poverty subjectively are that the poverty line is set by society rather than by experts, it is a relatively simple method of measurement, and with its “subjective method....[making it] a socially realistic method....and arguably [the] most democratic method” (Gordon, 2006, p. 52). However, it is not widely used as a measure of poverty (UNDP, n.d.). Additionally, issues with this method include that there is considerable variation in wording of the minimum income question used in most surveys (Gordon, 2006) and because the survey data are subjective, it is open to what Frey and Stutzer described as “systematic and non-systematic biases” (as cited in, Crettaz, 2012, p. 433).

Material deprivation. *Deprivation* usually refers to shortage of the necessities of life such as food, water, housing, education, or suitable clothing (Last, 2007a). The term *material deprivation* refers to a lack of resources a person has as opposed to a lack of income required to access needed resources (Hick, 2015). This conception of poverty was developed, in part, as a reaction to purely monetary based concepts of poverty and focuses on whether a person has the resources required to meet their basic needs (Wisor, 2017).

Townsend (1979) was one of the earliest and leading exponents of this concept of poverty and his well-known definition of poverty as a form of relative material deprivation, states that:

Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities. (p. 31)

Criticisms of Townsend’s concept of material deprivation include that the measures of deprivation were arbitrary and did not allow for the differences between choices and

constraints or the way in which people choose to live their lives (Hick, 2012). Income and material deprivation, as measures of poverty, were shown to be inconsistent, as “many of those on low incomes did not, in fact, experience material deprivation, while some deprivation was experienced by respondents with incomes far above Townsend’s poverty line” (Hick, 2015, p. 164). Income and material deprivation may indeed be two distinctive ways to conceptualise poverty, rather than “two ways to operationalize the same concept” (Hick, 2015, p. 165).

The concept of material deprivation, however, has formed the basis of many widely used poverty measures such as Townsend’s Deprivation Index and his later Perceived Deprivation Measure which aimed to overcome some of the criticisms of his original index (Gordon, 2006; Saunders, Naidoo, & Griffiths, 2008). Townsend’s (1979) theory of relative material deprivation formed the basis of Gordon’s (2006) child poverty measurement methodology and has been widely accepted internationally and adopted by international child advocacy agencies such as UNICEF (Gordon & Nandy, 2012).

Criticisms of material poverty. Material poverty has been widely criticised for focusing too narrowly on income or resource deprivation, and for not including the effects of other socially and environmentally constraining factors such as geographical isolation, or social exclusion (Bossert et al., 2013; Gordon, 2006; Hick, 2015; Sen, 1999; Woodward, 2010). More specifically, conceptualising and measuring poverty on the basis of income is widely used, but criticisms include that it does not take account of the many dimensions of human life such as quality of housing, access to transport, level of education or employment, and access to health care (Bossert et al., 2013; Hick, 2012; Sen, 1999). Also, having a fixed level at which poverty is deemed to occur is problematic as there are degrees to which someone is socioeconomically disadvantaged (Marmot & Bell, 2013).

Furthermore, defining poverty limited to income can be misleading as there are other factors than can influence people’s access to resources such as having sufficient capital assets, or declaring lower income through tax schemes, or being in the receipt of additional government or community resources (Bossert et al., 2013; Hick, 2014). However, the concept of relative poverty or deprivation certainly goes some way to addressing these criticisms and arguably has led to more ‘complex’ measures of

poverty (Gordon, 2006; Wisor, 2017). In New Zealand, relative income poverty measures are used widely by researchers and the government, alongside material deprivation measures such as the New Zealand Index of Deprivation, the NZ Economic Living Standard Index (ELSI), the Household Economic Survey (HES) and the Material Wellbeing Index (MWI) (Perry, 2016; Salmond & Crampton, 2012).

The capabilities theory and poverty. A further way to conceptualise poverty is in terms of a person's capabilities, defined as:

[T]he substantive freedoms he or she enjoys to lead the kind of life he or she has reason to value. In this perspective, poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes. (Sen, 1999, p. 87)

The *capabilities theory* was developed by Amartya Sen, a prominent social thinker and economist, as a conceptual means to examine economic and social inequalities (Hammell, 2015), and challenged contemporary economic development theories (i.e., neoliberal approaches to international development) (Kremakova, 2013; Navarro, 2000). As Sen (1999) stated “[d]evelopment can be seen...as a process of expanding real freedoms that people enjoy....[and] requires the removal of major sources of unfreedom: poverty as well as tyranny” (p. 3). The capabilities theory has been further developed by the philosopher Martha Nussbaum and a number of others (Wisor, 2017).

In terms of understanding poverty, Sen's work, alongside the work of Townsend and others, has helped develop a more multidimensional concept of poverty (Bossert et al., 2013; Gordon, 2006; Hick, 2012; Perry, 2014). As Sen (1992) pointed out, the concept of material poverty ignores the effect of personal or community-based capabilities. That is, the concept of material poverty fails to include the effects of other constraints on a person's life that create poverty, including the factors mentioned earlier (Gordon, 2006; Hick, 2012). The capability approach to poverty,

[F]ocuses on what people are able to do and be, as opposed to what they have, or how they feel...[the focus shifts from] ‘the means of living’, such as income, to the ‘actual opportunities a person has’, namely their functionings and capabilities...poverty is viewed as the deprivation of certain basic capabilities...from...being well nourished

[to being able to] take part in the life of the community. (Hick, 2012, pp. 292-293)

From an occupational perspective, the capabilities theory fits well with occupational therapy values (e.g., occupational rights) and position statements such as the World Federation of Occupational Therapists Position Paper on Human Rights (Hammell, 2015). The assertion that every person has the right to participate in occupations of meaning to them and that being able to do so is health enhancing, fits with the capabilities approach that envisions a person's capability to live the life they choose. However, the unequitable aspects in society (e.g., poverty) that in a large part determine the potential to achieve these capabilities and rights, needs to be addressed so that every person can achieve their fullest potential and realise their occupational rights (Hammell, 2015).

Critiques of Sen's concept of poverty include that it uses an 'absolute' level of poverty such as starvation or hunger, and it is argued that absolutist ideas themselves are relative and contextual. For example, nutritional needs are dependent on historical and cultural contexts (Gordon, 2006). A further criticism of Sen's concept of human freedoms is that it does not acknowledge the various sources of power in society or include a socio-political framework in which these freedoms can be achieved (Navarro, 2000). Other criticisms of Sen's theory include that it is vague, hard to operationalise, over emphasises individual agency and under values human interdependency, discounts the effect of social structures, and does not adequately take account of exploitative political forces (Kremakova, 2013). However, Sen's later work has attempted to address some of these issues by more clearly positioning capabilities theory within the context of social justice, human rights, democratic processes and ethical reasoning (Kremakova, 2013). For example, when developing what constitutes a person's capabilities, Sen now proposes these should be holistic, contextual, and take into account individual perceptions and the influence of socio-political and cultural factors (Hammell, 2015). The capabilities approach to poverty has been the basis of widely used poverty measures such as the United Nations Development Programme's (UNDP) Human Development Index or the United Kingdom's (UK) Equality Measurement Framework (EMF) (Kremakova, 2013) and contributed broadly to the development of multidimensional poverty measures (Bossert et al., 2013).

Multidimensional poverty or deprivation. *Multidimensional definitions of deprivation and poverty* reflect the way in which deprivation is individually and socially constructed and account for the multiple dimensions in society that can create inequality such as housing, education, and health status, as well as income (Bellani, 2013; Bossert et al., 2013). Multidimensional deprivation or poverty takes into account non-material factors such as participation in political affairs or one's health status, thus distinguishing it from material poverty (Bossert et al., 2013). From this perspective poverty can be defined as a state in which a person is unable to experience well-being over an array of life circumstances (Bossert et al., 2013). The multidimensional concept of poverty builds on Sen's capabilities theory and Townsend's concept of social/relative deprivation as "a state of observable and demonstrable disadvantage relative to the local community or the wider society or nation to which an individual, family or group belongs" (Townsend, as cited in Hick, 2012, p. 300).

The multidimensional understanding of poverty is reflected in this United Nations' description:

Typical measures of poverty are based on income or consumption, which register important dimensions of deprivation but provide only a partial picture. People can be deprived of many things beyond income. They may have poor health and nutrition, low education and skills, inadequate livelihoods and poor household conditions, and they may be socially excluded. (UN, 2014, p. 41)

Multidimensional poverty measures include both population wide indexes such as the Human Development Index or the Basic Capabilities Index, and at individual and household level such as the Multidimensional Poverty Index (Wisor, 2017). In New Zealand, a combination of the Household Economic Survey (HES) and the Material Wellbeing Index (MWI) can be seen as encapsulating this more complex sense of poverty (Perry, 2017a, 2017b). As discussed, multidimensional and monetary measures often diverge significantly in the assessment of deprivation or poverty and as such multidimensional measures have been important in assessing the progress in poverty reduction (Wisor, 2017).

Rights-based poverty approach. The *rights-based approach* to conceptualising and measuring poverty has received recognition and was used in the

2012 UK government's recommendation for a national minimum level of income (PSE, n.d.). Rights based poverty defines a person as being poor when they are not able to meet their basic human rights such as those stipulated in the Universal Declaration of Human Rights (e.g., right to a suitable standard of living that includes food, clothing, medical care etc.) (Wisor, 2017). This approach to poverty is not a new concept of what it means to be poor, rather it frames the issue of poverty as a matter of human rights and strengthens the claim for anti-poverty rights (Pemberton, Gordon, & Nandy, 2012; Wisor, 2017).

One example of this approach is that proposed by Woodward (2010). He defines and measures poverty from a multidimensional perspective, while continuing to use a monetary (e.g., income) means of measurement (Woodward, 2010). Human rights (e.g., health, nutrition, education) are used as the indicator, with the point where a minimum standard of living, or a rights threshold, and the income required to achieve this predetermined level meet, equating to the RBPL or rights based poverty line. For example, in terms of infant mortality, the RBPL would be the intersecting point where the basic right to survival is met by the level of income required to achieve this health outcome (see Figure 2.3).

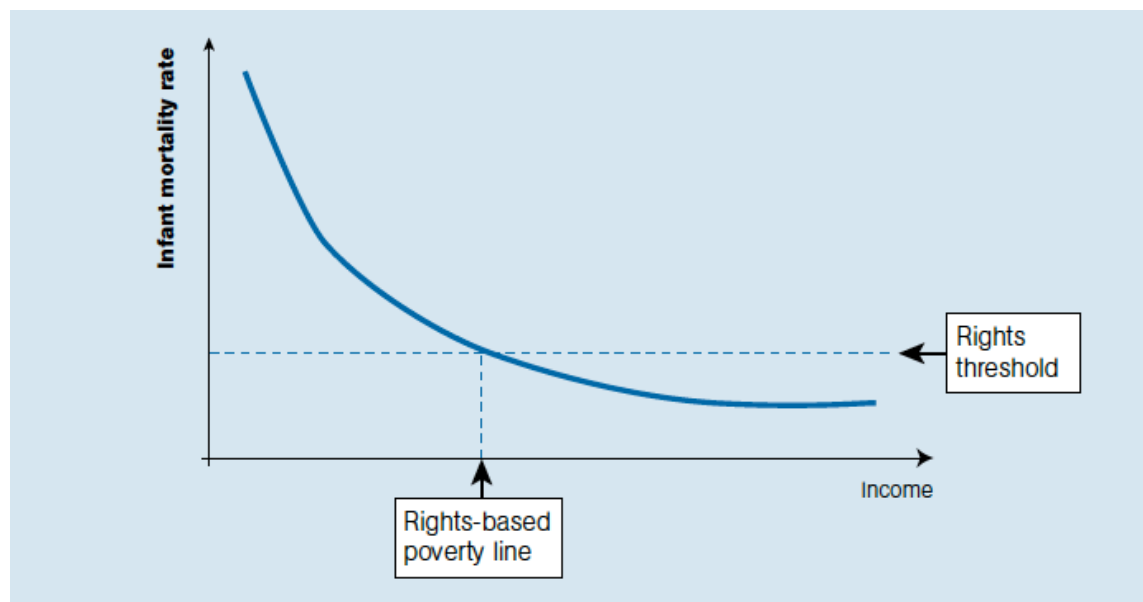


Figure 2.3. Showing the threshold level for the right to child survival. The curve represents an estimated statistical relationship between child mortality and income, with the point where this intersects equalling the RBPL for this child right. Reprinted from *How poor is 'poor'? Towards a rights-based poverty line* (p. 31), by D. Woodward, 2010, London, UK: New Economics Foundation. Copyright 2010 by New Economics Foundation. Reprinted with permission.

However, the RBPL continues to measure poverty in terms of income, even if this is the level required to meet a country specific standard of living that is linked to basic human rights. Additionally, it is not clear how this approach would achieve other less easily determined human rights, or rights that are not clearly linked to economic factors. These include the rights to security or to freedom of opinion, expression, thought, conscience, and religion and the right to dignity and freedom from discrimination (UN General Assembly, 1989). A further critique of the rights-based approach asserts that while rights are essential, realising these in practice requires a transformation of the socio-economic and political landscape or tackling the underlying imbalances in power that create poverty and inequality (Cousins, 2009).

Persistent or chronic poverty. For many adults and tamariki/children who live in poverty, it is an intergenerational experience they were born into and may well persist throughout their lives (Bourdillon, 2012; Marmot & Bell, 2013). For other tamariki/children and their families, the transition into and out of poverty may be more temporary or sporadic (Engle, 2012). Poverty has been shown to be a dynamic process with events such as ill health, war and conflict, or natural disasters pushing people into states of poverty (Wisor, 2017). Equally, people's states of poverty are not static and a person may move out of poverty due to factors such as diversifying their source of income or gaining employment (Wisor, 2017), increasing one's socioeconomic status both through personal attributes and through social supports (Engle, 2012; Wadsworth & Butterworth, 2005), and also through community and state-wide anti-poverty initiatives (Marmot & Bell, 2013). While many families do move out of poverty, studies have shown they tend to remain close to poverty levels and are at increased risk of falling back into poverty (Boston & Chapple, 2014). For example, the longer a household is on a low income the more at risk they are of high material deprivation (Perry, 2017b) (see Figure 2.4).

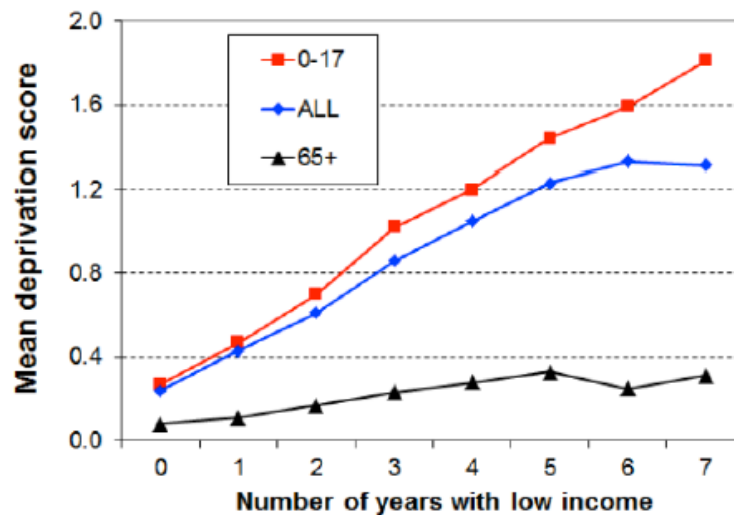


Figure 2.4. Showing the longer someone lives with low income the more likely their level of deprivation will become. Reprinted from *The material wellbeing of NZ households: Overview and key findings*, (p. 39) by B. Perry, 2017, Wellington, NZ: Ministry of Social Development. Copyright 2017 by Ministry of Social Development. Reprinted with permission.

When poverty is experienced by a child or adult over their life time or for sustained periods of time (e.g., for at least 2 of the previous 3 years), it is referred to as persistent or chronic poverty. Persistent poverty is strongly linked with negative health and social outcomes (Jenkins & Van Kerm, 2014; Marmot & Bell, 2013). For example, the longer a person remains in poverty the greater their chance of permanent social exclusion (Jenkins & Van Kerm, 2014).

The Link Between Poverty and Health Inequity

One of the most important explanations for how health inequity persists in society is social, rather than biological, determinants of health. These are the conditions “in which people are born, grow, live, work and age” (Marmot et al., 2012, p. 1012). The unequal distribution of income and resources, and imbalances in power, such as for those living in poverty, are key factors in creating health inequities (Marmot et al., 2012). The term *social gradient* means that the lower a person’s socioeconomic level is, the worse his or her health outcomes are expected to be (Marmot & Bell, 2013). Evidence for the theory of a social gradient comes from public health studies such as the Whitehall study. This cohort study examining the health of British civil servants showed a strong association between social status (i.e., defined by employment level) and mortality (Marmot et al., 1991). Generally, the lower a person’s socioeconomic status is, the greater the risk to their health in the longer term (Marmot & Bell, 2013).

The World Health Organization (WHO) developed a social production of health inequities model that provides a schema explaining how socioeconomic factors create and maintain health inequities (Solar & Irwin, 2010). Based on this model, biological and psychosocial factors and material conditions (i.e., *intermediary determinants*) interact with *structural determinants* such as occupation, gender, race or socioeconomic position to produce health inequities (Irwin, Solar, & Vega, 2008) (see Figure 2.5).

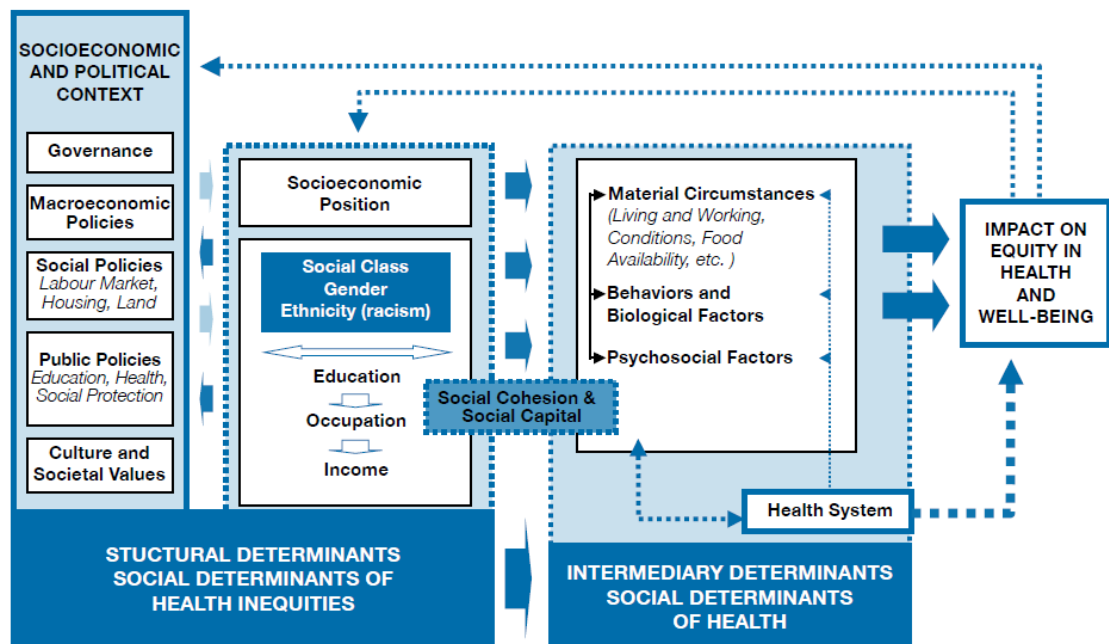


Figure 2.5. Conceptual Framework of the Social Determinants of Health. Reprinted from *A conceptual framework for action on the social determinants of health* (p. 6), by O. Solar & A. Irwin, 2010, Geneva, Switzerland: World Health Organization. Retrieved from: <http://apps.who.int/iris/handle/10665/44489> Copyright 2010 by World Health Organization. Reprinted with permission.

Poverty, Occupation and Health

The relationships between poverty, occupation and health are complex (Leadley & Hocking, 2017). There are well established correlations between poverty and health, and health and poverty (Anakwenze & Zuberi, 2013; Lee & Jackson, 2017), and there is growing evidence to support the links between poverty, occupation and health (Leadley & Hocking, 2017). However, the relationship between these factors is complicated, not well understood, and there appears to be a bi-directional relationship. For example, poverty's effect on health is likely to impact on occupations, and equally poverty's effect on occupations appears to affect a person's health.

Looking more specifically at the literature to support this relationship we find that evidence shows tamariki/children who live in poverty are at higher risk of developing obesity (Spencer et al., 2013) and in turn obesity can restrict participation in physically active occupations (e.g., walking) (Maggio et al., 2010; Riddiford-Harland et al., 2015). Equally, evidence shows that tamariki/children growing up in poverty tend to spend more time in sedentary-based occupations such as watching TV or playing computer games and spend less time in physically active occupations (Bass-Haugen, 2009; Ministry of Health, 2017a). As a result of increased time spent in sedentary occupations, tamariki/children's health is compromised as they are at greater risk of developing the health conditions associated with obesity (e.g., diabetes, cardiovascular disease, depression) (Atay & Bereket, 2016; Ministry of Health, 2017b). While it appears logical that there is a bi-directional relationship between poverty, health and occupation, the evidence that demonstrates this association is lacking.

The relationship between these factors could be understood using the conceptual framework of the International Classification of Functioning, Disability and Health (ICF). The ICF "is a framework for organising and documenting information on functioning and disability...It conceptualises functioning as a 'dynamic interaction between a person's health condition, environmental factors and personal factors'" (WHO, 2013, p. 5). In terms of health, functioning and disability, the ICF uses a recognised and standard language, takes a multidimensional perspective using the biopsychosocial model that incorporates the role of the environment, and covers the whole of life span (WHO, 2013). Using this framework, poverty (an environmental factor) can lead to a health problem such as malnourishment effecting both bodily functions and body structures (e.g., impairments in physical and cognitive functions) and that can lead to activity limitations and restrictions in participation (e.g., performing tasks or self-cares, or participating in learning). Alternatively, poverty (environment) could lead to activity limitations and restrictions in participation (e.g., interpersonal interactions and relationships) thus effecting bodily functions (e.g., emotions, energy, sleep, or blood pressure) (see Figure 2.6).

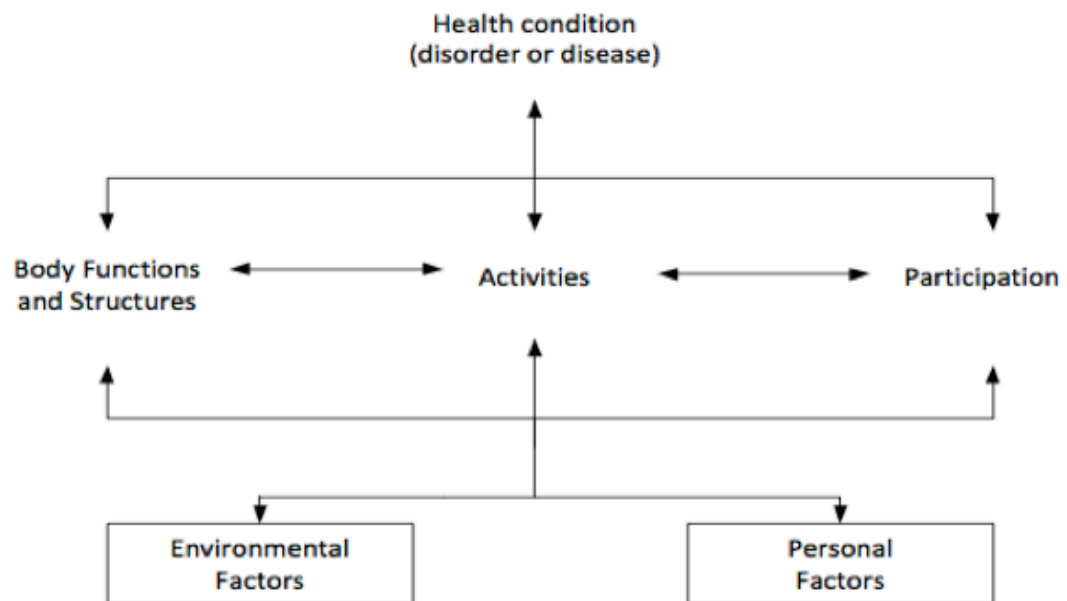


Figure 2.6. The ICF Model depicting the schema of an individual's functioning in terms of complex and dynamic interaction between their health and their environment and personal factors. Reprinted from *How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF). Exposure draft for comment* (p. 7) by WHO, 2013, Geneva, Switzerland: WHO. Copyright 2013 by WHO. Reprinted with permission.

Summary

Poverty is a dynamic and complex phenomenon that can be conceptualised in a variety of ways. Throughout this study the term poverty can be equated with the concept of material poverty, or a lack of income and resources, although, this does not limit the varied understandings that poverty encompasses (i.e., a multidimensional perspective). Additionally, the evidence is clear that poverty is a factor that is associated with health, with those who experience severe and persisting poverty being at greatest risk. There is growing evidence that poverty, health and occupations are associated, but the relationships between these factors are complex and not well understood. Furthermore, there is a clear consensus that poverty is a condition that should be addressed. The next chapter specifically examines the issue of childhood poverty, defining it, discussing the evidence of its effects and exploring tamariki/children's experience of poverty, examining the causes and the theories for how poverty impacts on tamariki/children's health and their occupations.

Chapter 3 Literature Review. Childhood Poverty

The literature review process completed for this thesis was outlined in Chapter 2 and also referenced in Appendix A: Results of data base search. This chapter outlines the results specific to poverty, as it relates to tamariki/children and its effects on them. The chapter starts with a discussion and critique about the concept of child poverty and examines the issue from a tamariki/children's rights perspective. As the research was conducted in Aotearoa New Zealand, the response to the issue by recent New Zealand governments is discussed. The remainder of the chapter details the harmful effects of poverty on tamariki/children's health and well-being, including major theories that explain the link between poverty and tamariki/children's health. International findings are separated from New Zealand data in order to highlight the context in which the research was conducted. The chapter ends with the examination of an occupational perspective of child poverty, why this is important and how this contributed to the research question. This includes a discussion on a key concept, *patterns of occupation*, and how this relates to tamariki/children and the effects of poverty.

The Concept of Child Poverty

While there is no agreed definition of childhood poverty, for the purposes of this thesis the concept of relative material childhood poverty is used, because relative material poverty is a widely agreed upon definition both here in New Zealand and internationally (Boston & Chapple, 2014; Perry, 2017a). Many studies use this or similar ways of understanding the phenomenon (Bourdillon & Boyden, 2014; UNICEF Office of Research, 2017). The experiential perspective of childhood poverty is also seen as important in informing policy relating to alleviating the problem (Attree, 2006; Bourdillon & Boyden, 2014; Ridge, 2004), and the interpretative epistemology that informs this perspective matches the methodology used in the thesis.

Relative material childhood poverty can be understood to mean a child whose family does not have enough money or has insufficient access to resources to meet their basic needs, at a level their country deems acceptable (Boston & Chapple, 2014; Perry, 2017a). Or more specifically, a child whose family income falls below the poverty line for their country which is typically set at 60% below the median household income of

the country (i.e., NZ median was \$76,200-⁶ in 2016, which equates to a poverty line of \$45,720-⁷) and where the child lives in a state of relative deprivation (Perry, 2017a). This includes such things as missing out on food, inadequate clothing, a lack of transport and medical services, living in a cold, damp house, or missing out on occupations that other tamariki/children take for granted such as school, sports and recreations (Boston & Chapple, 2014).

Equally, there is considerable academic debate over the concept of childhood, (i.e., a universal stage, biological and developmental status, is socially constructed) and there are differing cultural perspectives about what it means to be at this stage of the life span (Willumsen et al., 2014; Zhao, 2011). However, there is also substantial consensus internationally that childhood is a unique, protected and safe place in life and as such requires a particular set of rights (i.e., UN Convention on the Rights of the Child) (Willumsen et al., 2014; UNICEF, 2005). For the purposes of this thesis the widely accepted UNICEF (2005) definition of childhood will be used:

Childhood is the time for children to be in school and at play, to grow strong and confident with the love and encouragement of their family and an extended community of caring adults. It is a precious time in which children should be free from fear, safe from violence and protected from abuse and exploitation. As such, childhood means much more than just the space between birth and the attainment of adulthood. It refers to the state and condition of a child's life, to the quality of those years. (para. 1)

Childhood Poverty and Children's Rights

Tamariki/children (i.e., from 0-18 years of age) largely remain dependent, especially in the earlier stages of their life, on adults and/or the state for support and the protection of their rights (Rosenbaum & Johnson, 2013; WHO, 2008).

Tamariki/children are entitled to the same rights as adults, but owing to their stage of life and their dependency on others for their care and welfare, a unique set of rights for tamariki/children has been created. i.e., the *United Nations Convention on the*

⁶ The median income is calculated after all income tax is paid (i.e., a net figure), taking account of all State transfers (e.g., Working for Families Tax Credits (WfFTC), welfare benefits, NZ Superannuation/pension) and before housing costs are deducted (Perry, 2017a).

⁷ This 60% figure is not adjusted for household composition/family size.

Rights of Children (UNCROC). The United Nations (UN) and other child advocacy organizations assert tamariki/children's rights to access basic needs (e.g., food, shelter, clothing), to sustain their health, to freedom from harm and discrimination, and to engage freely and fully in the daily activities of life such as education, a right to a healthy and full life, play, recreation and cultural activities (Child Poverty Action Group [CPAG], 2014; UN General Assembly, 1989; WHO, 2008). However, social and environmental conditions such as poverty, conflict and war, or natural disasters create inequities and threaten tamariki/children's rights (UNICEF, 2016). Additionally, tamariki/children are more vulnerable to such threats due to their age and earlier stage of development, and to their dependency on others (Bourdillon, 2012; Rosenbaum & Johnson, 2013; UN, 2014).

Poverty is likely one of the most pervasive and permanent social conditions that threatens tamariki/children's rights and well-being. Approximately 34% of the 900 million people who are estimated to live in absolute poverty are tamariki/children (i.e., approximately 300 million), with the numbers being even higher if including those living in relative poverty (UNICEF, 2016). While global levels of poverty are falling, issues such as inequality and inequity are not and this is especially so for tamariki/children. In order for the world to achieve the UN SDGs by 2030 (e.g., eradicate extreme poverty, or reduce inequality and inequity) more needs to be done to tackle these global problems. If left unchecked, the effect for millions of tamariki/children will be dire (UN, 2015b; UNICEF, 2016) (see Figure 3.1). As a result of these deprivations a child's right to live a healthy and full life is compromised (Boston & Chapple, 2015; Bourdillon, 2012; Pemberton et al., 2012; UN, 2014; UNICEF NZ, 2013).

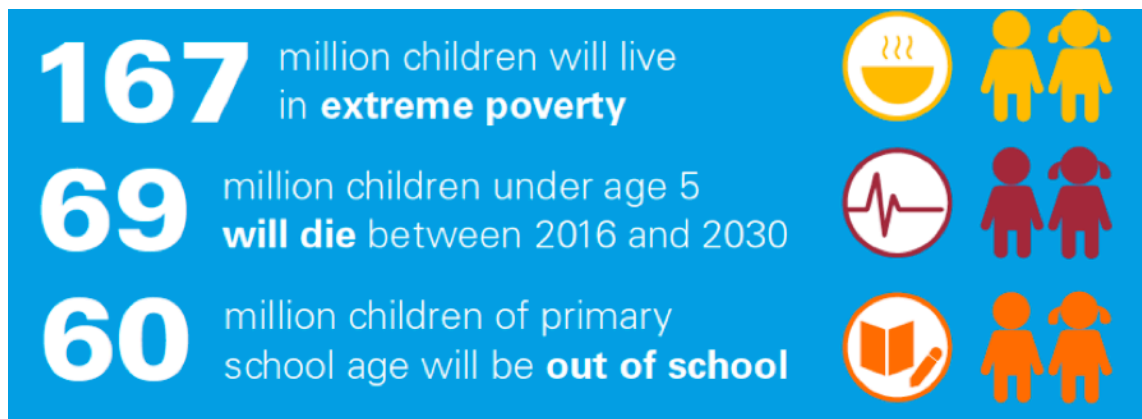


Figure 3.1. Statistics showing the level of childhood poverty and inequity in the world by 2030, if no actions are taken to address these issues. Reprinted from *The state of the world's children 2016: A fair chance for every child* (p. 3), by UNICEF, 2016, New York, NY: UNICEF. Copyright 2016 by UNICEF. Reproduced with permission.

As a signatory to the *United Nations Convention on the Rights of Children (UNCROC)*, Aotearoa New Zealand society promotes the human rights of tamariki/children to engage freely and fully in the daily activities of life (UN General Assembly, 1989). While the New Zealand government signed the UNCROC more than 20 years ago, a large portion of its tamariki/children have remained in long-term poverty (Duncanson et al., 2017). The rate of childhood poverty⁸ increased from between 10-15% in the 1980s to just below 30% in the 1990s following rising unemployment and benefit cuts. The rates then dropped to 22% in 2007 following the introduction of the Working for Families policy, before rising back to 30% by 2010 post the global financial crisis. The rates dropped again to just under 30% by 2011 and have remained relatively stable since (Perry, 2016; Simpson et al., 2016) (see Figure 3.2).

An ethnic disparity exists for Aotearoa New Zealand tamariki/children living in poverty (i.e., severe hardship or 11+ level⁹) where 2008 rates for Māori and Pacific Island tamariki/children were higher (i.e., 11% and 19% respectively) when compared with those from European and other ethnicities (i.e., 3%) (Simpson et al., 2016) (see Figure 3.3). While reasons for this disparity are complex, for Māori, the historical effects of colonisation have been acknowledged as a factor for diminished health and social

⁸ This figure is based on the number of dependent children (i.e., 0-17 years) measured by level of household income poverty at <60% of the contemporary NZ median income, after housing costs (AFC). The AFC figure is used as it more accurately represents the household's level of income-based poverty, as housing costs are a significant portion of a household expenditure.

⁹ Based on the NZ Living Standards Survey 2008 that used the DEP-17 to measure household material deprivation, a 17-point deprivation scale where 0 = no deprivation and 17 is maximum level of deprivation.

outcomes (Gray & McPherson, 2005; Māori Affairs Select Committee, 2013).

Additionally, families whose tamariki/children have disabilities or are from refugee backgrounds are also more likely to experience poverty (EAG, 2012; NZCPHM, 2017).

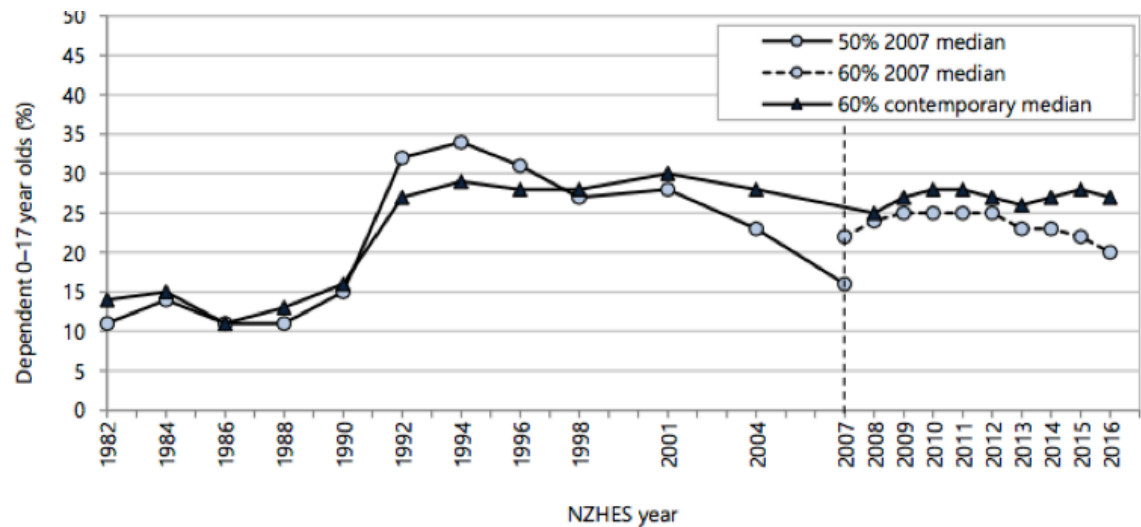


Figure 3.2. Showing the levels of New Zealand children aged 0-17 years living in households below selected poverty thresholds (60% and 50% median, and 60% contemporary median, after housing costs) from 1982-2015, with rates for the contemporary median just below 30% in 2016. Reprinted from *Child poverty monitor 2017 technical report* (p. 10), by M. Duncanson, G. Oben, A. Wicken, S. Morris, M.A. McGee, J. Simpson, 2017, Dunedin, NZ: University of Otago. Copyright 2017 by University of Otago. Reproduced with permission.

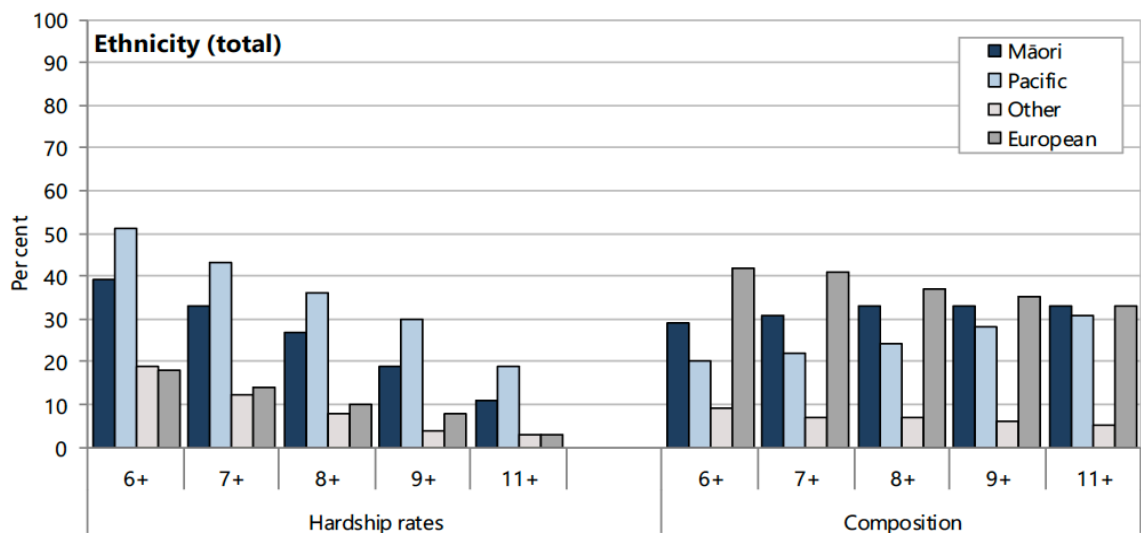


Figure 3.3. Showing the level of ethnic disparity amongst New Zealand children living in poverty (where 11+ is the highest level of deprivation), in 2008. The left side of the graph shows hardship rates, meaning the percentage of the ethnic group that are in hardship. The right side of the graph shows composition, meaning the percentage of all children that are in this ethnic group. Reprinted from *Child poverty monitor 2016 technical report* (p. 21), by J. Simpson, M. Duncanson, G. Oben, A. Wicken, S. Gallagher, 2016, Dunedin, NZ: University of Otago. Copyright 2016 by University of Otago. Reproduced with permission.

Based on international comparisons New Zealand is falling behind. For example, the latest report from UNICEF shows New Zealand has the 22nd highest percentage level of

child poverty (income based) out of the 41 high-income countries surveyed, lower than similar countries such as Australia (UNICEF Office of Research, 2017) (see Figure 3.4). This is a rise from a previous ranking of 17th, using 2013/2014 data (UNICEF Office of Research, 2016). Using material deprivation as the measure of child poverty, New Zealand ranks 18th out of the 22 countries surveyed, which is worse than comparable countries like the United Kingdom (UK) (see Figure 3.5).

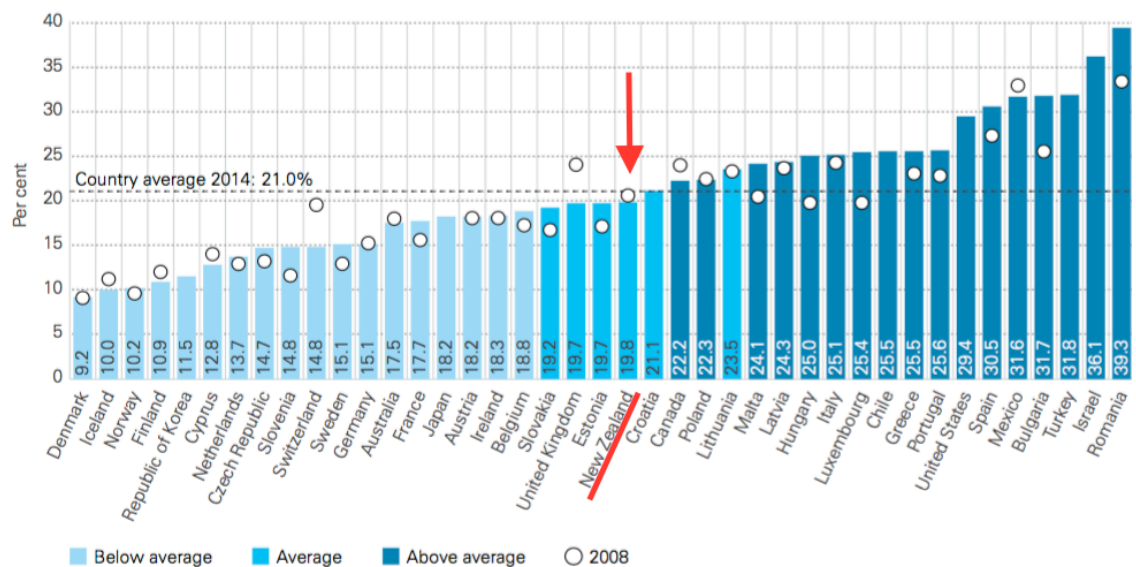


Figure 3.4. International comparisons of child poverty rates (at 60% of median income) by country in 2014. Reprinted from *Building the future: Children and the Sustainable Development Goals in rich countries. Innocenti Report Card 14* (p. 13), by UNICEF Office of Research, 2017, Florence, Italy: UNICEF Office of Research. Copyright 2017 by UNICEF. Reproduced with permission.

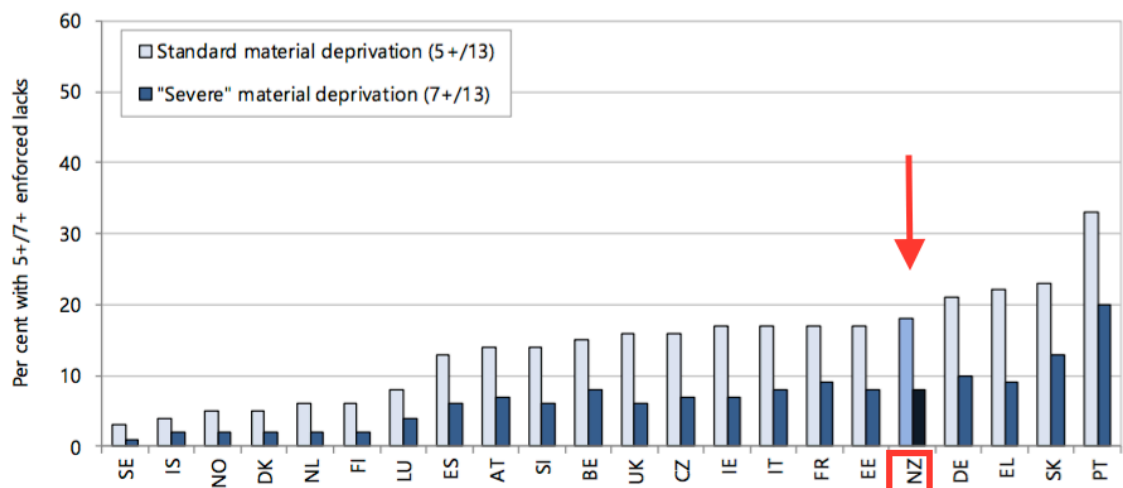


Figure 3.5. International comparison of material deprivation amongst children (aged 0-17 years) by country in 2008. Reprinted from *Child poverty monitor 2016 technical report* (p. 28),

by J. Simpson, M. Duncanson, G. Oben, A. Wicken, S. Gallagher, 2016, Dunedin, NZ: University of Otago. Copyright 2016 by University of Otago. Reproduced with permission.

NZ Government's Response to Child Poverty

Child poverty rates have remained relatively stable since an initial increase in the 1990s (i.e., approximately 30% of New Zealand tamariki/children). The combined annual health and social costs of child poverty for the country are estimated to be as high as \$10- billion/year (UNICEF NZ, n.d.). While the previous government received criticism for not implementing all of the recommendations from the New Zealand Expert Advisory Group (EAG) on child poverty (New Zealand Government, 2013) and for a focus on improving the economy, welfare reforms and moving families from welfare back into paid work, they did take some action. Which included some funding for a range of health and social initiatives that supported tamariki/children and families on low-incomes, e.g., insulating housing, free food in schools and family support programmes (New Zealand Government, 2016). However, if this problem is not addressed in an effective way, a large portion of New Zealand tamariki/children will continue to experience serious, negative health and well-being related outcomes.

Why have subsequent New Zealand governments not taken decisive action to address the issue of child poverty? One premise is that a lack of consensus on how to most effectively address child poverty can drive debate on the issue (Perry, 2016).

Furthermore, political motivations may have been obscuring the need to address the problem, e.g., the previous New Zealand government's failure to report on child poverty levels as outlined in the latest UNICEF Innocenti report card (Fyers, 2017, June 15; UNICEF Office of Research, 2017). Other researchers suggest that neoliberal social and economic policy in the last 20-30 years has led to increased economic and social inequalities in this country (Boston & Chapple, 2014; Bruce, 2014a; Carroll, Casswell, Huakau, Howden-Chapman, & Perry, 2011; O'Brien & Salonen, 2011). For example, rising unemployment from 1980 to the early 1990s and the 1990s benefit cuts resulted in increased child poverty rates in the early 90s (Perry, 2014; Simpson et al., 2016).

A lack of political or societal will to tackle the problem effectively is suggested as a primary reason for perpetuating child poverty in this country (Boston & Chapple, 2015; Hoare & Wilson, 2007; UNICEF NZ, 2013). There is evidence that New Zealand's egalitarian values changed to reflect more neoliberal assumptions over the last 20

years, with support for egalitarian values only recently increasing (Boston & Chapple, 2014). As one investigative journalist reporting on this topic stated, investing in the welfare of vulnerable tamariki/children can happen - the New Zealand government just needs to make this a priority (Bruce, 2014b).

Research also shows that international economic difficulties in the last decade have contributed to this problem (CPAG, 2014; Perry, 2014). For example, the recent Global Financial Crisis (GFC) of 2008 resulted in a worsening picture of childhood poverty including affluent, developed nations like Aotearoa New Zealand (UNICEF Office of Research, 2014). However, rates have since dropped to pre-GFC levels in New Zealand (NZ) (Perry, 2014). Additional factors that may be contributing to the issue of child poverty include NZ's low wage economy (Nana, 2017), high cost of living (Harris, 2017; Organisation for Economic Co-operation and Development [OECD], n.d.; Stats NZ, n.d.), not extending the Working for Families package to those on benefits (CPAG, 2016; Rashbrooke, 2013a), and benefit payments that remain low relative to increasing inflation (Hickey, 2017; Ministry of Social Development, 2016).

As a signatory to the UN Millennium Sustainable Development Goals (SDGs) the government has committed to achieving global health targets that include ending poverty, ending hunger and improving nutrition, ensuring healthy lives and promoting well-being (UN, 2015a). As part of the SDGs, the New Zealand government has agreed to the target of achieving a 50% reduction in child poverty (i.e., as it is defined in NZ) by 2030. As current rates of child poverty are 28% of the population (i.e., using the after housing costs (AHC) 60% poverty line), these would need to decrease to 14% by 2030 in order for the government to meet its SDG commitments (Simpson et al., 2016).

During the recent New Zealand elections in 2017, it appeared that the political will to take action on the issue of child poverty was growing, as evidenced by the promises of the two major political parties (i.e., National and Labour) who both pledged to reduce child poverty rates by 100,000 (Walters, 2017). The current Government has started work on its aim to address child poverty through new legislation (i.e., the Child Poverty Reduction Bill), relevant policy (i.e., the Child Wellbeing Strategy) and an expert Child Poverty Unit who will provide specialist advice on related policy and aim to improve the measurement of child poverty (Beehive, n.d.; DPMC, n.d). However, examining the

Ministerial information available, there does not appear to be an occupational perspective relating to child poverty reduction policy. In a small way, this study may help to inform this Government strategy by making more visible the effects of poverty on tamariki/children's occupations.

The Harmful Effects of Childhood Poverty

There is strong evidence that tamariki/children who live in situations of poverty and socioeconomic deprivation are at risk of experiencing negative health and social outcomes (Boston & Chapple, 2014; Marmot & Bell, 2012, 2013; Rosenbaum & Johnson, 2013; UNICEF, 2016). There is also accumulating evidence from studies aimed at understanding a child's experience of living in poverty that their lives are deeply affected by material hardship and it pervades all aspects of their lives (Attree, 2006; Crivello, Vennam, & Komanduri, 2011; Egan-Birtan, 2010; Ridge, 2004).

Poverty threatens tamariki/children's development and health in many ways, by creating diminished living conditions, (e.g., threats in access to food, water, suitable housing and health care) increased stress levels and instability in the home, decreased ability for families to cope with adversity, and environmental threats (e.g., increased exposure to toxins like hazardous wastes and poor air quality or increased crime and deprived neighbourhoods) (Rosenbaum & Johnson, 2013). Child health and impaired development are highly correlated with poverty, due in part to low stimulation, poorer maternal mental health, and inadequate nutrition affecting the development of the brain leading to attention and cognitive difficulties later in life (Dickerson & Popli, 2016; Hamad & Rehkopf, 2016). What is not so well understood though is the relationship between poverty, health and occupation and how these factors interact in relation to a child who grows up in poverty.

Despite poverty's harmful effects on a child's health and wellbeing, tamariki/children can be lifted out of this unfair state and its long-term consequences reduced. This can occur through upward socioeconomic mobility, positive state interventions, education, parental support and through positive social capital (e.g., a high level of community cohesion and community-based supports) (Kawachi et al., 2013; Lysack & Adamo, 2014; Marmot & Bell, 2013; Rosenbaum & Johnson, 2013). Whilst examples of

occupational therapy interventions that aim to address child poverty's negative effects are few, there is growing evidence for this (Leadley & Hocking, 2017).

Poverty's effect on a child's development and physical health. Ensuring that a child is able to develop biologically, socially and occupationally is vital and the consequences of disruption to this process can have life-long negative consequences for a child (Lysack & Adamo, 2014; Rosenbaum & Johnson, 2013). The success of a child's development and health starts early in their life (e.g., in the first 2 years) and even before birth (e.g., *in utero* and is dependent on the mother's health) (Slee & Shute, 2015; Wadsworth & Butterworth, 2005). Current theories of child development acknowledge the broad social and environmental factors that can affect the development and health of a child (e.g., systems theory, lifespan theory, and the life course theory) (Humphry & Womack, 2014; Slee & Shute, 2015). Furthermore, the nature-nurture debate, that held a dichotomous view of the role of genetics and environment in terms of human development, is now more generally agreed to be an interaction between hereditary and environment in relation to a child's development and behaviour (Davies, 2011; Engle, 2012; Slee & Shute, 2015; Wadsworth & Butterworth, 2005). One author more aptly describes this interactive process, as "nature dancing with nurture over time" (Shonkoff, Andrew, & Garner, 2012, p. 234).

There is a wealth of literature that demonstrates the association between poverty or low socioeconomic status (SES) and the harmful effects on a child's physical health. These effects start early in life, continue throughout the child's life and into adulthood (Slee & Shute, 2015). Recent research has studied the effects of poverty or low SES on brain and cognitive development. The combined evidence points to the negative impact of poverty on the development of a child's brain structure and their cognition (Dickerson & Popli, 2016; Gabrieli & Bunge, 2017; Hurt & Betancourt, 2016; Noble, 2017). Poor nutrition early in life is associated with stunting or poor growth, affects cognitive development, leads to learning difficulties and to poor health/morbidity (UNICEF, Lu, Black, & Richter, 2016; 2016). A study using psychological testing methods for tamariki/children and neuroimaging techniques showed that lower parental education and family income was associated with impaired brain development, in particular for areas of the brain linked to language and executive functions, and

especially for the most deprived families, irrespective of genetic variations and other confounding variables (i.e., age, sex) (Noble et al., 2015).

A systematic review of studies about tamariki/children growing up with low socioeconomic status (SES) showed that there are higher risks for a range of poor physical health outcomes later in life including asthma, obesity, infections, hospitalizations, injuries and dental caries (Spencer et al., 2013). These findings are supported by a number of other studies and show that tamariki/children in poverty have an increased risk for a range of other chronic health conditions such as cardiovascular disease, diabetes, arthritis, cancer, strokes, dementia and to increased risk of mortality (Adair et al., 2013; Donkin, Roberts, Tedstone, & Marmot, 2014; Klebanov, Evans, & Brooks-Gunn, 2014; Mollborn, Lawrence, James-Hawkins, & Fomby, 2014). In addition, a review of USA national mortality databases showed that amongst youth from lower SES there are increased rates of homicides, deaths from unintentional injury, and HIV/AIDs (Singh et al., 2013).

New Zealand evidence echoes these findings with increased rates of acute illnesses (e.g., asthma/wheezing, acute respiratory infections, bronchiolitis, pneumonia, gastroenteritis, skin infections, dermatitis, eczema and urinary tract infections) and chronic health conditions (e.g., diabetes, obesity, cancer); higher rates of smoking, substance abuse, hospitalisations, injuries and mortality for tamariki/children from low SES backgrounds (Caspi et al., 2016; Craig, Reddington, Wicken, Oben, & Simpson, 2014; Melchior, Moffitt, Milne, Poulton, & Caspi, 2007; Rajput, Tuohy, Mishra, Smith, & Taylor, 2015; Simpson et al., 2016). These medical conditions have a social gradient where tamariki/children from the highest areas of deprivation have a higher risk of these diseases (i.e., 1.5 times higher) compared to those from the lowest areas of deprivation (Simpson et al., 2016) (see Figure 3.6). Māori and Pacific Island tamariki/children typically have the highest rates for these health statistics compared with other ethnic groups (Craig et al., 2014; Ministry of Health, 2012; Simpson et al., 2016).

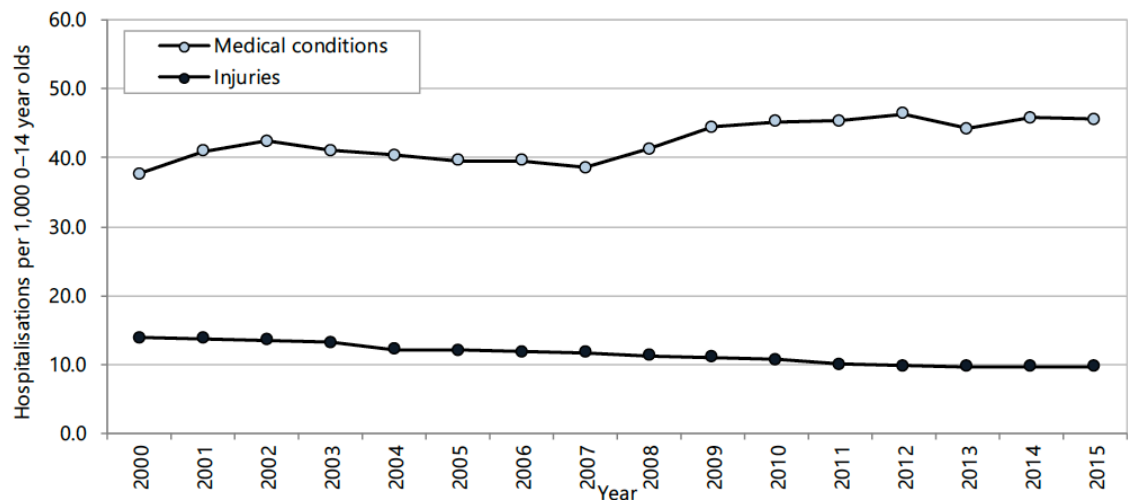


Figure 3.6. The hospitalisation rates, in 0-14 year olds, for medical conditions that show a social gradient, demonstrating a rise between 2000 to 2015. Reprinted from *Child poverty monitor 2016 technical report*. (p. 41), by J. Simpson, M. Duncanson, G. Oben, A. Wicken, S. Gallagher, 2016, Dunedin, NZ: University of Otago. Copyright 2016 by University of Otago. Reproduced with permission.

Poverty's effect on children's mental health. Poverty is considered a type of adverse childhood experience (ACE) with other examples including domestic violence, child abuse, neglect, trauma and high levels of sustained stress (Rosenbaum & Johnson, 2013). ACEs, and in particular exposure to trauma early in life, are strongly associated with mental health problems later in life, e.g., substance abuse, depression and anxiety (Harden, Buhler, & Parra, 2016). A systematic review of studies conducted into the association between low SES in childhood and mental health showed that persistent low SES was strongly associated with mental health problems. For example, tamariki/children in poverty are 2-3 times more likely to experience mental health problems such as anxiety and depression than their more affluent peers (Reiss, 2013). A systematic review of studies about homeless tamariki/children found they have higher rates of mental health disorders. For example rates of depression were up to 60% higher in homeless youths (Medlow, Klineberg, & Steinbeck, 2014).

Generally, the mental and social effects of childhood poverty include low self-esteem, higher rates of suicide, more behavioural and learning problems, increased aggression, delinquency, greater chances of involvement in criminal activity, and a higher likelihood of early sexual activity and teen pregnancies (Gibb, Fergusson, & Horwood, 2012; Reiss, 2013; Scott & Pressman, 2013; Thompson, Alonzo, Hu, & Hasin, 2017). Poor mental health is in turn associated with risky behaviours in adolescence (e.g., unhealthy lifestyle, smoking, alcohol and illicit drug use, promiscuity, criminal activity)

and in the long-term can increase the risk of physical health problems (e.g., respiratory disease, obesity, sexually transmitted diseases) and further entrench a person in poverty (Medlow et al., 2014; Reiss, 2013; Roberts, Donkin, & Marmot, 2016).

Likewise, Aotearoa New Zealand studies show similar mental health disadvantages for tamariki/children who live in poverty (CPAG, 2014; Craig et al., 2014; Gibson et al., 2017; Simpson et al., 2016). A New Zealand ministerial report entitled “Improving the transition: Reducing social and psychological morbidity during adolescence”, identified poverty as a contributing factor to mental health problems in adolescence (Gluckman & Hayne, 2011). Mental health data has shown that tamariki/children from low SES backgrounds have higher rates of maltreatment, abuse and neglect, with Māori and Pacific Island tamariki/children having the highest rates compared with other ethnic groups (Craig et al., 2014). New Zealand suicide statistics in 2013 show that suicide rates are highest amongst those from the most deprived areas, for the age group of 14 - 44 years (Ministry of Health, 2016c) (see Figure 3.7). For young Māori the rates are worse, being 2.8 times the suicide rate of non-Māori and half of these youths are from highly deprived backgrounds (Gibson et al., 2017). A longitudinal study from New Zealand (n=1000) showed that tamariki/children from a low SES are at increased risk of substance abuse (Poulton et al., 2002). A more recent longitudinal study (n=1265) found that risk factors such as a low standard of living increase the risk of mental health issues later in life (Fergusson, McLeod, & Horwood, 2015).

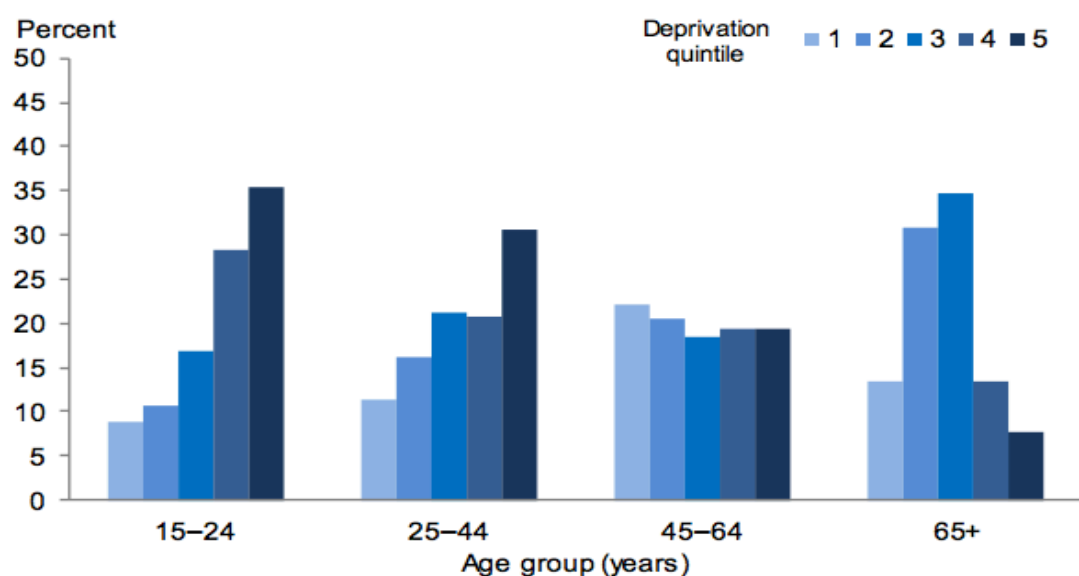


Figure 3.7. The rates of suicide by age group and ranked by decile (1 = least deprived and 5 = most deprived), 2013. Reprinted from *Suicide facts: Deaths and intentional self-harm*

hospitalisations: 2013 (p. 20), by Ministry of Health, 2016, Wellington, NZ: Ministry of Health. Copyright 2016 by the Ministry of Health. Reproduced with permission.

Theories explaining the effect of poverty on child development and health over the life course. Theories such as biological embedding, pathway and latency models attempt to explain the link between poverty and its adverse effects on tamariki/children and their long-term health. While each of these theories has a different focus on how adverse circumstances (e.g., poverty) effect a child's health and well-being, a more contemporary perspective is to consider each of these explanations as complimentary and interrelated. Additionally, the entire life span should be considered when studying the effect of childhood socioeconomic circumstances on the risk of disease in adulthood (Boston & Chapple, 2014; De los Reyes-Aragon et al., 2016; Engle, 2012; Marmot & Bell, 2013; Wadsworth & Butterworth, 2005).

The *biological embedding hypothesis* postulates that events occurring early in a child's life create changes in the neuro-physiological and genetic expression of the individual and a child's development and health are contingent on an interaction between the growth of an organ, especially the neural system, and the environment (Boyce & Keating, 2004; Wadsworth & Butterworth, 2005). A model that has been described as consistent with the biological embedding hypothesis and closely allied with the theory of epigenetics¹⁰ is the *ecobiodevelopmental model* (Hurt & Betancourt, 2016) (see Figure 3.8). This model postulates that the experiences of early childhood, combined with the effects of environment, impact on brain structure and function (Shonkoff et al., 2012). For example, for tamariki/children living in long-term and severe poverty, the combined effects of harmful and long-term stress, and damaging environmental effects (e.g., exposure to toxins, a lack of nutrition) have been shown to have damaging effects on the brain structure and cognitive development (Hurt & Betancourt, 2016; Shonkoff et al., 2012).

¹⁰ Epigenetics is "the study of factors that influence gene expression but do not alter genotype, such as chromatin methylation and acetylation involved in tissue-specific patterns of gene expression, or the parental imprinting of genes" (Martin, 2015, para. 1). For example, genetic changes can occur naturally or be influenced by factors such as age, the environment, lifestyle or disease.

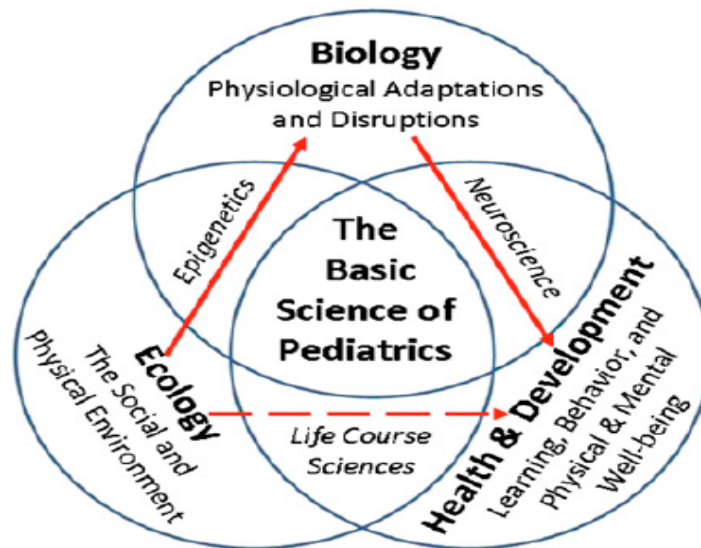


Figure 3.8. The ecobiodevelopmental model showing a proposed framework for interaction between biology, ecology and a child's health and development. Reprinted from "The lifelong effects of early childhood adversity and toxic stress," by J. P. Shonkoff, S. Andrew, and M. Garner, 2012, *Paediatrics*, 129(1), p. 234. Copyright 2012 by American Academy of Pediatrics. Reproduced with permission.

The theory of *cumulative risk* asserts that accumulating risk during early life and throughout the life course, such as from environmental factors, health behaviours and social factors, leads to increased risk of disease in adulthood (Boyce & Keating, 2004; Wadsworth & Butterworth, 2005). The *pathway model* suggests that the circumstances early in a child's life that constrain or afford her/his health and development, such as exposure to risk factors, are linked via a pathway to future events or circumstances that affect their life outcomes (Boyce & Keating, 2004). Adverse events early in a child's life increase the probability of future exposures, such as the association between childhood poverty and poor adult diet and unhealthy behaviours (e.g., smoking), and between lower educational attainment and low income (Boyce & Keating, 2004; Wadsworth & Butterworth, 2005). Additionally, this theory suggests that personal characteristics of a child (e.g., resilience) and the support they receive may reduce the effects of the early life adverse circumstances (Boyce & Keating, 2004). The *latency model*, sometimes referred to as the critical period, hypothesises that the discrete events in one's life, usually occurring earlier in life, contribute to the risk of disease in adult life (Boyce & Keating, 2004). For example, high levels of stress or a serious infectious illness may create a risk that later in life is exacerbated by future adverse life course events (Boyce & Keating, 2004; Wadsworth & Butterworth, 2005).

Finally, the *transactional model* of child development recognises the effect of the immediate and wider environment on the child's development and that the child is not a passive recipient of these influences, but has agency in this process (Davies, 2011). This model suggests "the development of a child is...a product of the continuous dynamic interactions between the child and the experience provided by his or her family and social context" (Sameroff & Fiese, as cited in Davies, 2011, p. 4). In other words, "the effects of poverty have a continuous impact through the ongoing relations between families and children, incorporating both moderated and mediated processes" (Engle, 2012, p. 136). A parent may find it challenging to raise a child who exhibits difficult behaviours, that may in turn affect their stress levels and mental health and subsequently this may have a negative effect on the child's well-being. When all this is occurring in the context of raising their child under conditions of material poverty, that creates additional stressors and further affects the relationship (Engle, 2012) (see Figure 3.9).

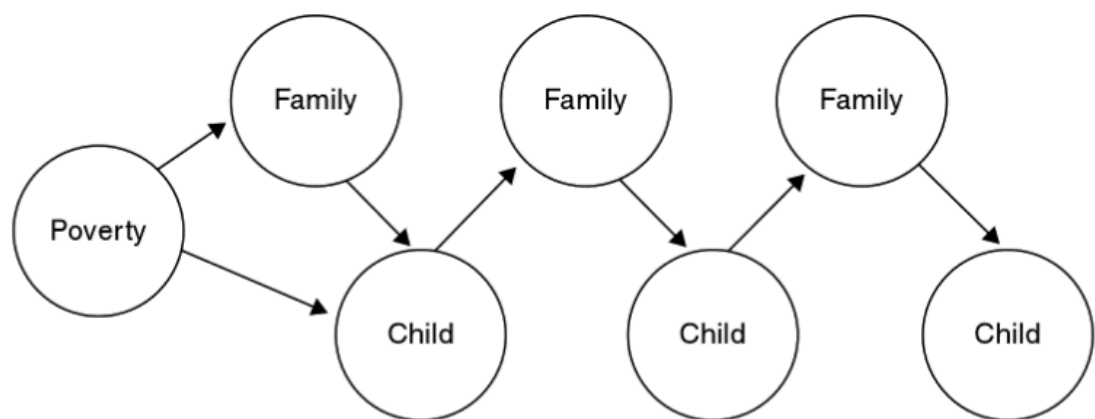


Figure 3.9. A diagrammatic schema of the proposed transactional model of how poverty effects a child's development and health. Reprinted from *Poverty and developmental potential* (p. 136), by P. Engle, (2011) in J. Boyden & M. Bourdillon (Eds.), *Childhood poverty: Multidisciplinary approaches*. New York, NY: Palgrave Macmillan. Copyright 2011 by Palgrave Macmillan. Reproduced with permission.

Poverty's effect on children's education and future employment prospects. A large body of research shows a strong association between persistent childhood poverty and diminished educational and future employment outcomes (Jackson, 2015; Lu et al., 2016; Scott & Pressman, 2013; Victora et al., 2008). Lower child educational attainment is correlated with a low parental education level and subsequently a greater likelihood of remaining in poverty (Marmot & Bell, 2013). Studies such as the Programme of International Student Achievement (PISA) provide

robust evidence of a correlation between student educational outcomes and family SES in developed countries (Ladd, 2012). American-based statistics show that a child living in poverty has only a 9% chance of completing a tertiary degree by age 24, which subsequently decreases their chances of earning higher rates of pay (Gabrieli & Bunge, 2017). Based on data from a longitudinal study (n= 1380) in the USA, comparing children who grew up in poverty with their peers whose families had incomes twice the poverty line, when adults they earned less than half the income of their peers, worked substantially fewer hours each year, and received more financial assistance from the government (Duncan et al., 2013).

Similarly, in New Zealand (NZ) childhood poverty has been shown to have a strong correlation with diminished educational and employment outcomes (Boston, 2013). A large longitudinal study (n=1265) examining the association between low family income and childhood outcomes showed that low income was associated with poor educational and employment outcomes (Gibb et al., 2012). NZ statistics show that the percentage of year 11 students (i.e., 3rd year secondary school) from the lowest decile schools, which have the highest level of socioeconomic deprivation, are approximately 30% less likely to pass the National Certificate of Educational Achievement, the official secondary school qualification than their peers from the highest decile schools (Haig, 2014) (see Figure 3.10). Reasons for this lower educational outcome for tamariki/children in poverty is in part that a majority go to low decile schools where there is often lower levels of parental involvement and support, limited digital learning facilities, higher teacher burnout rates, higher rates of truancy and disruption to classes, and higher rates of students with multiple needs (e.g., limited English language skills) (Boston & Chapple, 2014).

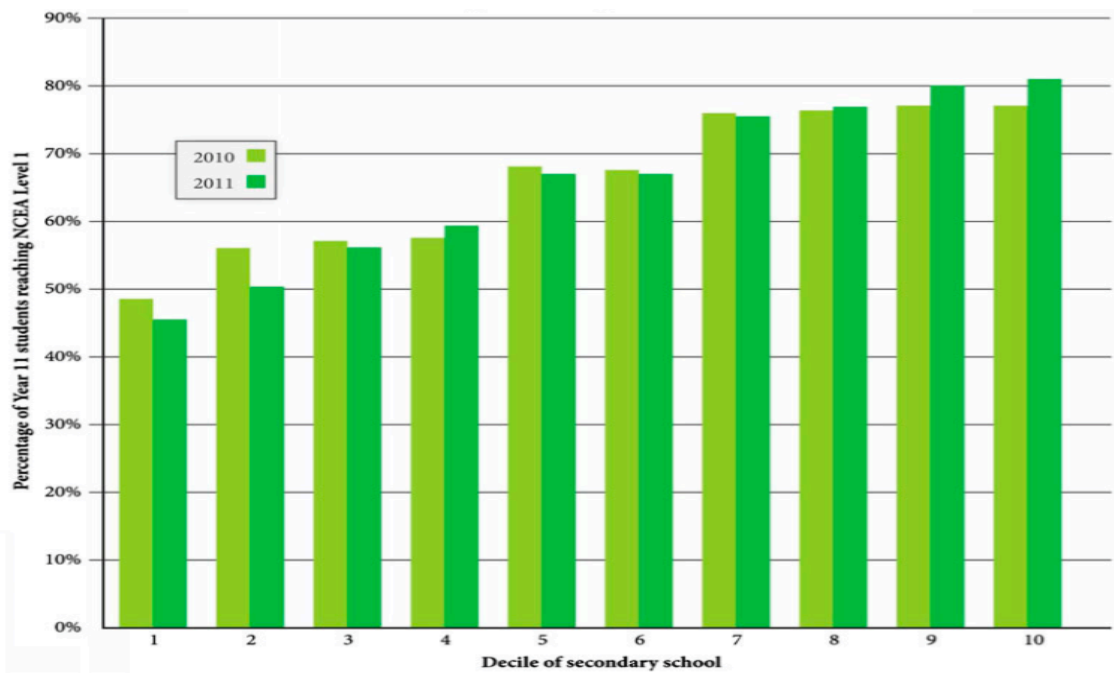


Figure 3.10. Year 11 (NCEA 1) pass rates by school decile, for 2010 and 2011. (Decile 1 = most deprived and decile 10 = least deprived). Reprinted from “Equipping schools to fight poverty: A community hub approach”, by T. Haig, 2014, *Educational Philosophy & Theory*, 46(9), p. 1019. Copyright 2014 by Taylor & Francis. Reproduced with permission.

Poverty’s effect on children’s participation in play, sports, recreation, social, cultural and productive occupations. Tamariki/children have a right to engage in daily occupations that are beneficial to them such as play, recreation and cultural occupations (UN General Assembly, 1989) and for the most part engagement in an array of enriching occupations is positive for their development and health (Holloway & Pimlott-Wilson, 2014; Lysack & Adamo, 2014; Rosenbaum & Johnson, 2013). However, for many tamariki/children who grow up in poverty, participation in a wide range of occupations is restricted thereby compromising their rights (Leadley & Hocking, 2017; UNICEF NZ, 2013) and research shows these restrictions in daily occupations can have negative implications for their health and well-being (Andrabi, Khoddam, & Leventhal, 2017; Cairney, Joshi, Kwan, Hay, & Faught, 2015; Stalsberg & Pedersen, 2010).

A systematic review of the literature relating to the effect of SES on physical activity in adolescents concluded that there is a relationship between low SES and physical activity (Stalsberg & Pedersen, 2010). The authors of the study discuss reasons for the reduced physical activity that are due to neighbourhood factors such as poorer quality and reduced numbers of recreational facilities, with longer distances to reach those

facilities, safety concerns, and reduced leisure time where adolescents are expected to help with family tasks (e.g., babysitting, caregiving) or help with family income through part-time work (Stalsberg & Pedersen, 2010). However, the study's findings were complicated by inconsistent use of variables and measures, and conflicting results from a number of studies. For example, while most studies (i.e., 38 out of 62) showed correlation between low SES and physical inactivity, some studies showed higher levels of active transport (e.g., walking, cycling) amongst those with a low SES (Stalsberg & Pedersen, 2010). More recent studies have reinforced the correlation between poverty and tamariki/children's restricted access to physically active occupations (Pabayo, Molnar, Cradock, & Kawachi, 2014) and including additional explanations such as the mother's concern about increased risks for their tamariki/children in time spent in outdoor free play (Kimbrow & Schachter, 2011).

Other studies have also shown that these tamariki/children have fewer opportunities to participate in free play and structured leisure opportunities such as organized sports, clubs, dance, music or afterschool programmes and consequently they suffer in terms of skill development, self-esteem and in terms of maintaining healthy leisure pursuits (Bazyk & Bazyk, 2009; Bouffard et al., 2006; Ridge, 2011). These restrictions are due to the costs (e.g., to pay for the activity, equipment or transport required), the quality of the neighbourhood (e.g., availability and suitability of services), and other factors such as staff attitudes towards low-income tamariki/children, transport issues and isolation from peers (Andresen & Meiland, 2017; Attree, 2006; Ridge, 2011; Sarti, Schalkers, & Dedding, 2015).

Compared with their wealthier counterparts, tamariki/children from impoverished backgrounds are more likely to engage in unstructured play that occurs in public spaces. This relates to factors such as overcrowding, cramped spaces, high levels of noise in the home and a lack of outdoor/garden space (Redmond, 2009; Sarti et al., 2015). However, unstructured or spontaneous street play can result in more risks for tamariki/children with increased exposure to criminal activity or being accused of anti-social behaviour (Redmond, 2009).

Restricted access to physically active occupations, in the context of growing up in poverty, carries with it further consequences for tamariki/children. For example, a

large survey (n=2553) of children living in Los Angeles, USA, showed that adolescents from low socioeconomic backgrounds had reduced access to substance-free enjoyable occupations (e.g., participation in sports teams or clubs) and that this reduction was associated with increased alcohol and drug use (Andrabi et al., 2017). The authors of the study concluded that increasing pro-social physical activities amongst socioeconomically disadvantaged youth may be useful in preventing substance abuse.

New Zealand evidence matches international findings in that tamariki/children living in poverty, but especially those of Māori and Pacific Island ethnicity, are less likely to engage in physical activity and tend to spend more time in sedentary activities (e.g., more time spent watching television, or screen time) (Maddison, Dale, Marsh, LeBlanc, & Oliver, 2014; Ministry of Health, 2014; Q&A Research, 2014; Sport New Zealand, 2018) (see Figure 3.11). These tamariki/children are less likely to participate in sports clubs and teams, have less access to sports equipment, facilities and coaching, there is greater distance required to access facilities, a lack of safe and clean spaces for play and recreational occupations such as to walk and ride bicycles and have less access to transport items such as bicycles (Boon & Farnsworth, 2011; Curtis, Hinckson, & Water, 2012; Egan-Birtan, 2012; Maddison et al., 2014; Maddison et al., 2016; Q&A Research, 2014). Lower neighbourhood social cohesion is an additional barrier to participation (Utter, Denny, Robinson, Ameratunga, & Milfont, 2011).

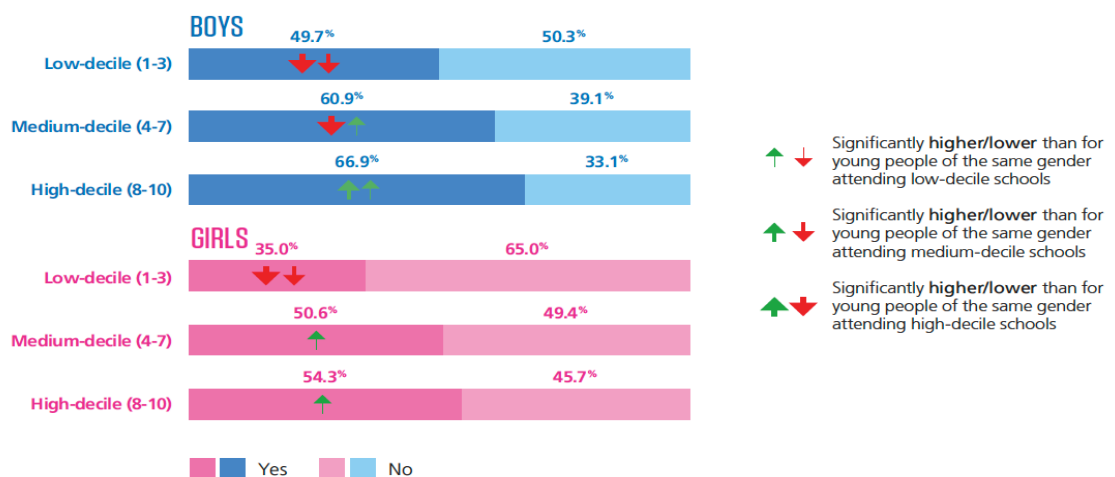


Figure 3.11. Showing rates of participation with sports clubs for high school boys and girls, by school decile (decile 1 = most deprived and decile 10 = least deprived). Reprinted from *Sport and recreation and the links with socio-economic background: New Zealand Young People's*

Survey series (p. 23), by Q&A, 2014, Wellington, NZ: Sport New Zealand. Copyright 2014 by Sports NZ. Reproduced with permission.

Qualitative studies about child poverty show the essential role of tamariki/children in productive occupations within the home such as domestic tasks (e.g., cooking, cleaning) and supporting the family (e.g., personal care for others) (Ridge, 2011). In particular, where a family member has a long-term illness or disability, this places increased demands on tamariki/children through caregiving responsibilities and a concern for the welfare of their family. For example, some tamariki/children are so anxious about their family's ability to manage household items such as food that they go hungry in order to help their family cope (Ridge, 2011). As a consequence of the increased time spent in unpaid care roles, young caregivers are more likely to miss out on leisure opportunities and face further social exclusion (Becker & Becker, 2008). Many young people enter paid work in order to help their families cope financially. This can result in having more money, increased access to resources and an ability to contribute to the family. However, it can have detrimental effects such as working long hours and negatively impacting on their education (Ridge, 2004, 2011).

Children's Experience of Poverty

The voice of tamariki/children who live in poverty needs to be heard so that a complete picture about the issue can be achieved. Firstly, equipping these tamariki/children to have a voice empowers them, enabling their agency, when so often the perspective of a child who lives in material hardship is marginalised in the discourse about poverty (Attree, 2006; Bourdillon, 2012; Ridge, 2004; Schweiger & Graf, 2015). Second, the lived experience adds a qualitative or subjective dimension to our understanding of child poverty, allowing researchers, those who work in the field of poverty, policy makers and the general public to hear the stories of these tamariki/children and how poverty impacts on their lives in the present, and not just on its future consequences (Attree, 2006; Bourdillon, 2012; Ridge, 2004; Schweiger & Graf, 2015). This creates a deeper understanding of the issue, helping to improve the formation of relevant policy and encouraging action on the issue. Lastly, it is the right of such tamariki/children to have their voices heard on social issues affecting their well-being as a matter of social justice (Bourdillon, 2012; Schweiger & Graf, 2015) and

as guaranteed under Article 12 of the UNCROC, which states the views of tamariki/children should be respected (UN General Assembly, 1989).

While research about child poverty has been predominantly quantitative (e.g., that examines the future risk posed by poverty), there is a growing body of qualitative research that explores the perspectives and experiences of tamariki/children who live with poverty (Attree, 2006; Bourdillon, 2012; Ridge, 2011; Schweiger & Graf, 2015). What the accumulating results tell us is that living in poverty has a pervasive and damaging impact on all aspects of a child's life, that they face a wide array of constraints in resources that limits their ability to realise their full potential and it ultimately impinges on their rights (Ridge, 2011; Schweiger & Graf, 2015).

However, tamariki/children's experiences are not homogenous. For example, some tamariki/children downplay the consequences of material poverty, may exclude themselves socially as a form of protection, and often show a strong desire to protect others in their family from the harmful effects of poverty (Attree, 2006; Redmond, 2009; Ridge, 2011). Furthermore, despite these significant deprivations tamariki/children demonstrate many helpful coping strategies, skills and a real sense of agency that enables them to manage their hardships (Attree, 2006; Crivello et al., 2011; Ridge, 2011) and many tamariki/children and young people have high aspirations and hope for their future prospects (Kintrea, St Clair, & Houston, 2015).

There is a dearth of published literature about the experience of childhood poverty in Aotearoa New Zealand and what exists mainly comes from projects developed out of the government's commissioned review of child poverty by the Children's Commissioner Manaakitia A Tātou Tamariki and their advisory group (EAG, 2012). However, the EAG report and other studies show similar findings to international studies (Boon & Farnsworth, 2011; Curtis et al., 2012; Egan-Birtan, 2010; Te One, Blaikie, Egan-Bitrán, & Henley, 2014). In this study, an overview of the predominant themes that have been published from tamariki/children's perspectives will be discussed.

Personal consequences, family and social relationships. Qualitative studies have shown that awareness of being poor starts from quite an early age, where tamariki/children begin to understand the reality of being 'different' (Attree, 2006). A

number of studies reveal how tamariki/children living in material poverty often have feelings of sadness, anxiety, fear, shame and humiliation about being poor and are often excluded from their peers. Consequently, this has a negative impact on their sense of identity, self-esteem, self-efficacy, confidence and sense of belonging (Attree, 2006; Crivello et al., 2011; Farthing, 2016; Ridge, 2011). These tamariki/children often experience constraints in their social relationships as a consequence of barriers to their participation such as a lack of transport, or an inability to afford the costs of leisure activities which lead to further unhappiness, anxiety and social insecurities (Andresen & Meiland, 2017; Ridge, 2011). Other material constraints such as not having the right clothing or food, can lead to social exclusion or bullying, and tamariki/children can feel ashamed that they do not fit in with their peers (Andresen & Meiland, 2017; Attree, 2006; Sarti et al., 2015). This is evidenced in the words of this 11-year old girl, “The older people [teenagers] laugh at you cos of the way you are, cos if you’re wearing something they don’t like or think that is wrong they laugh at you” (Ridge and Davis, as cited in Attree, 2006, p. 59).

A New Zealand study that used a range of data collection methods (e.g., focus groups, photoelicitation, poetry, artwork) similarly revealed that tamariki/children growing up in poverty experience negative, pervasive and disruptive effects to all aspects of their lives which results in the fear of being labelled different, in shame, sadness, stigma, and social exclusion (Egan-Birtan, 2010). They also often experience bullying and being excluded by their peers, made worse by not having the right clothing, or not being able to participate in occupations (Boon & Farnsworth, 2011; Egan-Birtan, 2010, 2012). A lack of money and material resources places considerable strain on these tamariki/children and their families as they live with a shortage of essentials such as food and clothing, an inability to afford other household costs such as bedding, towels, petrol, power, medical visits, school trips, and exclusion from recreation-based occupations (e.g., sports, hobbies, going to the movies) (Egan-Birtan, 2010; Houkamau, 2016). Combined, these issues impact negatively on tamariki/children’s health (Egan-Birtan, 2010).

Research has shown that the strain of being poor for tamariki/children can create pressure, stress and conflict in their relationships with parents and other family members, but it can also bring families closer together and tamariki/children often

show empathy for the pressure their parents are under (Andresen & Meiland, 2017; Ridge, 2011). Community support (e.g., involvement in community gardens) and the support of family and friends, especially from mothers, have been identified by tamariki/children as being particularly important to them, serving as a protective factor (Crivello et al., 2011; Egan-Birtan, 2012; Ridge, 2011).

Home, house and neighbourhood. Tamariki/children report that living in poverty can bring restrictions in shared occupations (e.g., such as family activities or holidays owing to increased costs), constraints in available leisure time spent together, an unreliable daily structure, boredom, and a lack of support due not only to financial restraints, but employment uncertainties, and difficult family and social environments (Andresen & Meiland, 2017; Farthing, 2016). For tamariki/children living in materially impoverished homes there is often a need to moderate desires for material resources, alongside an awareness of the advantages that more affluent peers enjoy, and this creates stress and anxiety (Ridge, 2011). Living in impoverished neighbourhoods brings further restrictions for tamariki/children and young people to engage in occupations due to the costs of services, restricted access to transport (e.g., families can't afford a vehicle, public transport is unsuitable and tamariki/children feel unsafe using it), or due to poorly designed and located services and facilities (Ridge, 2011; Sarti et al., 2015).

Housing issues and homelessness have been identified by tamariki/children as a common concern when living in poverty. Typical issues include cold, damp, mouldy, dirty and poorly maintained houses, overcrowding, transience and homelessness (Rice, 2006). In a UK report that reviewed relevant research, national data, and captured children's views, it was revealed that children living in sub-standard housing suffered poorer health and well-being, disrupted sleep, difficulties studying at home and challenges with friendships and social activity. For example, children reported that they were reluctant to have their friends visit or stay over due to the state of the house and this negatively impacted on social activity and in developing and maintaining friendships (Rice, 2006). As evidenced in the words of this 9-year old boy, "I don't like my friends to come to my house or see the ants...and we don't have much room to play" (Rice, 2006, p. 31). Moving house frequently and homelessness brings significant disruption and emotional costs to tamariki/children's lives with

consequences such as friendship loss, disruption to schooling and feelings of deprivation, embarrassment, stress, anxiety and social insecurity (Rice, 2006; Ridge, 2011). Likewise, New Zealand tamariki/children experiencing poverty face similar housing issues (EAG, 2012) that are clearly expressed in this child's account of their living circumstances. "This [stream] is where we wash, drink and have a bath because I don't have running water in our taps" (Egan-Birtan, 2010, p. 14).

A number of studies have described how tamariki/children in impoverished neighbourhoods perceive their public spaces as degraded and hostile, with broken glass, discarded needles and other hazards, and with increased drug use, gang, criminal activity and violence (Ridge, 2011). Furthermore, the experience of growing up in deprived neighbourhoods varies according to age, gender and ethnicity, with girls, young tamariki/children and those from ethnic minorities feeling more unsafe or experiencing harassment (Morrow, 2001; Ridge, 2011). This 13-year old boy's description of his neighbourhood highlights some of these issues, "The area is dangerous...[There is] fighting and people who take drugs and drink on the stairs [of my block]" (Rice, 2006, p. 35). Similar findings have been reported by Aotearoa New Zealand tamariki/children living in poverty and additionally they associate poor neighbourhoods with abuse, neglect, a high prevalence of fast food, liquor and gambling outlets, and the lack of safe and clean spaces in their neighbourhood for play and recreation-based occupations (Egan-Birtan, 2010, 2012; Te One et al., 2014).

Productive roles. From the child's perspective, having parent/s in paid employment can have dual effects for low-income families. On the one hand, benefits include increased income and opportunities for tamariki/children to participate in leisure activities. However, it can also result in tamariki/children performing more household chores, feeling increased concern about the pressures of paid work on their parent's health, and where there is uncertainty about long term employment tamariki/children may feel anxious about their parent/s returning to unemployment and lower income (Ridge, 2011). New Zealand tamariki/children report similar circumstances (Egan-Birtan, 2010). For example, having parent/s who are so busy working long hours can result in the older tamariki/children having to complete household roles, such as looking after younger siblings, causing disruptions to their schooling and education. They may also spend less time together as a family (Egan-

Birtan, 2010). As reported by this 15-year old, “I did used to have a job but it was interfering with my school life so I quit that” (Ridge, 2004, p. 46).

Education/schooling. The experience of going to school, as reported by many tamariki/children who live in poverty in developed and industrialised countries similar to New Zealand, is one of disadvantage and disruption to their educational opportunities and where only the minority of tamariki/children report good experiences (Attree, 2006; Farthing, 2016; Ridge, 2011). The difficulties are associated with material disadvantage, institutional issues, relationships and social integration. Firstly, in terms of material disadvantage, the lack of finances for necessary items or activities required by school such as course materials, school uniforms, or school trips can lead to conflict or discipline at school, impact on the quality of their learning, and lead to feelings of stigma, embarrassment, and shame (Attree, 2006; Ridge, 2011). This sense of disadvantage is clear in this 11-year old boy’s experience. “I don’t usually go on trips cos they are expensive and that...At our school they do loads of activities and they go to loads of different places...I don’t bother asking” (Ridge, 2002, as cited in Attree, 2006, p. 61). Secondly, institutional practises such as free school meals are often experienced by tamariki/children as adding to feelings of shame (Ridge, 2011). Thirdly, tamariki/children’s relationships with teachers are often negatively affected and they can experience discrimination, receive poorer quality teaching, and feel discriminated against and undervalued (Ridge, 2011). Finally, in terms of social integration, these tamariki/children often experience bullying, exclusion, feelings of isolation and anxiety, with a fear of bullying being the number one reason for school absenteeism (Attree, 2006; Ridge, 2011).

New Zealand tamariki/children living in poverty report similar perspectives (Egan-Birtan, 2010).

Poverty is... going to school but schools not understanding difficulties families are having – shame and embarrassment for kids. Kids playing up at school and get in trouble because of family issues. Schools reacting to kids’ behaviour and not why they are acting that way and maybe kicked out of school. (p. 16)

Institutional practices and individual staff behaviour (e.g., when teachers make an example of students in front of their peers for not having a suitable school uniform or materials like stationery and books) create negative experiences at school. This can

lead to a lack of confidence, negative attitudes to learning and reduced engagement (Egan-Birtan, 2012).

Future prospects. Poverty can easily erode a child's sense of hope for a better future, ambitions to climb the social ladder and achieve a better quality of life. For example, a qualitative study based on the experiences of children from poor rural backgrounds in India revealed that while valuing education, they had lowered educational aspirations compared with their wealthier peers (Crivello et al., 2011). However, studies also show that some tamariki/children living in poverty remain optimistic about their future (Kintrea et al., 2015), finding their way out of poverty through achieving educational goals (Redmond, 2009). Despite this, the majority of the literature to date shows that poverty predominantly has a negative impact on tamariki/children's hopes and dreams with increasing pessimism about educational success, future work prospects and a growing adaptation to their economic situation (Attree, 2006; Redmond, 2009). This sense of a bleak future is evident in this 14-year old girl's outlook, "I don't know sort of like the future what's going to happen and that. I might not get a good enough job and that" (Ridge, as cited in Attree, 2006, p. 62).

Aotearoa New Zealand tamariki/children living in poverty report that they view supportive families and communities, a good education, and future training and employment opportunities as a key way to lift themselves out of poverty (Egan-Birtan, 2012). However, just as with internationally-based studies, it is clear that for many New Zealand tamariki/children poverty can seem inescapable and they feel 'locked' into a deprived life. For example, a number of tamariki/children reported having the perspective that 'this is my lot in life', or a sense of uncertainty and pessimism about their future, with questions such as "Will tomorrow be better than this?" (Egan-Birtan, 2010, p. 23). A number of young women and teen mothers also spoke about how poverty led them into occupations they would have preferred not to have worked in, such as prostitution. Other young people felt that gang membership was the only option in life for them (Egan-Birtan, 2010).

Coping strategies. The review by Ridge (2011) reported the key coping strategies that tamariki/children who live in poverty use include contributing with cash or other forms of support to the family, curbing their needs and expectations, and

covering up the effects of poverty to their family and friends. Contributing financially meant saving up pocket money and using this for purchases (e.g., clothes or activities), or engaging in part-time paid work (Ridge, 2011). However, paid work held disadvantages such as long hours spent working, low rates of pay and sometimes resulted in receiving less pocket money (Attree, 2006). Curbing needs and expectations such as going without needed clothes or school activities, prioritising daily expenses and managing limited resources are more covert strategies that are often concealed from parents and are aimed at reducing stress and financial strain on the parents or at avoiding the associated stigma of asking for support (Redmond, 2009; Ridge, 2011). In a study from the Netherlands, children from poor backgrounds did not identify themselves as poor, partly as a protective mechanism to avoid a negative social identity (Sarti et al., 2015). Another strategy identified in the literature that tamariki/children used is to request cash or gifts from their wider family and support networks, but this is not available to all tamariki/children and may have drawbacks such as a loss of privacy or interference in family life (Attree, 2006).

In Aotearoa New Zealand, where tamariki/children contribute to the management of the household in order to support their parents in paid work, they show considerable empathy towards the financial pressures that their parents face (Egan-Birtan, 2010). A New Zealand report that conducted interviews with young people who had achieved successful educational and employment outcomes in their life despite experiencing adversity, such as poverty, identified a range of factors that contributed to their resiliency. These included positive attitudes, beliefs and aspirations, supportive relationships and community resources (Carswell, Kaiwai, Hinerangi, Lennan, & Paulin, 2017). The importance of supportive and caring families and communities was also identified as a key resource in helping tamariki/children and young people who live in poverty to cope (Egan-Birtan, 2012).

An Occupational Perspective of Childhood Poverty

Published literature thus far, shows the extent of restricted participation in daily occupations that poverty creates for tamariki/children. An in-depth and detailed analysis of how poverty affects a child's occupations and their patterns of occupation is not evident however. The literature provides only glimpses of how material poverty

might impact on the daily occupations of a child, or how it might disrupt a child's patterns of occupation (Leadley & Hocking, 2017).

Patterns of occupation. The concept of *patterns of occupation* is fundamental to the research question in this study. A definition of the concept includes the habits, routines, roles, rituals, and lifestyle that occur in the process of engaging or participating in occupations, which can either promote or hinder health (Matuska & Barrett, 2014). Furthermore, patterns of occupation are the everyday actions of our daily life that give it a sense of familiarity and are held together by habits. Our patterns of occupation are a function of habituation or a process of internalized willingness to behave with consistent behavioural patterns, are reliant on habits and roles, and occur within the context of everyday or "routine temporal, physical, and social environments" (Kielhofner, 2008, p. 52).

Habits can be defined as the "acquired tendencies to respond and perform in certain consistent ways in familiar environments or situations. Consequently, for habits to exist...we must repeat action sufficiently to establish the pattern [and] consistent environmental circumstances must be present" (Kielhofner, 2008, p. 16). *Routines* involve a more complex form of habit involving "sequencing and combining processes, procedures, steps, or occupations" (Matuska & Barrett, 2014, p. 166). Routines are influenced by habits, they provide structure and predictability and are linked to time and space such as the 24-hour day (e.g., grooming, meals, going to school) or a 7 day week (e.g., shopping, or sports) (Kielhofner, 2008; Matuska & Barrett, 2014).

Tamariki/children enter this world without internalized patterns of behaviour, but acquire increasingly complex habits and routines over the course of their development primarily from their parents. Some habits persist throughout life (e.g., eating and sleeping habits) whereas others are influenced by occupational settings (e.g., home, school) and stages of life (e.g., student or worker roles) (Kielhofner, 2008).

Family routines are the regular, repetitive and observable patterns that occur in family life, that help to define family roles, coordinate daily occupations, shape family identity and are one of the most influential factors in shaping a child's habits (Kielhofner, 2008; Matuska & Barrett, 2014). *Family rituals* are different from routines as they contain "strong elements of symbolism....[and] often are a reflection or enactment of one's

culture....[and] serve to construct and affirm family identity” (Matsuka & Barrett, 2014, p. 167). *Roles* can be defined as “normative models for behaviour shaped by culture and society....are dynamic throughout the life course....[provide] a sense of purpose, identity, and structure...and are learned through a process of socialization and acculturation” (Matuska & Barrett, 2014, p. 164). Roles influence our occupations by shaping our actions and partitioning the times in which we perform specific occupations (e.g., how we dress or speak, or the social spaces we enter) (Kielhofner, 2008). Tamariki/children’s primary roles are that of play (e.g., games, sports), school, and being a member of the family and involved in its routines (e.g., cleaning up after themselves, chores, self-care).

Patterns of occupation are influenced by tamariki/children’s environment, physical capacity, psychological factors (e.g., personality, beliefs, cognitive abilities), life stage, gender, and social, cultural and economic factors. For example, a child’s patterns of occupation centre around play and school whereas, for an adult, work becomes a focus (Erlandsson, 2013; Orban, Ellegård, Thorngren-Jerneck, & Erlandsson, 2012). Likewise, the physical environment or place influences tamariki/children’s patterns of play. Having access to streets with less traffic and local green spaces affords free and unsupervised play (Lynch, 2009). Patterns of occupation are socially and temporarily affected in a family context, where tamariki/children and parents often engage in occupations together, or co-occupations, and as such these require careful coordination, e.g., spending mealtimes together or getting to school and work on time (Orban et al., 2012).

Patterns of occupation are acknowledged as being important in the health and well-being of tamariki/children and the patterns that a child develops early in their life may persist into adulthood (Orban et al., 2012). A useful habit in a child’s life might include brushing their teeth each night before going to bed to avoid dental decay (Matuska & Barrett, 2014). Routines, such as regular exercise and sleep, provide a helpful structure to the day and can help family members to cope with illness and stress (Matuska & Barrett, 2014). The family environment has a strong influence over tamariki/children’s patterns of occupation and learning routines can help tamariki/children develop social and household skills such as self-care, meal preparation and maintaining healthy relationships (Koome, Hocking, & Sutton, 2012; Orban et al., 2012). Spending time

together as a family during mealtimes has been shown to increase a sense of togetherness or cohesion as a family (Koome et al., 2012; Orban et al., 2012) and in promoting healthy eating patterns (Orban et al., 2012). Additionally, maintaining routines has been identified as a protective buffer to stress and illness for adolescents and their parents, as this offers a sense of 'normality' and control over one's situation (Koome et al., 2012).

Disruption to patterns of occupation is associated with risks to an individual's health. For example, a loss of routine can have a negative effect for a child such as disruption to sleep routines resulting in sleep deprivation (Matuska & Barrett, 2014). Other unhelpful patterns such as spending long periods of time watching television (TV) are associated with unhealthy eating habits (Orban et al., 2012). With increasing access to the internet, young people have 'virtual places' to engage in occupations and while this may mean less need for transportation it can also increase the risk of health issues such as obesity (Orban et al., 2012).

The association between poverty and tamariki/children's patterns of occupation is not well understood. However, some evidence exists. Orban et al. (2012) highlighted how tamariki/children's time use and occupational opportunities could be constrained by socioeconomic factors and the availability of resources. Bass-Haugen (2009) used a review of US national survey data to show how low family income restricted children's participation in occupations such as family outings or being read to everyday and with longer time spent viewing TV. Galvaan's (2012) study described how the socio-political context where young people grow up can constrain their occupational patterns and choices.

Summary

While there is a growing body of literature relating to tamariki/children's patterns of occupation and the link to their health and well-being, there is limited evidence discussing poverty's impact on this. What is required is evidence that can inform the issue of child poverty from an occupational perspective, one that examines the issue from an in-depth and occupational focus exploring how poverty constrains or affords tamariki/children's day-to-day opportunities to participate in a range of occupations. Research that examines poverty's impact on a child's daily occupations might show

how the impacts and outcomes of living in poverty come together to shape tamariki/children's everyday lives across a range of contexts such as home, school and community life. Therefore, in order to address this gap in the literature, further research is required that examines how material poverty affects tamariki/children's participation in daily occupations and their patterns of occupation. The following chapter discusses the study's philosophical stance and underpinning theories, the methodology and methods used, ethical and cultural considerations, and rigour/trustworthiness.

Chapter 4 Methodology

Introduction

A review of the literature in the previous chapter has shown how long-term child poverty can result in enduring, negative effects on their lives, but that despite these deleterious circumstances, many tamariki/children and their families show great resilience. Whilst evidence also shows how tamariki/children's participation in occupations is restricted by poverty, an in-depth occupational perspective such as how their patterns of occupation are affected, is lacking. This chapter outlines the methodology and methods involved in conducting the research and how it aimed to answer the research question: *How does living in material poverty affect a child's patterns of occupation?* The chapter starts with an outline of my assumptions, followed by the theoretical and philosophical perspectives underpinning the study. Then follows a description of the case study methodology used, methods, data analysis processes, ethical and cultural considerations and how rigour was achieved in fulfilling the study's purpose (i.e., to learn more about the affect poverty has on a child's patterns of occupation).

Pre-research Assumptions

The topic of this thesis was chosen after identifying a paucity of published literature concerning poverty's effect on tamariki/children's occupations. This came about through discussions with my supervisors, a broad review of relevant literature on the topics of childhood poverty and occupational therapy's emerging role in public health and social justice issues, and through a personal desire to better understand the issue. Assumptions that are key to my understanding of the research topic include that childhood poverty is damaging, is unjust, is a breach of tamariki/children's rights, and is a problem that has practical solutions. Furthermore, I believe tamariki/children have a fundamental right to participate in a range of occupations that are meaningful and important to them, and that this is essential to their development and future prospects. My assumptions were identified in discussions with my supervisors and in my pre-suppositional interview. An outcome of the study will be a small contribution to the development of an occupational perspective of child poverty. The findings may

support the evidence base for occupational therapists' involvement in addressing the issue of childhood poverty and contributing to social policy.

Values such as a strong sense of social justice, a respect for human rights and a belief that participation in meaningful occupation is a basic right for all people, guided both my choice of topic and my perspective on it. For example, I have a clear sense of the injustice that occurs when material poverty restricts tamariki/children's participation in the range of occupations that are both essential and meaningful to them such as schooling, daily activities in their home, recreational and cultural occupations. These values that underpin my study are known as axiological assumptions. Making these explicit acknowledges the important role they play in shaping this research (Creswell & Poth, 2018; Denzin & Lincoln, 2011).

I had a primary concern about the injustice that tamariki/children who live in poverty experience and the way that this breaches their rights. As a concept, social justice is concerned with equity, a just society, fairness in the distribution of resources and the respect for individual's rights (Baum, 2016; Last, 2007d). The concepts of social justice and related human rights are well defined and form the basis of international conventions that New Zealand is signatory to (e.g., The United Nations Convention on the Rights of a Child, UNCROC). For tamariki/children, the aim of these conventions is to protect and improve their living conditions. However, critique of these concepts includes that there is an assumption they can be applied universally, overlooking conflicting ideas of social justice and rights, and that they are largely derived from Western ideology (Reisch, 2014). Whilst being mindful of this critique, the UNCROC remains an important perspective on tamariki/children's rights, is widely accepted and from this context tamariki/children are viewed as capable, competent and having agency (Harcourt, 2011). Therefore, the rights of tamariki/children, as outlined in the UNCROC, remain a central ethical perspective I take on the topic of this thesis.

A further assumption of mine is that childhood poverty is occupationally unjust and is likely to cause occupational deprivation. Contributing to the understanding of social justice and deprivation, occupational therapy theorists have developed the terms occupational justice and occupational deprivation. *Occupational injustice* ensues when one's right to access meaningful occupations is impeded by social, economic, political

or environmental factors resulting in adverse effects (Wilcock & Townsend, 2014). *Occupational deprivation* occurs when a person's ability to perform meaningful and necessary occupations are restricted by unjust environmental conditions (Whiteford, 2000). Although childhood poverty ought to be considered an occupational injustice and is likely to create occupational deprivation, there is a lack of evidence to back up this assertion (Leadley & Hocking, 2017). This lack of evidence further strengthens the rationale for undertaking this thesis.

Philosophical and Theoretical Perspectives

Underpinning the choice of methodology in any research are assumptions about what is reality and how we can come to understand it, or our ontological and epistemological position. Epistemology, therefore, is embedded in our philosophical and theoretical perspectives or interpretive frameworks, and this in turn informs the methodology (Creswell & Poth, 2018; Crotty, 1998). A cohesive study has clearly connected research aims, questions and methods, which some authors call methodological congruence (Creswell & Poth, 2018). The research question needs to effectively address the research problem and this in turn will guide the aim of the study, the study methodology and design (Kayes & Theadom, 2014; Wong, 2014).

The paradigm within which this study is located is that reality is socially constructed, meaning that there is no objective truth and people's knowledge of the world is developed and communicated within their social context. This is reflective of a relativist ontology and a constructionist epistemology. *Relativism* espouses that there are multiple realities and truths that are individually and socially constructed. We see the way things are in the world through our individual understanding of them (Crotty, 1998). From the constructionism perspective, knowledge is constructed "through our lived experiences and through our interactions with other members of society" (Denzin & Lincoln, 2011, p. 102). *Constructionism* is "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty, 1998, p. 42). From the constructionist perspective the aim of research is to understand as much as possible the perspectives of the participants in relation to the topic of inquiry (Creswell & Poth, 2018).

The theoretical perspective or philosophical stance I take as a researcher is interpretivism. *Interpretivism*, in the human sciences, is concerned with understanding and is a theoretical perspective aligned to constructionism (Creswell & Poth, 2018; Crotty, 1998). In the interpretivist paradigm the researcher attempts to make sense of human experience and the meaning people ascribe to their experiences (Grant & Giddings, 2002) and to look “for culturally derived and historically situated interpretations of the social life-world” (Crotty, 1998, p. 67). In terms of understanding child poverty from an occupational perspective, there is a lack of evidence to inform this point of view.

While there are a number of philosophical approaches that inform interpretivism (e.g., symbolic interactionism, phenomenology, hermeneutics) (Crotty, 1998) the form of philosophy known as pragmatism is fundamental to the research approach taken in this study. *Pragmatism* could be described as having an interest in the tangible and practical aspects of our lives, where inquiry is broad, seeking to provide tools to help us cope with life and that lead to perceptible changes in our behaviour (Bacon, 2012). The pragmatic approach has a focus on what works and on how to improve the world (Cutchin & Dickie, 2012). A research framework based on pragmatism is concerned with the research problem, the outcomes and finding solutions (Creswell & Poth, 2018). While pragmatist philosophers diverge quite strongly on their version of pragmatism, there is often a focus on political and social problems such as “the way in which communities provide the resources for human freedom” (Bacon, 2012, p. 17). The primary concern of this thesis is with the practical and everyday phenomenon, but equally deleterious social issue of poverty and how this affects the pattern of a child’s daily occupations. This study may generate insights into how economic, environmental, social, family and health impacts of poverty combine to shape a child’s patterns of occupation, thus supporting strategies to help address the problem. This practical focus fits well with the philosophical approach of pragmatism.

Connected to the philosophy of pragmatism is transactionalism. *Transactionalism* is a theory of action stemming from pragmatism and in particular the philosophy of Dewey, one of the group of three philosophers known as the classical pragmatists (Bacon, 2012; Cutchin & Dickie, 2012). Transactionalism may be understood as a theory that focuses on relational processes taking place amongst phenomena and the

context in which people act and experience those phenomena (Cutchin & Dickie, 2012; Nyman et al., 2014). The focus is on the interconnectedness of humans and the contextual elements of their everyday life (Nyman et al., 2014). From this perspective child poverty has been understood as a complex interplay of poverty's direct effects, the social and environmental context, and the individual agency of the child and her or his family (Davies, 2011; Engle, 2012).

A key theoretical perspective central to this thesis and informing the research problem is that of occupational science. *Occupational science* is the field of study aimed at developing knowledge about the substrates, form, function and meaning of people's occupations, and the concept of humans as occupational beings (Wright-St Clair & Hocking, 2014). The science claims that being able to engage fully in meaningful occupations is health enhancing (Hocking, 2014) and thus occupation is framed as a fundamental human right and a significant determinant of health (Wilcock & Townsend, 2014). For tamariki/children, participating in a wide range of occupations (e.g., play, schooling, recreations, cultural occupations etc.) is essential for their health and well-being (Bazyk & Bazyk, 2009; Rosenbaum & Johnson, 2013). Within occupational science, some theorists that draw from transactionalism theory propose a view of participation in occupation as a transaction with the environment (Cutchin & Dickie, 2012). From this theoretical perspective a better understanding of the complex interplay between material poverty, the child, her or his patterns of occupation and the sociocultural context in which she/he lives may emerge.

As identified in the introductory chapter, an additional theoretical perspective informing the study is the *life course perspective*, which is a theory of human development that considers the context, social and occupational processes and transitions that occur throughout life as important in shaping people's lives and affecting their occupations (Humphry & Womack, 2014). Life course theory (LCT) has four main principles. Firstly, that human development takes place in the context of evolving time and place. Secondly, the life of an individual occurs over a specified period of time. Thirdly, social phenomena interact with human development. Finally, individual choices can affect an individual's development (Mandich & Cronin, 2015). LCT stems from the developmental system theory that attempts "to resolve the nature-nurture controversy by relational interactions" (Mandich & Cronin, 2015, p.

25). LCT draws attention to the interplay between the individual (e.g., genes, biology, behaviour) and the environment (e.g., physical, cultural, social), and can help frame how the material constraints present in tamariki/children's lives may be affecting their development and future prospects.

Methodological Choice

Whilst the majority of poverty research has historically been based in a positivist paradigm, using quantitative research methodologies, with an undervaluing of qualitative ways of understanding poverty, qualitative research methods have become substantive, and more recent studies include mixed methods approaches (Kura, 2012; Lawson, Hulme, & Muwonge, 2008; Shildrick & MacDonald, 2013; Wisor, 2017). For example, the World Bank's project *Voices of the Poor* explored the views of those living in poverty from over 50 countries and contributed to the World Development Report (Wisor, 2017). As a consequence, the benefits of qualitative research in understanding poverty are now more widely recognised to show the effect that poverty has on people's quality of life, help represent marginalized and neglected perspectives, and contribute to the design of effective policies and services to reduce poverty (Attree, 2006; Wisor, 2017). In the case of child poverty, an emergent body of qualitative research shows the intensely negative affect of poverty on tamariki/children's lives and the ways that this impacts on them materially, emotionally and socially (Crivello et al., 2011; Ridge, 2011). However, what is not clearly articulated in the literature is the impact of poverty on tamariki/children's occupations.

A qualitative research approach to investigating the topic of material poverty and its effect on a child's occupations fits with the ontological and epistemological stance I take as a researcher and as outlined above. A qualitative approach would enable the perspectives of those who experience the phenomenon to be understood and provide them with a voice in this matter (Bourdillon, 2012; Egan-Birtan, 2010; Ridge, 2011). This qualitative study can also contribute to the growing body of studies already completed on the topic and could be a useful resource for those working in the field of child poverty.

In choosing a methodology to guide this research the following factors were considered relevant both in terms of the aims of the study (i.e., understanding

poverty's effect on a child's patterns of occupation) and the epistemological and theoretical approach taken. These factors included:

- a need to understand the research problem better as not much is known about the issue, (indicating the need for an interpretative approach).
- a strategy that can reveal the complex ways in which a life of poverty affects a child's daily occupations leading to new ways to mitigate its impacts on tamariki/children's occupations (indicating the need for a pragmatic approach).

Additionally, aligning with my relativist ontological view, the research strategy needed to enable the exploration and investigation of multiple perspectives (i.e., the child and those who support her or his participation in daily occupations). It needed to be holistic (e.g., able to incorporate the wider environmental context), examine the issue in an in-depth way and in the context where it occurs (i.e., the home and neighbourhood), and be appropriate to answering an explorative or 'how' type question such as posed by the research question. These research elements all fit with a constructionist epistemology and an interpretivist approach. Considering these elements in the choice of research methodology, it was initially clear that a qualitative design was required, but also one that could provide an in-depth description and analysis of the research problem (Creswell & Poth, 2018). This led to the choice of the qualitative, interpretative or naturalistic case study research approach proposed by Stake (1995).

Case Study Methodology

While there are different approaches to *case study* (Simons, 2009) it has been described as "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (Stake, 1995, p. xi). From this perspective, case study is "intensive...[with] detail, richness, completeness, and variance – that is, depth" and is holistic and context specific (Flyvbjerg, 2011, p. 301). The aim of case study research (CSR) is particularization, or to shed light on the phenomenon as it occurs in its natural context (Abma & Stake, 2014). Case study methodology is often useful when little is known about a situation (i.e., an occupational understanding of child poverty) and where a holistic and in-depth view of a process or case in its real life context is required (i.e., the multiple perspectives about

how living in poverty affects a child's patterns of occupation) (Abma & Stake, 2014). The depth and detail that case study generates in relation to a conceptualised phenomenon is well suited to exploring the intricate, situated nature of tamariki/children's occupations.

Important to a case study is the "individual unit of study and...its boundaries" (Flyvbjerg, 2011, p. 301). A case, according to Stake (1995), is a cohesive system and "is a specific...complex, functioning thing" (p. 2). Simons (2009) defined a case as a "single unit of analysis" (p. 39) with specific parameters relating to the phenomenon being studied that help define the case.

Case study research approach or methodology can utilise both quantitative and qualitative research methods and therefore is contingent on the researcher's epistemological stance or research paradigm (Crowe et al., 2011). The naturalistic case study research approach proposed for this study, using a single case design, is a qualitative research approach that focuses on interpretation (Stake, 1995). The researcher is "an interpreter in the field...[observing] the workings of the case, one who records objectively what is happening but simultaneously examines its meaning and redirects observation to refine or substantiate those meanings" (Stake, 1995, pp. 8-9). This approach values the varying perspectives of the participants and the researcher's interpretation of these in their natural context, and fits, therefore, within an interpretivist paradigm (Simons, 2009). As Stake (1995) pointed out "the interpretations of the researcher are likely to be emphasized more than the interpretations of those people studied, but the qualitative case researcher tries to preserve the *multiple realities*, the different and even contradictory views of what is happening" (p. 12).

Interpretivist or naturalistic case study research methodology not only aims to provide explanation, but also understandings about the phenomenon (Abma & Stake, 2014). As Abma and Stake (2014) have suggested, the broad research question in case study methodology is "How can we understand the case better?" (p. 1151). As the research question in this study seeks to understand 'how' a facet of society (e.g., poverty) affects children's occupations, the chosen methodology is suited to exploring this question.

Stake (1995) further categorised case studies into three types that include the *intrinsic*, *collective* and *instrumental* case study. An intrinsic case study examines a case owing to an intrinsic interest in it, its uniqueness and what can be learned from it. In contrast, a collective case study uses multiple cases to explore the research problem. The instrumental case study involves the use of case/s to understand another issue or research question rather than being about the case per se (Simons, 2009; Stake, 1995). In this study the case was used to gain insight into the effect material poverty has on a child's patterns of occupations. As a result, either instrumental or collective case study would be suitable to use. However, an instrumental, single case study was adopted for this project in order to gain as much depth and exploration about a topic as possible, where little was known about it, and for the pragmatic reason of consistency with the scale of master's level study.

Defining the case. Stake (1995) defined a case as “a specific...complex, functioning thing...is likely to be purposive...[and is] an integrated system” (p. 2) with boundaries. Definition of the case for this study responded to the terms of the research question. The case was defined as:

- A child (10-13 years of age), their whānau/family who live in relative material poverty. Poverty was defined as having a disposable household income (i.e., before deducting housing costs) at 60% of the median income and adjusted for the composition of the household (e.g., number of parents and tamariki/children living in the house) (Refer to Appendix B: Income Tables) (Perry, 2017a), and living in a neighbourhood with a high deprivation index (e.g., 7-10, where 10=highest level) (Salmond & Crampton, 2012).

The age range of the child/participant (10-13 years) was chosen based on the evidence that tamariki/children at this stage of life are usually actively engaged in occupations and settings outside of the home such as school, recreational pursuits, cultural occupations and clubs (Case-Smith, 2010; Davies, 2011; Vroman, 2010).

From the ages of 10-15 years or from the middle childhood/pre-adolescence to the early adolescence stage, tamariki/children become increasingly more independent and autonomous in most aspects of their occupations (Cronin, 2015a, 2015b; Vroman, 2010). Although there can be varying expectations of tamariki/children across cultures

(Case-Smith, 2010). During these stages, tamariki/children start to take more responsibility for activities of daily living (ADLs) such as personal care (e.g., dressing, hygiene, medications), or household chores (e.g., meal preparation, housework, lawns, shopping). They increasingly require less supervision in most areas of their lives such as transport (e.g., walking, biking, use of public transport) or communication (e.g., use of phones, or internet). Expectations of tamariki/children at school throughout these stages are that they are more self-managing and acquire greater independence in school tasks. Play-based occupations begin to move towards more structured leisure such as sports, clubs, music or dance lessons. Social relationships and occupations become increasingly more important to children/adolescents and while family activities remain important, tamariki/children begin to spend more time apart from their family. Productive occupations such as caring for family members (e.g., babysitting) or engagement in a part-time paid roles (e.g., paper run, or helping in a family business) are often part of early-mid adolescence (Cronin, 2015a, 2015b; Vroman, 2010). Therefore, the expected level of age-relevant occupations and required resources can be examined alongside the child/participant's level of participation in her/his occupations.

Methods

This section describes the research design and methods used that stemmed from the conceptual structure, which Stake (1995) described as central to a case study.

Conceptual structure. Issue questions or *issue statements* are types of questions/statements that can provide conceptual structure for the study, help to focus the problems and concerns of the study and highlight the complexity and context-based nature of a case (Stake, 1995). Issue statements relating to material poverty, poverty and families, impacts of poverty on a child's patterns of and participation in occupations were developed, based on the research question, intense engagement with the child poverty and occupational science literature (e.g., tamariki/children's patterns of occupation), and available statistics on the occupations of tamariki/children in Aotearoa New Zealand. The five issue statements in this case were:

- Tamariki/children's occupations are shaped by the adults/family they live with.

- Tamariki/children participate in occupations according to their age, gender and culture. These types of occupation include activities of daily living (ADLs), school/work and play/leisure.
- Tamariki/children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical, environmental, societal patterns of time use (e.g., school hours) and other people in their environment.
- Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations.
- Material poverty, for a family/whānau, impacts on a child's patterns of and participation in occupations both directly (i.e., through a low income resulting in missed opportunities) and indirectly (i.e., reduced income results in deprivation and reduced access to resources).

The issue statements were transferred to a table, then topical information questions that arose from the statements were also recorded, along with planned data gathering methods to answer the questions and who, or where, I would need to gather this information from (Refer to Appendix C: Issue statements/assumptions – Case study research: Material poverty's impacts on a child's patterns of occupation; and Topical information questions matrix grid: Case study research).

Sampling strategy. A purposive sampling strategy was chosen for this case study. This means that the child, and their whānau/family, and other adults (e.g., teachers, sports coach etc.) were chosen on the basis that the family met the case definition, and for their ability to provide insight into the phenomenon being examined (Simons, 2009). Sampling was also guided by the conceptual structure (refer Appendix C). Sample selection was facilitated through contact with local organisations who work with tamariki/children and whānau/families who were experiencing poverty.

Inclusion criteria. Inclusion criteria for the whānau/family were:

- Parent/s on a low income at or below 60% of the NZ median income for a family of their size.

- Living in a high deprivation neighbourhood.
- Child attending a low decile school. The NZ school decile system is a measure of the socioeconomic level of the community in which the school is located, where decile 1 has the highest level of students from a low socioeconomic background and decile 10 has the least (Ministry of Education, n.d.).
- The child needed to provide her or his assent and the parent/s needed to provide their consent for their own and their child's participation.
- English as the primary language spoken in the home.

Ensuring that the *whānau*/family met the inclusion criteria was partly achieved through the recruitment process (i.e., asking community agencies that work with families in poverty if they met this criteria), in addition to the family reading through the participant information sheet that discussed these criteria, and in preliminary discussions about these criteria between the family and myself prior to confirming their involvement the study.

Inclusion criteria for other adults were:

- Adults currently supporting the child in her/his daily occupations.
- Nominated by the child and her/his parents.

The total number of participants recruited was expected to be approximately between 4-6, involving the child, her/his parent/s, and 2-3 other adults who support the child.

There was no exclusion on the basis of gender, ethnicity, culture, or disability. While a case could be have been made for purposive recruitment of a Māori or Pacifica family, given the known health disparities and the over representation of these families in the New Zealand poverty statistics (Simpson et al., 2016), the central concern of the study was on the impact of poverty. To bring that to light, it was imperative that the family recruited to the study was information rich and comfortable with the level of engagement with me that was required. These were the driving concerns for myself and the organisations through which the participants were recruited.

To prepare for the possibility that some or all of the participants might identify as Māori, a Māori cultural advisor was recruited to provide advice regarding the potential for working with a Māori *whānau*/family and their *tamariki*, and for research

conducted within the Aotearoa New Zealand context (e.g., Te Tiriti o Waitangi). If the family was from a Pacifica background or an ethnicity other than mine (i.e., Pākehā/European background) then an appropriate cultural advisor would have been included. Pākehā is a Māori term meaning a New Zealander of European or other foreign descent (Moorfield, n.d.-c). Additionally, to inform the study design and protocols for partnering with Māori participants, consultation was completed with Auckland University of Technology's (AUT) Clinical Sciences School's Mātaraunga Māori Research Committee. Key recommendations from this committee included using correct spelling of Māori words, use of a cultural advisor, avoiding embarrassment for the whānau/family during hosting me as a guest, finding sensitive ways to obtain demographic data, and spending time building a connection with whānau/family prior to research (Refer to Appendix D: School of Clinical Sciences Verification of Māori Consultation).

Overview of study process. A full summary of this study process, including the steps taken and a time line are covered in a flow chart (see Figure 4.1).

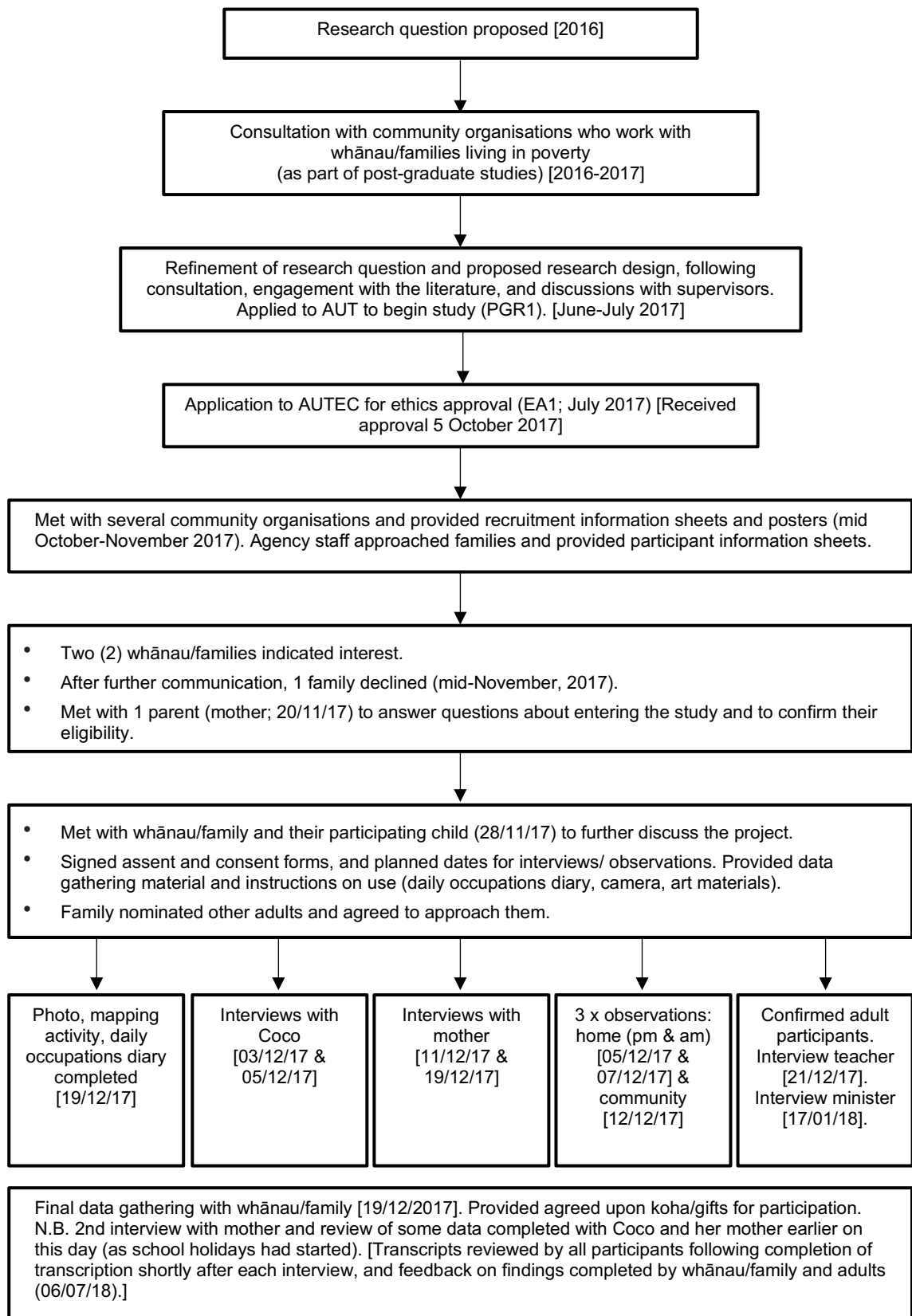


Figure 4.1. Research design flow chart: Case study research (CSR).

Recruitment. Organisations in the city where the study was conducted that were contacted included three community centres, a church-based community social

agency, and a facility providing free meals to those in need. My involvement with several of these organisations, and other church-based services, began several years ago as my interest in the subject of poverty began alongside starting my post-graduate studies at AUT. My contact with selected organisations occurred on several occasions as I developed an understanding of the needs of the families they worked with, and in other cases initial contact was made during the formal recruitment period in October, 2017. The rationale for targeting these groups was that these community groups would have staff who were in regular contact with *whānau*/families experiencing poverty and would have an established relationship with them.

I met on at least one occasion with a representative of each organisation (e.g., manager, senior staff member/s), discussed the project, inclusion criteria and recruitment process, and provided them with the information and recruitment sheet (Refer to Appendix E: Information Sheet: Community Organisation: Recruitment; and Community Recruitment Sheet: Selection Criteria). All community organisations contacted for the study agreed to support recruitment. Organisation representatives were asked to make initial contact with the family who met the inclusion criteria by providing them with the participant information sheets (Refer to Appendix F: Parent/s Information Sheet; and Child Participant Information Sheet). Organisations were advised that in order to preserve anonymity of the family as far as possible, that they would not be informed whether families they approached were selected to participate.

Additionally, a self-selection process was used to enhance the availability of information about the study and participant choice, by placing posters about the study at the organisations contacted (Refer to Appendix G: Case Study Research Poster). While recruitment via schools had also been identified as a potential recruitment strategy it was initially decided to defer contacting schools directly to let this initial phase proceed (i.e., to reduce the possibility of large numbers of families offering to participate). If recruitment through organisations was not successful, then schools would have been contacted as a further step in the recruitment process.

Initially two (2) families, approached by different community agencies, were interested in participating, but upon further discussion with me about the requirements of the study one *whānau*/family declined to participate. The other family and their older

tamaiti/child, (a 13 year old girl) did agree to consider participating in the study. They had already been provided with the relevant information sheets, by their community representative. Further phone contact was made with the mother of the child/participant after a few days and with her agreement this was followed up with an initial meeting involving myself and the mother at her local community centre. Once her questions about the study were answered, including confirming that the family met the inclusion criteria (e.g., approximate level of income, area of residence, the child's school decile) and with the parents' and their child's further agreement, a visit to their home to meet the family as a whole was completed. This was in order to answer any further questions the child and the parents had, and build rapport between myself and the child/participant and her family. It was at this stage that the parents and the child/participant signed the assent and consent forms (Refer to Appendix H: Assent Form-Child; Parent/Guardian Consent Form; and Consent Form Parent/s).

Other adults recruited in the case study (e.g., the child's teacher/sports coach, minister) were nominated by the family, with an initial approach towards them made by the child and her parents. One nominated adult declined to participate in the study. I followed-up with the remaining adults, providing them with the relevant information sheet (Refer to Appendix I: Participant Information Sheet: Other Adults), answering their questions about the study and organising interviews. At each interview the appropriate consent forms were signed (Refer to Appendix J: Consent Form - Other Adults).

Data collection. To support safe and effective data collection, when planning the study, I gave careful thought to pre-study consultation and the level of engagement required of the tamaiti/child and her whānau/family. The consultation I completed with community organisations who work with families in poverty was necessary in order to develop a better understanding of the circumstances for these families and how to conduct a study safely with them (e.g., being mindful about the potential stigma of poverty, protecting their privacy, or ensuring the family did not incur additional costs such as those related to hosting me as a guest in their home). Additionally, I thought it would be helpful to build relationships with these agencies so that that they developed trust in me and would, thus, be both willing to assist with the

recruitment process and be able to present me as trustworthy to families they might approach to participate. The level of engagement with the family was planned to occur over a short period of time (i.e., 1-2 weeks) so as not to be overly intrusive in their lives, but allow for the in-depth data gathering required of the case study. The study needed to allow for the data gathering with the child to occur outside of her school hours and for the other adults she nominated to be in the study, to occur at a suitable time after this. Consequently, this short period of intense data gathering necessitated a range of data gathering methods that allowed for a holistic exploration of the case and in order to ensure rigour in the study (i.e., triangulation).

Case study research typically uses a range of methods (e.g., observations, interviews, examination of documents) and this allows for an in-depth, contextualised understanding of the phenomenon being studied from the perspective of those experiencing it (Simons, 2009; Stake, 1995). In this case, guided by the conceptual structure (refer Appendix C) it included the input of the child, their parents, selected adults supporting the child's participation in occupations, and my observations. The intent in this case study was to represent these multiple views in a fair manner, whilst maintaining the central perspective of the child, and balancing this with my own interpretations. Actions taken towards preserving the child's perspective included using child friendly methods, review of transcripts and a summary of the findings by the child, her parents and the other adults, use of the child's words in the study, and reflexivity on my part.

Particular attention needs to be paid to research methods with tamariki/children due to their age and potential vulnerability, the ethical implications of research involving tamariki/children, the power imbalance between a child and a researcher, and that standard research methods are typically designed for adults and may represent an adult perspective (Graham, Powell, & Truscott, 2016; Harcourt & Einarsdottir, 2011; Willumsen et al., 2014). Therefore research methods for tamariki/children need to be age appropriate (i.e., match the child's conceptual level and language development), safe and child friendly (e.g., foster engagement with tamariki/children, are fun and interactive), highlight the child's perspective and involve her or him in the research process (e.g., providing choice of data gathering methods) and require reflexivity by the researcher (Carter & Ford, 2013; Graham et al., 2013; Willumsen et al., 2014).

A range of child friendly or participant friendly methods were prepared in advance to facilitate the data gathering process with the child, and make the process interactive, fun and safe. In addition to semi-structured interviews, these including offering options of photoelicitation (i.e., taking photographs to represent occupations), writing, and drawing (Barker & Smith, 2012; Carter & Ford, 2013; Darbyshire, MacDougall, & Schiller, 2005). A disposable camera and art supplies (e.g., pens, pencils, felts and a book for drawing and writing) for the child to use to record ideas about her occupations during the data gathering period were provided, along with appropriate instructions on the purpose and use of these methods. Two further, child-centred data gathering strategies were planned. A daily occupation diary was developed for the child to complete, in order to capture data about the her schedule of occupations over a 1-week period (Refer to Appendix K: A Young Person's Weekly Activity Diary). In addition, an interactive mapping activity, which involved annotating a map of the city, was designed to elicit visual information about the location of the child's usual occupations, mode of transport to access them and distances travelled.

Semi-structured interviews with the tamaiti/child, the parent and the other adults, and observations of whānau/family centred occupations in which the child participated were also planned. Separate interview guides derived from the issue statements were developed for the child, the parent/s, and other adult informants (Refer to Appendix L: Indicative Questions for Interviews – Child; Parents and Other Adults). The interview guide was designed with open ended questions about the child's occupations and routines to ensure it covered all the intended topics (Creswell & Poth, 2018; Rossetto, 2014). Conceptually, the questions asked of the child related to issues about her patterns of occupation, types and level of participation in daily occupations, resources that supported her participation and any occupations that she was missing out on.

The photoelicitation method has been used with tamariki/children as a data gathering tool and involves tamariki/children taking photos of matters relevant to their lives and then collaboratively working with the researcher to interpret the meanings of the images. It can be used alongside traditional interviewing techniques, can provide a non-adult perspective, is more meaningful for tamariki/children, is engaging and fun and does not rely on verbal or literacy skills (Barker & Smith, 2012; Jorgenson & Sullivan, 2010; Lomax, 2012). Additionally, part of the rationale for its use in this study

was that it might provide more community based insights about the child's occupations, as my capacity as a researcher to go with the child in the community was limited (i.e., to help protect her privacy). For this study the tamaiti/child was provided with camera and, along with her mother, were given instructions on the purpose of the photos (i.e., about occupations she enjoyed), and appropriate use of the camera (Refer to Appendix M: Photoelicitation and creative media protocols). Arts-based data gathering methods (e.g., poems, or artwork) can be used with tamariki/children alongside a traditional interview technique to create a more child-friendly, child-driven approach. These methods use modes of expression other than the medium of words and can capitalise on a child's skills, capacities and interests (Carter & Ford, 2013; Robinson & Gillies, 2012).

A time-based, tamariki/children's daily occupation diary was provided for the child/participant to complete in order to gather data about her daily routines over a typical week. Time use methods are considered some of the most useful and well established means of understanding human occupation, with time diaries being the most frequently used method in occupational therapy and occupational science (Hunt & McKay, 2015). Time diaries can help reveal a person's everyday patterns of occupation, habits and routines and the importance of these in their lives (Erlandsson, 2013; Hunt & McKay, 2015; Koome et al., 2012). In this study the purpose of the diary was to further explore the child's patterns of occupation.

Visual data gathering methods such as occupational mapping (i.e., where participants mark out locations of occupations on a map to better understand the nature of their occupations and facilitate discussion) have been used successfully as a qualitative data gathering method (Huot & Rudman, 2015) and in particular with research involving tamariki/children (Darbyshire et al., 2005).

Collecting the data. An initial schedule for conducting the interviews and observations was set and agreed upon with the tamaiti/child and parents at the initial whānau/family meeting, and are reported here in chronological order. All the interviews with the child and the parents were conducted in the family home, with those for the child completed after school hours (Refer to Appendix N: Researcher safety protocol).

The interview with the child/participant was conducted in two parts (i.e., to reduce the time spent being interviewed per session), for a duration of 50-60 minutes per interview and was semi-structured. The interview was in the child's home and in the company of her parents, where the child maintained control, and was conducted in a relaxed and child friendly manner. She chose when to take breaks, or what questions she wished to answer, she was in control of the audio recording equipment and I used a reflexive approach (e.g., deciding not to pursue line/s of questioning that appeared to be too sensitive and uncomfortable for the child). Based on my experience as a parent of two sons (one at the approximate age of the child/participant) I endeavoured to pitch the language used at an age appropriate level for the child (i.e., age 13 years).

An additional conversational interview was organised once the child participant had taken the photos, and they were developed and given back to her. That time was spent together discussing the occupations related to the images. Colourful sticky notes were used, aimed at maintaining the fun aspects of the activity, where the child was invited to write a brief sentence about each image explaining what the photo was about, why she took it and what the occupation meant to her. The child remained in control of this process. These sticky notes were attached to the back of each photo. The child kept these original photos and a digital copy was retained with her permission for further analysis.

The child/participant did complete a few drawings and discussed these at her 2nd interview. However, while she stated she enjoyed creative writing and drawing, this was not a medium used extensively in the time spent with her for this study. In reflection it may have been that she had a greater interest in craft activities (as she stated at a later point in the study) rather than drawing, or that she felt she did not need to contribute anything further, having completed the interviews, photos and activity diary. Additionally, I could have spent more time discussing and facilitating these arts-based methods with her.

The activity diary used in this study was created to be child friendly (i.e., age appropriate language, colourful, use of pictures), structured as a daily entry and with seven entries completed for one week, describing the occupation performed, the time

of the day, the location and who was engaging in the occupation with the child/participant. Instructions on the use of the diary were provided and a full daily entry for a typical Monday was completed by the child/participant with my support. The remainder of the entries were completed by the child/participant with her mother's oversight.

The use of a novel and interactive mapping activity was used with the *whānau/family*. Felt pens were used to draw out routes from home to locations in the city (on a map of the city) where the child/participant and other members of her family participated in occupations (e.g., water polo, youth group, playing in city parks etc.). Different coloured felt pens were used to denote different forms of transport, and sticky notes were used to write a sentence about the activity, frequency or how often this activity occurred each week, or who was supporting the child/participant in accessing the activity. This was in order to explore time use, routines and occupational engagement in the home and neighbourhood to help understand the geographical spread of the child's and their *whānau/family's* patterns of occupation.

An interview was conducted with the child's parent, (i.e., the mother, with the father's agreement) and was completed in two parts for a duration of 80 and 60 minutes respectively. The initial part of the first interview included completing the NZiDep questionnaire that asks eight questions about areas of financial and household need that an individual/household has experienced over the last 12 months (Salmond, Crampton, King, & Waldegrave, 2014). The purpose was to assess the level of material deprivation that the family was experiencing at the time (Refer to Appendix O: NZiDep Questionnaire). Interviews were also completed with the school teacher/sport's coach (for a duration of 40 minutes), and the church minister/youth group leader (for a duration of 45 minutes). All the interviews were semi-structured using an interview guide with open ended questions about the child's occupations and routines (Creswell & Poth, 2018; Rossetto, 2014). From a conceptual point of view, the aim of the interviews with the adults was to answer questions relating to the child's patterns of and participation in daily occupations, the resources that supported her participation, the level of poverty the family experiences and the impact of this on the child's occupations.

For the interview with the Māori church minister, both parties began by using their *Mihimihi*¹¹, spoken in Māori, as a form of introduction (e.g., to establish a connection or *whakawhanaungatanga*). This was a culturally appropriate protocol that helped to facilitate the interview (Egan-Birtan, 2010). Whakawhanaungatanga is the process of getting to know someone and forming a connection or a relationship (Moorfield, n.d.-c) (Refer to Appendix P: Simon's Mihimihi).

The three specific instances of observation took place in the family's home at agreed-upon times during the morning and in the afternoon/evening during the first week of data gathering, and during the second week in the community during a local Christmas event that the child and her family were involved in. I kept detailed notes about my time spent observing the child and her family in her daily occupations and at the community event.

The observations were completed during one morning in the home (i.e., Thursday from 7am-7:45am) when the child was getting ready for school, (e.g., making her lunch, packing her school bag), in one afternoon and evening in the home (i.e., Tuesday from 5:00pm-8:00pm) observing the child's key occupations such as chores, the tamariki/children playing on the computer, watching television, playing in the backyard, mealtime and a *whānau/family* activity of playing a board game. A further instance of observation occurred in the community, with the child and parents' consent, at a Christmas carols and a nativity play at the local school/church they were members of, that the child and her *whānau/family* took part in. All times spent in the home and with the family were with the child and parents' agreement and at selected and pre-agreed times over approximately a two week period (Refer to Appendix Q: Table of observations completed with child and family). The purpose of the observations from a conceptual perspective was to gain further understanding of the child's patterns of occupation, level of available resources and the impact of poverty (Refer to Appendix R: Observation protocol).

Examination of relevant documents was also completed during the data gathering stage in order to further contribute to an in-depth understanding of the case (Simons, 2009). For example, the school website detailing extracurricular activities available to

¹¹ Mihimihi is a form of Māori greeting or speech conducted as a way of introducing oneself (Moorfield, n.d.-c).

tamariki/children attending the school, and city council documents/website outlining recreational or commercial facilities proximal to the child's suburb.

The interviews with the other two adults took place in the community at an agreed venue of their choice. The data gathering with the family was completed over a 2-week period in November-December 2017, and the interviews with the other adults were completed in December, 2017 and January, 2018. All Interviews, including a discussion about the photos the child took, a review of the completed daily occupations diary and the mapping activity, were audio recorded using a digital dictaphone and transcribed. All transcription was completed by Dr. S. Naylor after signing a confidentiality agreement (Refer to Appendix S: Confidentiality agreement form: Transcriber).

Data Analysis

In qualitative-based case study analysis Stake (1995) explains that direct interpretation and categorical aggregation are the two primary strategies for deriving meaning from cases. *Direct interpretation* examines a particular instance in a case and derives meaning from this and *categorical aggregation* looks for multiple instances from the case, assigns categories or codes to the data, with the aim that meanings will emerge from this analysis (Stake, 1995). Categorical aggregation is often required for instrumental cases as it "serves to help us understand phenomena or relationships within it....[and] to concentrate on relationships identified in our research questions" (Stake, 1995, p. 77). Consistent with a pragmatic need to fully explore unique issues and influences on those issues, and balancing this with a need to generate understandings that might apply more widely, this study included both direct interpretation and categorical data analysis. Important to both these strategies are the search for patterns, consistency, or correspondence amongst the data that is gathered (Stake, 1995), generating useful information about the patterns of occupations and the way they are shaped by contextual circumstances such as poverty.

Making this information or the case study understandable for the reader is important as this can help ensure the findings become more broadly useful. The way that the audience draw their own understanding of the case after their engagement with it is what Stake (1995) termed naturalistic generalisation or "conclusions arrived at through personal engagement in life's affairs or by vicarious experience so well

constructed that the person feels as if it happened to themselves” (p. 85). While generalisation from a single case is limited, a lot can be learnt from a single case where there is depth and contextuality (Stake, 1995), as in this study.

The process used in this case study for arranging and analysing the data included organizing the data into files, reading through texts, making memos and using direct interpretation to form initial codes, describing the case and its context, using categorical aggregation to create themes or patterns from the codes, and direct interpretation to help develop natural generalisations about the issues (Creswell & Poth, 2018; Simons, 2009; Stake, 1995). These data analysis strategies along with the notion of naturalistic generalisation, were used to help generate meaning from the data and to present the data in the form of a case study report (Simons, 2009; Stake, 1995).

Data analysis in case study can be complicated by the range of data types and by the inclusion of straight description, alongside categorical aggregation. Whilst Stake (1995) provides some general guidance and examples of analysis, more guidance was sought with the process of categorical aggregation. Merriam (1998) provides a detailed explanation of the process of category construction in qualitative case study and this was used to supplement Stake’s work.

The first stage was the analysis that occurred throughout the data collection phase. As Stake (1995) pointed out “[t]here is no particular moment when data analysis begins. Analysis is a matter of giving meaning to first impressions as well as to final compilations” (p. 71). This analysis continued throughout the data gathering stage such as asking clarifying questions to follow-up on issues arising in an interview, constant memos, use of a reflective diary and exploring the literature while in the field (Merriam, 1998). All data were organised and stored in a secure (i.e., password protected) and coherent manner in a computer (e.g., folders labelled as observation notes, participant interviews, activity diary, photos, map data).

The second stage was intensive analysis and involved constant reading and examination of the data (e.g., transcripts, observation notes, photos, map, activity diary), making memos (e.g., through memos, I identified that the child’s habit of walking home slowly from school served as an incidental way of socialising given the

constraints in social occupations) and mind mapping techniques in order to generate codes and themes (Refer to Appendix T: Mind mapping techniques used during data analysis). Specific qualitative data analysis techniques were used during this stage to help work with the data and move between concrete data and abstract concepts, as well as in making interpretations. These included: making direct interpretation of individual features in the case, generating meaning by aggregating occurrences in the case (Stake, 1995), clustering (e.g., grouping similar data together), going from the particular to the general, noting patterns and themes (e.g., finding patterns in case study data, such as how recurring examples of restricted income constrained participation in childhood occupations), seeing plausibility, and building a logical chain of evidence (Merriam, 1998).

The third stage involved developing categories based on the research question and key issue statements. All relevant data was first printed in hard copy, then labelled, manually separated (i.e., cut into parts) and then grouped under categories (e.g., issue statements one through to five). The data were further categorised into sections relevant to parts of the research question (e.g., the case, occupational patterns, occupational participation). This categorisation was then written up into data tables (Refer to Appendix U: Photo of categorizing data stage; and Analysis tables).

Stake (1995) argued that the distinction between quantitative and qualitative treatment of data is arbitrary, and that in reality, differences are more about emphasis. Therefore, for this case study, when information involved quantities such as distance or time, the data were analysed using strategies such as calculating means or percentages. Some analysis is presented in a visual format such as the time-use pie graphs or the results of the interactive mapping activity and photos. (Refer to Appendix V: Analysis of Coco's occupations: Home and away from home; and Appendix W: Analysis of Coco's occupations: Active and passive.)

Using data from the weekly activity diary enabled analysis of the child's time use throughout a week. Hours spent in categories of occupations (e.g., ADLs (activities of daily living), transport, school, social, recreations etc.) over the period of a week were added, with totals of time spent in each occupation calculated as a percentage of time in a total week (e.g., 70 hours in ADLs out of the total number of hours in a week or

168 hours, equals 42%). Information from other sources such as the mapping activity or interviews (child and parent) helped to corroborate these findings (e.g., amount of time spent watching TV/PC was reported as 4 hours/day in the diary and in the interviews). These categories of occupations were further classified into two themes. Firstly, those performed at home (e.g., ADLs, TV/PC, social activities in the home) and those away from home (e.g., transport, active and productive occupations out of the home such as sports or paid work roles). Secondly, those that were passive or sedentary (e.g., passive type ADLs such as sleep, classroom-based school activities, or transport in the car) and those that were active or physical in nature (e.g., sports, physical play, walking, or active ADLs such as personal cares). The data for each theme was displayed in the form of a pie graph. This allowed for comparisons to be made between the child's average time spent in occupations at home and away from home, and those that were passive versus active (refer to Appendices V and W: Analysis of Coco's Occupations).

The final stage was the write-up and consisted of bringing all analysis together using a scheme with sections such as 'the case' and 'missing out on children's occupations'. The results were written in an experiential and narrative style that is used in presenting qualitative case study research results and in order to help achieve naturalistic generalisations. "To assist the reader in making naturalistic generalizations, case researchers need to provide opportunity for vicarious experience....A narrative account, a story...personalistic description...provide rich ingredients for vicarious experience" (Stake, 1995, pp. 86-87). In this way, reader's learning and conclusions about the phenomena are supported.

Ethics and Culture

A completed application for Ethics Approval for Research Projects form (EA1) was submitted to Auckland University of Technology Ethics Committee (AUTEC) and the guidelines, procedures, and exemplars of the AUTEC were adhered to.

In order to protect participants from harm, aspects of the language in the participant documentation were modified to better reflect the purpose of the study and to mitigate any potential stigma associated with the term 'poverty'. i.e., a child's daily occupations and the effect of restricted family and community resources.

Protecting tamariki/children from harm during research is imperative and needs to be balanced with a child's right to participate in research and the wider benefits of this to tamariki/children (Graham et al., 2013). Research should be with, for or by tamariki/children, meaning that it includes and involves them in the research process, that it is of benefit to them, and should honour their views and perspectives on issues important to them rather than just take an adult view (Alderson & Morrow, 2011; Graham et al., 2013). Every attempt was made to ensure that control over the research remained with the tamaiti/child and her whānau/family thus keeping the study child and family-focused and helping to address the issue of power and control between myself and the child/participant and the family. This was accomplished by, firstly, ensuring they were fully informed about what participation in the study would involve and how their privacy would be protected.

Informed consent. Informed consent is required for a tamaiti/child to participate in research (Alderson & Morrow, 2011; Graham et al., 2013; Peart & Holdaway, 2007). Due to the age of the child/participant (13 years), I gained the informed consent of the parents and the assent of the child to participate in the research (Refer to Appendix H: Consent Form-Parents; Parent/Guardian Consent Form; Assent Form – Child). In order for the parent (mother), schoolteacher and the minister to be interviewed, I asked for the assent of the child to interview them, and the parents' and other adults' informed consent for their participation (Refer to Appendix J: Consent Form – Other Adults).

Confidentiality. I ensured privacy and confidentiality was maintained through the use of pseudonyms, changing details of the context where necessary (i.e., in order to conceal the tamaiti/child's and the whānau/family's identity from others in the community not involved in the study, but who know them), storing personal identification details separate from data, ensuring anyone else (e.g., transcriber, cultural advisor) involved in viewing the data had signed a confidentiality agreement and maintaining all research records in a secure and confidential manner (Refer to Appendices S and X: Confidentiality forms). Anonymity between participants in the study was not possible due to the study design (e.g., the child and parents nominated the other adults). However, this was explained to the participants during the consenting process. Furthermore, transcripts were only reviewed by each respective

participant (e.g., child and parent transcripts only reviewed by them) and no information of a sensitive nature has been reported in this thesis, in reports or subsequent publications. Additionally, the referring agency involved in the recruitment process was not informed about who the participants were. The photos taken and stored by the child involving places or objects of importance to her were primarily used for analysis purposes (i.e., to help the child tell her story through photos), with explicit permission given for selected images to be incorporated into the findings of the thesis. No photographic or creative media images captured in the study will be used for any other presentation 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/removed) (Refer to Appendix H for Parent/Guardian Consent Form and Assent Form – Child).

Giving the family control within research. Every effort was made to ensure there was an ongoing assent process for the tamaiti/child and consent by whānau/family to participate. I used child friendly or participant friendly data collection methods and remained reflexive (e.g., through reflective processes in supervision, notes/diary) about the participant-researcher relationship and especially the power imbalance between the child participant and myself (Alderson & Morrow, 2011; A. Clark, 2011; Graham et al., 2013; Powell, Fitzgerald, Taylor, & Graham, 2012). The child and the family were able to make choices about the methods of data collection and a member checking process was used to help ensure the child's and the family's views remained a key focus in the study.

Cultural safety considerations. Being a Pākehā, English speaking, male researcher, I understand that I need to be sensitive and responsive to cultures other than my own. From this perspective I acknowledge that my worldview may be different from those of other cultures and can affect all aspects of the research process (Hudson, Milne, Reynolds, Russell, & Smith, n.d.). Given this research was conducted in Aotearoa New Zealand, Te Tiriti o Waitangi / Treaty of Waitangi and its three principles of partnership, participation, and protection, and the principle of biculturalism¹² were

¹² Biculturalism refers to the partnership between the Māori and the Crown established through the Treaty of Waitangi (New Zealand Government, 2005). Biculturalism aims to rectify the historical injustices and the social disparity for Māori that have arisen from the effects of colonization, by addressing historical Treaty claims and

important considerations (Gray & McPherson, 2005; NEAC, 2012; Water & Godbold, 2014). For example, when conducting research with Māori participants this involves working with the local Māori community (partnership), respecting Māori cultural values (protection), and engaging Māori in the research process (participation). The participants in the study initially did not identify as being Māori, but during the interview with the parent (mother) it was revealed that the father had European and Māori ethnicity. As a consequence, I consulted with my cultural advisor and one strategy that was suggested was to offer the *whānau/family*, in the follow-up interview, cultural support from the advisor. However, this offer was not taken up.

Every attempt was made to ensure that the three principles of partnership, protection and participation were honoured throughout the design, implementation and dissemination of the study. As previously outlined, in preparation for the study, I consulted and developed relationships with members of the community (from several ethnic backgrounds such as Maori, Pacifica and European) who work with tamariki/children and whānau/families experiencing material poverty. Additionally, I consulted with the AUT's Clinical Sciences School's Mātaraunga Māori Committee for advice and guidance on working with Māori participants and my obligations under the Te Tiriti o Waitangi / Treaty of Waitangi. Finally, I recruited and collaborated with a Māori cultural advisor throughout the study to ensure a Māori perspective on the research and to provide relevant cultural advice. (Refer Appendix X: Confidentiality agreement form: Māori cultural advisor, S. Bryant.)

In regards to the principle of protection, I endeavoured to ensure Māori values or *tikanga* (or protocols, practices, customs) were honoured (Health Research Council of New Zealand, 2010; Hudson et al., n.d.). This involved relationship building with participants (e.g., use of my *Mihimihi* and through *whakawhanaungatanga*); cultural sensitivity; protecting privacy (e.g., use of pseudonyms and amending details to further protect confidentiality); and respect for participants or *manaakitanga* (e.g., being aware of culture issues such as making the offer of cultural support from the Māori advisor for the *whānau*, and ensuring I was not a burden on *whānau* resources such as during a shared meal where I brought a contribution to the meal/*kai*). *Manaakitanga*

through implementing a bicultural framework in government policies (Gray & McPherson, 2005; New Zealand Government, 2005).

can mean respecting and protecting people's mana (or their prestige) and in terms of research can mean an ethic of cultural and social responsibility (Hudson et al., n.d.; Moorfield, n.d.-c). In relation to participation, therefore, I sought to actively involve all participants in study related decision-making processes (e.g., tamaiti and whānau chose which adults to invite to the study, use of a member checking process). Furthermore, I ensured that the Māori cultural advisor was actively involved throughout the study such as in the implementation, analysis and dissemination stages (e.g., the advisor reviewed all chapters of the thesis and provided advice from a Māori perspective).

AUTEC granted ethics approval for the study to commence (AUTEC ethics approval number: 17/281. Date approved: 05.10.2017) (Refer Appendix Y: AUTEC ethics approval letter).

Rigour/Trustworthiness

Producing rigorous qualitative research is important not only to meet the call for evidence based practice (Nicolls, 2014; Stake, 2010; Stanley & Nayar, 2014), but also because rigorous research can contribute to effective healthcare practice (Ramsbotham, 2014) and can effect positive social change (Liamputtong & Ezzy, 2005). Trustworthiness, a parallel term for rigour and often associated with qualitative research methods, includes ensuring one's research meets criteria such as credibility, transferability, dependability and confirmability (Lincoln & Guba, 1986). Other authors use terms such as validity (i.e., a process of determining the accuracy of results) and reliability (i.e., consistency between multiple data sources and codes used) to represent rigour in qualitative research (Creswell & Poth, 2018). Throughout the research process I attempted to remain reflexive, clarifying researcher bias when necessary, examining disconfirming evidence, preparing all documentation in order to provide for external audits and a peer review process, collaborating with participants where possible (e.g., sharing in decision-making such as choice of other adults to include in the study), and producing detailed descriptions of the setting and use of participants' words in order to further strengthen the rigour of the study (Abma & Stake, 2014; Creswell & Poth, 2018).

In case study research, triangulation and member checking are the typical means used to achieve rigour (Creswell & Poth, 2018; Simons, 2009; Stake, 1995). Triangulation means to use different sources of data, methods or theories to understand issues or themes and corroborate evidence (Creswell & Poth, 2018). Member checking involves confirming with respondents that findings are accurate and fair (e.g., checking accuracy of transcripts and reviewing drafts of reported findings) and ensures that participants play an important role in the shaping of the findings (Creswell & Poth, 2018; Simons, 2009).

Rigour and trustworthiness was supported/assisted in this case study through triangulation of multiple sources of data (e.g., interviews of child, parents and other adults; photoelicitation, daily activity diary, mapping activity, observations and review of documents). Member checking was completed and involved each participant having the opportunity to review the transcripts of their interviews for accuracy and review a draft report of the findings in order to provide feedback. After the data gathering and analysis stages I did not initially complete this step, as I originally thought that I only needed to have the participants review the transcripts. On reflection, it seemed more respectful to ensure the participants had an opportunity to see and provide feedback on how I was presenting the child's occupations, the family's circumstances and the multiple perspectives on this. For the tamaiti/child participant, I developed an abbreviated version comprising her direct quotes and specific commentary about her, using colourful and creative headings to enhance its appeal. An extension to the ethics application (form EA2) was sought through AUTEK, and approved, so that I could re-visit the whānau/family and communicate with the other adult participants, seeking their feedback. (Refer to Appendix Z: AUTEK extension letter.) Rigour was further achieved by providing a thorough description of the data, documenting a detailed trail of decisions, completing a peer review process throughout the study (e.g., regular meetings and review of all research tasks by supervisors), and by being reflexive throughout the study (e.g., use of supervision and a reflective diary).

Summary

In this chapter I have reviewed the philosophical and theoretical underpinnings of the study and justified my choice of methodology. I have provided a description of the research design including sampling strategy, inclusion criteria, the recruitment process,

data collection and analysis strategies used, how rigour was ensured and a review of ethical and cultural considerations. As a researcher, my aim was to highlight the perspectives of the tamaiti/child and their whānau/family, balanced with views of the selected adults who supported the child in her daily occupations. Ultimately, the findings are my interpretations of the participants' perspectives on the topic, along with the data gathered from the other methods (e.g., observations, interactive mapping activity). The following chapter provides a comprehensive report of the findings from the study.

Chapter 5 Results

Introduction

This chapter presents the results of the study that explored how poverty affects a child's patterns of occupation. The results relate to the issue statements identified in the conceptual structure for this study. The relevant issue statements are identified at the start of each section. The chapter starts with a description about the tamaiti/child participant Coco and her whānau/family, their circumstances, and the two other adults who they invited into the study. Following this, a description of the depth of poverty the family experience is provided. Then Coco's patterns of occupation, or the regular and predictable nature of her occupations or activities is discussed. Finally, the poverty related features of Coco's day-to-day life that impacted on these patterns and the occupations she was not able to participate in are reviewed.

Introducing the Participants: Coco, her Whānau/Family, Teacher and Church Minister

Key issue statements relating to this section include: Issue statement 1 -

Tamariki/children's occupations are shaped by the adults/family they live with; and Issue statement 2 - Tamariki/children participate in occupations according to their age, gender and culture.

Coco is a 13-year-old girl who lives with her two younger brothers, Jae and Aaron, aged 11 and 8 respectively, and their parents Kim and Bob who are in their mid-forties. The whānau/family have lived in their current neighbourhood in a large city in Aotearoa New Zealand for a number of years. Coco has just finished intermediate school and is due to start high school¹³. She could be described as a typical young adolescent girl who enjoys spending time with her friends, listening to her favourite music, reading books, writing creative stories, drama, arts and crafts, playing games on the computer, watching her preferred TV shows and playing sports. She has an outgoing personality, is energetic, enjoys helping others and is eager to help out where she can such as in leadership roles at her local youth group. Coco and her brothers have a relationship

¹³ In New Zealand, *primary school* starts at Year 0 through to Year 6 (or ages 5-10 years) and in some cases, up to Year 8. *Intermediate school* includes Years 7-8 (or ages 10-13 years) and may include Year 9 as well. *High school* consists of Years 9-13 (or ages 13-18 years). <https://www.education.govt.nz/school/running-a-school/school-structures-and-governance/>

like many other siblings in that, at times, they play together having fun in the backyard or at the local park, but they can also squabble amongst themselves.

Bob, Coco's father, is a qualified baker and works at a local bakery. Bob's working conditions are not optimal. As well as working on a casual contract with variable weekly hours, he has to work shifts which can mean he starts work early in the morning. Additionally, he tends to work long hours and needs to work on weekends and public holidays. Bob has reported a number of health and safety concerns in his workplace and he is paid a low hourly wage for the work he does. Combined, these working conditions mean that Bob is regularly not at home or when he is, he is tired and just wants to catch up on sleep. For the family and for Coco, this means their father is often not present for family events, or occupations that Coco participates in.

No [Bob can't get to watch Coco's water polo games] because he's working mostly Sundays. We do our best to [have quality family time together]...invariably it's hard when Bob is tired or...He'll sit and he'll watch TV for a bit with all of us as a family and then all of a sudden, it's "oh I'm feeling tired now I'm going to go and lie down for a bit". I mean I'm used to it but they're not. Kim

Kim, Coco's mother, has not been in a paid work role for the last 13 years, but has recently returned to a few hours a week as a child-care assistant. Kim originally qualified with a teaching degree from a private tertiary institution but, due to having never worked in this profession, she would need to complete several years of tertiary study to be eligible to work as a teacher. Consequently, she has found completing this further study too expensive and arduous, given her primary role in raising her family.

While Bob's time and energy is taken up in his paid work role, Kim's primary role is in the home. Additionally, due to Bob's absence in the home resulting from his working conditions, Kim is left to essentially act as the sole parent available to manage the household and meet the needs of the tamariki/children.

Yeah pretty much [I am] the general overseer, manager of everything. [I'm the main support]...I take her there. I basically do it... Bob just doesn't have the energy. There's the odd occasion that he will do it [help out]...but invariably it's me...I will go down and watch them doing water polo practice...I will go on a Sunday afternoon and I will cheer them on through water polo. I'll go to Girls' Brigade...If I'm up

to it I will do the parade with them and power walk down across the bridge and everything. Kim

Kim is of European ethnicity and Bob has both Māori and European ethnicity. Kim has started to develop their family tree or whakapapa¹⁴. As she says, this is to ensure their tamariki/children understand their mixed cultural heritage, re-connect with their Māori culture and also explore what support they may be able to access for their tamariki/children through the local *iwi*¹⁵ (or tribe) (for example, educational scholarships).

Coco and her parents chose the two other adults that they wanted to participate in the study, who are important in Coco's life and support her occupations. The first adult was Coco's teacher, Margaret, who has taught Coco for the last two years at intermediate school. Margaret has also supported Coco by introducing her to the sport of water polo and in acting as the head coach for this school-led recreational occupation. The second adult is Reverend (Rev) RT, the minister at the family's local church, one of the two churches they are associated with. The main connection with this church is through the Kids' Club and the Youth Group. Coco has been a member of the Kids' Club, and along with her brother Jae, graduated to the Youth Group a couple of years ago. Her younger brother Aaron remains in the Kids' Club. Rev RT is the leader of the Youth Group and has known and supported the family for a number of years. This church is also closely linked with the primary school that Coco and Jae used to attend and where Aaron is currently a student.

The Context of the Case Study

Key issue statements relating to this section include: Issue statement 1 -

Tamariki/children's occupations are shaped by the adults/family they live with, and

Issue statement 4 - Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations.

The neighbourhood the family live in is classified as a high deprivation area, with a score on the New Zealand index of Deprivation (NZiDep) of 8/10, on a scale where 10

¹⁴ Whakapapa is the Māori term for one's genealogy or family line of descent (Moorfield, n.d.-c).

¹⁵ A Māori term meaning tribe, or a group of people who are connected by kinship, descended from a common ancestor and from a specific region (Moorfield, n.d.-c).

equals the highest level of deprivation. In this neighbourhood, there are likely to be many whānau/families that rent their homes, who are on lower incomes and many who are transient. The houses in this neighbourhood are primarily older (e.g., built in the 1960s or 70s), smaller in size, lower quality housing (e.g., in need of repair, poorly ventilated, cold and damp) and lower in value compared to more affluent parts of the city. All the schools in the area are classified by the NZ school decile scale as being low decile schools, meaning they have a high proportion of students from low socioeconomic backgrounds. Coco's school has a 3/10 decile rating (where 10 equals the highest decile). In some parts of the neighbourhood gangs are present and the safety of tamariki/children when playing has been reported as a concern.

Evenings they've had issues with local gangs...Taking over...So they've had a security guard who, just walks around and keeps an eye on things to make sure there's no vandalism happening and cars being broken into. Kim

However, there are a number of services and supports that exist in the neighbourhood including a large shopping centre that offers most services such as a supermarket, food outlets, a local medical clinic and a community centre. The schools are all within walking distance and range from primary through to high school levels. There is a considerable effort by leaders in the community and by the schools to provide the best opportunities for the tamariki/children and the whānau/families who live in the neighbourhood. These organisations (e.g., school, church, community centre) provide quality education, support for families and young people, youth groups and a network of leaders from these organisations meet on a regular basis to help address the needs of the community. The government provides increased funding for low decile schools such as in this neighbourhood, and through a private-public partnership help to fund a free breakfast programme within the schools¹⁶. A range of NGOs (non-governmental organisations) provide support for tamariki/children and families who are in need within this neighbourhood like 'KidsCan', which provides essential items such as food and clothing¹⁷.

Oh, I think the community offers a lot for Coco. And [as community leaders we are] involved with...monthly meetings with all these

¹⁶ <https://kickstartbreakfast.co.nz/faq>

¹⁷ <https://www.kidscan.org.nz/>

different agencies that get together because we care about our community here. Rev RT

The local church and their minister Rev RT are a particularly important support for Coco and her whānau/family in terms of supporting their religious and cultural identity and supporting Coco and her siblings in their occupations. The importance of whakawhanaungatanga for establishing connections and building relationships for Māori whānau was highlighted by Rev RT. This is especially the case for whānau living in Coco's neighbourhood who live in poverty, as they are often disconnected from their community and their traditional supports such as their wider whānau or hapū¹⁸ (i.e., their extended family) and from their ethnic and cultural roots (e.g., their language, land and marae¹⁹).

A lot of our Māori family here, they're transient. A lot of them are disconnected from their marae. So, there's talk of this place [the church] being that marae for them and they can use it for that... Whānau have come to use this place for... tangihanga²⁰ to funerals, to unveilings, to baptisms, to family karakia²¹, to blessings... But the fact is as a Māori minister here and a kaumātua²², they can see this place as being that marae should they want to use it... they see this as a point of contact for them and a place [to stand], a tūrangawaewae²³ for them. Rev RT

The rented house that Coco and her family live in is relatively small for a family of five (5). As Kim says, "Yeah it's a small, small house compared to a lot of other sized houses". The house size is approximately 130 square metres, which is under the average house size for the city (e.g., 150-160 square metres)²⁴. The main entrance to the house is through the kitchen sliding door. Upon entering I immediately felt the restriction of space in the home. The area in the kitchen is taken up by an older fridge located to the left of the sliding door, a kitchen work bench in the middle of the room, and the kitchen sink and the cupboards either side of the bench. The passageway

¹⁸ Māori term referring to a clan or a sub-tribe consisting of a number of whānau/families sharing a common ancestor (Moorfield, n.d.-c).

¹⁹ A Māori term that usually means the meeting place, courtyard, or buildings belonging to a hapū or iwi (Moorfield, n.d.-c).

²⁰ Māori term for funeral (Moorfield, n.d.-c).

²¹ Māori term for prayer, or ritual chants (Moorfield, n.d.-c).

²² A Māori term for an older man, or respected person with status (Moorfield, n.d.-c).

²³ 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.-c).

²⁴ <https://www.qv.co.nz/property-insights-blog/average-house-size-by-area/61>

through to the hallway is narrow. The entire house has this cramped, restricted feeling, with a narrow hallway, three small bedrooms and one bathroom, and only one relatively small living area where the family eat, relax, watch TV and play on the family computer. There is no room for a family dining room table in this living area. The house also has the appearance of being old and worn out, such as with the carpet which is well used, the wallpaper which is deteriorating in places and the furniture which is pre-used and older in appearance. Kim reported that in winter the house is cold and damp, and in summer it is very hot and has poor ventilation. However, the family do their best to live together in this limited space, make do with the resources they have available to them, and as Coco says, they are grateful for what they do have.

The thing that counts [the most] is that we actually have a place to stay. Coco

The Whānau/Family's Level of Poverty: Scrimping and Saving

A key issue statement relating to this section is: Issue statement 5 - Material poverty, for a family/whānau, impacts on a child's patterns of and participation in occupations both directly (i.e., through a low income resulting in missed opportunities) and indirectly (i.e., reduced income results in deprivation and reduced access to resources).

We do try...with a lot of scrimping and saving. Kim

Coco's whānau/family experience poverty on a daily basis. As the minister says, "they're a family that struggles right now" (Rev RT). The family are on a low income or an average combined weekly income before housing costs of between \$740-890 before tax or approximately \$42,000/year²⁵. This level of income is considered to be below the poverty line for a New Zealand family of five (Perry, 2017a). The family's material hardship was apparent in their very high deprivation score (e.g., 8/8) on the NZiDep questionnaire (a form designed to identify an individual's level of socioeconomic deprivation) (Salmond & Crampton, 2012), and from the lowered quality of the house they live in. Adding further strain to the family's financial hardship has been the fact that Bob has been in and out of paid work over the last few years.

²⁵ Based on 52 weeks on average of \$800/week gross. The poverty line is based on 60% of the contemporary NZ median income (\$76,200) or \$45,720 (net) and including all government transfers/benefits, before housing costs are deducted and when adjusted for the size of this family (2 adults, 3 children) equates to \$46,540 (Perry, 2017a).

I do know the hardship of the family...I mean you know Kim is honest...with me many times about "No we can't afford that, I need to pay that off"....and...I know that [Bob] got laid off his job. I think it was last year. Margaret, teacher.

During my time spent with the family in their home it was clear that they had a very restricted budget and that every expenditure had to be considered carefully. For example, Coco requested \$15 to attend the end of year school farewell party, which Kim explained was difficult for them to afford, or the care taken in managing essential household items such as food. During my visits, I observed that Aaron's shared lunch for school was very basic, consisting of a plate of buttered white bread. Also, that special care was taken to conserve and re-use uneaten food and how carefully food was portioned for the evening meal. The occupation of careful budgeting is one of Kim's strengths that helps to mitigate the effects of the family's poverty and through modelling this occupation, Kim is also teaching her tamariki/children valuable life skills.

We had to use Work and Income [a government social welfare department] the other day to get a grocery grant. So, I showed Bob how to frugally shop by buying things that you could buy for under \$1 and you go "Right this will make a dinner...a tin of tomatoes and a pack of pasta and a tin of tuna and maybe a can of corn, \$5"...Can make a meal, a great meal. Kim

Most of the family's income comes from Bob's wages with additional income from the government in the form of Working for Families Tax Credits²⁶, (WfFTC), a payment to families on low-moderate incomes who work for 30 hours or more, and an accommodation benefit, paid and administered by Work and Income, Ministry of Social Development, and the Inland Revenue Department, New Zealand. Although Bob is a qualified baker, his wage of approximately \$17/hour is only slightly above the minimum wage of \$15.75/hour²⁷, and being on a casual contract results in fluctuating hours each week. Furthermore, there are reporting requirements for WfFTC where families need to declare to the authorities if their income or circumstances change. In Bob and Kim's case, their weekly income often changes due to Bob's casual working

²⁶ <https://www.workingforfamilies.govt.nz/> & <http://www.ird.govt.nz/resources/4/b/4bc819e2-8007-412b-81ea-46795b5a523d/ir691.pdf>

²⁷ <https://www.employment.govt.nz/hours-and-wages/pay/minimum-wage/minimum-wage-rates/>

conditions, which can result in reduced WFFTC payments and this adds further uncertainty to their weekly budget.

There's weeks where he might have 3 days in a row off...and it's like, "Hmm, God, you know, we haven't even hit 30 hours a week yet". So, he might have done 28 hours and I've done 2 and a half hours so that makes it 30 hours. So between the two of us, for the family support, as long as you are a married couple doing 30 hours or more, you keep your working for families tax credit but if you go below it, then you lose it...We've had times where [Bob's] been out of work and we've been on the Work and Income benefit, and we've lost the Working for Families Tax Credit so it's been, not only have we got less money coming in because he's working less, we've also got less money coming in because the government are now penalising us for not working...It's like oh my goodness you can't win. You're either below the threshold, you're on the threshold or you're above it. Kim

The family must carefully manage its money each week to pay all their expenses. For example, the rent is \$340/week and when all other expenses are deducted (e.g., power, phone, electricity, school costs etc.) they are left with minimal additional income for food or other discretionary or unexpected costs. As a result, the family often only have \$60-/week to buy all the household food. This is well below the amount to meet the costs of food for a family of five, based on government recommendations (i.e., more than \$300/week)²⁸. They find it difficult to purchase clothes, or pay for medical bills and additional recreational or school-based occupations for Coco and their tamariki/children. They can't afford to travel out of town to visit family, and can't afford leisure occupations such as going out for a meal or to the movies as a family. In the NZiDep questionnaire, Kim indicated that in the last 12 months they have been forced to buy cheaper food in order to meet other family needs, have missed out on fresh fruit and vegetables and have been cold in the home in order to save on heating expenses. Additionally, they have needed to ask for help from organisations for items such as for food, clothing and money. This level of support requires the family to be monitored by government agencies and other NGOs in terms of their level of income and personal affairs. Despite this level of financial hardship, the parents do their best to manage their budget effectively and meet the needs of their tamariki/children.

²⁸ Based on data from the 'Household Economic Survey' (Inland Revenue Department [IRD], 2016).

They, [our children] know that we scrimp with our money. They know that we try to be cautious with our money. But they also know that we try to give them what we know they need. Yeah so...[the priorities] at the moment [are] trying to keep them fed, keep them clothed. Kim

Being under the pressure of constant financial hardship, over time, takes its toll on the parents. Furthermore, for Kim, the added pressure of being the main parent in the home creates additional stress for her where she often worries about the well-being of her family.

When we're not doing anything else we're worrying about our kids and our husband and what they're getting up to. What they're spending, what they're not spending. What they're eating, what they're not eating, doing or not you know...it's a wonder why some of us women just don't crash at times or when we do crash we crash for real...You know. Kim

This pressure the parents are under is also reflected in the minister's observations.

The challenges...that the family has. I mean, I've had Kim here on a number of occasions, just about in tears. I said don't worry, we'll help. What do you need? You only need to ask. Rev RT

Coco's Patterns of Occupation: The Impact of Poverty

Key issue statements relating to this section include: Issue statement 2 -

Tamariki/children participate in occupations according to their age, gender and culture. These types of occupation include activities of daily living (ADLs), school/work and play/leisure; and Issue statement 3 - Tamariki/children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical, environmental, societal patterns of time use (e.g., school hours) and other people in their environment.

The material poverty that the whānau/family live with has observable impacts on Coco's occupational patterns. That impact is described in relation to her habits, daily routines, roles and the occupations that are important to her family.

Coco's habits and weekly routines. In most cases Coco's habits and routines appear to be those of any other young adolescent girl. These include making sure her hair was tidy for school, listening to her favourite songs in her room, watching

her choice of television (TV) programmes such as ‘The Evermoor Chronicles’, which is about teenage girls with magic powers who save the world, and the family routine of eating meals together in front of the TV. However, there are aspects of Coco’s habits and weekly routines that are impacted upon by her family’s material poverty. For example, her need to find time alone, Coco’s regular habit of TV viewing, frequent walking, and the effect on family routines such as hectic mornings and meal times spent in front of the TV.

Time to myself. Coco described spending time in her bedroom playing with her toys in fantasy-based games, listening to music and singing, or writing creative stories. This pattern of occupations was evident in interviews and the photos she took of her bedroom (see Figure 5.1). Coco retreats to her room between TV shows and when she is not able to watch TV or play on the computer.

The things that I really like to do [are]... playing with my toys in my bedroom and listening to the radio because...you just can sit down and you can just relax and listen to it...Sometimes I tend to do it when I get home. Because either my programme’s not on or we’re not allowed to use the TV or the computer...Sometimes I go in there at ads and during my programme. Coco



Figure 5.1. Picture taken by Coco of the desk in her bedroom where she likes to play with her toys, listen to music, write stories and relax.

Whilst many young teenagers find spending time alone helpful, in Coco's case there are additional factors at play. These include the cramped living space in the home and having time away from her two younger brothers. This was clearly evident when I observed the family in their morning routine where the space in the kitchen was significantly restricted due to its small size and the presence of appliances, benches and cupboards. As an observer in the home, I found it difficult and awkward standing in the limited space of the room, with Coco, her two brothers and Kim hurriedly completing their morning activities. However, it was not long into this routine that once ready for school, Coco left the house and spent time alone outside on the steps. It seemed here, clearly, that this was an example of what Coco had talked about earlier in her interview of needing her own space.

I just like want to get away from family and just have some time to myself. Coco

Watching my programmes. As noted in her entries into the 'Young Person's Weekly Activity Diary', Coco comes home from school, turns on the TV, watching it in the afternoon, when eating dinner and again before going to bed.

I like sitting in here watching my programmes...like 'Liv and Maddie'...And the 'Evermoor Chronicles'....[I watch TV] when we get home and while mum's making dinner and when we're sitting down here eating...I think it's about 4-5 hours [per day]. Coco

Monday. 4:00-5:00pm: My programme: The Evermoor Chronicles...6:30pm: Neighbours. 7:00pm: Shortland Street. 7:30-8:30pm: Animals make you laugh out loud. /Tuesday 5:30-6:00pm: Dinner. 6pm: Computer time. 7:00pm-8:30pm: TV. (Extract from Coco's entries in the 'Young Person's Weekly Activity Diary').

For Coco, watching TV probably serves as an escape from the realities of the real world and as an avoidance of certain other occupations (e.g., homework or housework chores). Furthermore, Kim is often the only available parent in the home, TV occupies the tamariki/children's time and allows her to focus on other household tasks such as preparing the evening meal or supervising younger tamariki/children.

[After our Saturday morning routine, we] usually come home and blob in front of TV...now and then...[my friend] will come over with her kids. And they'll watch TV...It's usually in front of TV [where Coco spends most of her time at home]. Kim

Unrestricted TV viewing/screen time also brings with it risks of watching inappropriate material. Coco's mum, however, has a moderating influence in terms of the content of the TV and movies that are watched in the home as she monitors what the tamariki/children watch. For example, the TV programmes that Coco reports she watches are produced for family and adolescent viewing (e.g., Evermoore Chronicles, Shortland Street). Kim reports that she ensures that her tamariki/children only watch movies and TV shows that are appropriate for their age and based on official movie or TV ratings. She also uses some of this viewing time for educational purposes. E.g. to teach religious values to her tamariki/children.

Like, I've got a green box down on their shelf where it's got movies where they must have parental supervision...to watch...I watch [the] TV and...movies and pull out what biblical values there are and morals that are in there even though it's not Christian if you know what I mean. Kim

Another aspect to Coco's habit of watching TV is its impact on her time spent in homework and its role in distracting her from performing household chores. While Coco's school website does recommend that students perform regular homework, she does not engage in this after-school educational occupation very often, as evidenced in her interviews and in her entries into the 'Young Person's Weekly Activity Diary'. Although TV is not the only reason that she performs less than the expected amount of time in homework tasks (e.g., restricted computer use) it is where Coco spends most of her after-school time at home. TV at times also distracts Coco from engaging in the household tasks that her parents expect of her.

[My chores at home are]...Bedroom...Clean it up...Well. Um toilets...And vacuuming the house...Meant to be every day...But I don't do it...all the time. Coco

I think the most common one at the moment is tidy your bedroom... Which doesn't happen...like last night I asked [Coco] to help with dinner. And...Yeah...she came back down in here and watched TV instead so mum did dinner all by herself. Kim

Dawdling. Walking is a large part of how Coco gets to and from the occupations she participates in around her neighbourhood such as walking home from school or to her water polo training (see Figure 5.3). The other primary form of

transport is the family car. As Coco says, “normally [mum] drives us to school...well she takes us every day to school unless...there’s something she has to do”. The amount of time Coco spends walking is highlighted in the route she walks on the way home from school shown on the map (i.e., thicker lines indicate a higher frequency of walking), as well as in this extract from Kim’s interview, “probably going to have to...get a few more shoes...because she’ll walk them out”.

It is during the time spent walking that Coco is able to access incidental social time with her friends, as her time spent with her friends outside of school is restricted by her parents’ concerns for her safety in the neighbourhood and the restrictions that their small house poses in having friends over to play/stay the night. Based on her interview and her entries into the ‘Young Person’s Weekly Activity Diary’ it appears that she walks home from school at a casual pace or to the pools for her water polo training and this enables her to have more time with her friends.

Sometimes I’ll walk with my friends [home from school]...And sometimes we dawdle...Sometimes I walk to school. I walk home if my mum can’t come and pick me up...On Tuesday afternoons we walk to [the pools] to do our training. Coco

Dawdling may not be an intentional habit of Coco’s, and is likely to be typical for a young adolescent. However, the advantage for Coco remains that she does gain increased time with her friends and this may also compensate for the restricted time she has to socialise with her friends after school. Furthermore, walking is a healthy form of exercise for Coco, that may help to offset the high amount of time she does spend in sedentary occupations at home. Despite these benefits of frequent walking for Coco, it is the family’s material hardship that in part creates this habit. For example, owning only one family car, usually only one parent (primarily Kim) being able to provide transport for three tamariki/children, and the cost of petrol are contributing factors restricting transportation. As Kim stated, “At the moment...it’s just having...money to cover petrol”.

Hectic morning routine: Weetbix, milk and toast. The morning routine in Coco’s home consists of being woken at 7:00am each week day, getting ready for school (e.g., getting dressed, grooming, making lunch, and packing her school bag). The kitchen appears to be one of the focus points for this morning routine where lunch is

prepared, bags are packed and parts of the grooming tasks may take place (e.g., Coco brushing her hair). With four members of the household competing for the limited space in the kitchen, along with the restricted time available to complete their morning routine and be ready for Kim to transport them to Breakfast Club (i.e., Coco and Jae need to be at school before 7:50am when breakfast is served), makes for a hectic routine. Kim drives Coco and Jae to their school, approximately 1.5kms away, before returning to drop the youngest child, Aaron, to his primary school which is approximately 0.5kms from their home.

While the Breakfast Club provides free Weetbix, milk and toast, and that this is vital to their well-being, the time the tamariki/children spend there each morning is brief (e.g., approximately 10 minutes). As a result, they have to entertain themselves for almost 1 hour before school starts. Furthermore, Coco and Jae spoke about their dislike for the Breakfast Club supervisor as she 'is grumpy and shouts at you'. Kim defended the adult's behaviour with the justification that they 'need to get children fed and out quickly and don't want children playing in the breakfast room'. As a consequence of having to eat breakfast each day at school, the family lose the opportunity to have a more settled, relaxed breakfast routine at home, eating a meal and planning the day together.

7:00am: Mum wakes me up to get ready for school...dropped off at 7:30am...7:50am: Breakfast Club. [At] 8o'clock, me and my brother are waiting at school for the 8.15 bell, to go into school. (Extract from Coco's entries in the 'Young Person's Weekly Activity Diary' and her interview.)

Dinner time: Eating and watching TV together. Family evening meals typically involve eating a meal on their laps, together in the lounge/living room while watching the TV. As Coco said, "[we watch TV]...when we're sitting down here eating". Viewing TV during meal times occurs every week night and during most weekend mealtimes. This routine appears to have developed partly out of Coco's and the family's prevalent TV watching habits and due to the lack of space for a family dining table and chairs. The family living area is a shared space for a range of occupations such as mealtimes, spending time together, watching TV and using the computer. Dinner time is an important time for Coco and her family to spend time together and this conjoint occupation appears to be relaxing for the family.

The price of children's occupations: Keeping them entertained with free play and low-cost occupations. Living on a low income, raising three

tamariki/children and finding ways to keep them entertained and active is tough. Kim has found creative ways to achieve this, such as finding occupations that are free of cost (e.g., free-to-air TV channels or computer time, periods of free play at home, playing in parks), or low-cost occupations (e.g., art or craft-based occupations).

Sometimes I'll bring out pencils and paper and they'll just sit there quietly and they'll draw in front of TV, which is cool...I mean, yeah, they'd like all the latest toys that come out...and it's like well you know you don't need to have the latest flash craze thing...you don't have the newest things here and there. But you've got enough here that can keep you entertained. Kim

Low-cost or free leisure occupations form a large part of Coco's and her siblings' out-of-school time and are part of their regular weekly routine. In addition to home-based occupations, visiting family or playing at parks are a part of a regular weekend routine. Whilst performed on a less regular basis, arts and crafts, or gardening are also an important part of Coco's regular weekly occupations (see Figure 5.2).

[I like] going to the park and playing a game...with my little brothers...[and] playing with my toys in my bedroom and listening to the radio. Coco

One of the things we love to do weekly is on a Saturday morning going and visiting my parents...at their retirement village. The kids just love it...[or] I will...say "come on kids, let's go to a park". And I'll sit and I'll watch them as they run around and have fun and use up a whole pile of energy and wilt and come back...home. Kim

However, even these relatively low-cost leisure-based occupations do require money for transport or materials. Not having all the available resources can diminish the fun experienced by the tamariki/children. This was pointed out in some of the conversations on this matter by both Coco and Jae. As Coco states the "thing is getting the colours [and]...having the right colours to do your creation [with the pipe cleaners]".



Figure 5.2. Pictures taken by Coco of the orchids she and her family grow in their backyard.

School holiday routines. The school holidays bring different patterns of occupations for most whānau/families as tamariki/children are out of school and need occupations to keep them busy. In the case of Coco's family, the opportunities for out of school child-based occupations are fewer, such as not being able to travel for holidays, or afford to go shopping or to the movies. The increased spare time the tamariki/children have results in a modified routine. This involves more time spent at home (e.g., in free play, TV and computer-based occupations) and during the day spending more time playing at parks both locally and city based.

One of the things I have planned for the school holidays is taking a plain paged book with us and pencils and going down to the...[public] gardens...and they've got to draw something from the... garden...[or] mum would say "right we're going to a park", or we might go to the recycle shop for a little bit and then we'll go home and watch TV and play computer. Kim

Other highlights during the Christmas period that are free include attending local carols and Christmas pantomime events, or visiting free displays of Christmas lights in the city. The importance to Coco of being involved in their local Christmas pantomime is evidenced in the photos she took of her role as narrator in the event.

Mum took this photo because I was helping the community church...for Carols by Candlelight...I was the narrator...For the little performance that the Kids' Club was doing...I enjoyed the fact that old

teachers from my school were there and that my mum was there to support me as well. Coco

Many holiday-based tamariki/children's occupations like shopping, swimming during the summer months, or travel are restricted for Coco and her brothers. "Sometimes we go to [the beach]...sometimes if we have the money for petrol, we would go [visit]...my nana" (Coco). A typical holiday occupation that many tamariki/children in Aotearoa/New Zealand enjoy is spending time at local malls or shopping centres. However, while being there may be free, there are many pressures to spend money especially while other families are doing so. This is likely one of the reasons that Coco and her family tend not to visit the malls as a school holiday occupation.

There's times when we might go to [the local shopping centre or the mall]...It depends on whether I have enough money to be able to take them. Kim

The costs of swimming at local pools is often prohibitive for low-income whānau/families, restricting participation during the hot summer months for tamariki/children like Coco. Her parents would need to pay pool entry for 3 tamariki/children or approximately NZ\$11- each visit. One alternative is to swim in the local river or small ponds in city parks, but while this is free it also poses risks for the tamariki/children.

There's times I will take them down to [swim in a pond at a park in the city]...but at the same time I'm dubious about that...because two years ago when we went down [Coco] ended up with giardia from swimming...Last year we had one hot day and we went down to [the river by the] boat ramp...and I let them have a splash in the river. And Bob got in with them...[but] I said, "what you do have to watch out for is boats going in and jet skis going in, but this is all I can do for you at the moment because we can't afford to go to the pools". Kim

The geographical and temporal aspects of Coco's patterns of occupation: Close to home. The geographical space and temporal aspects that constitute Coco's patterns of participation in daily occupations were made visible in the family mapping activity (i.e., where Coco and Kim marked out locations of occupations on a map of the city) (see Figure 5.3). The map also shows the modes of travel (e.g., walking, car) and frequency of use (i.e., thicker lines indicate this mode of travel occurs more frequently) and types of occupation Coco performs, (e.g., primarily

school, playing at parks). One finding from this mapping activity was that the majority of Coco's out-of-home occupations occurred within a 1.5km radius from her home (i.e., as indicated by the red circle around her home on the map). Coco's occupations within this area include school, youth group, local parks, water polo, grocery shopping and the community centre. Participating in occupations that occur close to home is likely due to walking accessibility (i.e., free). Consequently, walking is a frequent mode of transport for Coco. Alternatively, occupations that are performed out of the 1.5km radius, occur on a less frequent basis (e.g., Girls' Brigade, visiting grandparents, access to other parks within the city). Additionally, a number of tamariki/children's occupations are absent on the map such as shopping at malls, going to the movies, or involvement with sport's teams occurring outside of the city. Again these constraints on Coco's patterns of occupation are likely related to material hardship (e.g., cost of travel, only having one older family car).

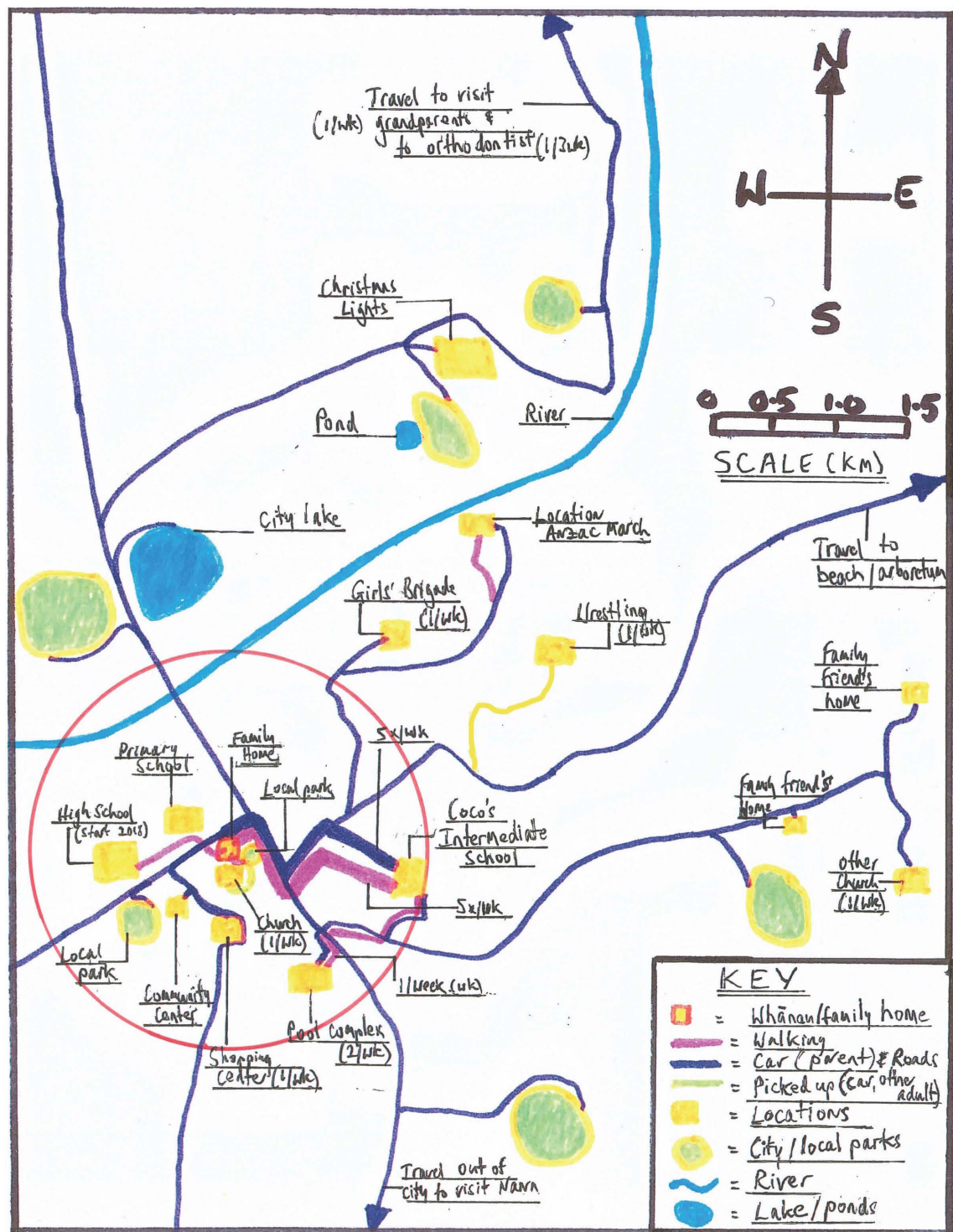


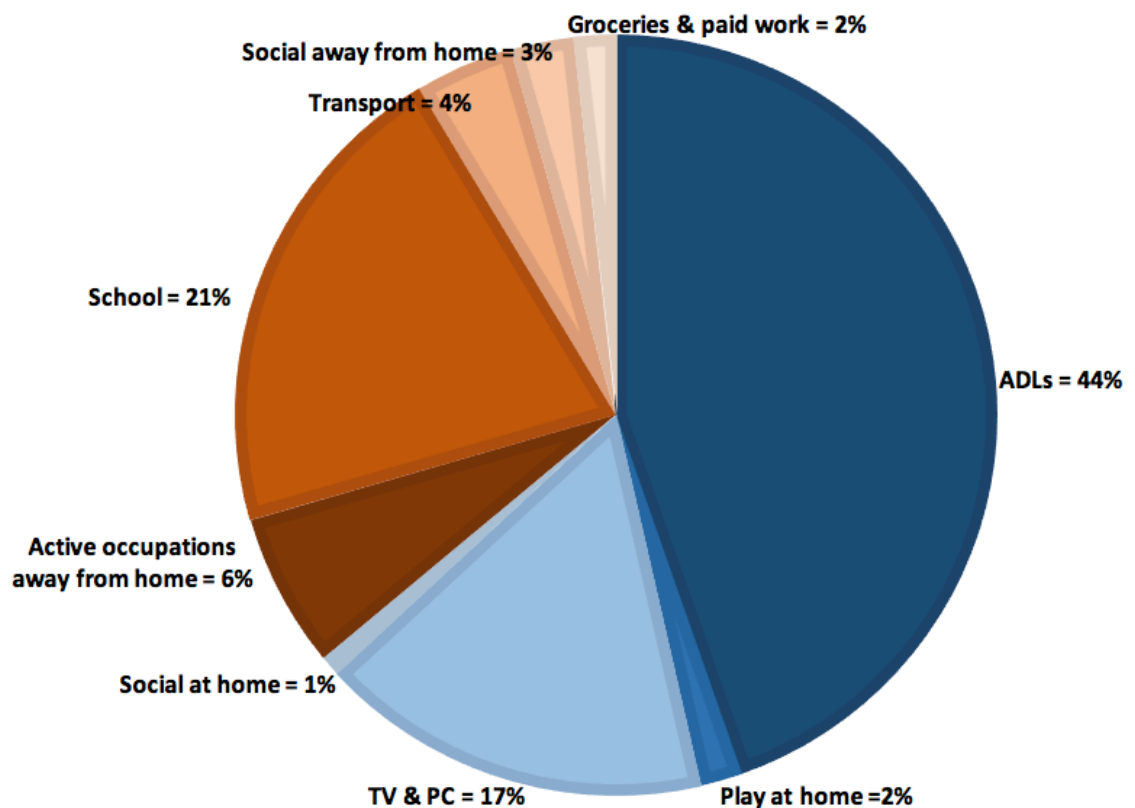
Figure 5.3. Map²⁹ of the occupations Coco engages in, the locations, routes to get there, forms of transport and frequency of participation. The circle in red indicates the 1.5 Km radius around the family home.

However, as evidenced in the map, the community does meet some of the needs for free/low-cost tamariki/children's occupations in Coco's neighbourhood. For example,

²⁹ In order to further protect the child's and her family's identity, all identifiable features have been altered, whilst preserving the key elements of the map. E.g., types of occupations, geographical aspects, modes and frequency of transport.

the community centre provides a variety of child and youth-based occupations (e.g., after-school care, holiday programmes, youth events) and the local church facilitates groups for tamariki/children and adolescents. As Coco's teacher explained, "Oh I think that the neighbourhood or the community that [Coco] lives in definitely does promote involvement...having a place like the community centre...the schools and the church" (Margaret).

An analysis of the map and other data drawn from the research shows that Coco spends most of her time at home (i.e., 64%) compared with the time spent in activities out of the home (i.e., 36%). A large part of the time spent at home is based on her activities of daily living (ADLs) and self-care based occupations³⁰ (i.e., 44%), and a significant portion of her out of home time is spent at school (i.e., 21%). This still leaves a majority of time in home-based occupations (i.e., 20%) compared with out of home-based occupations (i.e., 15%) with sedentary occupations like TV and computer use making up the majority of this remaining time use at home (i.e., 17%) (see Figure 5.4).



³⁰ ADLs includes self-cares such as washing, grooming, dressing, eating, sleeping as well as household chores.

Figure 5.4. Analysis of Coco's occupations: Home and away from home.

Key: Blue colouring = Home-based occupations. Brown/orange colouring = Away from home occupations.

Coco's patterns of active and passive occupations. Exploring the categories of time and location of the occupations that Coco engages in enables a comparison of active and passive occupations. This data is drawn in particular from her time-use diary, interviews and the mapping activity. What this data shows is that Coco spends the majority of her week in passive-based occupations (e.g., 80% of her week). However, a large part of this time is spent in activities of daily living (ADL) and school-based occupations (e.g., learning in the classroom). Excluding these occupations, her total time spent in passive occupations is still moderately-high (e.g., 23%, with TV comprising most of this time) in comparison to active occupations (e.g., 20%) such as sports at school, water polo or walking (see Figure 5.5).

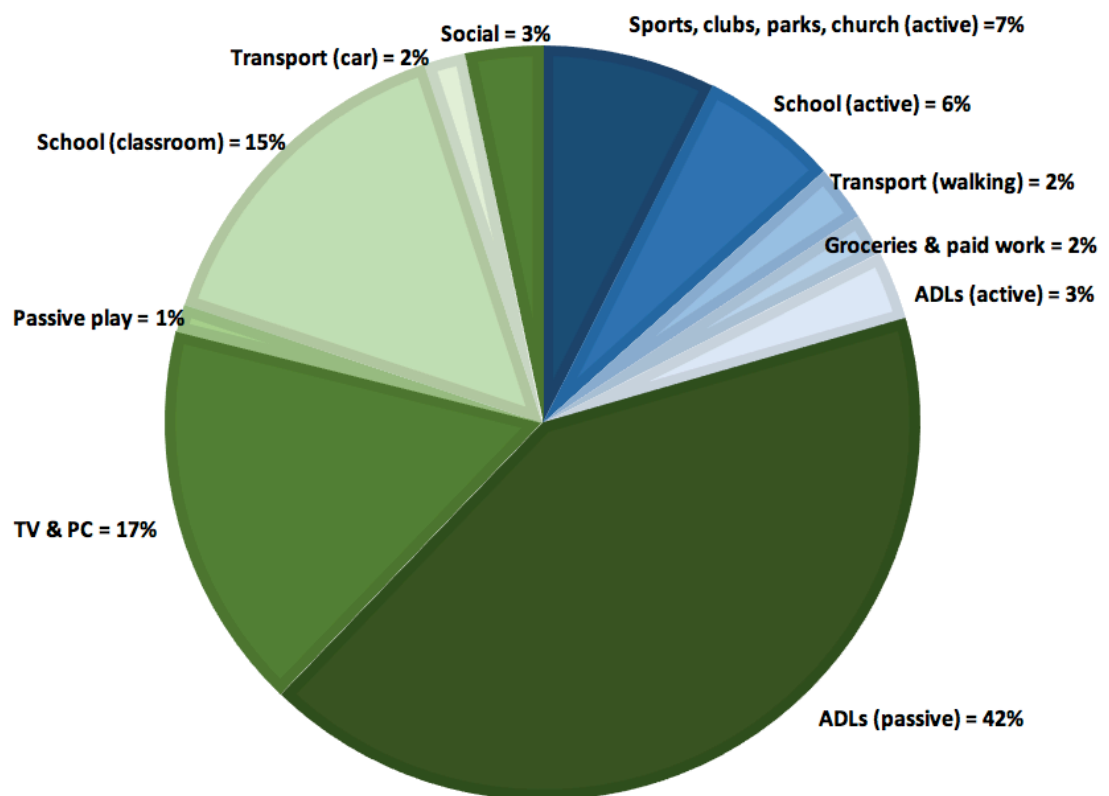


Figure 5.5. Analysis of Coco's occupations: Active and passive.

Key: Green colouring = Passive-based occupations. Blue colouring = Active-based occupations.

The impact of poverty on Coco's roles. Many of Coco's roles such as daughter/family member, student, friend, sports team member are likely to be typical for a young adolescent girl. However, the whānau/family's poverty necessitates certain

roles for her (e.g., an informal paid work role), while others are restricted (e.g., social roles with peers).

Social roles: *Playing with my friends.* As a young teenager, Coco's world revolves around her peers and socially-based occupations. She does have regular contact with her friends and peers throughout her week at school and at organized activities such as Girls' Brigade and Youth Group. Also, Kim reported that sometimes her friend visits with her tamariki/children. However, Coco generally misses out on spending time with her friends out of school such as playing together or having sleep-overs, both at her home and at her friends' homes. This social contact with her peers is important for Coco.

I'm not allowed to go to any friend's house. But I would like them to come over to my house which doesn't work...Yeah because I barely get to do that anymore...Because I rarely get my friends over and I'm not allowed to go over to their house. Coco

These restrictions in Coco's social occupations are shaping her identity and role as a peer and as a friend. The reasons for the restrictions are complex, but relate to the family's poverty. Specifically, Kim's concern for Coco's safety in their neighbourhood (i.e., perceived risks for Coco, the presence of gangs), and the limited space in their home which is a restrictive factor in inviting other tamariki/children into the home.

We don't often have a lot of people over just because the house is smaller than a lot of other houses and so end of the day it just makes entertaining difficult...You know I really want to let [Coco] go but I really don't know...it's peace of mind and safety really. Even knowing that they're down at the park. I sit here and I worry until they walk back in through the door...It's also knowing what she's doing because she might go there and they might then go to a park...and sometimes knowing some of little bits of what the [friend's] family's like or maybe even not knowing the family it's, I don't feel comfortable letting [her] go. Kim

Another factor may be the sense of embarrassment the family feel when someone visits their home, given the quality of the house and the restricted space. This was certainly the case when I returned after my first visit to the family home, as Bob had been clearing up space in the living room for me to conduct the interviews. He told me that he felt embarrassed about the clutter and limited space in the room. The

appearance of being poor and the stigma this can bring is acknowledged by the local minister, “I know [being poor]...can be an embarrassing thing” (Rev RT).

Coco on the other hand does not perceive the risks to her safety that her mother does. She did not think there were any dangers for her in visiting her friends’ homes or engaging in occupations in her neighbourhood. For Coco, it was parental permission that was the primary constraining factor that limited her time with her friends. In fact, Coco likes adventure and an element of danger as she discussed, “I like being dangerous [like water polo]...it’s the second most dangerous sport...you get people drowning you and they kick you and scratch you...[and] I write some...dangerous stories” (Coco). This is in contrast to her parents’ concerns and is in part likely to do with Coco’s level of development as a young teenager as well as her own perspectives on the issue. However, her parents have many more years of life experience and maturity to rely on and likely have a greater awareness of the risks posed to tamariki/children in their neighbourhood.

Circulars: Coco’s paid work role. Whilst some tamariki/children may be required to assist with raising funds for their recreational occupations (e.g., fundraising for sports teams), most New Zealand tamariki/children at the age of 13 years would not be required to participate in informal paid work roles in order to pay for a tamariki/children’s summer camp. However, Coco needs to raise money through paid work options as her family cannot afford for her and her younger brother Jae to go on a 1-week summer camp during the school holidays.

The camp is a church run event that is located at the local beach, approximately ½ hour’s drive from the city, and the cost to attend per child is NZ\$235-. Kim was given the opportunity to perform a circular delivery job (i.e., advertising pamphlets) for a friend at their school who normally performs the job, but was injured. The job involves delivering circulars into the letterboxes of homes throughout the neighbourhood. The family walk to complete the job and use an old pram to carry the pamphlets. Whilst this occupation is a paid work role, Coco is not officially employed, rather she is assisting her mother to complete the work and in so doing helps to earn income. The New Zealand government does provide guidelines for tamariki/children engaged in

paid work roles in order to help protect their employment rights and safety³¹, but work for younger tamariki/children tends to be more informal (Anderson, 2010). Additionally, the task of delivering pamphlets is not easy work, it is tiring and poorly paid³² (i.e., a large quantity of pamphlets need to be delivered in order to earn the minimum wage). It also needs to be managed amidst the family's other weekly routines (e.g., sometimes performed before or after school or early mornings in the weekend).

Probably could have had a photo of you shoving circulars into a letterbox to say this was the paper run I was doing, "Look at me lugging all of these...Why [are we] delivering circulars, so [Coco] can go to camp"...At the moment, we're doing them early in the morning because it's cooler...get up at 6 o'clock go out deliver all the circulars and everything and then on their way to school...One day we had to pick Bob up and so we came home from [my friend's] and we did an hour's worth of circular deliveries and then went and picked him up.
Kim

While the amount they get paid for the circular run is very low, over the last few months that Coco, her siblings and their mother have been performing this job they have been able to save a sizeable contribution towards the cost of the camp.

It's getting close...we've still got a bit more money to come in but so far Jae's got \$90 towards his camp and she's got \$70. Kim

The impact of poverty on Coco's family rituals: Whānau/family time.

Coco clearly values the love, care and support from family and the time she has together with them. Her parents, Kim and Bob are loving and responsible in that they do their best to provide for their tamariki/children's needs, work to earn the family income, are responsible with their money (e.g., good budgeting skills), try their best to be involved in all aspects of their tamariki/children's lives, make use of community supports, and set good examples in terms of healthy behaviours (e.g., don't smoke, seldom drink alcohol).

[My values and what is most important to me are]...having family time. Like asking if we can have a Christmas Eve movie fiesta and just

³¹ <https://www.employment.govt.nz/starting-employment/rights-and-responsibilities/young-employees/>

³² <https://thestandard.org.nz/junk-pay/> and

https://www.nzherald.co.nz/sideswipe/news/article.cfm?c_id=702&objectid=11485277

sleep out in the lounge...and our family Christmas tradition...[of] going to grandma's and just having a family morning tea...[and] a fish and chip picnic lunch in the lounge. Coco

The examples of family occupations that Coco describes have an importance to her beyond other routine occupations and can be understood as family rituals or a type of patterned occupation that carry special significance for a family (Matuska & Barrett, 2014). For Coco and her family this includes being involved in religious events throughout the year such as at Easter or Christmas, visiting their extended family and spending quality time together such as going to parks, sharing meals or watching movies together. This is clear from Kim's description of the intimate and nurturing times she spends with her tamariki/children.

The main one is trying to spend quality [family] time...Together. Cuddling up on the couch watching a movie. I mean I've only got two sides so I usually have one child on each side and one sitting between my legs on the floor to watch a movie. Kim

For the most part, Coco, her mum and brothers are able to participate in these family occupations. However, the time and energy that Coco's father, Bob, has to participate with his family is limited by his working conditions. This is particularly the case during weekends when their family occupations usually occur, as Bob is often required to work or is too tired. This constraint on family time is in part related to the poverty the family experience as Bob is in a low paid work role and has working conditions that are not family friendly.

You know [it] would be nice to have Bob there so it's like a family thing. Invariably it doesn't always work out that way...last year we had Christmas here and he was so tired we would be waking him up to open up a Christmas present and two mouthfuls into lunch and...he couldn't even keep his eyes open and crashed for three hours. Got up had lunch and went back to bed again. Kim

Additionally, the opportunities for Coco to visit and spend time with her nana, who lives in a neighbouring city, or engage in out of town family leisure occupations are constrained by the cost of travel (e.g., petrol).

We do try to go there at times...and that might be with a lot of scrimping and saving for petrol money...it's just financial you know...There are definitely things I would like to do. Not just with

Coco but with all of them...if we had petrol money [and]...the car's healthy enough we might drive out to [the beach] and have a look and a play...I mean [the kids] would love gem stone fossicking, out with the pick axe, taking them up the hills where we used to go...to look if we can find an amethyst on the side of the road. Kim

What ifs: Restraints on Coco's Occupations

Key issue statements relating to this section include: Issue statement 1 -

Tamariki/children's occupations are shaped by the adults/family they live with; and

Issue statement 5 - Material poverty, for a family/whānau, impacts on a child's patterns of and participation in occupations.

It's just sort of watching all the possibilities and options where things could go wrong. Kim

As identified above, some of the constraints on Coco's participation in occupations relate to her parents' concerns for her and her siblings' safety as well as the potential for unexpected costs or harm that may occur from engaging in occupations. While these constraints are partly based on parental values, they are also related to the family's poverty. In the case of playing at local parks in the neighbourhood, Kim's concerns for her tamariki/children's safety at certain parks or times of the day can constrain their participation.

Yeah definitely with...things like [the children's safety in the neighbourhood] it's like worrying. Like last night I let them go down to the park and...I said I want you back by 5. Six o'clock they finally came back and I was close...I do watch it closely. Kim

Some of these safety concerns are also voiced by Coco's teacher and her local minister. "Oh, don't get me wrong there are parts of the neighbourhood that are unsafe. And I wouldn't leave my kids out at night" (Margaret, teacher). When Coco needs to get to and from the local church for the youth group, approximately 10 minutes walking distance from her home, the church provides the transport to ensure her safety.

I know that Bob...works and he just so happens to work on a Friday evening...the vehicle is gone with him so we just provide extra support...you know we don't want kids wandering off on a Friday evening. Especially in winter time when it's dark. And so, we provide that support. Not only because...the family vehicle has gone somewhere else but also for safety for the kids...I'm responsible for

those children if you like, once they come through these gates and when they leave. 'Til they get back home. And it's, just piece of mind for me to say right they're home. Rev RT

These concerns with safety can result in parents having heightened awareness about the risk to their tamariki/children when they participate in free play and socially-based occupations occurring in their neighbourhood. This is certainly the case for a conscientious parent like Kim who tries to balance a concern for safety with letting her tamariki/children take some risks. However, these concerns for her tamariki/children's safety can be a further constraining factor in terms of Coco and her siblings' participation in recreational and social occupations in their community.

We sort of keep an eye on them. But at the same time, we don't want to wrap them up in cotton wool...so if they want to go down to the park usually it's, "I'm going down to the park mum". It's like "no excuse me, can I please? Yeah okay...[and] if you've got a watch on, I want you back at this time". Kim

At other times, the constraint on participating in child or family occupations is Kim's worry about the potential for increased costs or unexpected dangers. For example, tamariki/children's water-based play during summer months and the possibility of council fines for the use of a sprinkler during a period of local water restriction.

In summers [I like] having a water fight...Yeah, we did it last year...I'd like to have a water fight but we can't because of the water...not allowed to use it too much...[we need] parent allowance. Coco

They would all love to have water play especially in all this hot weather. But I've also got to follow the Council rules and...I don't need stray kids coming in through the gate and wanting to use it. I don't want to come home and find someone drowned in it...I don't need the Council ringing up and saying, "you've been using too much water we're going to charge...your landlord extra water rates", so she's then going to put the rent up. Kim

In the case of leisure occupations such as going out of the city to a beach, or visiting whānau/family, Coco's parents' concern relates to the potential costs of the family car breaking down. For Kim and Bob, any additional financial costs such as mechanical repairs to their car are not only an inconvenience, but pose considerable strain on an already tight household budget and create further stress in the home. "The car

wouldn't survive it...[and] it just seems that every time we organise to do something great [like travel out of town]...things happen." (Kim).

Missing out on Children's Occupations

Key issue statements relating to this section include: Issue statement 4 - Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations; and Issue statement 5 - Material poverty, for a family/whānau, impacts on a child's patterns of and participation in occupations.

While the poverty the whānau/family experiences has an impact on Coco's participation in occupations, the support of her parents, the school and their wider community helps to ensure that Coco is able to participate in her schooling and a number of recreational occupations. For example, Coco has been part of a school-based water polo team for the last 2 years, she has been attending a local Girls' Brigade club for the last 7 years, and is attending the local Youth Group. Yet, despite these community supports, the family's lack of income and resources constrain Coco's choice of and participation in occupations.

I know there are other activities, whether it be sports or trips away that the kids, well Coco, would miss out on because of...financial reasons...she misses out in the main because of financial reasons and [because] the parents can't support it. Rev RT

Just the money.

When I was playing it [softball] at primary I played it at the softball park, and we had...I think it was the softball, New Zealand Softball team come and they said that I had a strong arm...[but it was] just the money [that meant I could not continue with softball]. Coco

This excerpt from Coco's interview highlights the disadvantage Coco experiences when choosing the recreational or sport-based occupations she would like to participate in. Regarding softball, this was a sport she was told she was good at, and one that she enjoyed. However, it was beyond her reach as once the initial introduction to the sport was completed at school, she was not able to participate any further due to the difficulty her family would have in paying for the costs such as for the softball

equipment required. This financial constraint on participating in a sport like softball was confirmed by Coco's mother and her teacher.

There are a few that she would like to do [softball]...but finances again and...money [prevent this]. Kim

Softball is a very expensive sport to play...so I can imagine that...would [or] might be out of reach for [Coco's family]. Margaret

The phrase 'just the money', an excerpt from Coco's interview, carries more meaning than not only being unable to afford to participate in one sport. Coco seldom discussed the financial hardships her family experience and the impact this has on her choice or access to occupations. Rather it seemed to be a 'taken-for-granted' reality.

Nonetheless, Coco is aware of the monetary constraints on her participation in occupations, such as travelling out of the city to stay with her Nana. "Sometimes if we have the money for petrol, we would go...and spend Christmas with my nana" (Coco).

There are a number of other opportunities for participation in occupations that either Coco or her parents would have liked her to engage in, but are constrained by their poverty. For example, Coco is not able to play in a netball team, or attend gymnastics classes, attend either singing, acting or paid music lessons, or join a school club. Furthermore, high cost occupations are completely out of Coco's reach, such as travel on an overseas school trip.

She'd love to do swimming full time but we just do what we can, when we can afford it...She would like to do netball, [and] gymnastics. I know she wanted to do wrestling...I wouldn't mind her...doing the Leo club, it was just the finances. With [the school] they did a trip to Japan and a trip to Noumea and she would have loved to have done both of those and I would have loved to have been able to send her but finances again and...money. Kim

Coco's love of the water and swimming, her talent in the sport and her team's success meant that she was chosen to join the regional team. Coco discussed her passion for this sport.

The things that I really like to do would have to be swimming because I get to play in the water and play with my friends if I'm at the pools [at water polo]...also because my friends call me the water girl because I love water so much. Coco

However, Coco's mother and her teacher both discussed how a lack of money prevented Coco from progressing further in her current sport of water polo. As her teacher Margaret said, Coco "was invited [to join the squad, but]...her mum had to pull her out just because of the cost".

While there are other factors that constrain the choice of occupations that Coco is able to participate in (e.g., time limitations), financial concerns are the primary reason. Kim states that two paid tamariki/children's extra-curricular occupations are all that the family can cope with financially. In fact, for the last two years Kim has not even been able to pay for one of Coco's occupations, Girls' Brigade, and consequently has a sizeable debt to repay.

[Coco] doing water polo through school and Girls' Brigade being paid options, it was like "No I'm sorry you're doing two things, that's enough". Kim

Other types of tamariki/children's recreational occupations that do not entail a membership fee such as riding a bicycle or access to digital devices are also constrained by the family's low income. For example, Coco and her brothers were given second hand bicycles and have been provided with bicycle safety lessons from the school, but can't ride them because the bikes are in need of repair or they lack essential items. "I have a bike but I don't use it because I don't have a bike chain [to secure it]...And my brother doesn't have one as well otherwise our bikes get stolen" (Coco). Kim adds further clarity around this restricted resource.

The [bike] we've got for [Coco]...I've got to take it down and get the brake cable fixed...We haven't been able to do it because we just haven't been able to afford it...it's finding the finances for everything. Kim

In terms of access to digital technology, the family only have an older computer, but do have access to the internet. However, there are no other digital devices in the home such as smart phones, I-pads/tablets or gaming devices like an X-Box or PlayStation. This means that the one household computer has to be shared amongst the five family members. At times this shared access can lead to conflict and may also limit Coco's and her brothers' ability to make use of digital technology for their education and entertainment. Furthermore, the computer is located in the lounge and

using it for homework purposes means competing with other occupations that occur in this space such as watching TV.

[I like] going on the computer and playing games with my dad...when he's...not hogging the computer...We only have half an hour on the computer [per day]...I sometimes use it for school to go on Khan Academy to help me practice my maths and geometry. Coco

Sunday would consist of getting up in the morning, getting organised for church, they'd watch TV and fight over the computer...I mean that's our computer. It's slow...For the kids it's hard, like for Aaron it's like, "it's not working...bang, bang, bang...No it needs time to think, it's got to whirr over, it's old!"...At the moment the kids don't have cell phones...We don't have any of those [I-pads, laptops] in the house, we just can't afford it. Kim

Recreational and social occupations such as going shopping, visiting the local mall, or just buying a few small luxuries from the local dairy are constrained for Coco and her family due to their financial hardship. It was clear from some of Coco's discussions with me that being able to have some discretionary money, just like her friends have, was important to her.

If I have spare money, like if my friend has money that she doesn't want and she gives it to me, I can just like go to the shops and get like a sandwich. Coco

Coco's parents do their best to find alternate ways for their tamariki/children to participate in leisure occupations like shopping by giving them a small amount of money to buy 2nd hand items. For example, on my last visit to see the family, Coco was proudly wearing some pink slip on sandals that she had recently bought from the 2nd hand store.

Pocket money wise if we had the money frequently to be able to give them, adequately in the budget we would do...Invariably what I will do is maybe in the school holidays when we go and visit a friend...we'll go through the op shops and they'll ask if they can have a bit of money and I might let them have a couple of dollars or we might go to the [rubbish] tip recycle shop and I'll go "okay I've got an extra \$15 in my wallet here's \$5 each and that's what you've got to spend so be frugal and have a look" ...So I took them down there the other day and [Coco] brought herself a pair of shoes with her \$5. Kim

Living in poverty: Resource issues affecting Coco's participation in occupations. The impact of resource constraints can be far reaching for a tamariki/child whose daily life is affected by material poverty. For example, Coco's teacher noted how the low-quality food that Coco sometimes brings to school for lunch may have an impact on her engagement in her schooling.

You know what [Coco] does bring to school for lunches and stuff aren't always the best option and I do worry about that and you know there can be some...lethargy and you know whatever after that. Margaret, teacher.

There are a number of city resources that Coco and her whānau/family make use of such as parks, playgrounds, the lake and the river. For example, Coco enjoys playing at the local park with her siblings and also realizes the benefit these well-equipped playgrounds have for tamariki/children.

[Our local park is] a really cool park. It...just used to have slides and then they asked every school in the area...and even the kindies, to see what ideas they could get up. And they managed to make a spider web, like a balancing beam. And all sorts for the kids to go on and it's really cool, because all ages can go and play. Yeah and they can build confidence up as well. Coco

However, while parks and playgrounds generally offer safe and free play-based occupations for tamariki/children, safety while at the parks in their neighbourhood limits their participation. For example, the presence of gangs restricts which local playgrounds/parks they can visit, or the times during the day when they can play there.

You've got to go at certain parts of the day [to the local park]...At night time everybody steers clear. The gangs are there. Kim

Another important resource that can help facilitate tamariki/children's participation in daily occupations are community resources and neighbourhood cohesion. While the local community does offer a range of support for tamariki/children and their families like Coco, more could be done. As the minister says, "Oh I believe that...every community...[has] a lot of challenges...[but] I believe [our community] could do a lot better in supporting...our kids" (Rev RT). Additionally, the level of support and

interaction between families in Coco's neighbourhood was identified by Kim as being low in terms of supporting their tamariki/children in daily occupations.

At the moment, there's not a lot really that help out. I mean like, the...Community Centre do, we go down there quite often...we started off with the bike thing there. We go down for [food parcels]...we'll call in there and have a bit of rapport there...[But] around the neighbourhood area here, not a lot of them help out...Some of their kids might go to the church and to the school...but otherwise most people keep to themselves. Kim

The limited time Bob has to support Coco due to his working conditions, results in Kim providing the majority of the support for her tamariki/children's occupations.

However, Kim is also limited by having three tamariki/children to care for, as well as managing the household, recently starting part-time paid work, and her own finite amount of energy.

It's money and time...I can't be at two places at once for two games...it's not nice...when it's just your older brother cheering you on, you know sometimes you want mum or dad...and then with water polo, it's just us [as dad is at work] and that...ruled out being able to do things on a Sunday afternoon. Kim

Summary

The findings both confirm and add to or shed further light on the issue statements that were identified in the conceptual structures for this study. Coco is a young adolescent girl whose daily life in many respects is like that of most other Aotearoa New Zealand tamariki/children her age. However, her whānau/family's material disadvantages impact on her everyday occupations. This includes the amount of time spent in sedentary leisure occupations, an increased pace to weekly morning routines, restricted time together as a whole family, restraints on Coco's time spent with peers in her neighbourhood, a need to engage in informal paid work roles and reduced time spent in after-school educational occupations like homework.

Coco's choice of occupations and the locations that she participates in these occupations, are also constrained by the family's poverty. Consequently, she has had to give up occupations for which she displayed some talent and her narrowed range of occupations limits opportunities to develop diverse skills and talents, and a network of relationships beyond her immediate neighbourhood. The poverty related factors that

impinge on Coco's occupations include her family's low income, reduced level of resources and aspects of their neighbourhood such as safety concerns and a lowered level of community cohesion. Balanced with these disadvantages is the love, care and support Coco's parents, and their community, provide for the tamariki/children in order to meet the necessities of life and enable participation in valued occupations. The next chapter discusses the study's results in relation to what is already known about child poverty and the implications of this in terms of occupational therapy's role in countering the effects of poverty for tamariki/children and how this can contribute to social policy.

Chapter 6 Discussion

Introduction

In this final chapter of my thesis I will briefly revisit the research problem and discuss the key findings of the study. I examine what these results mean in the context of the current body of literature and the contribution this study makes to the issue of child poverty. Then I discuss the implications of the findings in terms of occupational therapy practice and policy aimed at addressing child poverty, the need for future research and a review of the study's limitations. The chapter concludes with the key outcomes of this enquiry into poverty and its impact on tamariki/children's patterns of occupation.

Restating the research problem. The experience of poverty for many tamariki/children is one imbued with feelings of shame, a sense of difference and a loss of opportunities when compared with their wealthier peers (e.g., educational, social and recreational occupations). The long-term health and social implications for a tamaiti/child who grows up with long-term poverty are deleterious. These include a greater likelihood of physical and mental health problems, and constraints in participating in education, employment, recreational, social and political occupations. In effect, child poverty impinges on their rights by restricting engagement in life's daily occupations and limiting potential. However, not all tamariki/children in poverty go on to face these long-term consequences, as a child's resiliency, effective parenting, positive social capital, improved educational and employment prospects, and support from non-governmental organisations (NGOs) and government all act as buffers. Whilst the breadth of child poverty literature is considerable, research that examines the impact of poverty on a child's habits and roles, or patterns of occupation, is lacking. This study, using a qualitative case study methodology and a single case design, sought to understand from the perspective of a child, her parents and key adults that support her occupations, how poverty affects a child's patterns of occupation.

Synopsis of Findings

The key findings from this study include that material poverty does affect a child's patterns of occupations and constrains choice and participation in tamariki/children's occupations. Poverty impacts a child's occupations directly (i.e., low income) as well as indirectly (e.g., lack of resources, neighbourhood effects). In this case study, this consisted of habit structures that have been linked to lower SES, including increased time spent in sedentary occupations (e.g., TV viewing), an increased need to find time alone due to limited space in the home, and seeking incidental opportunities to spend time socialising with friends out-of-school. Family routines that were impacted by poverty included regularly watching TV whilst eating meals as a whānau/family, an increased pace to morning routines in order to access free school breakfasts, routinely spending time engaged in free or low-cost tamariki/children's occupations (e.g., playing at parks and playgrounds) and school holiday routines constrained by limited income and resources, (e.g., reduced opportunities to go shopping at malls). The majority of occupations are routinely performed in close proximity to the home (e.g., within a 1.5Km radius). Coco's social roles such as time spent with her friends were restricted due to concerns for her safety in the neighbourhood and the limited space in their home restricting the opportunity to have friends visit. There was a need for her to engage in an informal paid work role alongside her mother. Important family rituals such as spending quality time together in family occupations were disrupted by her father's working conditions (e.g., low pay, shift work). Coco's choice and level of participation in tamariki/children's occupations (e.g., free play, sports, clubs, digitally-based occupations and visiting extended family out of the city) were constrained by poverty related factors. These factors included the costs of occupations (e.g., fees, equipment, travel costs), parental availability (i.e., typically the mother was the only available support for their 3 tamariki/children to attend occupations), the family's limited resources (e.g., only one older family car), the potential risk of unplanned expenses, and low cohesion and increased safety concerns in the neighbourhood. Overall, the family's poverty limited the range and availability of occupations for the tamariki/children, resulting in restricted opportunities to grow a wide range of skills and talents and develop a broad social network.

Balanced with the constraints that the family's level of poverty incurred, was the extent of love, care and support from her parents that helped keep Coco and her siblings engaged in their occupations. Alongside this was a degree of positive social capital including community-based organisations such as their local church, community centre and school that supported Coco's engagement with both her education and with other meaningful recreational, religious and cultural occupations (e.g., water polo, Girls' Brigade, church, time with the whānau/family). Coco's personal characteristics and a range of skills, often learned through the role modelling of supportive adults in her life, further helped enable her to cope.

The Significance of the Findings

The findings of this study provide new insights into the affect that poverty has on a tamaiti/child's patterns of occupation. Previous studies have shown that the physical environment, including resource constraints, impact on tamariki/children's patterns of occupations such as opportunities for play (Orban et al., 2012). Another study, based in South Africa, demonstrated how the socio-political context for young people growing up in marginalized communities constrained their choice of and patterning of their daily occupations (Galvaan, 2012). Bass-Haugen, (2009) used US national survey data to show that tamariki/children growing up in poverty were more likely than their wealthier peers to report constraints on their participation in occupations outside of school such as being read to every day or engaging in family outings. This case study builds on these identified constraints in tamariki/children's occupations by adding the knowledge that poverty has a widespread impact on a child's patterns of occupations from daily habits (e.g., increased sedentary behaviours), roles (e.g., needing to engage in paid work), to restricted family occupations (e.g., a parent's working conditions can diminish family time). The following section provides a detailed review of the significance of the key findings from the study.

How poverty affects a child's habits. A body of evidence has identified the higher rates of time spent in sedentary occupations (e.g., TV/screen viewing) for tamariki/children from lower socioeconomic backgrounds (Cronin, 2015a; Fletcher, Marino, Anderson, & Whitaker, 2014; Goisis, Sacker, & Kelly, 2016). For example, US studies have shown that children living in poverty are more likely to spend 4 or more hours per day viewing screens/TV (Bass-Haugen, 2009; Fletcher et al., 2014). New

Zealand data shows similar trends, where tamariki/children from the most deprived neighbourhoods are more likely to watch 2 or more hours/day of TV than those from the least deprived neighbourhoods (Ministry of Health, 2017a). It is widely recommended that tamariki/children spend less than 2 hours/day of TV/screen time, due to the increased risk that spending large amounts of time in such sedentary occupations has for health concerns such as obesity (Cronin, 2015b; Maddison et al., 2016; Ministry of Health, 2017a) or with poorer educational outcomes (Fletcher et al., 2014; Kostyrka-Allchorne, Cooper, & Simpson, 2017). Despite these negative effects associated with TV viewing, research has also shown that the quality of content is important and parents can play an important part in moderating this and thereby reducing the associated harm (e.g., watching inappropriate programmes) (Cronin, 2015b; Kostyrka-Allchorne et al., 2017). For the tamariki/children in this case study, their mother has a positive influence in terms of the content viewed such as only allowing them to watch age appropriate TV programmes or movies.

The results from this case study support the premise that tamariki/children from backgrounds of poverty tend to spend high levels of time in sedentary or passive occupations such as TV/screen time. For the child in this study, TV viewing was habitual and occurred every day afterschool, during the weekends and during mealtimes for approximately 4 hours/day, both individually and together with her whānau/family. This resulted in approximately 17% of her week spent in this occupation, which is well above the recommended level of TV. Whilst being together as a family and watching TV/movies was seen by Coco and her parents as an important time of togetherness, where this was often constrained, it further added to the formation of sedentary habits and routines. Studies have highlighted that tamariki/children who regularly watch TV during mealtimes may be at greater risk of obesity (Domoff, Lumeng, Kaciroti, & Miller, 2017). The time Coco spends watching TV also distracted her from performing other important occupations expected of a child at this stage in life (Cronin, 2015a) such as completing homework and household chores.

Other studies have examined why tamariki/children living in poverty have higher TV viewing rates such as a lack of alternatives due to a restricted budget (e.g., to buy books, or spend on family outings) (Bass-Haugen, 2009; Kostyrka-Allchorne et al., 2017; Thompson et al., 2015), the busyness of parents (Thompson et al., 2015), level of

parental education (Lapierre, 2012), or that TV allows the parent to complete other household occupations like housework (Thompson et al., 2015). While this study supports some of these findings it also adds depth to understanding that a range of factors are likely combine to influence patterns of TV watching. For example, restricted income and resources to pay for other recreational occupations, the limited availability of parents to interact with their tamariki/children, the fact that TV is a free and readily available form of entertainment accessible by low-income families, housing and neighbourhood safety concerns that restrict free play and social occupations, all influence TV time. TV viewing can become habitual with regular TV/screen time habits in childhood potentially becoming the basis for the formation of unhealthy, sedentary habits or patterns of occupation that in adulthood can bring with it associated health risks (e.g., obesity) (Matuska & Barrett, 2014; Thompson et al., 2015).

Moving through the developmental stages from middle childhood to adolescence brings with it many physiological changes to a young person's body, development of their identity, increasing levels of autonomy and new types of occupations and roles (e.g., starting high school, taking more responsibility for chores around the home etc.) (Cronin, 2015a; Gilmore & Meersand, 2015). Essentially, this is a period in the life stage that is filled with challenge and turmoil and it is realistic to expect that adolescents will need their own space in order to spend time alone, to play and to recuperate (Andresen & Meiland, 2017; Cronin, 2015a; Gilmore & Meersand, 2015; Vroman, 2010). This is no different for the young adolescent in this study, Coco. However, her family's material circumstances and in particular the restricted space in their house relative to the size of family (e.g., a family of 5), constantly living in close proximity to each other, creates a greater need for Coco to have time alone. Coco's circumstances, mean she does not need to share a bedroom with siblings or other members of the family like for some tamariki/children (Rice, 2006), but it may also be that Coco's awareness of her family's level of poverty and its impact on her life leads to increased stress and feelings of unhappiness, which contribute to the desire to be alone (Andresen & Meiland, 2017; Ridge, 2011). By engaging in this occupation of seeking time alone for the purpose of solitude and recuperation, Coco has developed a coping strategy that acts to buffer the effects of her family's poverty. While some studies have shown that overcrowding can make it difficult for tamariki/children to find privacy and

time alone (Egan-Birtan, 2010; Rice, 2006), the finding from this study highlights a child's need for personal, private space and helps provide an explanation for why this occurs.

The effect poverty has on a family's routines. Whānau/family routines are important for the wellbeing of a family and rituals help develop and sustain family identity (Matuska & Barrett, 2014). Important family routines for Coco and her family in this case study included getting ready for school and work in the mornings, spending evening mealtimes together, and in the weekends visiting Coco's maternal grandparents, playing at parks and playgrounds, and attending church and water polo games. Family occupations that carried greater significance for Coco and her family, or family rituals (Matuska & Barrett, 2014), included spending quality time together such as at home watching a movie and sharing a special meal, visiting extended family, or attending religious events throughout the year. As in other studies where co-occupations like spending time together as a family during mealtimes had been shown to be conducive to family unity (Orban et al., 2012), Coco's family maintained a routine of eating meals together in the evenings. This was important to them and was considered a time of togetherness. However, these evening mealtimes were routinely spent watching TV and consequently increased overall TV viewing time for the tamariki/children, possibly reinforcing Coco's habit of watching a lot of TV and potentially creating a risk to her long-term health (Domoff et al., 2017).

It has been argued that studies about child poverty show that opportunities to spend time together as a family in shared occupations are constrained by restricted budgets and parents' availability (Andresen & Meiland, 2017). New Zealand time-use data has shown that work commitments reduce fathers' time spent in childcare-based occupations (Statistics New Zealand, 2013). Equally, this study showed the way in which poverty related factors such as the father's working conditions, an inability to afford the costs of travel or potential for unexpected expenses associated with long distance travel (e.g., the older family car breaking down) impacted on family occupations. This led to disruptions in family rituals (e.g., not spending Christmas together), in regular time spent together as a family, restricted ability of Coco's father to participate in her occupations (e.g., Coco's water polo games, or spend time playing computer games together at home), and constrained opportunities to visit extended

family out of the city. This finding further supports the premise that poverty has a wide spread impact on a child's and her/his family's patterns of occupation.

Meeting food security needs for a whānau/family is vital if tamariki/children are to maintain their health (Utter et al., 2012), sustain their engagement in occupations and is the right of every child (Andresen & Meiland, 2017; Wynd & O'Brien, 2014). Free food in school programmes have been seen as a positive part of the solution to meeting the dietary needs of tamariki/children from poor families (Children's Commissioner, 2013). However, tamariki/children who do not have adequate food or who receive free food at schools targeted to those who are poor, has been shown to lead to stigma, judgement and feelings of shame (Moore & Bailey, 2017; Ridge, 2011). Whilst some studies have identified shortcomings in free school-based breakfast programmes (e.g., does not improve school attendance or academic performance) (Mhurchu et al., 2013), overall the body of research demonstrates the benefits (Children's Commissioner, 2013). These include improved satiety and nutrient uptake for tamariki/children, positive social effects such as doubling as a place to socialise or complete homework, and in the longer-term can lead to better academic results by helping to address important health issues such as obesity (Black, D'Onise, McDermott, Vally, & O'Dea, 2017; Wynd & O'Brien, 2014).

The child in this study did not identify issues such as stigma or shame associated with her participation in the free school breakfast programme, but she and her brother did report aspects of the programme's administration they found to be unpleasant (e.g., being hurried through the breakfast and being shouted at). Furthermore, what is not identified in the current literature, and that was discovered in this case study, is how the need to organise and get tamariki/children to school early enough for the breakfast programme places increased pressure on the family's morning routine making it hectic and rushed. While the breakfast programme does benefit these tamariki/children through access to a nutritious breakfast, it also results in decreased time together as a family during weekday mornings. A number of studies have highlighted the importance and benefit of sharing in regular meals as a family such as promoting healthy diets, positive role modelling, improved psychosocial functioning, providing structure, and a sense of togetherness and security for tamariki/children (Berge et al., 2018; Fulkerson, Neumark-Sztainer, & Story, 2006; Watts, Loth, Berge,

Larson, & Neumark-Sztainer, 2017). Additionally, the tamariki/children also spend increased time in unsupervised occupations at school (e.g., approximately 1 hour/day after attending the breakfast club from 7:50-8:00am, with the additional time spent 'hanging out at school' with her brother or peers). In total, Coco spends approximately 21% of her week at school, which is higher than the average for New Zealand tamariki/children (i.e., 17%) (Statistics New Zealand, 2011).

The effect poverty has on a child's life roles. Social occupations and time spent with peers are important to tamariki/children particularly as they develop throughout the middle childhood stage (i.e., 6-12 years) into adolescence (i.e., 12-17 years), with teens increasingly spending more time with their peers (Andresen & Meiland, 2017; Cronin, 2015a; Vroman, 2010). It is recognised that being able to spend time in occupations that are an expected norm at any given life stage (e.g., for tamariki/children this includes playing and socialising with their friends) is important for a person's health and well-being (Erlandsson, 2013). Time spent in social occupations helps tamariki/children build social and cultural skills, a wide social network, and nurtures the growth of a child's self-esteem and identity (Cronin, 2015b). Potential consequences for tamariki/children who are not able to fully engage in social occupations such as for those growing up poor include feelings of shame or isolation (Egan-Birtan, 2010; Rice, 2006; Ridge, 2011). This case study also identified poverty as a constraining factor on a child's social occupations such as not being able to fully engage in the role of being a friend/peer in her neighbourhood. The percentage of time Coco spent in play with her friends out-of-school was non-existent, other than in the organised clubs or sports she engaged in. The total percentage of time Coco is engaged in social occupations is approximately 4% of her week and this is less than half the average time New Zealand tamariki/children (i.e., under 15 years of age) spend in social occupations (i.e., 8% of the week), based on time use data (Bascand, 2011).

A range of studies have described the poverty related reasons for tamariki/children's restricted time with peers including housing issues (e.g., overcrowding, low quality housing, transience, homelessness), quality of the neighbourhood (e.g., safety concerns and socio-spatial structures), the costs of accessing leisure occupations with peers (e.g., transport or fees to attend activities), not fitting in with their peers (e.g., don't have the right clothing or missing out on activities their peers engage in),

bullying, stigma and a sense of shame (Andresen & Meiland, 2017; Egan-Birtan, 2010; Rice, 2006; Ridge, 2011). What this case showed was that it was a combination of factors that reduced participation in out-of-school social roles including parental concerns for safety in the neighbourhood, that were viewed differently by the child (i.e., Coco did not share the same level of concern as her parents), and restricted space within the family home along with the potential for feelings of embarrassment when visitors enter the home. However, the importance of parents and the community in terms of supporting the social networks for tamariki/children growing up in poverty has been highlighted (Andresen & Meiland, 2017; Egan-Birtan, 2010). The support of Coco's parents, partly facilitated by adults (e.g., local minister, teacher/sports coach) and organisations within her community enabled her time spent in organised, group-based social occupations such as water polo, youth group and Girls' Brigade. However, these came at a cost in terms of the family incurring a mounting debt related to failure to pay the associated fee.

Walking can offer tamariki/children informal opportunities for socializing and this was highlighted in a recent study exploring active transport amongst tamariki/children from disadvantaged neighbourhoods (Veitch et al., 2017). Adding to this, the findings from this case study showed that time spent by Coco in the co-occupation of walking, at a slowed pace (i.e., dawdling), home from school each day and to water polo training, allowed for incidental time with her friends. Co-occupation is the shared engagement by two or more persons in an occupation (Orban et al., 2012). This habit of dawdling helped to compensate for the constraints in her out-of-school social occupations with her peers. So, as in this case, whilst on the one hand poverty is impacting on a child's ability to engage in social occupations with her friends (e.g., visiting her home or their home, or free play in the neighbourhoods) other occupations can create opportunities to maximise opportunities for social interaction.

Another important role for tamariki/children as they enter adolescence, alongside being a family member, student, friend, or team mate, can be engaging in a paid work role (Cronin, 2015a). However, for tamariki/children and younger adolescents engaging in paid work roles is usually not expected or is limited due in part to their age, employment laws, their need to engage in formal education and other extracurricular commitments (e.g., recreational occupations) (Cronin, 2015a; Vroman,

2010). However, many young people perform part-time paid work while at school, with much of this being more informal or 'invisible' paid roles (e.g., family-run businesses, caring for family members, babysitting, fundraising activities with a sports team), and many teenagers increasingly take on paid work roles as they move through this stage in life towards leaving high school and entering adulthood (Anderson, 2010, Nov; Cronin, 2015a; Roth, 2010). For tamariki/children who grow up in poverty, the need to become involved in paid work roles often starts earlier than for other tamariki/children, they may feel pressure to contribute to their family's finances, and consequently work roles can impact on their lives (e.g. interfering with their school work) (Egan-Birtan, 2010; Ridge, 2011). In this case study, Coco and her brother were required to engage in an informal paid work role alongside her mother in order to raise the funds to attend a tamariki/children's summer camp. While there are aspects to this paid work role that are beneficial (e.g., developing vocational skills), the work she performed was at a low rate of pay and impacted on their daily family routines such as having to perform the work early in the morning before school, after school and in the weekends.

Missing out on children's occupations. While other studies have described a range of tamariki/children's occupations that are restricted by poverty (Andresen & Meiland, 2017; Ridge, 2011; Sarti et al., 2015), this study contributes to the small body of New Zealand specific literature on the topic (Egan-Birtan, 2012; Maddison et al., 2016; Q&A Research, 2014; Sport New Zealand, 2018). The findings of this study, however, provide detail and depth about the types of occupations and the poverty related factors that constrain participation for a child. As with other studies, the factors that constrained Coco's occupations included distances to reach locations and costs of occupations (e.g., fees, equipment), lack of resources (e.g., lack of digital devices in the home, parental time, size of whānau/family home), quality of the neighbourhood and parental concerns for their tamariki/children's safety. A unique finding from this study was the extent to which parental concern for unexpected consequences of engaging in some tamariki/children's occupations may have on the family's restricted budget. Examples include free water-based play during summer months and the risks of regional council fines for high water use, or the risk of health

or injury issues arising out of some freely accessed occupations (e.g., playing in local rivers or parks).

As a consequence of these combined constraints, Coco's occupational choices were restricted and led to reduced participation in a range of tamariki/children's recreational, social and cultural occupations. These included not being able to join a school led overseas exchange visit, unable to join a tamariki/children's community-based club, not able to engage in paid recreational and cultural groups (e.g., arts, craft, dance, drama, singing), not able to afford going out for meals or to the movies, not able to participate in shopping for social and recreational purposes, restricted social time with friends out-of-school, and restricted travel out of town with her family (e.g., visits to beaches, national parks or recreational sites, and visiting extended family). However, the level of support from her parents and other adults and organisations in her community did mitigate, to a limited extent, the degree to which her participation was constrained, by facilitating her weekly involvement in school, a sports team, and group/clubs (e.g., youth group and Girl's Brigade), physical occupations (e.g., playing in parks) and time with family (e.g., visiting locally based grandparents).

As in other studies about child poverty, participation in physically-based occupations are constrained (Maddison et al., 2016; Q&A Research, 2014; Stalsberg & Pedersen, 2010). For example, Coco would have liked to play representative level water polo for her region, as she proved she was skilled enough, but her family could not afford the extra costs involved (e.g., fees, equipment, or associated travel costs). Other sports where Coco could not participate due to costs included softball and netball. The family had been gifted free 2nd hand bicycles for the tamariki/children, but they were not used as they could not afford the costs to repair them and did not have the necessary accessories (e.g., bike locks). In the case of the only sporting occupation Coco regularly engaged in, or water polo, there were relatively low costs for the family, as the fees were relatively low, minimal equipment was required and many of the associated costs were met by the school and the Water Polo Association.

While the value of free play for tamariki/children has been shown to be beneficial (i.e., enhancing learning, social skills and creativity) (Cronin, 2015b; Vroman, 2010), it was constrained for the tamariki/children in this study due mainly to parental concerns for

their safety in the neighbourhood. Other studies have identified both parental concerns and safety in low SES neighbourhoods as reasons for tamariki/children's restricted free play (Kimbrow & Schachter, 2011; Redmond, 2009; Sarti et al., 2015). The New Zealand Expert Advisory Group (EAG) set up to examine solutions to child poverty discussed the need to provide more play grounds and parks for tamariki/children living in socioeconomically disadvantaged neighbourhoods (EAG, 2012). However, whilst the local government in the city where this case study was conducted, invested significantly into the development of a well-resourced tamariki/children's playground in the child's community, its use by tamariki/children was hampered by the presence of gang members particularly at certain times in the day.

As with other studies about poverty and its impacts on tamariki/children's occupation, this case study showed that geographical location was an important factor. A number of studies have highlighted that poor tamariki/children are hindered in their access to occupations by the long distances needed to get there (e.g., the costs of travel or the lack of transport options) (Andresen & Meiland, 2017; Ridge, 2011; Sarti et al., 2015; Stalsberg & Pedersen, 2010). This study confirmed that most of the occupations Coco performed were within a 1.5 km radius of her home, with walking being a prominent mode of transport. The main constraints in transport for the family in this study were the costs of travel by car - having one, older family car, with the consequent risks of mechanical breakdowns that became more likely with longer travel, the cost of petrol, the price of public transport, and not having working bicycles and necessary accessories (e.g., bike locks). A number of recreational facilities (e.g., swimming pools, other parks and playgrounds) are located at some distance from their neighbourhood thus incurring travel expenses and some facilities had additional costs that the family could not afford (e.g., swimming pool entry fees).

This case study revealed that Coco spent more time in passive or sedentary occupations (e.g., TV/computer viewing totalling 17% of her week) compared to active or physical occupations (e.g., sports, walking, active occupations at school totalling 15% of her week) after excluding activities of daily living (ADLs) such as sleeping or personal care. If the active occupations at school are excluded, leaving only sports, clubs, playing at parks and walking, then the level of active occupations drops to 9%. This high level of sedentary occupations, if continued into adulthood, places Coco at

higher risk of health problems (e.g., coronary disease, obesity) (Atay & Bereket, 2016; Ministry of Health, 2017b).

However, the support of her parents and selected adults in her community help keep Coco engaged in healthy, active occupations (e.g., clubs, sports, playing in parks/playgrounds, physical activities at school) for at least some of her spare time, and with the regular walking that Coco performs, together partly counteract her high level of sedentary occupations. Walking as a form of active transport has been identified in other studies as occurring frequently for tamariki/children from low SES backgrounds (Maddison et al., 2016; Stalsberg & Pedersen, 2010) and therefore can contribute in a positive way to their health (Turrell et al., 2013; Veitch et al., 2017). The routine way that Coco uses walking for transport and the family's regular patterns of playing at parks/playgrounds in the weekends, further highlights how aspects of being poor (e.g., restricted access to a car for transport, or looking for free tamariki/children's occupations) can affect a child's patterns of occupation in a positive manner.

Digital technology is a feature of modern life including access to the internet, mobile or smart phones, tablets and laptops and features quite predominately in tamariki/children's lives during the middle and adolescent stages (e.g., between the ages from 6-12 years and into adolescence) (Cronin, 2015b). Whilst it is necessary to monitor both time spent in and content of digital-based occupations as some aspects of this technology can have adverse effects on tamariki/children and adolescents (e.g., cyber bullying, internet addiction), it can also have its advantages. These include complementing school-based learning (e.g., a school project), increasing access to clubs and sports groups, opportunities for self-expression, support from peers, and facilitating social relationships (e.g., social media) (Cronin, 2015a, 2015b). For example, a US study reported that the majority of teenagers found social media helped in their relationships (Common Sense Media, 2012). However, tamariki/children from low SES backgrounds can have limited access to digital facilities and this can have consequences for them such as reduced educational outcomes (Boston & Chapple, 2014). As with this case study, Coco had restricted access to digital technology having only one, older computer that needed to be shared amongst the whole family and at home she had no access to mobile/smart phones, I-pads, portable laptops, or gaming

devices (e.g., X-Box). The restricted access was due to parental concern for tamariki/children's safety when accessing the internet, restricted resources and an inability to pay for digital devices. This constrained access to technology further limited Coco's level of social interaction with her peers such as not being engaged in forms of social media and meant that she was not able to use these devices to her benefit in other ways (e.g., for educational purposes).

Coping strategies: For a child living in poverty. As in this study, other research has highlighted how tamariki/children who live in poverty develop coping strategies such as curbing their needs and expectations, utilising their support networks and community resources, or maintaining a sense of optimism (Attree, 2006; Egan-Birtan, 2010; Kintrea et al., 2015; Ridge, 2011). Coco has personal characteristics (e.g., energetic, outward going personality, a desire to help others and leadership traits) and has developed a range of strategies that support her participation in occupations. These include spending time alone and in recuperative occupations, engaging with and utilising supports within her community (e.g., being part of community events or a local youth group), curbing her desires for material wants and thereby living within her whānau/family's means (e.g., buying cheaper 2nd hand shoes and clothing or not asking for the latest tamariki/children's toys), having a sense of optimism for her future (e.g., dreams of travelling overseas), and placing value in non-material assets such as her family being together. These coping strategies and personal characteristics, along with parental and community support, were seen by the adults that supported Coco, as an indication of her resiliency and as offering hope that she would grow and develop to realise her full potential in life despite her family's poverty.

Social capital and support from parents. The importance of whānau/family and community support for tamariki/children growing up impoverished has been identified in the literature as helping to build tamariki/children's resiliency or skills required to cope with the negative effects of these circumstances. This includes having loving, caring parents, positive community resources, and engagement in tamariki/children's essential daily occupations such as school (Carswell et al., 2017; Egan-Birtan, 2010; Marmot & Bell, 2013). Equally, in this case study, Coco's parents are caring and despite the family's quite severe material limitations, they do their best to enable their tamariki/children to participate in a range of positive tamariki/children's

occupations (e.g., a sports teams, playing in parks/playgrounds, and clubs such as a youth group and Girls' Brigade). Coco's mother also acts as a positive role model teaching her tamariki/children valuable life skills (e.g., budgeting skills) and morals (e.g., religious principles that are important to the family).

Whilst the neighbourhood is classified as a high deprivation area and resources are constrained overall (e.g., neighbourhood cohesion was low), there is a degree of positive social capital that exists in the extent to which the local community provides support for Coco to participate in occupations. This includes opportunities for healthy tamariki/children's occupations (e.g., tamariki/children's playgrounds, a Kids' Club and a Youth Group), a supportive school (e.g., minimising the costs to families for their tamariki/children's participation in school occupations, providing a free breakfast in school programme), and additional resources for the family (e.g., gifts of money and food from the local church, or free bikes from the community centre, and support from NGOs). However, when accessing these supports the family typically needs to share their personal details, or expose themselves to some degree of monitoring by these agencies and the input or resources provided does not meet all the needs of the tamariki/children (i.e., they still experience restricted participation).

Government support for a family living in poverty. The primary government support for the whānau/family comes in the form of targeted assistance or Working for Families Tax Credits (WfFTC). Other supports include the state funded schools the tamariki/children attend, a financial contribution to their accommodation costs, and a contribution to the free breakfast programme at the local schools. However, in terms of parents' experience of utilising the WfFTC, it is a complex process that requires the parents to regularly keep the state agency informed about their level of income and hours worked each week, with a loss of entitlements if their paid work hours drop below a certain threshold (i.e., 30 hours/week). The complexity of this benefit package, the constant monitoring of their income and level of work, along with the ever-present threat of reduced assistance make this a stressful process for the parents.

Targeted approaches apply only to those who qualify for criteria such as having a low enough income. Alternatively, a universal approach provides support to all citizens

regardless of their financial status. Both approaches have their merits (Boston & Chapple, 2014; ECC, 2011). For example, universal assistance has the advantage of having less administrative costs, is less intrusive, results in no associated stigma, but does have a higher fiscal cost and can benefit those who don't require the assistance. On the other hand, targeted assistance approaches cost less, aim assistance towards those who specifically require it, but do have higher administrative and compliance issues, can create stigma, require significant monitoring, and do not raise incomes above relative poverty levels (Boston & Chapple, 2014).

The WfFTC package was introduced in 2004 by the previous Labour-led government and has been described as one of the most effective government introduced financial initiatives in alleviating childhood poverty in New Zealand (Perry, 2017a; Simpson et al., 2016). However, the policy has been criticized for not including families on welfare benefits (CPAG, 2011), is complex (e.g., aims to create an incentive to work whilst also reducing child poverty), does not acknowledge the unpaid work of parents/caregivers and has not helped some of the worst off families (e.g., those dependent on benefits) (CPAG, 2016). Evidence from the United Kingdom (UK) has shown that amongst the changes introduced by the then UK Labour-led government (i.e., 1997-2010), to tackle child poverty, increased benefit payments for those both in and out of work were the most significant factor in reducing child poverty in the UK (Dickens, 2011).

It is suggested that in New Zealand, a balanced approach such as proportionate universalism, is required in order to achieve a fair and sustainable solution to child poverty (Boston & Chapple, 2014; ECC, 2011). Proportionate universalism delivers assistance to all tamariki/children, but its adjusted to provide greater resources to those at the lowest end of the socioeconomic spectrum or those in greatest need (Marmot & Bell, 2012). Successful examples of this approach are found in the Nordic countries (see Figure 1.3) where there is a high level in transfer of resources socially, such as the investment in early childcare education, with universal entitlement and respectful integration of tamariki/children from all socioeconomic backgrounds (ECC, 2011).

A benefit package based on a proportionate universalism approach for poverty stricken families that does not rely on a complex, targeted process and that is available

to all families whether working or not, would be more effective in reducing childhood poverty as it would reach those at the lowest end of the poverty spectrum (i.e., those on benefits, unemployed or reliant on casual contracts) (CPAG, Boston & Chapple, 2014; 2016). This study highlighted the complexity of the WfFTC, where a family having around the specified minimum hours to be considered 'employed' experience increased stress (i.e., due to monitoring/reporting requirements) and financial insecurity. Categories such as 'employed', 'on a benefit' or 'unemployed' are treated as relatively stable sources of income, but working 'on call' or casual hours like Coco's dad does mean that for an increasing proportion of the workforce their income is highly unstable (New Zealand Council of Trade Unions [NZCTU], 2013; Wigglesworth, 2016). A more inclusive WfFTC would require more funding in order to be accessed by a greater number of families in need, but it would likely be less of a burden on these families (i.e., less complex), and involve less administration thereby reducing associated costs.

The Expert Advisory Group on Solutions to Child Poverty (EAG) recommended a range of interventions to help reduce child poverty in New Zealand. These included increasing government-based payments to low income families, improved access to quality housing, education and employment opportunities, free child care for parents who are working, free primary health care for all tamariki/children, and with a particular focus for tamariki/children of Māori and Pasifika ethnicity and those with disabilities due to the recognised disparity and high rates of poverty for these groups (EAG, 2012). However, an occupational perspective to the issue is less visible in the solutions they provide.

Implications of the Findings

The findings from this case study help to develop an occupational perspective about child poverty (i.e., how it affects a tamaiti/child's patterns and participation in occupations). There is support for the premise that child poverty is occupationally unjust and creates occupational deprivation. The study sheds new light on the bi-directional relationships that exist between poverty, health and occupation and the impact this can have on a child's development and life course. Poverty has both direct and indirect effects on a child's occupations, with social and environmental factors as well as the child's and her family's agency, contributing to the dynamic transactions

that are at play in the child's life. In other words, using the WHO's Conceptual Framework of the Social Determinants of Health, both intermediary determinants (e.g. living in poverty) and structural determinants (e.g., a current lack of effective government policy on alleviating child poverty, and the socioeconomic position of the family) combine to constrain participation and patterns of occupations for a child, that has implications for their future health and wellbeing. Additionally, the findings can contribute to the development of occupational therapy practice and education in this field and could contribute to future child poverty policy (i.e., by highlighting the occupational implications of child poverty).

Occupational perspective. One of the aims of this study was to develop an occupational perspective about the issue of child poverty. The findings detail the way in which poverty affects a child's patterns of occupation and how her/his choice and participation in tamariki/children's occupations is constrained. This entails restrictions in the choice of and participation in a wide array of recreational, social, cultural and whānau/family occupations due to poverty related factors (e.g., low income and resources and neighbourhood safety concerns). Collectively, this impacts on a child's patterns of occupation, causing disruption and unhealthy habits such as increased levels of sedentary occupations, or restricted opportunities for study out of school that may have negative and life-long consequences for a child. As in this case, constrained access to computer-based devices can affect a child's educational engagement outside of school (i.e., homework) and may have a negative impact on their success. This is despite the government's desire to promote information technology competency for tamariki/children in the school curriculum (Ministry of Education, 2017) and more broadly as part of a national health strategy (Ministry of Health, 2016b). Being channelled towards sedentary occupations at home and exposed to dietary habits that do not maximise health (i.e., meals out of cans, low intake of fresh fruit and vegetables) may undermine a child's performance (e.g., the teacher's concerns about ability to concentrate at school) and limit occupational potential throughout her life course (e.g., lost opportunities to pursue occupations for which they display aptitude). However, aspects of the family's materially constrained circumstances had positive consequences such as spending time together during mealtimes and at parks and playgrounds in the weekends, the health benefits that arise from regular walking, or

learning life skills through parental role modelling or during engagement at clubs and groups in the community.

Occupational injustice. Whilst it can be said that the tamaiti/child in this study has developed a range of strategies to cope with her socioeconomic disadvantage that, alongside parental and community support, enable her to participate in her education and a number of other tamariki/children's occupations (e.g., self-care, play, recreations), her right to engage freely and fully in her choice of occupations is constrained by poverty. There are many instances where Coco is not able to participate in tamariki/children's occupations that are meaningful for her and this potentially leads to disadvantages in her health and well-being. For example, not being able to engage in regular physical activity within her neighbourhood due to concerns for safety or due to the costs of occupations is creating unhealthy sedentary habits that pose potential risks to her health in the long-term. This, and many other restrictions in her ability to participate in occupations is an impingement of her basic rights as a child. Likewise, these external factors that constrain her engagement in occupations such as her family's level of poverty can be viewed as a form of occupational deprivation (Whiteford, 2000). That is, she is denied the opportunity to participate in occupations that she finds to be personally, socially and culturally meaningful to her due to external factors beyond the family's control (Shaw, Jacobs, & Hocking, 2012). This occurs, for example, when she is not able to fully engage in social occupations with her peers that are deemed to be normative for her life stage and in her society (e.g., socialising with her friends in her neighbourhood, or using social media to enhance social relationships).

Bi-directional relationship: Poverty, health and children's occupations.

The relationship between poverty, health and occupations is complex and not that well understood (Leadley & Hocking, 2017). Studies have described the bi-directional relationship between poverty and health (Anakwenze & Zuberi, 2013; Lee & Jackson, 2017) and others have discussed the inter-relationship between income, wealth and opportunity (Nana, 2013). This study, however, helps to elucidate this topic further in that a number of instances of this relationship were evident. One such example is the effect that poverty had on Coco's patterns of occupation by influencing her TV watching habits, where she spends a lot more time in this occupation than is

recommended. In turn, this sedentary habit is associated with health risks such as obesity.

A further example involves the effect of poverty in constraining her social occupations such as being unable to have friends at her home or visit them in their homes, and also having no access to digitally-based social media to enhance her friendships. These constraints may consequently be causing increased feelings of stress, diminished self-esteem and negatively impacting on the development of her self-identity. In the longer-term this may impact on her mental health and well-being. Equally, the ICF Model could be used as a framework to explain the interaction between poverty, occupation and health. Where personal (e.g., family poverty) and environmental (e.g., deprived neighbourhood) factors combine, leading to increased sedentary activities and reduced participation in physical occupations, this creates risk to a child's health (e.g., obesity). An alternative and positive example of the bi-directional relationship is the support of Coco's parents and community for her education, that potentially increases her opportunities to access future educational and employment pathways. The bi-directional relationships highlighted, further demonstrate the complex interplay of factors that combine to affect a child's occupations. These conclusions, although evidenced in this case study are tentative as these are based on a single case study only.

Occupational therapy practice. Occupational therapy practice in the field of child poverty has not been widely discussed in the profession's literature and the evidence supporting the effective role of the profession has consequently not been well developed (Leadley & Hocking, 2017). Drawing on the findings of this case study, several tentative recommendations are suggested. Occupational therapists could work to address the impact of poverty on tamariki/children's lives by addressing a range of areas including: increasing access to physically-based and meaningful tamariki/children's occupations, working to improve safety for tamariki/children in low SES neighbourhoods, maximising tamariki/children's engagement in their education, advocating for alleviation of poverty to enhance tamariki/children's access to occupations at local and national governmental levels, providing education for occupational therapists about child poverty and seeking/creating employment opportunities (e.g., NGOs) for occupational therapists to work in the field.

Occupational therapy in the community. Occupational therapists could be employed to reduce barriers to participation in healthy, physical occupations by collaborating with communities and agencies to reduce costs of occupations, providing transport options, creating new opportunities for physical occupations (e.g., opportunities for safe, accessible, free physical sports or recreations in a child's neighbourhood) and providing education on the importance of a healthy lifestyle. This would be particularly important for those facing the most severe levels of poverty, and for tamariki/children in poverty from Māori and Pasifika ethnicities who experience higher rates of poverty (EAG, 2012). For the tamaiti/child in this case study, the development of sedentary habits potentially places her health at risk in the long-term. This risk could be reduced by working with agencies who support tamariki/children's engagement in physically active occupations to ensure they target tamariki/children in poverty and with agencies working with families in poverty to ensure their input includes opportunities for active lifestyles. Other measures include reducing barriers such as costs and resources required to participate in physical occupations such as fees (e.g., to join a sports team, club, or swim at a pool complex), equipment (e.g., sports gear), transport (e.g., bus fares) and support from adults. Simple measures such as ensuring tamariki/children have working bicycles with the necessary equipment (e.g., bike locks, safety gear) could improve levels of physical activity and improve transport options for these tamariki/children. Other barriers such as concerns for neighbourhood safety that constrain free play, or regular walking could be addressed by collaborating with the parents and the community such as education for parents and tamariki/children on staying safe in their neighbourhood, facilitating community-based adult supervision, and working with local gangs to reduce risks of violence or intimidation.

Occupational therapy input might help to further address important health risks (e.g., obesity, diabetes, cardiovascular disease) for tamariki/children growing up in socioeconomically disadvantaged communities (e.g., promoting healthy eating habits and engagement in physical and productive occupations such as gardening) (Cahill & Suarez-Balcazar, 2009). Support and education could be provided for families about the importance of sharing meals together without the presence of TV (Thompson et al., 2015). However, given findings from this study, poverty related factors such as

limited space in the house and the satisfying aspects of primetime TV viewing routines would need careful consideration. Based on the findings of this and other studies, it is necessary to address any socioeconomic barriers related to these interventions such as costs and resources, and that these strategies meet the cultural needs of Māori and Pasifika tamariki/children and other at risk groups (e.g., refugees). By making the input free, providing support and resources, locating these in the child's neighbourhood, and collaborating with Māori, Pasifika and refugee communities, some of these issues could be addressed (EAG, 2012; NZCPHM, 2017).

Tamariki/children need the opportunity to participate in the full array of occupations to ensure they achieve their maximum potential. This includes social occupations such as being able to spend time with friends, develop social skills, relationships and networks that are vital to their self-esteem, identity, mental health and well-being (Case-Smith, 2010; Cronin, 2015a, 2015b; Vroman, 2010). As discussed previously, poverty can constrain tamariki/children's social occupations in several ways such as living in a low quality house, restricted ability to participate in recreational and social occupations with peers or through stigma (Andresen & Meiland, 2017; Egan-Birtan, 2010; Rice, 2006; Ridge, 2011). Several of these factors restricted social occupations for the child in this study. However, occupational therapy based strategies to address this need could involve collaboration with the community to reduce risk to tamariki/children in their neighbourhood, education for parents and tamariki/children about safety issues, providing adult support, reducing costs and resources required to participate in social occupations and maximising opportunities for appropriate social occupations (e.g., clubs, groups, walking with friends, free play, social media). Where access to the internet or to digital devices is restricted or if there are concerns about tamariki/children's safety online, occupational therapists could work with families and communities to improve free access (e.g., locate free digital devices at a community centre) and provide education about internet safety (Cronin, 2015a).

Occupational therapists in schools. Support for whānau/families that maximises their tamariki/children's engagement in school-based occupations is essential, in order for them to have a successful educational pathway (Boston & Chapple, 2014; Cronin, 2015b). While the school in this case study received a high level of government funding and kept costs for families to a minimum, money was still

needed for school donations, school camps and overseas trips that were beyond reach. Partnering with schools to create alternatives to overseas trips such as enriching occupational opportunities (e.g., adventure and outdoor recreations, or social and cultural trips within the country), that are free, supported, and accessible could help reduce the disparity between families who can and cannot afford such experiences for their tamariki/children.

Tamariki/children growing up in poverty are more likely to have negative experiences of school, have restricted access to digital technologies, higher rates of truancy and ultimately lower rates of educational success (Boston & Chapple, 2014; Haig, 2014). Whilst the child in this study attended a well-supported school and did not discuss many negative experiences at school, she did have restricted access to digital technologies at home that could have otherwise enhanced her learning opportunities and participation in after school educational occupations (i.e., homework). To help counter these constraints to fully engaging in education, occupational therapy led afterschool groups that provide opportunities for enriching and rewarding occupations and skill development have been shown to be effective in helping tamariki/children who live with poverty (Bazyk & Bazyk, 2009).

Future research. It is widely recognised that tamariki/children need and have a right to nutritious food, that this is linked to their occupational performance and that tamariki/children from poor backgrounds are more likely to miss out on regular healthy meals (Black et al., 2017; Children's Commissioner, 2013). School breakfast programmes have been shown to be a positive intervention for tamariki/children from low income families (Children's Commissioner, 2013; Wynd & O'Brien, 2014). However, this case study showed that although the tamariki/children were provided with a nutritious breakfast and this helped the whānau/family in terms of managing their restricted budget and to meet their weekly food requirements, it also had negative consequences. These included an increased pace to the morning routine, tamariki/children reporting being shouted at by the busy programme coordinator, and having to spend significant amounts of unproductive time at school, as well as missing out on time spent as a family during weekday breakfasts. While some of these issues can be corrected by improvements to the way the programme is administered (e.g., following best practice as advised in the Children's Commissioner's food in schools

report (2013)), a practical solution could be to provide families with the resources required to share in healthy, morning mealtimes together, at home. However, this option might not be suitable for all families living in poverty (i.e., where there are issues of neglect), and advice on food choices that aligns with health promoting information should be provided (Black et al., 2017). The findings from this study, balanced with the current evidence indicate the need for further research about how best to meet the dietary needs of tamariki/children from low-income families, whilst acknowledging some of the limitations highlighted by this study.

Restricted participation in occupations may be more pronounced for tamariki/children from families in the most severe levels of poverty, where there is neglect or abuse, for tamariki/children facing homelessness, with single parents, tamariki/children of refugees, and for families who have tamariki/children with disabilities. While these issues were not present in this case study, they occur with a higher probability for those facing persistent poverty (Duncanson et al., 2017; EAG, 2012; Rosenbaum & Johnson, 2013). Occupational therapy has been shown to be effective in addressing issues associated with homelessness for youth (e.g., fostering occupational skills, enabling engagement in meaningful occupations) (Aviles & Helfrich, 2006; Kronenburg, 2005; McDonald, 2006) and addressing the needs of tamariki/children from low SES backgrounds who have disabilities (e.g., improving access to playgrounds and recreational facilities) (Rodger & Ziviani, 2006). However, more research needs to be conducted about the impact of poverty on occupations, and the potential role of occupational therapy for these groups of tamariki/children.

This case study has highlighted the affect poverty has on a child's patterns of occupation, and the restriction in choices and participation in a full array of occupations that this brings. This is despite the best efforts of her family and the community to support tamariki/children like her, as well as the child's own coping strategies. As a consequence, this child's fundamental rights to engage in occupations are being constrained and this creates risks to such tamariki/children's health and well-being. However, these findings are based on a single case study which has limitations. Future research could include multiple cases, or utilise different methodologies, or begin to explore the effectiveness of occupational therapy interventions for tamariki/children living with these material constraints.

Child poverty policy. Expert advice to the New Zealand government on solutions to child poverty include key strategies such as using proportionate universal approaches to providing funded supports for whānau/families in poverty, improving access to healthy homes, improving educational and employment opportunities for these tamariki/children, improving opportunities for safe and healthy play in low socioeconomic neighbourhoods, reducing disparities for those of Māori and Pasifika ethnicity and those with disabilities, and supporting existing effective initiatives within these communities (EAG, 2012). However, this report does not include an occupational perspective to child poverty and the many opportunities for occupational therapy to contribute to addressing the problems that have been discussed above. Even though this study is limited to drawing evidence from a single case study, and further research is warranted, it provides insights into how the profession can contribute to policy in this area. For example, by ensuring that policy aims to address the needs of tamariki/children to be freely and fully engaged in all aspects of their daily occupations and that barriers to participation are reduced and occupational choices enhanced.

Occupational therapy can provide advocacy for tamariki/children and whānau/families who experience the effects of poverty on their occupations, with the aim to alleviate and address these issues, especially for those who are most at risk (e.g., Māori and Pasifika, those in severe poverty, and those with disabilities or from a refugee background). This could include the need to decrease costs and other barriers to participation in tamariki/children's occupations, and reduce the negative impact on tamariki/children's habits, roles and family routines. Also support for families who have limited access to digital technologies in the home for educational, recreational and social purposes. As well as advocating for improved housing for low income families (e.g., warm, well ventilated and suitably sized house).

The family in this case study experienced constraints in their ability to spend time together, or in visiting extended family members due to the father's working conditions and due to costs of travel out of the city. Whilst this is not necessarily a role for occupational therapists, the profession can advocate for improved remuneration and working conditions for parents in low-income families and work with these families to find strategies to enhance time together as a family (e.g., through stress management or self-care strategies for the parents).

Limitations of this Research

Whilst there is much insight to be gained in a singular case study and the importance of this should not be diminished, additional cases in this study may have provided comparisons between cases adding further to the insights gained. Additionally, while some readers will question the usefulness and perhaps rigour of a single case study, the aim is not to generalise from the findings to the wider population. Instead, the purpose is to learn as much as we can from a detailed and in-depth enquiry from time spent examining a single case, that can help inform the research question. Naturalistic generalisations and vicarious understandings, as well as having a richer understanding of the research topic are intended benefits of this type of study (Simons, 2009; Stake, 1995).

Other limitations in this study may include my lack of experience as a researcher (i.e., this being at a master's level versus a PhD), and in research with tamariki/children. This might have contributed to some of the limitations already discussed in data collection such as in the reduced use of arts-based methods. However, this needs to be balanced with the wide range of successful data gathering methods employed in this study, and the constant support and advice of two experienced supervisors (i.e., with a proven track record in occupational science and child research) which has been invaluable in completing this study.

Four key theoretical perspectives helped guide this study including interpretivism, transactionalism, life course theory and occupational science. This case study enabled the perspectives of the participants about the topic of enquiry to be understood, whilst also enabling me to develop my interpretations of the findings, thus supporting the use of interpretative theory. Through the use of transactional theory this study was able to better understand the phenomenon of poverty's effect on the child/participant's occupations, in the context of her everyday life (i.e., home and neighbourhood) and where there was a complex interplay between the whānau/family's material circumstances, and their wider environment (e.g., social and physical features of the community). Life course theory helped shed light on the typical features of the life stage examined (i.e., a child between the age of 10-13 years) whilst also taking into consideration the broader context and occupational processes that were occurring in the child's life (e.g., living in a state of material poverty, maturing as

a young adolescent, adjusting to restrictions in her socially-based occupations). Occupational science was a core guiding theory used throughout this study, providing the basis for the research question and associated case study issue statements, and enabled insights into how poverty was creating constraints in participation and altered patterns of occupation for the child and the affect this could have on her future health and well-being.

Conclusion

Growing up in poverty breaches tamariki/children's rights by restricting their full participation in occupations, creating stigma and social exclusion and by placing them at increased risk of negative health and well-being outcomes. This study has generated new insights into the ways in which child poverty has a wide-ranging adverse effect on a tamaiti/child's patterns of occupation that systematically constrain educational engagement, sporting accomplishments, the development of social networks, and embedding physical activity and nutritional habits that do not support health and well-being into adulthood. It is plausible to hypothesise that such impacts constrain vocational aspirations and outcomes. This thesis provides evidence to show that child poverty is occupationally unjust, reduces occupational potential, and can lead to states of occupational deprivation. However, much can be done to alleviate and eradicate the problem of child poverty and its deleterious effects. This includes a concerted effort by governments to take effective action, ensure a more equitable distribution of occupational opportunities, as well as evidence-based and culturally appropriate local initiatives that work to mitigate the immediate effects for these tamariki/children and their whānau/families. Occupational therapy has a role to play by promoting an occupational perspective in the discourse about child poverty, in that all tamariki/children have the right to participate to their fullest potential in occupations. The profession can advocate for the occupational rights of these tamariki/children and their families, provide advice in terms of child poverty policy and implement a range of practically and occupationally-based solutions that can improve the prospects for these tamariki/children and their whānau/families.

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Glossary

Hapū	A Māori term referring to a clan or a sub-tribe consisting of a number of whānau/families sharing a common ancestor (Moorfield, n.d.-c).
Iwi	“Extended kinship, group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory” (Moorfield, n.d.-a, para. 1).
Karakia	Māori term for prayer, or ritual chants (Moorfield, n.d.-c).
Kaumātua	A Māori term for an older man, or respected person with status (Moorfield, n.d.-c).
Manaakitanga	“Hospitality, kindness, generosity, support - the process of showing respect, generosity and care for others” (Moorfield, n.d.-b, para. 1). “Cultural and social responsibility” (Hudson et al., n.d., p. 19).
Marae	A Māori term that usually means the meeting place, courtyard, or buildings belonging to a hapū or iwi (Moorfield, n.d.-c).
Pākehā	A Māori term meaning a New Zealander of European or foreign descent (Moorfield, n.d.-c).
Taitamariki	A Māori term meaning youth (Moorfield, n.d.-c).
Tamaiti	A Māori term denoting child (Moorfield, n.d.-c).
Tamariki	A Māori term meaning children (Moorfield, n.d.-c).
Tangihanga	Māori term for funeral (Moorfield, n.d.-c).
Tikanga	“Correct procedure, custom, habit, lore method, manner, rule, way, code, meaning, plan, practice, convention, protocol - the customary system of values and practices that have developed over time and are deeply embedded in the social context” (Moorfield, n.d.-d, para. 1). “Protocols and practices” (Hudson et al., n.d., p. 19).
Tūrangawaewae	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.-c).
Whakapapa	The Maori term for one’s genealogy or family line of descent (Moorfield, n.d.-c).
Whakawhanaungatanga	A Maori term meaning a process of getting to know someone and forming a connection or a relationship (Moorfield, n.d.-c).
Whānau	A Māori term meaning family or extended family (Moorfield, n.d.-c).

Appendices

Appendix A: Results of data base search: Child poverty and children 's patterns of occupation.

Study: Case study research methodology investigating the topic of material poverty and its impact on children's occupations.

Research question: *How does material poverty affect a child's patterns of occupation?*

Step 1: Literature Search

The purpose of my literature search was to review recently published literature (i.e., in the last 10 years) about poverty and childhood poverty as this relates to my research question: *How does material poverty affect a child's patterns of occupation?*

Search 1:

Table 1: Search details – children 's physical health and poverty.

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases:CINAHL, MEDLINE). SCOPUS (** <u>2nd</u> figures are results from this database) [Limits: 2010-2017; journals & books; English]	<i>Date:</i> 2010-2017 <i>Scholarly</i> (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	1. child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND "physical health" 2. limited to: <i>All child</i> 3. AND "New Zealand" (without age limit) 4. Limited to: Geography: Australia & NZ	1,129/ 716** 498/ 150** 205 28

N.B. Search was further refined to articles most relevant to the topic (children , poverty, occupations); quality of study design; original research or literature reviews and systematic reviews. *After first refining, number of CP (child poverty) related physical health articles = 84.*

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 45. (Note many articles in the physical health search included child development material and thus the final number of articles from both searches was combined = 51.)

Search 2:**Table 2: Search details – children’s mental and emotional health, and poverty.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND “mental health”	1,138
		limited to: <i>All child</i>	502
		AND “New Zealand” (without age limit)	205
		Limited to: Geography: Australia & NZ	28

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related mental health articles = 65.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 26.

Search 3:**Table 3: Search details - children’s development and poverty.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND “child development”.	1137
		Limited to: <i>All child</i>	507
		AND “New Zealand” with limit:	28
		(Geography: Australia & NZ)	

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related child development = 28.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 6. (Note these articles were combined with the physical health search to create a new ‘physical health and child development’ category with the final number of articles from both searches = 51.)

Search 4:**Table 4: Search details – child’s education and poverty.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND education	1167
		limited to: <i>All child</i>	522
		AND “New Zealand” with limit: (Geography: Australia & NZ)	28

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related education = 36.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 24. (Combined total - Note many articles in the education search included work-related material and thus the final number of articles from both searches was combined.)

Search 5:**Table 5: Search details – children’s chores/work, future work and poverty.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND work AND chores	1128
		limited to: <i>All child</i>	498
		AND “New Zealand” with limit: (Geography: Australia & NZ)	28

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related work articles = 31.

A process of further review/refining (i.e., reading through abstracts/article for relevance to research topic): final number of included articles is = 24 (combined total - Note many articles in the education search included work-related material and thus the final number of articles from both searches was combined.)

Search 6:

Table 6: Search details – children’s play, recreation, sports and other activities and poverty.

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic; AND play; AND sport*; AND recreation*; AND occupat*	1128
		limited to: <i>All child</i>	498
		AND “New Zealand” with limit: (Geography: Australia & NZ)	40

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related play, recreation, sports, occupation = 32. A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 21

Search 7:

Table 7: Search details – children’s health and deprived neighbourhoods/environment.

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND health AND neighbourhood; AND environment*	1515
		Limited to: <i>All child</i>	668
		AND “New Zealand” with limit: (Geography: Australia & NZ)	115

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related neighbourhood/environment = 103.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 31.

Search 8:**Table 8: Search details – children, poverty, and occupational therapy.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND “occupational therapy”	1129
		limited to: <i>All child</i>	498
		AND “New Zealand” with limit: (Geography: Australia & NZ)	29
		Using only: “occupational therapy” AND poverty with Age limit: <i>All child</i>	144

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related occupational therapy = 61.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 11.

Search 9:**Table 9: Search details – children subjective experiences of poverty/qualitative research.**

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE). SCOPUS (**2 nd figures are results from this database). [Limited: English; 2010-2017; Poverty; Child] *Only Scopus figure for this search.	<i>Date:</i> 2010-2017 Scholarly (peer reviewed) journals. <i>Language:</i> English <i>Subject:</i> poverty	child* (*=truncated) AND teen* AND youth AND poverty OR income OR Socioeconomic AND “experience” AND “qualitative research”	1278
			555 / 16**
		with Age limit: <i>All child</i>	29
		AND “New Zealand” with limit: (Geography: Australia & NZ)	144

N.B. Search was further refined using criteria as stated above under Search 1.

After first refining, number of CP (child poverty) related qualitative research/experiences = 17.

A process of further review/refining (i.e., reading through abstracts/articles for relevance to research topic): final number of articles = 19.

SEARCH STRATEGY: CHILDREN'S PATTERNS OF OCCUPATION

Table 1: Search details – children's patterns of occupation.

Databases	Limits	Terms Searched	Search Results
Journal of Occupational Science	<i>Date:</i> 2008-2018	"Patterns of occupation" AND children.	170

From this search 170 articles were found. Through a further refining process (e.g., reviewing the abstracts and checking for relevance with the search topic: children's patterns of occupation), five (5) articles were chosen for closer reading and review.

Table 2: Search details – children's patterns of occupation (EBSCO database search).

Databases	Limits	Terms Searched	Search Results
EBSCO (Health databases: CINAHL, MEDLINE).	Scholarly (peer reviewed) journals. Date range: 2008-2018	child* (*=truncated) AND "patterns of occupation"	83

From this search 83 articles were found. Through a further refining process (e.g., reviewing the abstracts and checking for relevance with the search topic: children's patterns of occupation), two (2) articles were chosen for closer reading and review.

Appendix B: Income tables (Perry, 2017).

Table E.2
50% and 60% low-income thresholds or 'poverty lines' for various household types (BHC)
(2016 dollars, per week)

Household type	Equiv ratio	REL ('moving')		CV ('anchored' /'fixed')	
		50% of 2016 median	60% of 2016 median	50% of 2007 median in \$2016	60% of 2007 median in \$2016
One-person HH	1.00	365	435	305	370
SP, 1 child	1.40	510	610	430	515
SP, 2 children	1.75	640	765	540	645
SP, 3 children	2.06	750	900	635	760
Couple only	1.54	560	675	475	570
2P, 1 child	1.86	680	815	570	685
2P, 2 children	2.17	790	950	665	800
2P, 3 children	2.43	885	1065	745	895
2P, 4 children	2.69	980	1175	825	990
3 adults	1.98	720	865	610	730

Appendix C: Issue statements/assumptions: Case study research (material poverty's impact on a child's patterns of occupation); and Topical Information questions/matrix grid: Case study research.

Issue statements/assumptions – Case study research: material poverty's impacts on a child's patterns of occupation.

S. Leadley, July 2017

Research Question: *How does living in material poverty affect a child's patterns of occupation?*

Methodology: *Case study research; a qualitative, interpretative approach.*

Key Issue statement/assumptions

- 1 Children's occupations are shaped by the adults/family they live with.
- 2 Children participate in occupations according to their age, gender and culture. These types of occupation include activities of daily living (ADLs), school/work and play/leisure.
- 3 Children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical, environmental, societal patterns of time use (e.g., school hours) and other people in their environment.
- 4 Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations.
- 5 Material poverty, for a family/whānau, impacts on a child's patterns of and participation in occupations both directly (i.e., through a low income resulting in missed opportunities) and indirectly (i.e., reduced income results in deprivation and reduced access to resources).

TOPICAL INFORMATION QUESTIONS – MATRIX GRID: CASE STUDY RESEARCH.

Research Question: *How does living in material poverty affect a child's patterns of occupation?*

S. LEADLEY

KEY ASSUMPTIONS/ISSUE STATEMENTS	TOPICAL INFORMATION QUESTIONS	DATA GATHERING METHOD/S	WHO/WHERE I WILL GATHER DATA
1. Children's occupations are shaped by the adults/family they live with (Kielhofner, 2008).	I. What are the demographics of the child's parent/s? e.g. age, gender, employment status, educational background, family income, health status, number of and age of persons living in the house.	I. Interview.	I. Parent/s.
2. Children engage in occupations according to their age, gender and culture. These types of occupations include activities of daily living, productive activities (school/work) and play/leisure (Kielhofner, 2008).	I. Demographics: What is the child's age, gender? Does she/he have any health problems/- developmental delays or learning difficulties? What is her/his ethnicity/culture? II. What specific occupations (school/work activities of daily living, leisure/play) does the child/participant or engage in?	I. Interview. II. Interview & observations. And possibly photoelicitation techniques and creative media to represent participation.	I. Parent/s. II. Child, parent/s, & other adults. III. Child, parent/s, other adults & observing child in their home and neighbourhood.

	III. How does this child engage in occupations? (e.g. where, with whom, when, how often, quality of engagement).		
3. Children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical, environmental, societal patterns of time use (e.g., school hours) and other people in their environment (Kielhofner, 2008).	<p>I. What are the child's daily and weekly routines? (e.g. how ADLs are performed (steps/sequence of activity such as get bread out, then get utensils, then butter etc.) where, when, with whom; daily, weekly, annually, seasonal) specific habits, routines, rituals).</p> <p>II. How are the 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 (is it un/safe), proximity of</p>	<p>I. Interview, observations, weekly schedule child/family, Hamilton mapping activity.</p> <p>II. Interview, observations.</p> <p>III. Observations primarily (possibly interview as well, and mapping activity).</p> <p>IV. Interview and observations (and maybe weekly schedule, or creative media).</p>	<p>I. Child, parent/s, & observing child in their home and neighbourhood.</p> <p>II. Observing child in their home and neighbourhood (and perhaps interview with parents).</p> <p>III. Observations as above, and from interviewing child, parent/s, and other adults and mapping activity with child/family.</p> <p>IV. Child, parent/s, & observing child in their home and neighbourhood.</p>

	<p>places where occupations are performed)?</p> <p>IV. What are the child's roles?</p>		
4. Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations (Kielhofner, 2008).	<p>I. What are the resources (physical, social, cultural, institutional) that are available to the child/participant that support their engagement in occupations?</p> <p>II. What are the resources that are needed for the child to engage in occupations?</p> <p>III. Are there occupations that the child would like to do but currently does not do, or would like to do more often?</p> <p>IV. What resources might better support the child's participation in, and patterns of occupation?</p>	<p>I. Interview, other documents.</p> <p>II. Interview, other documents.</p> <p>III. Interview.</p> <p>IV. Interview, observations.</p>	<p>I. Mainly parent/s & other adults (but maybe child too), observations, & documents/websites.</p> <p>II. Mainly parent/s & other adults (but maybe child too), and observations.</p> <p>III. Child, parent/s & other adults.</p> <p>IV. Mainly parent/s & other adults (but maybe child too), and observations.</p>
5. Material poverty, for a family/whanau, impacts on a child's patterns of and participation in occupations (Matuska &	I. What is the family's income? (Use Poverty line of <60% of median NZ income: combined	<p>I. Pre-screening questions, Interview.</p> <p>II. Pre-screening questions and observations.</p>	<p>I. Parent/s.</p> <p>II. Parent/s – using NZDep area measure with family residence location, observations.</p>

Barrett, 2014) both directly (i.e., through a low income resulting in missed opportunities) and indirectly (i.e., reduced income results in deprivation and reduced access to resources).	<p>household income, gross, BHC-before housing cost).</p> <p>II. What is the residential area the family live in (area level deprivation, using NZDep.)</p> <p>III. What is the level of individual deprivation the 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>III. Pre-screening questionnaire (NZiDep), Interview and observations.</p> <p>IV. Interview.</p> <p>V. Interview/Observations.</p>	<p>III. Parent/s – using the NZiDep questionnaire. Other data about deprivation can be gleaned from interview with parent/s (& maybe child), or other adults & observations of home and neighbourhood (e.g. lack of resources, type of neighbourhood/state of environment).</p> <p>IV. Parent/s, (and maybe child) other adults.</p> <p>V. A/A.</p>
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References:

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- Matuska, K., & Barrett, K. (2014). Patterns of occupation. In B. A. B. Schell, G. Gillen, & M. E. Scaffa (Eds.), *Willard & Spackman's occupational therapy* (12th ed., pp. 163-172). Philadelphia, PA: Lippincott Williams & Wilkins.

Appendix D: School of Clinical Sciences Verification of Māori Consultation.

School of Clinical Sciences Verification of Māori Consultation



This document provides verification that the research project named below was discussed with the School of Clinical Sciences Mātauranga Māori Committee, Auckland University of Technology. Specific comments and recommendations are indicated below.

Research Title: Case study research exploring the impact of material poverty on a child's patterns of occupation		
Researcher(s): Simon Leadley	Date: 02/08/2017	
Discussion Areas	Addressed	Comments/ Recommendations
Whakapapa: Relationships		
Researcher experience in field	x	C5
Consultation with local stakeholders	x	R5
Consenting process	x	
Clarity of data usage	x	
Dissemination of findings	x	C6
Benefits to participants	x	C5, R1
Tika: Validity of the research		
Clear purpose of project	x	C1,2
Relevance to Māori	x	
Likely outcome for participants, communities, other stakeholders	x	C5
Participant recruitment methods	x	
Māori involvement in project (participants, researchers, etc)	x	
Manaakitanga: Responsibility and respect		
Participants' access to appropriate advice	x	R5
Participants treated with dignity and respect	x	C3,4 R3,4,6
Privacy and confidentiality	x	
Whānau support	x	C2
Transparency of research process		
Mana tangata: Power & Authority		
Reciprocity (acknowledgements, compensation, gifts)	x	R1,3,6
Risks of participation identified	x	C3
Ownership of outcomes		
Informed consent process	x	

Comments

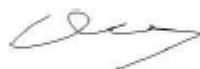
1. The project will focus on the social issue of child poverty from an occupational perspective. Specially, the project will examine how material poverty affects a child's everyday occupations.
2. By involving one child from one family and incorporating multiple perspectives, the project will provide an in-depth exploration of the topic. It aims to identify both the difficulties faced/imposed and the strengths of the child and their whānau.
3. To reduce the potential of the child or family feeling stigmatised for being "poor", Simon indicated that the interactions with the child will focus on their interests, activities, and supports rather than on what they may be missing out on. Conversations with the parents/whānau may be more overt regarding the impact of poverty but Simon will make a considerable effort to form a relationship with the family first.
4. Methods of data collection involving the child will include photo-elicitation, observation, drawing, or story writing, rather than more formal interviews.
5. Simon indicated that he may be able to provide some assistance to the child/whānau through his existing community connections and his role as an occupational therapist.
6. Simon indicated that he would ask the family how they would like feedback at the end of the project, e.g. verbally, written report.

Recommendations

1. If photo-elicitation is used in the project, the child should be able to keep the camera at the end of the study.
2. The committee supported the idea of providing an opportunity to meet with child and whānau at least once before the formal research process starts as a way to form a relationship early in the process. It would be useful for Simon to give his pepeha at the initial meeting and establishing that he is from Hamilton will help form a relationship.
3. Māori may be embarrassed about hosting a guest if they are not able to manaaki in way that would maintain mana, e.g. providing food and drink. This may limit the participation of Māori in the project, or they may wish to meet (at least initially) in a neutral location outside of their home. It would be beneficial to let the family know that the researcher will be bringing kai/whāunu so that participation in the project does not bring any additional cost to them.
4. Simon will need to develop some sensitive ways of obtaining appropriate demographic information of the whānau, e.g. income, literacy.
5. It would be beneficial if Simon showed his cultural advisor the information sheet that he will use so that they can check the use of language.
6. Simon should be prepared to accept anything offered by the family to him. It will help to build a relationship if Simon is prepared to share food, stories, or information with the family.
7. It is not appropriate to add an "s" to Māori word to indicate a plural, or to add a "n" to form "Aotearoan". To describe the child involved in the study, Simon should use taitamariki (youth) or tamaiti (child). "Pacifika" is the preferred description of someone of Pacific Island ethnicity.

Feedback on these comments and recommendations is to be provided by: 10/08/2018

Signature:



Date: 09/08/17

Gwyn Lewis, Representative, Mātauranga Māori Committee

Appendix E: Information Sheet: Community Organisation: Recruitment; and Community Recruitment Sheet: Selection criteria.

Information Sheet - Community organisation: Recruitment

Date Information Sheet Produced:
01 October 2017

Project Title
Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Background purpose of this research

This research project aims to examine the effects of material poverty (i.e., low income and material deprivation/hardship) on a child's daily activities. For example, how does not having enough money/resources as a family/whānau affect how a child participates in school activities, sports, recreational, social, and cultural activities? Or how is a child's day-to-day life and routines affected by financial hardship? Or what are the supports and personal strengths that the child and his/her family/whānau have to help them cope with these circumstances.

For 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 family/whānau, 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 work with other children and their families/whānau who live with material poverty.

The report of the findings will be written up as a thesis for my master's degree. I also hope to publish the results of the study in health 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.

How is a participant identified and invited to participate in this research?

The child and their family/whānau 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 child and their family/whānau choose to participate then they can contact me/the researcher directly or with the family's/whānau consent you/community worker can forward their contact details to me.

The choice of the family/whānau 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 child (aged 11-13 years), and their parent/s or family/whānau. Also included are 2-3 adults who are important and close to the child and her/his family/whānau. E.g. school teacher, extended family/whānau member, sports coach etc....

The family/whānau needs to meet the following selection criteria: combined household income (after tax/net) of 60% below 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 NZDep Index and matching with the family's home address), and the child needs to be attending a low decile school (e.g. deciles 1-4).

How does the participant agree to participate in this research?

The participation in this research is voluntary. All participants are able to withdraw from the study at any time. If participants choose to withdraw from the study, then they 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 their data may not be possible.

All participants will need to complete the consent form and the child will need to complete the assent form to take part in this research. I will provide these for all participants when we meet together.



TE WĀNANGA ARONUI
O TĀMĀKĪ MĀKAU RAU

7 July 2018
page 1 of 3
This version was edited in July 2016

What will happen in this research?

This project involves the researcher spending pre-agreed times (of the child's and their family's/whānau choosing) during the course of approximately 2 weeks with the child/participant and her/his parent/s in their home/neighbourhood. I will interview the child/participant and their parent/s (i.e., semi-structured interview style and up to 60-90 minutes' duration), the parent/s complete the NZDep 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), use a weekly activity schedule, and an interactive time/area mapping activity to learn about activities the child/participant participates in, about the activities available in their neighbourhood and the impacts of material hardship on her/his participation in activities. The child/participant may also choose to take photographs¹ of activities that are important to her/him in their home/neighbourhood, make drawings, or write poems or stories (e.g., 2-3 sessions of 30-60 minutes/each). All material collected will be kept secure and confidential. Interviews will be audio-taped.

With the child/participant's and her/his family's/whānau agreement, I will also spend time observing the child/participant in their home/neighbourhood (e.g., 2-3 visits of 1-2 hours/time) and taking notes. Finally, with the assent of the child/participant and their parent/s consent I will interview 2-3 other adult/s (i.e., semi-structured interview style and up to 60-90 minutes' duration), who are important to the child's participation in their daily activities (e.g., school teacher, sports coach, club leader, family/whānau member). This is to help me better understand the effect of financial hardship on the child/participant's daily activities.

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. 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 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 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 of this study?

There are no immediate benefits to the child/participant and their family/whānau from taking part in this study. However, they will be contributing to information that could help to better support other children and their families/whānau who live with material hardship. There has been minimal published research about children's daily activities and the impact of limited resources. This study may help occupational therapists and others who work with children and their families/whānau, and help shape policy on the issue.

Additionally, the child and her/his family/whānau may discuss with the researcher ideas that they find helpful. For example, learning about supportive agencies, or interesting clubs, and groups that the 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.

What compensation is available for injury or negligence?

In the unlikely event of a physical injury as a result of your participation in this study, rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

¹ Any photos and images taken and stored by the child involving places or objects of importance to them will only be used for analysis purposes (i.e., to help the 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.

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, will have signed a confidentiality clause and will type onto a computer which is password protected. A code 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 transcribed transcripts.

What are the costs of participating in this research?

There is no cost to the participant family/whānau. If they choose to take part, they will need to complete the interview (e.g., 60-90 minutes) and allow me/the researcher to spend several hours in their home/neighbourhood with their child over the course of 1-2 weeks. 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 family/whānau for this project?

Firstly, consider if the child and her/his family/whānau meet the selection criteria. Please discuss this with me as required. Discuss the project with the child and her/his family/whānau and provide them with the relevant information sheets (I will provide these for you). Within two weeks of receiving this information sheet the family/whānau is asked to indicate if they would like to take part in this research. If after the family/whānau have read through all the information and are still interested in participating, then they can contact me/the researcher directly or with their consent you can forward their details to me. I will contact the family/whānau 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 and getting to know each other, before signing the consent/assent forms, and before starting the data gathering process (e.g., interview). The child and her/his family/whānau 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 School of Rehabilitation and Occupation Studies, 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, AUTC, Madeline Banda, madeline.banda@aut.ac.nz, Ph. 09 921 9999 ext. 8044.

Whom do I contact for further information about this research?**Researcher Contact Details:**

Simon J. Leadley. Postal address: c/o S. Leadley, CHASP, WINTEC, Private Bag 3036, Waikato Mail Centre, Hamilton 3240. Ph. 07-3900066 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the School of Rehabilitation and Occupation Studies, 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 05/10/2017. AUTC Reference number 17/281.

**Community Recruitment Sheet: Selection Criteria.
Recruitment pack.**

Study title: *Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.*¹

Participant Selection Criteria – Family's/whānau level of material poverty.

Researcher: S.Leadley. Em: simlea71@gmail.com ph. 07-3900066.

1.) **Family/whānau Income information** – Family/whānau combined income needs to be at or below the NZ poverty line.
NZ poverty line is 60% of NZ median income level and below (i.e., \$76,200; at 2016), this is all income (paid work - net, benefits or any other income combined and before housing costs (BHC)). Therefore 60% of median NZ income is \$45,720/year = NZ poverty line. However, household income needs to be adjusted for household make up (e.g., 2 parents, 2 children etc.) and so incomes will be sought from Poverty line tables in Perry's latest report (2017). N.B. As it can be difficult to calculate exactly a 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 data. I will need the family's/whānau physical location/address of their home/house and then I will check this against the NZDep maps/tables. Refer to this link to see the maps and tables. Website
- http://cphronline.massey.ac.nz/maps/maps_nz_dep_index.html

3.) **School decile** – The child needs to be attending a low decile school (i.e., deciles 1-4). So, we also need the name of the school the 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 05/10/2017. AUTEK Reference number 17/281.*

Income Tables from Perry's (2017, p. 106)² Income report. N.B. Use CV, 60% column.
(Permission to use income table granted from B.Perry, author of the report, for purposes of this study.)

Table E.2
50% and 60% low-income thresholds or 'poverty lines' for various household types (BHC)
(2016 dollars, per week)

Household type	Equiv ratio	REL ('moving')		CV ('anchored' /fixed')	
		50% of 2016 median	60% of 2016 median	50% of 2007 median in \$2016	60% of 2007 median in \$2016
One-person HH	1.00	365	435	305	370
SP, 1 child	1.40	510	610	430	515
SP, 2 children	1.75	640	765	540	645
SP, 3 children	2.06	750	900	635	760
Couple only	1.54	560	675	475	570
2P, 1 child	1.86	680	815	570	685
2P, 2 children	2.17	790	950	665	800
2P, 3 children	2.43	885	1065	745	895
2P, 4 children	2.69	980	1175	825	990
3 adults	1.98	720	865	610	730

² Perry, B. (2017). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2016*. 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 F: Parent/s Information Sheet; and Child Information Sheet.

Participant Information Sheet



TE WĀNANGA ARONUI
O TĀMAKI MAKĀU RAU

This information sheet is for use with parent/s of the child in this study.

Date Information Sheet Produced:

01 October 2017

Project Title

Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

An Invitation

You and your child are invited to take part in this research project examining the effects of poverty or financial hardship on a child's daily activities. For children, daily activities involve household tasks, play, school, sports, social activities, recreation and cultural activities. Patterns of 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 family/whānau, or the types of leisure and social activities we participate in.

You and your child's participation in this research are entirely voluntary. You and your 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 poverty/hardship) affects a child's everyday activities. For example, how do you cope with these circumstances and the strengths and supports you have to help you and your child/ren, or how does not having enough money/resources as a family/whānau affect how your child participates in school activities, sports, recreational, social, and cultural activities? Or how is your child's day-to-day life and routines affected by financial hardship?

It is hoped that the information gained from this study will help in the work with other children and their families/whānau who live with material poverty.

This research project is part of my Master's study at AUT. Findings from this research may be used in academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You and your 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 family/whānau to participate. The participant in this study needs to be a child (aged between 11-13 years) and whose family/whānau is experiencing material hardship (e.g., household income below a defined threshold, living in a neighbourhood where there is high material hardship, and with a child at a low decile school). If you and your child choose to participate (I ask you to read through the child information sheet with your son/daughter), then you can contact me/the researcher directly or with your consent your local contact person can forward your contact details to me. If your child prefers not to participate you will not be able to take part.

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 from the study, 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 and your 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 involves me spending pre-agreed time of your choosing during the course of approximately 1-2 weeks with your child/participant and you as parent/s. If you and your child choose to participate, then you will need to complete an interview (i.e., semi-structured interview style and up to 60-90 minutes' duration), about the project

topic. For your child this may involve talking to me/the researcher, taking photographs¹ of activities important to them in your home/neighbourhood, making drawings, or writing poems or stories (e.g., 2-3 sessions of 30-60 minutes/each). All material collected will be kept secure and confidential. Interviews will be audio-taped. With your agreement, I will also spend time observing your child in their home/neighbourhood and taking notes (e.g., 2-3 visits of 1-2 hours/time). This is to help me better understand the effect of limited resources on your child's daily activities.

Also with your consent and your child's assent I would interview 2-3 other adult/s that are important to your child's participation in their daily occupations (e.g., school teacher, sports coach, club leader, family/whānau member). You and your child will decide who you want to invite to be interviewed for the study and how to contact them.

You and your child will have an opportunity to review and revise the transcripts of your 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 you or your child feel uncomfortable or distressed. 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 or your child find distressing, or you or your child 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 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 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 or your child from taking part in this study. However, you will be contributing to information that could help to better support other children and their families/whānau who have limited resources. There has been minimal published research about children's daily activities and the impact of limited resources. This study may help occupational therapists and others who work with children and their families/whānau, and help shape policy on the issue.

Additionally, you and your child may discuss with the researcher helpful ideas. For example, learning about supportive agencies, or interesting clubs, and groups that your child may be interested in joining. In addition, some people find that being interviewed about what they have been through is an enjoyable and/or interesting experience.

What compensation is available for injury or negligence?

In the unlikely event of a physical injury as a result of your participation in this study, rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

How will my privacy be protected?

The people that you suggest to participate in the study will know that your family/whānau is involved in the research. However, interview recordings and transcripts will only be available to the research team. No information identifying you or your 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, will have signed a confidentiality clause and will type onto a computer which is password protected. A code 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.

¹ Any photos and images taken and stored by the child involving places or objects of importance to them will only be used for analysis purposes (i.e., to help the 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 AUTC guidelines on the recording of images and photographs will be followed.

What are the costs of participating in this research?

There is no cost to you. If you choose to take part, you and your child will need to complete the interview and allow a few hours during the week for me to observe your child in your home/neighbourhood. This study will not interfere with your work, or with your 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-). Before the research begins we will also discuss what simple gift/koha I can provide to your as a family/whānau 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 and your child would like to take part in this research by advising me/researcher, or if you are happy to, your local contact person who can then forward your contact details to me. After I receive your contact details, I will then 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 and initially spend time building rapport and getting to know each other, before signing the consent/assent forms, and then starting the data gathering process (e.g., interview, agreed time spent in your home). 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 School of Rehabilitation and Occupational Studies, 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, Kate O'Connor, ethics@aut.ac.nz, 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. 07-3900066 Em: simlea71@gmail.com

Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the School of Rehabilitation and Occupation Studies, 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 05/10/2017. AUTEK Reference number 17/281.

TITLE OF RESEARCH

A project about the effect of family and neighbourhood resources on children's activities at home and in their community.

INFORMATION SHEET FOR CHILDREN

(parent/caregivers please read to children)

Kia ora/Hello, my name is Simon Leadley and I would like to invite you to join a project I am organising.

It involves a child your age (11-13 years) spending time telling me about the activities you like doing and about what you do in your neighbourhood.

You can tell me about this by

- ✓ taking photos of activities you like doing;



- ✓ making drawings, or paintings;
- ✓ writing stories or poems;
- ✓ Or just talk to me about what you like doing.

I would also like to spend a few hours over a week with you and your 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).



Your name, address and details will be kept private at all times.

WHAT IS THE PURPOSE OF THIS PROJECT?

The purpose of this project is to understand how living in neighbourhoods with fewer resources can affect everyday activities. The results will be used to help other children and their whanau/families and to help health workers like me and others to make life better for children and their whanau/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

whanau/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?

Either, you and your family/whanau may have seen the poster advertising this project, or someone from your local school or organisations working in your area have suggested that your family/whanau 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. If they do not want to be in the study, I cannot include you. I would also like to talk to 2-3 people who know your family/whanau, such as your teacher.

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, and 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.



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.

Researcher name and contact details:

Simon Leadley.

Em: simlea71@gmail.com


ph. 07-3900066

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, Professor Clare Hocking. Clare can be contacted at the School of Rehabilitation and Occupational Studies, 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, AUTC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTC Reference number 17/281.



Research about the effect of family and neighbourhood resources on children's activities at home, and in their community.




Would you like to be a part of a helpful and interesting research project?

Are you a family/whanau with the following?

- At least one (1) child aged between 11-13 years of age.
- Living in Hamilton/Kirikiri city.
- Experiencing difficulty affording daily items and activities for you and your family/whanau.
- English is one of the primary languages spoken in your home.


The goal of the study is: To learn about how limited resources affect children's daily activities.



To know more about this study, or to receive an Information Sheet, please contact me/the researcher:
Simon Leadley. Ph 07-3900066
Em: simlea71@gmail.com

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Appendix H: Assent form Child, Parent/Guardian Consent form; and Consent form Parent/s.



Assent Form - child

Project title: *Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.*

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 October 2017 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 family/whānau in our home/neighbourhood, or when I take photos/create art-work for this study.
- ☐ I understand that the photos/art-work I make during this study are to help the researcher know about my view of activities. No places or people in the photos/art-work will be identified. None of the photos or artwork will be published without my agreement and my parent/s' written consent. An electronic copy of photos/art-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 2-3 other grown-ups that I choose and who are important to me and my family/whānau (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 name:

Participant Contact Details (if appropriate):
.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Note: The Participant should retain a copy of this form.

2 July 2015
page 4 of 5
This version was last edited in June 2016

Parent/Guardian Consent Form

AUT

TE WĀNANGA ARONUI
O TĀMAKI MAKAU RAU

Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

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 October 2017.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that notes will be taken during interviews with my 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 family/whānau, and that my child may take photographs, or make drawings, or write stories or poems for the purposes of this study.
- ☐ The photographs, and drawings, poems, or stories your child may take or make during this study are only to help the researcher better understand your child's view of the activities they do in and around your home. Any locations or people who are identifiable in the photos/media will be obscured and will not be named. None of these photos or artwork will be published without your written consent and your child's agreement. An electronic copy of images will be kept, for analysis purposes, securely for 6 years as with all other research data.
- ☐ I permit the researcher to use the photographs 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 solely and exclusively for the researcher's use.
- ☐ I understand that the photographs and other creative media produced in the course of the study will be used for academic purposes only and will not be published in any form without my written permission.
- ☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw my child and/or myself from the study at any time without being disadvantaged in any way.
- ☐ I understand that if I withdraw my child and/or myself from the study then I will be offered the choice between having any data that is identifiable as belonging to my child and/or myself 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 child taking part in this research.
- ☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

Child's name/s :

Parent/Guardian's signature:

Parent/Guardian's name:

Parent/Guardian's Contact Details (if appropriate):

.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEC Reference number 17/281.

Note: The Participant should retain a copy of this form.



Consent Form – Parent/s

Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

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 October 2017.
- ☐ 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 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 transcript and be able to 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:

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Note: The Participant should retain a copy of this form.

Appendix I: Participation Information Sheet: Other Adults.

Participant Information Sheet

This information sheet is for use with other adult participants in this study.

Date Information Sheet Produced:
01 October 2017

Project Title
Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

An Invitation
You are invited to take part in this research project examining the effects of material poverty (i.e., low income and material deprivation/hardship) on a child's daily activities. For children, daily activities involve household tasks, play, school, sports, social activities, recreation and cultural activities. Patterns of 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 family/whānau, 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 child's everyday activities. For example, how does not having enough money/resources as a family/whānau affect how a child participates in school activities, sports, recreational, social, and cultural activities? Or how is a child's day-to-day life and routines affected by financial hardship? Or what are the supports and personal strengths that the child and her/his family/whānau 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 children and their families/whānau who live with material poverty.

This research project is part of my Master's study at AUT. Findings from this research may be used in academic publications and presentations.

How was I identified and why am I being invited to participate in this research?
You have been identified by the participant/child and their family/whānau as an adult who is close to them and they invited you to participate in this study. If you choose to participate, then you can contact me (the researcher) on my contact details in 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 from the study, 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 take part in this research (e.g., interview). I will provide this for you.

What will happen in this research?
This project involves me spending a pre-agreed time and location of your choosing of up to 60-90 minutes interviewing you. This will include asking you questions relating to the 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 family/whānau activities), and your role and support for the 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.



TE WĪNANGA ARONUI
O TĀMAKI MAKĀU RĀU

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.

How will these discomforts and risks be alleviated?

You can choose not to talk about subjects that you find distressing, or 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 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 children and their families/whānau who have limited resources. There has been minimal published research about children's daily activities and the impact of limited resources. This study may help occupational therapists and others who work with children and their families/whānau, and help shape policy on the issue.

In addition, some people find that being interviewed is an enjoyable and/or interesting experience.

What compensation is available for injury or negligence?

In the unlikely event of a physical injury as a result of your participation in this study, rehabilitation and compensation for injury by accident may be available from the Accident Compensation Corporation, providing the incident details satisfy the requirements of the law and the Corporation's regulations.

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 University 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 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 family/whānau have nominated you for participation in this study, you will not remain anonymous to the 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/researcher. 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 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 School of Rehabilitation and Occupation Studies, 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 AUTC, Kate O'Connor, ethics@aut.ac.nz, 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. 07-3900066 Em: simlea71@gmail.com


Project Supervisor Contact Details:

Project Supervisor, Clare Hocking. Clare can be contacted at the School of Rehabilitation and Occupational Studies, 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 05/10/2017. AUTC Reference number 17/281.

Appendix J: Consent form: Other Adults.





Consent Form – Other Adults

Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

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 October 2017.
- ☐ 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 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 I will not be anonymous to the family/whānau who have nominated me to participate in this study. However, my confidentiality will be guaranteed in any reports or publications and I will not be named or identified in anyway in the transcripts or the study.
- ☐ 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 transcript and be able to 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:

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Note: The Participant should retain a copy of this form.

Appendix K: A Young Person's Weekly 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 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.

Indicative Questions for Interviews - Child



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

For use with child participating in the study

(General introduction about the case study and the process of the interview.)

1. Can you please tell me what are your interests and what do you enjoy doing both at home and in your neighbourhood/community? What are the things (values) that are important to you and your family/whānau?
2. Can you please tell me what are the activities you need to do or are important to you and your family/whānau at home or outside of the home? What activities do you do together as a family/whānau, or would like to do together?
3. Can you please tell me about your typical weekday and weekend at home, at school, after school (Prompt: start from when you wake up. What happens next? 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.)
4. Can you please tell me if you have any chores/jobs to do or special responsibilities at home (chores, baby-sitting, caring for others) or outside the home (like at school, or in a club or team)?
5. Can you please tell me about how you get to the activities you do, where are these places located, who do you do these activities with, who supports you to do these activities, or what are the things you may need to do these activities (like equipment/gear, training etc.)?
6. Can you please tell me about your neighbourhood and the places you like to visit and go to play, or do other activities, or meet with your friends? Is there anything you would like to change if you could about your neighbourhood that would help support you to do the activities you want?
7. Can you please tell me if there are any activities you can't do but would like to do and can you tell me about that? For these activities you might miss out on are there any things you do/can do that help you, or are there other people supporting you to do these activities that are important or fun for you?

Project Supervisor's Contact Details:

Professor Clare Hocking

clare.hocking@aut.ac.nz, 921 9162

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Indicative Questions for Interviews – Parent/s



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

For use with parent/s participating in the study.

(General introduction about the case study and the process of the interview.)

1. Family demographic questions: age, sex, ethnicity and health status of members of household, household make-up (e.g. parent/s, number of children, marital status of parents), employment status of parent/s, educational background of parent/s, level of material constraints for family (e.g. NZiDep questionnaire).
2. Can you please tell me about your child's interests and the activities that they do in the home and in their neighbourhood/community and what is important to them (values)?
3. Can you please tell me about how they get to and from these activities, where these are located, and how often they go.
4. Can you please tell me about your child's typical weekday, and weekend routine, at home, getting to school, after school and in the evenings, and about their leisure or rest time. (Prompt: Start from when your child wakes up. What happens next?).
5. Can you please tell me about who supports your child to participate in their day-to-day activities? And how your child is supported (e.g., transport, time spent with them, support groups/agencies, funding/or other resources etc.)?
6. Can you please tell me about your neighbourhood and what aspects of your area may either support or constrain your child's participation in their day-to-day occupations/activities?
7. Can you please tell if there are any activities that your child is not able to participate in and why? Do you have ways to help support your child to overcome these barriers (e.g., support from others/agencies, extra resources/funding provided etc.)? Are any of these barriers due to your family's/whānau's material hardship (i.e. lack of resources or due to low income).
8. Can you please tell me about the skills and strengths your child has that helps her/him 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?)

N.B. Also to be used is the weekly activity schedule (i.e., where the child and parent/s complete a written schedule of all the child's activities throughout a 1-week period) and the interactive mind-mapping activity (i.e., using mind mapping techniques superimposed on a map of the local area) exploring time use, routines and occupational engagement in the home and neighbourhood.

Project Supervisor's Contact Details:

Professor Clare Hocking clare.hocking@aut.ac.nz, 921 9162

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEC Reference number 17/281.

Indicative Questions for Interviews – Other Adults



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

For use with other adults participating in the study (e.g. school teacher, close family/whānau member, sports coach etc.)

(General introduction about the case study and the process of the interview.)

1. Can you please tell me about what your role is with this child/participant? How do you support this child/participant to engage in their day-to-day activities?
2. Can you please tell me where the activity occurs that you support this child in, and when it occurs, how often, what times of the day and for how long, what is her/his attendance patterns (prompt: early, on time/punctual, late or missing events struggling to stay engaged?), who do they do the activity with, and how they get to and from the activity? Are there any influences from the physical environment that supports or restricts child 'x's' access to this activity?
3. Can you please tell me about the child/participant's performance in this activity? (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?) Do you observe any difficulties in child 'x' 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 this child/participant is not able to participate in and why? Do you have ways to help support child 'x' to overcome these barriers (e.g. support from others/agencies, 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 this child/participant 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 this child/participant lives in and what aspects of this area either supports or constrains this child's participation in their day-to-day activities?

Project Supervisor's Contact Details:
Professor Clare Hocking
clare.hocking@aot.ac.nz, 921 9162

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTC Reference number 17/281.

Photoelicitation and Creative Media Protocols



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

- If the researcher provides the camera, use a disposable digital camera. Provide all necessary creative media resources required (e.g. paper and pens for drawing).
- Discuss with 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 child/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, 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 child and the child has provided their verbal assent to use the camera for the purposes of the study.
- Discuss instructions on camera use with the child and her/his parents. E.g. safe and appropriate use of camera including:
 - Parents knowing the child's whereabouts
 - Positioning him/her self 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 child and her/his family/whānau during photoelicitation, or use of creative media.

Project Supervisor's Contact Details:

Professor Clare Hocking

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Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEK Reference number 17/281.

Researcher Safety Protocol



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

- A third party will be advised of the time and venue of the interview and expected length of the interview. This person will be sent a text message before the interview starts and after the interview is completed and the researcher has left the building.
- If the text on completion is delayed by more than half an hour that 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.
- The researcher will use his extensive skills developed over the past sixteen 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.

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NZiDep Questionnaire

An index of socioeconomic deprivation for individuals¹²

Clare Salmond and Peter Crampton
Wellington School of Medicine and Health Sciences
and

Peter King and Charles Waldegrave
Social Policy Research Unit, The Family Centre, Lower Hutt

The following few questions are designed to identify people who have had special financial needs in the last 12 months. Although these questions may not all apply directly to you, for completeness we need to ask these for the purposes of this research project.

1. [Buying cheap food]

In the last 12 months have you personally been forced to buy cheaper food so that you could pay for other things you needed? (yes/no)

2. [Unemployment] NOTE: defined as no for those 65 and over, and for full-time care-givers/home-makers; otherwise:

In the last 12 months, have you been out of paid work at any time for more than one month? (yes/no)

3. [Being on a means-tested benefit; amended 2014: see NOTES below.]

In the 12 months ending today did you yourself receive payments from any of these three benefits: Jobseeker Support, Sole Parent Support or Supported Living Payment? (yes/no)

4. [Feeling cold to save on heating costs]

In the last 12 months have you personally put up with feeling cold to save heating costs? (yes/no)

5. [Help obtaining food]

In the last 12 months have you personally made use of special food grants or food banks because you did not have enough money for food?

(yes/no)

6. [Wearing worn-out shoes]

In the last 12 months have you personally continued wearing shoes with holes because you could not afford replacement?

(yes/no)

7. [Going without fresh fruit and vegetables]

In the last 12 months have you personally gone without fresh fruit and vegetables, often, so that you could pay for other things you needed?

(yes/no)

8. [Help from community organisations]

In the last 12 months have you personally received help in the form of clothes or money from a community organisation (like the Salvation Army)?

(yes/no)

Benefit Note: Previous means-tested benefits were the Unemployment Benefit, Domestic Purposes Benefit, Independent Youth Benefit, Sickness Benefit, and Invalids Benefit. From 15 July 2013, these benefits became obsolete and were replaced by the three benefits now listed in question 3. Note that it is not possible to have perfect consistency with the previous list of means-tested benefits. The unemployment cut off has been set at age 65 since 2007 in accordance with GRI entitlements, and as used in the national small-area indexes of deprivation NZDep2006 (created in 2007) and NZDep2013.

¹² Permission to use this version of the NZiDep granted by authors of NZDep. Reference: Salmond, C., & Crampton, P. (2012). Measuring socioeconomic position in New Zealand. *Journal of Primary Health Care*, 4(4), 271-280. Retrieved from <http://www.nzcp.org.nz/journal-of-primary-health-care>

² Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEC Reference number 17/281.

Simon's Mihimihi

Tēnā koe / kōrua / koutou

(Greetings/hello one, two, everyone)

Hei mihi ki te whare e tū nei

(I acknowledge the house/building we are in)

Te papa e takoto nei

(The ground, Papatuanuku, we stand on)

Me te kaupapa o te rā

(And the (event/subject/discussion/policy/topic/purpose/programme/ issue etc.) of the day)

I tipu ake ahau ki Waikato

(I grew up in Waikato)

Nō England (Ingarani) No Ireland ōku tupuna

(My ancestors are from England and Ireland)

Ko Simon ahau

(I am Simon)

Nō Kirikiriroa ahau

(I am from Hamilton)

He kaiwhakaora ngangahau ahau

(I am an occupational therapist)

No reira,

Tēnā koutou, Tēnā koutou, Tēnā koutou, katoa.

Appendix Q: Table of observations: Case study research.

Table of observations: Case study research (CSR)

Day, Time	Location	What was purpose and what was observed?
Tuesday 4:30-8pm [5/12/17]	Coco's home.	To observe Coco and her whānau/family in their afternoon and evening routines. <i>Observed Coco, her siblings and parents engaging in occupations such as:</i> using the computer, watching TV, playing with her brothers, playing in the backyard, having an evening meal, performing chores (e.g., clearing plates after evening meal), playing a board game with their father.
Thursday 7am-7:45am [7/12/17]	Coco's home.	To observe Coco and her whānau/family in their morning routine. <i>Observed Coco, her siblings and parent (mother) engaging in occupations such as:</i> basic self-care tasks such as brushing hair (performed with mother and siblings in the kitchen), helping younger sibling get ready for school, preparing lunch, packing school bag.
Tuesday 6pm-7:45pm [12/12/17]	Coco's neighbourhood – primary school, and community church that Coco and her whānau/family attend.	To observe Coco and her whānau/family in an occupation of their choice in their community. <i>Observed Coco, her siblings and parent (mother) engaging in occupations such as:</i> greeting guests at the church for the nativity play, performing in the nativity play, spending time with church parish and guests sharing a meal after the nativity play. Also observed mother in her role helping out with the school choir performance.

Observation Protocol



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

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- Confirm (e.g. face-to-face or by phone call, or email) with child/participant and her/his parent/s that they agree that the observation takes place, the location, agreed time and duration of observation.
- Ensure parent/s are available to supervise time spent in family/whanau home for purposes of the time spent by researcher in observation (or that other adults, as approved by parents, will be in the home during observations if the parents are absent).
- For observations outside the home, ensure there is agreement with the child and parent/s about who will be present, start and finish times, and areas to be visited.
- As an accompanying adult, intervene to ensure that child/participant is safe as required, e.g. street/traffic safety.
- Ensure all cultural and family customs are observed by the researcher. e.g. removing shoes at the door, common courtesies, not sitting on tables etc.
- Ensure no additional costs are incurred during the time researcher spends with family/whanau in their home or contribute where necessary through koha.
- Ensure the Research Safety Protocol is followed.

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Appendix S: Confidentiality agreement form: Transcriber (Dr. S.Nayar).

Confidentiality Agreement - Transcriber



Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

- ✓ I understand that all the material I will be asked to transcribe is confidential.
- ✓ 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:Shoba Nayar.....

Transcriber's Contact Details:

...Email: xxxxxxxx@gmail.com.....

.....
.....
.....

Date: 11th October 2017

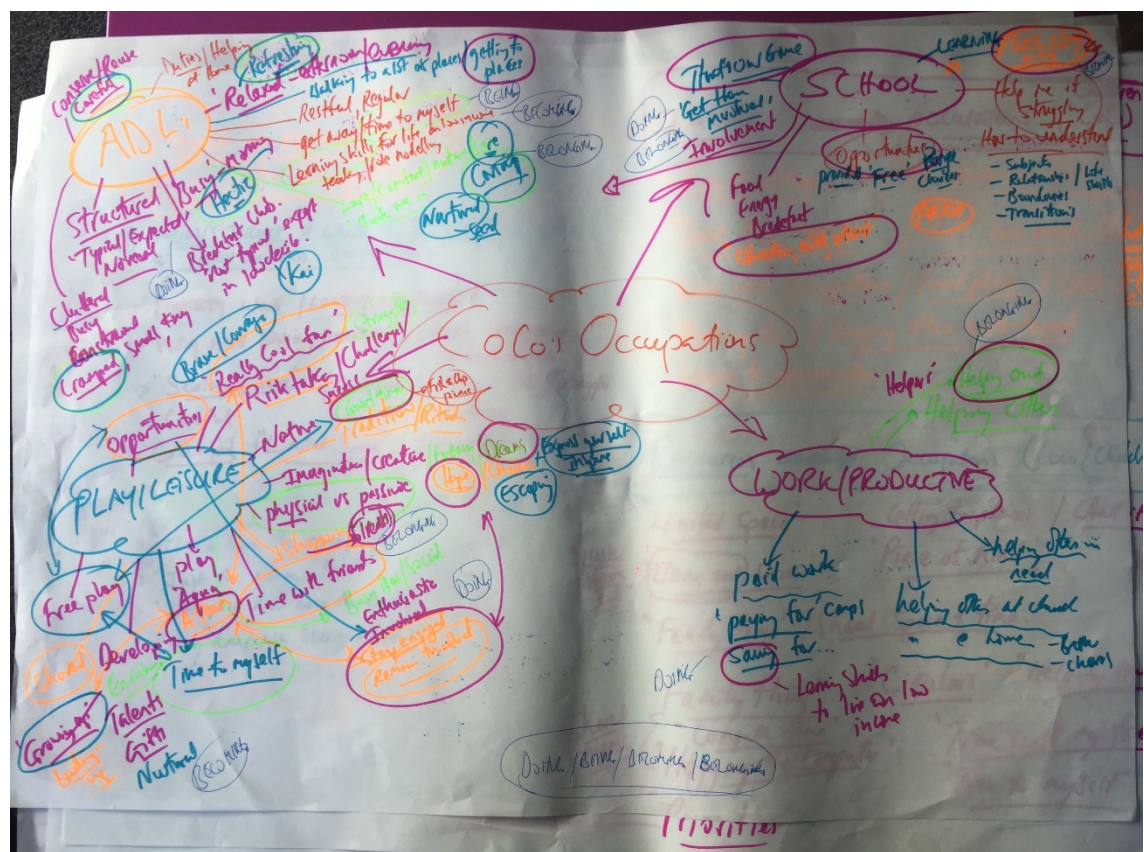
Project Supervisor's Contact Details:

Professor Clare Hocking

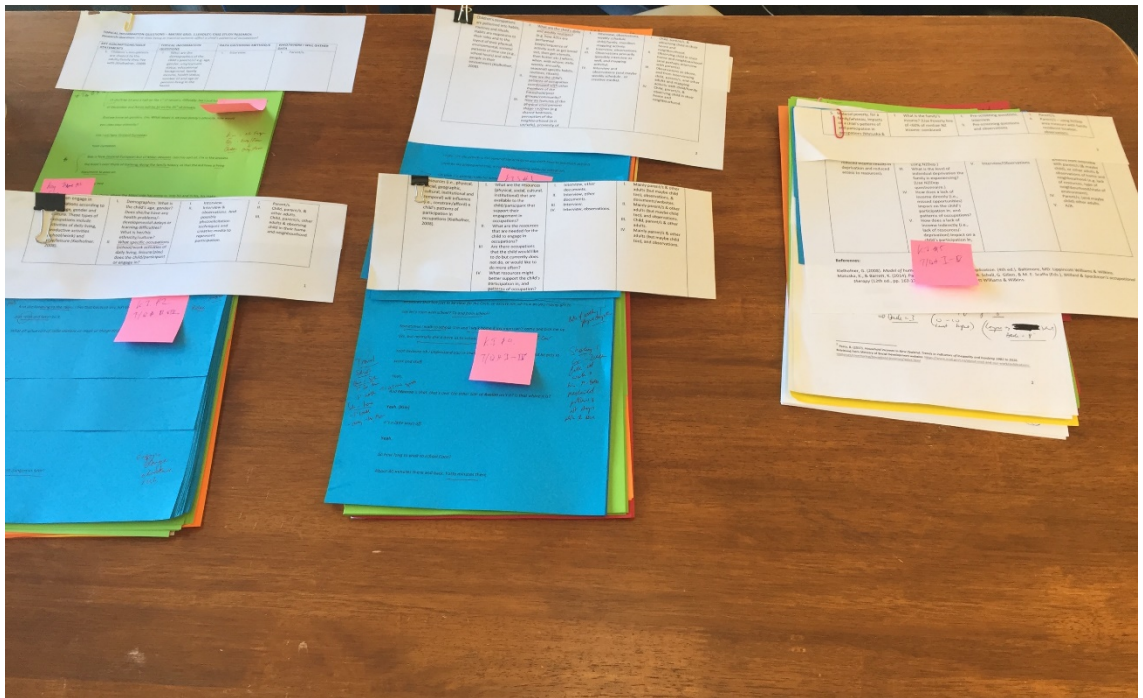
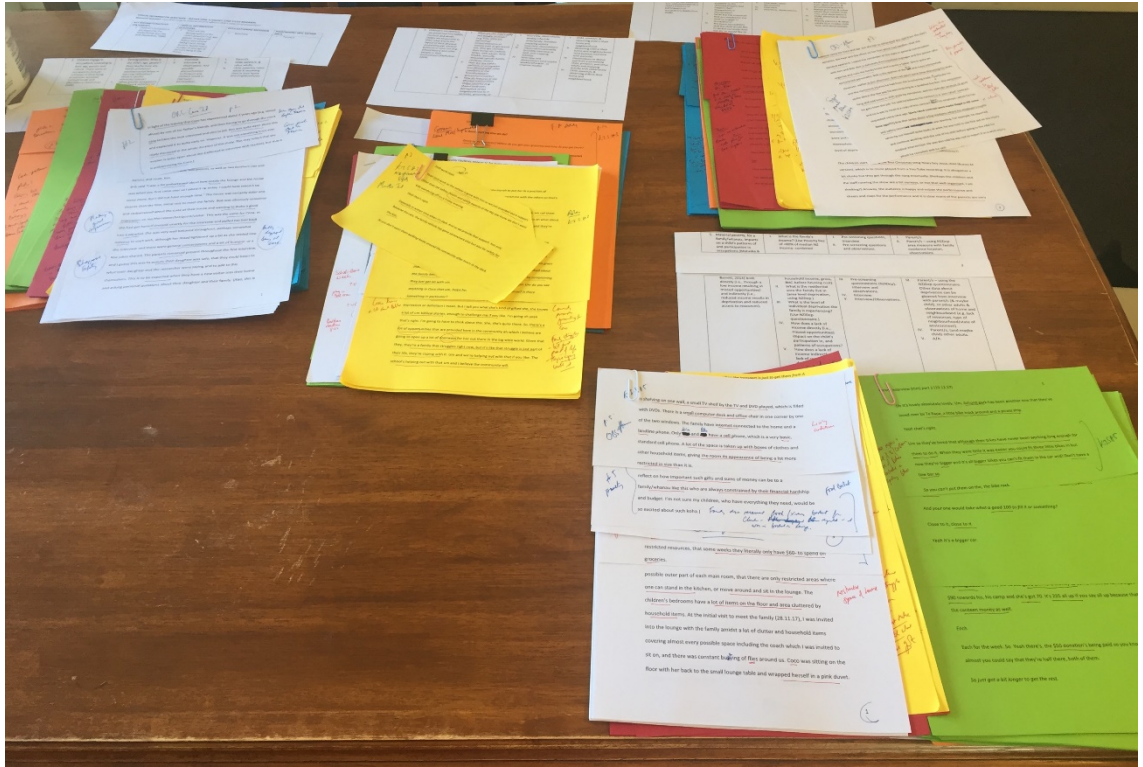
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Note: The Transcriber should retain a copy of this form.



Appendix U: Photos of categorizing data stage; and Analysis tables (examples of).



KEY ASSUMPTION / ISSUE STATEMENT: # 1. Children's occupations are shaped by the adults/family they live with.

TOPICAL INFORMATION QUESTION	DATA	DATA SOURCE
I. What are the demographics of the child's parent/s? e.g. age, gender, employment status, educational background, family income, health status, number of and age of persons living in the house.	<p><u>Age of parents:</u> Bob = in their 40s; Kim = in their 40s (PI#1 p.4)</p> <p><u>Age of children:</u> Coco = 13 years of age; Jae = 12 years of age; Aaron = 10 years of age (PI#1 p.4)</p> <p><u>Gender of children:</u> Coco = female; Jae = male; Aaron = male</p> <p><u>Ethnicity of Parents:</u> Bob = European/Māori; Kim = European; <u>Children</u> = European/Māori (PI#1 pp.4-6).</p> <p><u>Marital status:</u> married for 16 years (PI#1 p.9).</p> <p><u>Parents' employment status:</u> Bob = baker, casual contract; Kim = part-time early child care assistant (4.5 hours/week; since October 2017) & unemployed prior to this/last 16 years (PI#1 p. 7). Works in voluntary roles with school (e.g. Breakfast club, school library etc.) (PI#1 p.7-8).</p> <p><u>Parents' educational background:</u> Bob = qualified baker; Kim = degree qualification as school teacher/not registered, 6th form certificate (PI#1 p.10-11).</p> <p><u>House:</u> Rented (cost \$340-/week); 3 bedroom (PI#1 p. 11-12).</p> <p><u>Family income:</u> Between \$740-890/week (inclusion information).</p> <p><u>Family member health status:</u> Bob = chronic tiredness, high cholesterol; Kim = sleep apnoea; (PI#1 pp. 13-15); Coco = braces Jae = head injury (resolved), grommets, sinus; Aaron = braces, grommets, repeated ear infections (PI#1 pp.16-20).</p> <p><u>Number of persons in the household:</u> 2 parents/adults and 3 children.</p> <p><u>Stress for parents of living in poverty</u> – refer: PI#1 p. 55, 46, 52, PI#2 p. 16; MI p.24; Obs.pm p.8; FMA p.23.</p>	Parent Interview (Kim) part 1 (PI#1) Pre-screening information.

KEY ASSUMPTION / ISSUE STATEMENT: # 2. Children engage in occupations according to their age, gender and culture. These types of occupations include activities of daily living, productive activities (school/work) and play/leisure.

TOPICAL INFORMATION QUESTION	DATA	DATA SOURCE
I. Demographics: What is the child's age, gender? Does she/he have any health problems/-developmental delays or learning difficulties? What is her/his ethnicity/culture?	<p><u>Coco's age:</u> 13 years.</p> <p><u>Gender:</u> Female</p> <p><u>Health status:</u> Orthodontic braces. No other health issues (PI#1 p. 16-20). Bullied at school (PI#1 p. 35)</p> <p><u>Concern for Coco's safety</u> trusting other adults – family visits (PI#1 p. 38) & visiting other friends' family homes (CI#1 p. 18; CI#2 p.16; FMA p. 27, 35-36; PI#2 pp.20-22; Obs.pm. p.5, 1; Obs.CI p.2).</p> <p><u>Ethnicity:</u> European/Māori (PI#1 p.4).</p> <p><u>Culture:</u> As a family the traditions and culture appears European (Observations). Although, as Kim explained she is working on establishing the family tree or genealogy/whakapapa (PI#1 pp.6-7).</p>	Parent interview Part 1.
II. What specific occupations (school/work activities of daily living, leisure/play) does the child/participant or engage in?	<p><u>ADLS: Grooming/self-care:</u> Coco getting herself ready for school, (e.g., dressing, personal cares, brushing tying up her hair), packing her bag, and getting ready for bed (Obs.am p.1; CAD); getting ready for water polo, Girl's Brigade, church, youth group (e.g. dressing, grooming, un/packing); getting ready for bed (e.g. dressing, personal cares, getting into bed and to sleep).</p> <p><u>Eating:</u> Breakfast club week days (CI#1 p. 27; Obs.am p.2) but at home in weekends; lunch at school (at home weekends) evening meals in front of TV on laps as family. Minimal friends or guest over for meals and don't visit friends for meals, but sometimes visit grandparent to family, or family friends and may have shared meal at their homes.</p> <p><u>Meal preparation:</u> breakfasts provide by school (weekdays, e.g. Weetbix, milk, toast) make own lunch meals for school (weekdays), carefully use, re-use and conserve food, not always make nutritious food for lunch (Obs.am p.1,5; TI?); help</p>	<p>Coco's interview (CI) part 1: Refer: CI#1 (pp. 1 – 39), CI#2 (pp.30, 32)</p> <p>Parent's Interview (PI) part: Refer: PI#1 pp. 26-36 & PI#2 pp.1-17, 22.</p> <p>Child photo activity and Interview (CPI)</p> <p>Family mapping activity (FMA)</p> <p>Observation Coco Interview (Obs.CI)</p>

KEY ASSUMPTION / ISSUE STATEMENT: # 3. Children's occupations are patterned into habits, routines and rituals. Habits are responsive to their roles and to the layout of their physical, environmental, societal patterns of time use (e.g., school hours) and other people in their environment.

TOPICAL INFORMATION QUESTION	DATA	DATA SOURCE
I. What are the child's daily and weekly routines? (e.g. how ADLs are performed (steps/sequence of activity such as get bread out, then get utensils, then butter etc.) where, when, with whom; daily, weekly, annually, seasonal) specific habits, routines, rituals).	<p>Weekdays: Sleep: 8:30pm-7:00am; then 7:00am - get up and get ready for school (bathing, dressing, grooming), making lunches (carefully use and re-use/conserves food) and packing school bags; 7:30 -Travel to school in car with mum (2018, now walking brother to school as started high school); 7:45am-8am - having breakfast at school/Breakfast Club (with brother & peers/friends); 8-8:45am - hang out at school with brother or peers/friends; 8:45am - start school, getting ready for class; 9am – start classroom work, which involves classroom time (English/reading, maths) mixed with sporting/PE (physical education) and other cultural activities (e.g. drama, singing, talent time) and with two breaks for morning tea at 10-10:20am and lunch -11:35am-12pm (this time involves eating morning tea/lunch and spending time with friends walking around the school, or playing in the playground, or climb trees); 12pm-3pm more class time, then finish school at 3pm.</p> <p>Mondays (pm): 3-3:30pm walk home (with friends or by myself); 4-5pm watch TV (with brothers at home), 5-6:30pm playing in bedroom/use computer (alone/by myself), 6:30-8:30pm – eat dinner and watch TV (with family at home), 8:30pm getting ready for bed and going to sleep (alone/by myself).</p> <p>Tuesdays(pm): walk to water Polo/Pools for training 3-3:45pm (with friends), 3:45-4pm get dressed for water polo (with peers at pools); 4pm-5pm - water polo training (with friends/peers, at pools); 5-5:15pm get dressed for home (with peers at pools), 5:15-5:30pm travel home (in car with mum and brothers); 5:30-6pm making dinner with mum (at home), 6-7pm – eat dinner and watch TV (with family at home) and may spend time on computer time (home); 7-8:30pm - watch TV (with family at home); 8:30pm - getting ready for bed and going to sleep (mum or dad tuck me in to bed).</p>	<p>Child Activity Dairy (CAD)</p> <p>Child Interview #2 (CI#2)</p> <p>Family Mapping Interview (FMA)</p> <p>Observations –pm & am (home), FI</p> <p>Child Photo Activity (CPA)</p>

KEY ASSUMPTION / ISSUE STATEMENT: # 4. Resources (i.e., physical, social, geographic, cultural, institutional and temporal) will influence (i.e., constrain/afford) a child's patterns of participation in occupations

TOPICAL INFORMATION QUESTION	DATA	DATA SOURCE
I. What are the resources (physical, social, cultural, institutional) that are available to the child/participant that support their engagement in occupations?	<p><u>Physical resources:</u> Transport – car or bikes/buses/walking; (FMA; CAD; PI#1 p. 32, 56; Obs.CI p.5; CI#2 p.20-21); <u>home/house</u> (CAD; CPI; Obs); <u>Food; clothing and footwear; swimming pools, school</u> (all facilities – classroom, sports grounds and other resources such as school electronic device support) (PI#2 p.20); & <u>churches & community centre facilities & clubs & sports groups; playgrounds & parks & river; 2nd hand clothes/op shops, recycle goods shop</u> (CI#1 p. 27); <u>Breakfast club/school</u> (TI p.22-23).</p> <p><u>Social resources:</u> Main supports for Coco (CI#1 p. 28; Obs.pm p.8)</p> <p>Parents (mainly mum, not much dad PI#2 p.31, TI p.4,6; FMA, CAD, CI#2 p. 28; CPA p.13-14; Obs.Ci p.4); Mum budgeting skills (CI#1 p.27, Obs.pm p.8)</p> <p>Grandparents (financial, sleep-overs, time together, gardening) (CAD; PI#2 p.32), <u>Family friends</u> (PI#2 p.32, 9),</p> <p>Local church (financial and food parcels) & <u>youth group/minister</u> (Kids' Club, Youth Group activities, mentor/role model, transport) (PI#1 p. 29; PI#2 p.32, 55; CPI-photo 1, TI p. 27; CPA p.4-5; Obs.pm p.2; MI p.2-3, 5-7, 20; Mara-MI p.15, 26,, city-based church & church mentor (CI#1 p. 30-31; CPA p.5),</p> <p>School & teacher (CI#1 p.7,28; CI#2 p. 20-21; TI p. 1, 5, 6, 14, 17, 22-23, 26; CI#2 p. 25; CPA p.3; CPA p.29; MI p.15, 14), more funding for low decile schools (TI p. 17)</p> <p>Community centre (e.g. Bike club, free food, vege co-op; CI#1, p. 38) (PI#2 p. 9, 31, 39; CPA p.4, 11);</p> <p>Other parents such as at Girls' Brigade (PI#2 p.32); Landlord (PI#2 p. 13);</p> <p><u>Employers?</u> A lack of support within the neighbourhood (PI#2 p.39-40);</p>	

KEY ASSUMPTION / ISSUE STATEMENT: # 5. Material poverty, for a family/whanau, impacts on a child's patterns of and participation in occupations both directly (i.e., through a low income resulting in missed opportunities) and indirectly (i.e., reduced income results in deprivation and reduced access to resources).

TOPICAL INFORMATION QUESTION	DATA	DATA SOURCE
I. What is the family's income? (Use Poverty line of <60% of median NZ income: combined household income, gross, BHC-before housing cost).	<p><i>Family income (combined, all sources) estimated: \$745-895/week, Net*. This is at or below the NZ Poverty Line at 60% of median income (BHC – before housing costs, and CV anchored, Perry 2017). Bob's income fluctuates as his hours at work fluctuate and on low pay /close to minimum wage & there are H&S issues at work (PI#1 p. 21; Obs.pm. p.8)</i></p> <p><i>*Sources of income: Bob/fathers wages, Kim's/wages; Working for Families & Accommodation benefits (Work & Income, MSD), Child support (IRD). **Note WFF benefit can fluctuate depending on the hours worked/week by parents (PI#1 p. 22-25). Bob paid minimum wage despite being a qualified baker (PI#1 p. 25) and H&S conditions are sub-standard (PI#1 p. ?)</i></p> <p><i>Family in long-term poverty. Exs: PI#1 p. 52, time mother's been out of work, time father's been in current job, state of house and renting long-term, deprivation rating of neighbourhoods they have lived in etc. (e.g. last 12 months as per NZiDep questionnaire, lived in current house for years and previous house in similar level of area deprivation).</i></p> <p><i>Children's awareness of poverty (PI#2 p. 18 - Jae, & Coco –CI#1 P.34, CI#2 p.23; PI#2 p. 36, 38; MI p.25)</i></p> <p><i>Trying to make a good impression for a visitor/Rxer (Obs.pm 2; Obs.CI ?)</i></p>	<p>Pre-Screening questions (Income, school decile, street address/NZDEP rating).</p> <p>Parent Interview.</p> <p>Child interview</p> <p>Minister interview</p> <p>Observations.</p>
II. What is the residential area the family live in (area level deprivation, using NZDep.)	<p>NZiDeprivation rating for the neighbourhood family lives in = 8/10 or High level of deprivation (Salmond & Crampton, 2012).</p> <p>The area the family live in is considered a high deprivation area. For example, the housing quality is lower than other low deprivation areas, there is likely to be a higher level of rental properties, the schools have a lower decile rating, it is</p>	<p>Pre-Screening questions (Income, school decile, street address/NZDEP rating).</p>

OCCUPATIONAL PATTERNS: HABITS

THEME	DESCRIPTION	QUOTATION
Watching my programmes	<p>Coco enjoys watching her favourite Television (TV) programmes afterschool on weekdays and she also watches quite a bit of TV in the weekends. This is a relaxing and enjoyable activity for her and primarily she watches fantasy-based programmes, and like the play with her toys and creative writing in, may serve as a form of escape for her providing some relief from her circumstances. However, the increased time spent watching TV is also associated with increased health risks. <i>Refer: Two (2) or more hours of watching TV/day is more likely for children who live in greater deprivation, and greater for Māori and Pacific children¹.</i></p> <p>Poverty is <i>indirectly</i> linked with Coco's high level of passive-based occupations such as watching TV as it does not have any financial cost, and is a convenient and affordable way for children to be entertained.</p>	<p>"I like sitting in here watching my programmes...like 'Liv and Maddie' because there's a basketball girl and also her twin sister Liv is a really talented actress and singer. And the 'Evermoor Chronicles'....[I watch TV] when we get home and while mum's making dinner and when we're sitting down here eating...I think it's about 4-5 hours [time spent watching TV/day]." (CI#1 p.8-9) Coco.</p> <p>"[I like] Playing on the computer. Playing in my bedroom. Playing with my brother's new car set. And watching t.v. [to relax]." (CI#2 p. 24) Coco</p> <p>"[Coco spends most of her time when at home] usually in front of t.v....watching her programmes." (PI#1 p.33) Kim</p> <p>"[We watch TV]...Um when we get home and while mum's making dinner and when we're sitting down here eating." (CI#1 p.9) Coco</p>

¹ https://minhealthnz.shinyapps.io/nz-health-survey-2016-17-annual-data-explorer/_w_584b35ee/#/explore-indicators

	<p>Able to play in the parks in city, river as these are free (PI#1 p. 42 &)</p> <p>Making do with toys, often 2nd hand/gifts (PI#1 p. 46)</p> <p>Learn to appreciate what they have got and live within their means (PI#2 p. 36-37; MI ?) 'having enough' (PI#2 p.37) 'keeping themselves entertained with low costs occupations such as lume bands, drawings when at parks; tv/movies at home-DVD (PI#2 p. 37-38; PI#2 p.7, 42).</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>Multiple activities, multitasking (morning obs), one parent and one car to transport children to and from occupations (PI#1 p. 32, 56; Obs.CI p.5; CI#2 p.20) have to take dad to work some mornings –early start for family (Obs.am p. 3; Obs.CI p.5), dad may use car for work Friday evenings and Coco need ride to and from youth group (MI p.3)</p> <p>Coco needs to walk back from school, and now walks to and from school (high school), and walks to water polo due to <u>restricted transport</u> (e.g. mum can't always pick her up with one car, have to transport younger brother, part-time work, old enough to walk alone/with friends) (CAD, FMA; CI#1 pp.20-22, 27, CI#2 p.10-11; PI#1 p.27; Obs.FI p. 6; FMA p.30); don't use bus much (CPA p.32-33). Church help with transport (as father work and uses 1 car – MI p.2-3)</p> <p>Older car and concern with mechanical break downs and associated costs if use for long distance travel (PI#1 p. 53, 38, 52; PI#2 p. 3, 7, 16; Obs.CI p.5). No tow bar and bike carrier to transport bikes to bike park tracks (PI#2 p. 5)</p> <p><u>Reduced money to buy food</u> such as out at beach where food is more expensive than city, therefore make picnic lunch or buy food on way back to city (PI#2 p. 8; FMA p. 38)</p> <p>Bikes, but need repair and don't have bike locks (CI#2 p. 11).</p> <p><u>Only have one computer</u> in the house, older machine, goes slow and have to share this amongst 5 people (PI#1 p. 34; PI#2 p.20)</p> <p>Children have no cell phones, now I-pads, or personal laptops/computers, no gaming computers (e.g. X-Box, PlayStation) (PI#1 p. 34; PI#2 p. 19; Obs. pm p.5) –</p>	

Dawdling	<p>Coco does need to walk quite a lot (e.g. to and from school, to water polo) and says she takes her time coming home. This is also time where she can spend with her friends, as they do not come to her home and neither does she spend time at their home due to restricted social access.</p> <p>Poverty <u>indirectly</u> affects her occupational choices as she is required to walk more often (due to restricted access to transport), but benefits of this are more adhoc time with friends and regular time spent in a physically-based occupation.</p>	<p>"Sometimes I'll walk with my friends [home from school]...And sometimes we dawdle." (CI#2 p.10) Coco</p> <p>"Sometimes I walk to school. Um and I walk home if my mum can't come and pick me up. Um, but normally she'd drive us to school....Um well she takes us every day to school unless...Yeah every morning unless there's something, she has to do something... She'll come and pick us up we just wait at the bus, bus stop." (CI#1 pp.20-21) Coco</p> <p>"On Tuesday afternoons we walk to [the pools] to do our um training." (CI#1 p.21) Coco</p> <p>"Probably going to have to just get a few more shoes but that would be about it um. Especially because she'll walk them out." (CI#1 p.27) Kim</p> <p>Child daily activity dairy.</p> <p>Observations – family has 3 children and 1 car for transport. Costs associated with running the car such as petrol are highlighted throughout reports by the Kim for travel generally, but not directly about the costs of running children to and from school. E.g. "At the moment I think the car can cope with it, it's just having...money to cover petrol." (PI#2 p.7) Kim</p>
Escaping Get away Time to myself	<p><i>Get away or time to myself</i> - Coco talks about wanting to leave the family living space (e.g. limited space, 5 people in the home, noise) and spend time alone in her room as a form of</p>	<p>"Um the things that I really like to do [is]... playing with my toys in my bedroom and listening to the radio because, I just like want to get away from</p>

OCCUPATIONAL PATTERNS: ROLES

THEME	DESCRIPTION	QUOTATION
Circulars	<p>In order for Coco and her younger brother to attend a Summer camp in the school holidays, her mother has found an opportunity for them to help with the paid work role of delivering circulars. This work is not well paid, involves walking around the neighbourhood delivering advertising material into people's letterboxes, and is available for only a limited time as they are doing it to cover for a friend who normally completes this work.</p> <p>?Coco is learning skills to help her access occupations and cope with restricted financial circumstances, role modelling from her mother.</p> <p>Poverty is directly (income) impacting on her roles such as needing to perform paid occupations in order to participate in a summer camp for children.</p>	<p>Child daily activity diary</p> <p>"Probably could have had a photo of you shoving circulars into a letterbox to say this was the paper run I was doing, look at me lugging all of these...To go to camp. Why am I delivering circulars so I can go to camp." (CPA p.20) Kim</p> <p>"if it was cool enough we might go out and do circulars otherwise we collate them and do them very early the next morning. At the moment we're doing them early in the morning because it's cooler... Um and so what we do on that Thursday morning now would be get up at 6o'clock go out deliver all the circulars and everything and then on their way to school I'll let them have a hot pie as their breakfast. Um...otherwise we might, get out like we had one day where we had to pick Bob up and so we came home from [my friend's] and we did an hour's worth of delivery circulars and then went and picked him up so." (CPA p.23) Kim</p> <p>"Yeah they were looking, they're always looking for helpers if you like, we call them helpers. And I've always mentioned oh have you, have you asked Coco ah what about Amanda? Oh yes okay. So they get a hold of them and they come along and they're only just too keen to come along and help." (MI P.10) Rev RT</p>

TABLE FOR THEMES – DATA ANALYSIS

RESEARCH QUESTION: HOW DOES MATERIAL POVERTY AFFECT A CHILD'S PATTERNS OF OCCUPATION?

THEME	DESCRIPTION OF THEME & RELEVANCE TO KEY ASSUMPTION.	PARTICIPANTS' QUOTATIONS & DATA SOURCE.
<p>Just the money</p> <p>Scrimp and Save / scrimping and saving</p> <p>Can't afford...</p> <p>Careful</p> <p>Priorities</p> <p>CASE</p>	<p>'Just the money' – this sums up Coco's awareness of the impact of her family's low income on her participation in occupations of her choice. This statement is particularly relevant as Coco did not discuss her family's financial hardships in such direct ways throughout her interviews except for this and another instance, which I think reflected her acute awareness of this fact and her sensitivity to the issue.</p> <p>'Scrimp and save' – sums up the poverty that the family face. The family live on a low income and have limited material resources. This is reflected in the children's awareness of their limited income and resources and Kim's, mum's, statements about the struggles and challenges they face living with these circumstances. There are many things they can't afford due to their low income. The family needs to prioritise their expenditure (e.g. choosing how to spend their money such as on essentials like clothing, food, rent, education versus high-cost sports for the children or travel to visit family out of the city, or repair of children's bicycles), carefully use their resources (e.g. re-using and careful saving of food, careful budgeting of household income).</p>	<p>"They, they know that we scrimp with our money. They know that we're, we try to be cautious with our money. But they also know that we try to give them what we know that they need." (PI#2 p. 36) Kim</p> <p>"We do try to go up at times. Um, and that might be with a lot of scrimping and saving for petrol money to go up [visiting family out of the city]" (PI#2 p. 16) Kim</p> <p>"Um just the money [is a barrier to participating in more sports]." (CI#2 p. 23) Coco</p> <p>"Sometimes if we have the money for petrol, we would go...and spend Christmas with my nana." (CI#1 p.34) Coco</p> <p>"We just don't have the funds [to visit family and attend birthdays or weddings out of the city]." (PI#2 p.18) Jae.</p> <p>"They don't get as much pocket money as everybody else does. They don't have a lot in their bank accounts like everybody else does but, at the moment trying to keep them fed, keep them clothed [are the household priorities]" (PI#2 p.25) Kim</p> <p>p.26 CI#1 debt & G.Brigade.</p>

<p>Weetbix, milk and toast</p> <p>HABITS/ROUTINES</p>	<p><i>'Weetbix, milk and toast'</i> – This sums up the purpose of Breakfast Club, that is to provide a basic, nutritious meal to children from low income families, and Weetbix and milk are quite iconic breakfast foods in NZ. The children are served Weetbix, milk and toast as a basic breakfast at school and as part of the breakfast club. While this is a fairly nutritious meal, it is also quite basic and repetitive. The reason that children attend breakfast club each week day morning is due to the family's low income and the restricted amount of money they have to afford to buy food. While, this free breakfast helps the children and their family, it also means that the morning routine is more hectic, that the children spend more time at school, before school begins, and the family don't spend relaxed, quality time together eating breakfast.</p>	<p>"Weetbix and milk and toast...I mean we get milk from Fonterra and Weetbix gets donated from Sanitarium and I think we just buy the toast because some kids don't like Weetbix anymore." (T1 p. 22-23) Margaret</p> <p>"Mum wakes me up to get ready for school [at 7am]...Um, 7.30 we leave to go to school. And then, 8 o'clock, me and my brother are waiting at school for the 8.15 bell to go to go into school...[Breakfast Club is] from 7.50 to 8.00...We, we start school at 8.45. And then at 9 o'clock we start our work." (CI#2 P.3-5) Coco</p>
<p>Hectic morning routine Getting ready for school</p> <p>HABITS/ROUTINE</p>	<p>The morning routine is busy, noisy and filled with activity and with multitasking by mum, Kim, and the children. This occurs as they need to get out of bed, get ready for school and be out of the home in order to be at school for breakfast club, within the space of approximately 30-40 minutes. There is limited space in the kitchen and with 3 children and mum this can add to sense of being cramped or confined and in Coco's cases adds to her desire to be away from these constricted spaces, hectic and noisy spaces and be alone.</p>	<p>As noted above. & Observation notes: Occurs from 7-7:30am; or a short space of time due to the need to get from home to Breakfast Club at 2 different schools at locations that are approx. 1km apart (Coco & Jae at Intermediate School and Aaron at primary school); Coco is quite independent in her ADLs; the kitchen's limited space is a constraining factor when getting ready for school together; it is a busy, noisy space during this time with Mum and 3 children in a small area and Coco left this space once ready to sit by herself outside the house.</p>

<p>Refreshing Time to myself</p> <p>HABIT</p>	<p>Coco identified that she enjoys and perhaps needs to spend time by herself in her room where she be in a space away from others in her family, from the noise (2 younger brothers) and restricted space of the rest of the house, and engage in leisure and restful occupations of her choice (e.g. listening to music, singing, playing with her toys, relaxing).</p>	<p>"Um the things that I really like to do [is]... playing with my toys in my bedroom and listening to the radio because, I just like want to get away from family and just have some time to myself to play... And like listening to the radio. I like that because you just you can sit down and you can just relax and listen to it." (CI#1 p.1) Coco</p> <p>Coco's Photo 6 – playing in my bedroom.</p>
<p>Caring 'Tucking me into bed' Getting ready for bed</p> <p>ROUTINE/SUPPORT Nurtured –Seed (minister)</p> <p>SUPPORT</p>	<p>Coco identified that her parents are caring and loving parents which is encapsulated in her entry into her 'children's daily activities dairy' of 'mum and dad tuck me into bed'. This is also appears to be a nightly routine for Coco when getting ready for bed. This care is also evidenced by their support of her parents (e.g., transporting her to her occupations and attending these events such as watching Kim watching her children playing water polo, or taking them to the parks in the weekend and giving them an education-based drawing activity to complete while at the park, spending time together watching movies at home, or spending time together at church on Sundays, budgeting carefully the family income so that they can pay for the household essentials and for children's school donations, school camp costs, and their other recreational occupations).</p>	<p>Child daily activity dairy: "Tucked into bed by mum/dad."</p> <p>"The main one is trying to spend quality [family] time...Together. Cuddling up on the couch watching a movie." (CI#1 p.36) Kim</p> <p>"[My main supports are my]...Mum, dad, teacher and youth group leaders." (CI#1 p.28) Coco</p> <p>"my dad's teaching me how to play the guitar." (CI#1 p.10) Coco</p> <p>"Now she wants to learn so Bob's going to teach her because he knows how to play the guitar." (PI#1 p.41) Kim</p> <p>Coco's Photo 1 Christmas pantomime – support of mum.</p>
<p>Watching my programmes</p>	<p>Coco enjoys watching her favourite Televisions (TV) programmes afterschool on weekdays and she also</p>	<p>"I like sitting in here watching my programmes...like 'Liv and Maddie' because</p>

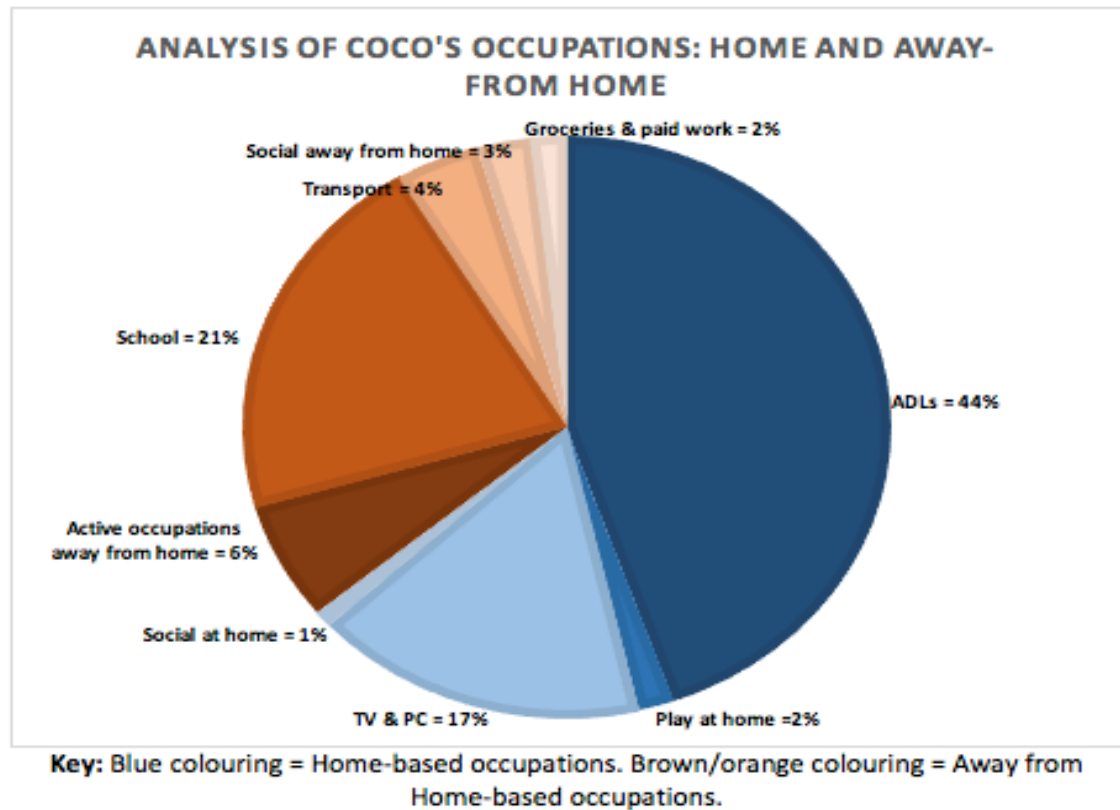
<p>Low cost occupations Making do Keeping them entertained Learn to appreciate</p> <p>PARTICIPATION/ ROUTINE</p>	<p><i>Keeping them entertained</i> – this phrase encapsulates the parents' need to help their children stay occupied, but by finding low cost or free occupations for them to do.</p> <p><i>Low costs occupations</i> - are also utilised and include riding scooters around the neighbourhood, playing with lume-bands, pipe cleaners, drawings and other craft-based occupations. For mum, Kim, these free or low-cost occupations keeps her children entertained without much expense and is part of making do on their restricted/tight budget, and is part of the parents' ethos of teaching the children 'to appreciate what they have'.</p>	<p>"So they can keep themselves...Entertained. We bought lume bands when lume bands came out...And they all sat there quietly doing lume banding so now and then we'll bring out the lume bands and we'll play with the lume bands." (PI#1 p. 38).</p> <p>"nobody should steal their scooters because I've only got them from the tip recycle shop. So it's not like they're brand new and everything so. (PI#1 p. 47)</p> <p>"Yeah I mean, yeah they'd like all the latest toys that come out like every child does um, and they watch the what's it world's most expensive toys the other day and it gave them a new insight into how the others live. Um and it's like well you know you don't need to have the latest flash craze thing you don't need...you don't have the newest things here and there. But you've got enough here that can keep you entertained. I can buy a pack of pipe cleaners and [Jae]... is making, he's making you know people and dinosaurs out of pipe cleaners." (PI#2 p.37) Kim</p>
<p>Active versus passive occupations</p>	<p>Although Coco is quite active throughout her week and at school, with physically-based occupations (e.g. water polo, walking, other school-based sports, activities at youth group and Girls brigade) a lot of her time at home during the week days and in the weekends is spent in passive-based occupations (e.g. TV primarily, computer, time in her room playing). Increased time</p>	<p>Coco's passive occupations: playing in bedroom with toys, listening to music, creative writing; watching TV, playing computer games; passive pay at Girl's Brigade or youth group.</p> <p><u>Time spent in passive occupations at home (in decreasing order):</u> sleeping, watching TV, playing on computer, playing in bedroom.</p>

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<p>Missing out on occupations Restricted/limited occupational choices Do what we can The monetary/financial costs of occupations</p> <p>PARTICIPATION</p>	<p><i>Do what we can</i> - Missing out on occupations: This phrase sums up the restrictions on Coco's ability to participate in a range of occupations that she would like to do, due to financial and resource constraints.</p> <p>There are a number of occupations that Coco misses out on due to a lack of income and resources such as: participating in the representative water polo programme (costs); other sports or recreational occupations of choice (singing or drama lessons, travelling, going out for a meal or to the movies); overseas school trips; use of a bicycle; types of socially-based occupations with her peers.</p> <p>Furthermore, Coco's choice of occupations she participates in is constrained by a lack of income. E.g. she was good enough to be nominated to water polo regional representative team but can't afford the associated cost, would love to become a better singer but can't afford lesson, would like to ride a bike, but can't afford the costs of the repairs/equipment, would like to travel beyond her city to visit family or overseas with her school but can't; nor does she discuss occupations that are common to children her age such as going to the movies or shopping and hanging out at malls.</p>	<p>"She probably would love to do gymnastics. She'd love to do swimming full time but we just do what we can when we can afford it." (PI#1 p.42) Kim</p> <p>"I have a bike but I don't use it because I don't have a bike chain for it... And my brother doesn't have one as well otherwise our bikes get stolen." (CI#2 p.11) Coco</p> <p>"Um we got given a lovely bike um through [school] um a stranger came in and donated a bike to the school... Um, so it's the only bike that's in working order at the moment. Um, Jae's one blue one, we can't keep the tyre up, I've got to take, I've got to go, take it in and probably get a whole new, tube, inner tube for his, his bike. And Aaron his was fine until he rode through a pile of glass... Puncturing the tyre so it's, yeah it's... It's finding the finances for everything." (PI#1 p. 46) Kim</p> <p>"Um there were different things that she couldn't do at school like joining the Lion's group which she wanted to...Just because of finances...Well they call it the Leo club but it's a branch of the Lion's club...So where they do camps and all of that and it's like, I just don't have the funds...To, to do it um. Her doing water polo through school and Girls Brigade being paid, paid options it was like no I'm sorry you're doing two things, that's enough. Um, Jae himself had</p>
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Appendix V: Analysis of Coco's occupations: Home and away from home.



¹Calculations: (Total hours in week = 168)

Home-based Occupations (hours/week):

ADLs (sleep: 66; personal cares: 4; meals: 4; chores: 1) = 75

Play at home (play around the house, alone in bedroom, or at local park) = 3

TV & PC: (Watching TV: 25; Playing on computer (PC): 3) = 28

Social (family/friends) = 1.5

Total: 107.5 = 64%

Out of Home-based Occupations (Hours/week):

Active occupations: (Water Polo: 4; Girls' Brigade: 1; Youth Group: 2; Play at parks: 4) = 11

School = 35

Transport (walking: 4; & car: 3) = 7

Social: (extended family/friends: 3; Church: 1.5) = 4.5

Productive Occupations: (groceries: 1; paid work: 2) = 3

Total: 60.5 = 36%

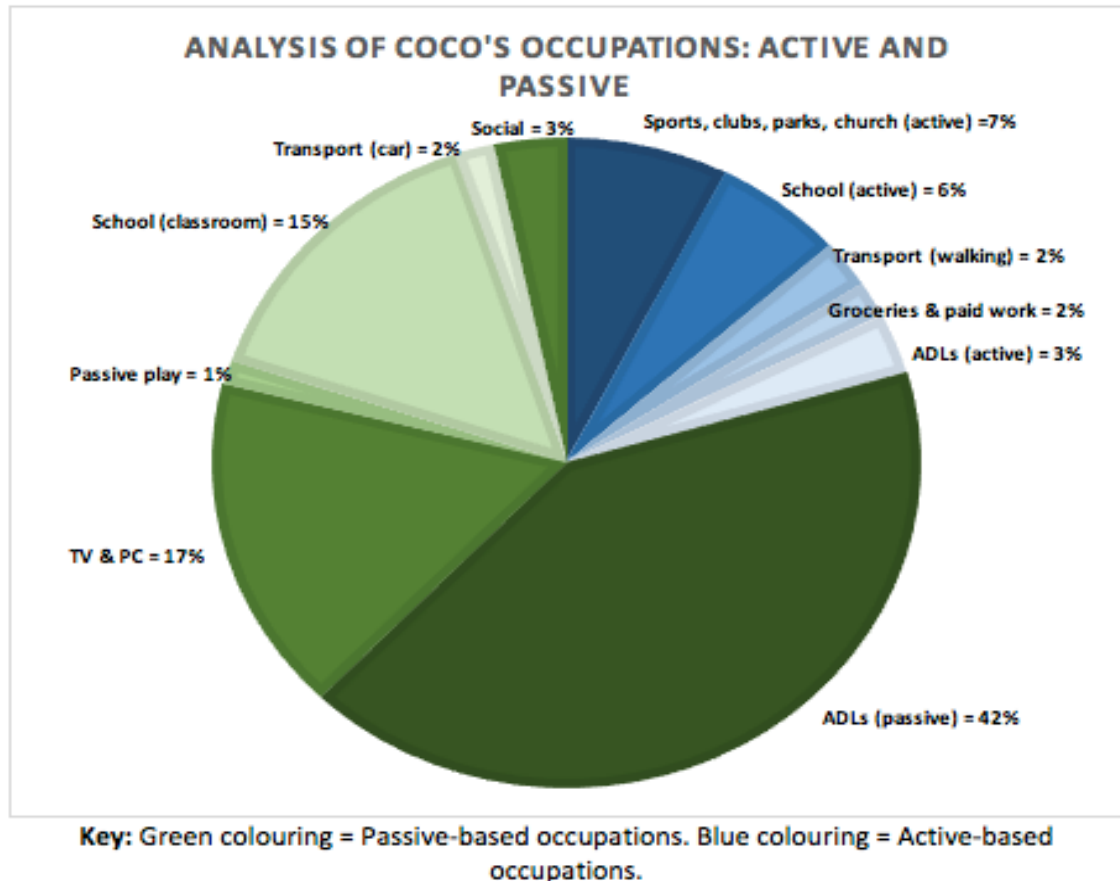
¹ Figure based on data drawn from research (e.g., interviews, daily occupations diary, mapping activity) and are approximations only.

Summary:

1. Occupations occur primarily occur at home.
2. Except for ADLs, most time spent at home on TV/PC.
3. Apart from school, most out of home occupations are active-based (e.g. sports, clubs, play in parks).
4. Time in social occupations, at home and away from home, are restricted. (Compared with an average of 8% of time/week in social occupations for young people (12-24 years) (Bascand, 2011).

US data shows that children of this age spend on average an estimated 55% of their time in ADLs, 15% in school, and 30% in discretionary occupations (e.g., screen time/TV watching, play, sports, hobbies) (Cronin, 2015). NZ time use survey data shows that young people (12-24 years) spend on average 45% of their week in ADLs, 17% in school/education/training, and 29% in discretionary related occupations (e.g., free time, social entertainment, sports, hobbies) (Bascand, 2011).

Appendix W: Analysis of Coco's occupations: Active and passive.

**Calculations: (Total hours in week = 168)****Active occupations (hours/week):**

Sports, clubs, and play in parks: (Girls' Brigade: 1; water Polo: 4; youth group: 2; active play at parks/home: 5; active play at church: 0.5) = 12.5

School (physically-based occupations): sports, drama, active play = 10

Walking = 4

Productive Occupations: (groceries: 1; paid work: 2) = 3

Active ADLs (personal cares: 4; chores: 1) = 5

Total: 34.5 = 20.5%

Passive Occupations (hours/week):

Passive ADLs: (sleep: 66; meals: 4) = 70

TV & PC: (Watching TV: 25; Playing on computer (PC): 3) = 28

Passive play (in bedroom: writing, listening to music, play with toys) = 2

School (studying in classroom) = 25

Transport (car) = 3

Social: (family/friends: 4.5; church: 1) = 5.5

Total: 133.5 = 79.5%

¹ Figure based on data drawn from research (e.g., interviews, daily occupations diary, mapping activity) and are approximations only.

Summary

1. Most occupations are passive.
2. Apart from ADLs or school (classroom), majority of time spent in passive occupations is on TV/PC.
3. Except for school (active), majority of active occupations include sports, clubs, and play in parks.
4. Time spent in social activities may be restricted (excluding social contact through school, clubs, sports and church). This is in comparison with time use data drawn from the NZ Time Use Survey: 2009/10, where young people (aged 12-24 years) spend on average 2 hours/day in social entertainment (Bascand, 2011).

Appendix X: Confidentiality agreement form: Cultural advisor (S.Bryant).



Confidentiality Agreement – Cultural advisor

Project title: Case study research exploring the effect of family and neighbourhood resources on children's activities at home and in their community.

Project Supervisor: Professor Clare Hocking

Researcher: Simon J. Leadley

☒ I understand that all meetings or material and information discussed with the researcher is confidential.

☒ 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.

Cultural advisor's signature: Sharon Harth-Bryant

Cultural advisor's name: Sharon Harth-Bryant

Cultural advisor's Contact Details:

[redacted]@hotmail.com

Ph [redacted]

.....

.....

Date: 8/12/2017

Project Supervisor's Contact Details:

Professor Clare Hocking

clare.hocking@aut.ac.nz, 921 9162

Approved by the Auckland University of Technology Ethics Committee on 05/10/2017. AUTEC Reference number 17/281.

Appendix Y: AUTECH ethics approval letter.

AUTECH Secretariat

Auckland University of Technology
 D-88, WU406 Level 4 WU Building City Campus
 T: +64 9 921 9999 ext. 8316
 E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics



5 October 2017

Clare Hocking
 Faculty of Health and Environmental Sciences

Dear Clare

Re Ethics Application: **17/281 Case study research exploring the impact of material poverty on a child's patterns of occupation**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTECH).

Your ethics application has been approved for three years until 4 October 2020.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTECH prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTECH Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTECH Secretariat as a matter of priority.

Note:

1. The statements about the photos currently on a separate Consent Form may be merged into the main Consent Form, so that participants only have to sign one form;
2. The Assent Form for the children might be simplified.

Please quote the application number and title on all future correspondence related to this project.

AUTECH grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that 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.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,



Kate O'Connor
 Executive Manager
 Auckland University of Technology Ethics Committee

Cc: simlea06@aut.ac.nz; Margaret Jones

Appendix Z: AUTECH (EA2) Amendment approval letter.



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

18 June 2018

Clare Hocking
 Faculty of Health and Environmental Sciences
 Dear Clare

Re: Ethics Application: **17/281 Case study research exploring the impact of material poverty on a child's patterns of occupation**

Thank you for your request for approval of amendments to your ethics application.

I have approved minor amendments to your ethics application allowing member checking of findings.

I remind you of the **Standard Conditions of Approval**.

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTECH prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTECH Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTECH Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTECH grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements.

For any enquiries please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
 Executive Manager
 Auckland University of Technology Ethics Committee

Cc: , simlea06@autunl.ac.nz; Margaret Anne Jones