The Outcomes of Outdoor Education for Children at Sir Peter Blake MERC: A Grounded Theory Study

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Attestation of Authorship

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

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Ethics Approval

Ethical approval for this research (ethics application number 13/279) was sought from the Auckland University of Technology Ethics Committee (AUTEC). Approval was received on 30th October 2013 (refer Appendix A Ethics).

Thesis Abstract

In New Zealand, outdoor education represents a compulsory part of the school curriculum. It is therefore experienced by most New Zealand children at one time or another during their schooling. Outdoor centres are a common provider of practical outdoor education to schools. However, little is known about the lived experiences of children (in such programmes) or the outcomes they obtain.

The aim of this research was to identify outcomes and the factors that influence the process of learning, in the context of Sir Peter Blake MERC, a marine education centre in Auckland. Using a grounded theory methodology, 15 children were interviewed during their residential outdoor school camp. Data was collected and analysed using theoretical sampling and constant comparison. These were employed to develop categories and explain relationships, until a substantive theory was reached: The theory of assisted reflection.

This research has shown that children gained inter-personal and intra-personal development during their MERC camp. They achieved this through a process of assisted reflection, whereby children were facilitated in the recognition, re-evaluation, and expansion of personal boundaries. The process was recurring, taking place after each challenging episode. A key factor in this process was the social environment surrounding children during these experiences.

Chapter One: Introduction

Tirohia kia mārama
Whāwhāngia kia rangona te hā.
Observe to gain enlightenment;
participate to feel the essence.

Whakataukī

Introduction

Outdoor education is a compulsory learning area of the New Zealand Curriculum, and therefore should be experienced within all New Zealand schools. During the late primary-school years, outdoor education often takes the form of a residential camp. Outdoor centres are popular providers of such experiences because they represent convenient, well-prepared and suitably-equipped options for busy school staff.

Children attending outdoor education camps take on new experiences as part of a group. They are exposed to outdoor activities, often in unique environments, surrounded by people with whom they may be unfamiliar. Simultaneously, their usual familiars - home, school, family - are generally absent. This set of widely varying circumstances is claimed to have a number of positive outcomes for students, some of them potentially life-changing. It is however, difficult to determine exactly what is occurring, or by what process. This study set out to answer these questions.

To place this study in context, this chapter will provide a brief background leading to the research questions. It will elaborate on why outdoor education is widely experienced by New Zealand school children and will introduce some key concepts relating to outdoor programming. The research aims and questions will be stated, and the purpose and scope of this study will be explained. Key terms will be defined, and the research methodology briefly discussed. The researcher position and significance of this research will be identified. The chapter will conclude with an overview of the structure of this thesis.

Outdoor Education in the New Zealand Curriculum

As will be discussed further within the literature review, outdoor education has been a regular component of New Zealand schooling in various forms since 1849 (Boyes, 2012; Stothart, 2012). Its formal recognition, however, came in 1998, when the Ministry of Education formally ratified its presence within the Health and Physical Education curriculum of New Zealand (Ministry of Education, 1998). This recognition continues into the current contemporary version of the New Zealand Curriculum and therefore continues to represent official state policy (Ministry of Education, 2007). Outdoor education is one of seven key learning areas identified within the Health and Physical Education curriculum. Each of the seven areas is to be experienced in schooling at both primary and secondary level – they are not optional (Ministry of Education, 2007).

The New Zealand Curriculum applies to all students in all New Zealand state schools whose language medium is English (Ministry of Education, 2007). A parallel document, Te Marautanga o Aotearoa, exists, the function of which is to provide the same guidance to Māori-medium schools. In all, approximately 96% of the 2529 schools in New Zealand (at 1 July 2016) were state or state-integrated schools (Education Counts, 2017), and therefore subject to the formal curriculum. Consequently, the above-mentioned 96% of schools are required by state policy to include some form of outdoor education in their teaching and learning programmes. In addition, many private schools who also acknowledge the benefits of outdoor education have programmes reflecting this including some who have directed significant financial and teaching resources toward the area. Nearly all New Zealand children are therefore exposed to outdoor education during their school years, hence it is important to expand the body of research around outdoor education in New Zealand schools.

Approximately 85% of New Zealand's schools draw students from primary Years 1 to 8 and are also state or state-integrated schools subject to the curriculum (Education Counts, 2017). Primary-aged students therefore represent a substantial proportion of the community, and most will take part in some form of outdoor education. Most research to date has focussed on high-school students, tertiary students and adults. The experiences of the age group under study (up to 12 years old) will be important in informing future outdoor education practice.

Outdoor research frequently focusses on longer-term programmes, often with an emphasis on wilderness environments and highly physical events. In contrast to this, the outdoor experiences of primary-aged students are generally of a shorter duration (hours

or days rather than weeks) and take place most often within school grounds or at outdoor centres (Zink & Boyes, 2006). Such centres will likely provide primary school outdoor education well into the future, due to their resources, experience, and convenience. Their influence in the education of New Zealand primary school children is therefore worthy of attention and study.

Existing research has suggested that outdoor programming may result in a variety of possible outcomes. Ewert and Garvey (2007) explain these broadly in terms of moral development, personal growth, group development, and leadership development. However, whilst practitioners often hold strong personal beliefs about the efficacy of such programmes, research backing the claims of many is limited and relatively recent (Ewert & Garvey, 2007). In addition, Ewert and Garvey suggest that some of these outcomes, particularly personal growth, do not come about as a natural consequence of participation; rather, the quality of programme design and implementation may be key influential factors.

Learning theories are an important consideration in the design of education programmes. Experiential teaching is enhanced when the teacher is cognisant of learning theories – understanding how to empower participants to extract their own meaning allows the full impact of an experience to be realised (Panicucci, 2007). Lacking such an understanding requires that the experience alone be enough to impart results. With some activities and outcomes, this may of course be possible. However, if there is no clear link between participation and behavioural change as Ewert and Garvey (2007) suggest, then designing and facilitating *for* or *to* enable results may logically lead to outcomes more consistently and reliably. In order to make such design possible, it is necessary to not only describe, but also to explain what is occurring in a given context.

Research Aims

The aims of this study were to describe outcomes for the participants of a particular outdoor education programme in the New Zealand school camp context, and to develop an explanatory theory around these outcomes.
The central questions of this research were therefore:

1) What does a participant gain (or lose) as a result of taking part in an education programme at an outdoor centre?

2) By what process(es) might these gains or losses occur?

Purpose and Scope of this Study

This research sought to develop a substantive theory of the outcomes of outdoor education for children, in the context of a particular outdoor centre. The ultimate purpose of generating a theory in this area is to inform outdoor education practice.

The potential pool of subjects for a study such as this is large: primary-aged children taking part in outdoor education in New Zealand. It would not be feasible to include all potential subjects in this investigation due to time and resource limits and requirements of Masters-level research, therefore the limits of this research were as follows:

1). The focus of this study was the clientele of an outdoor centre: The Sir Peter Blake Marine Education and Recreation Centre (MERC). The centre provides outdoor-focussed programmes for all ages, which commonly range from a single day to a week in length. MERC sits adjacent to the Long Bay – Okura Marine Reserve, and Long Bay Regional Park. Its proximity to such locations allows a strong focus on marine-based education and recreation, including sailing, kayaking, and rocky-shore studies.

Situated in Auckland, MERC draws its participants from as far north as Kaitaia and south to the city of Taupo. The centre is operational most days of the year, and the majority of students are school-aged children. MERC has been introducing children to the outdoors since 1990 (Lynch, 2006). As such, it is a prominent, stable, and recognised institution within the outdoor sector. It hosts thousands of children each year from all school backgrounds, and therefore provides a large and varied selection of potential subjects.

2). Based on personal and professional experience and observations, multi-day school camps with overnight stays begin for most primary-aged students from Year 6 onward. Prior to this, outdoor education events often consist of single- day 'taster' experiences with little expectation of growth or learning, and where 'fun' is a central objective sought by teachers. Within Year 6 camps onward, objectives generally reflect values such as 'teamwork', 'communication', and 'confidence building'. I have also observed that Year 6 students have begun to clearly articulate what they observe and feel during 'debrief'

sessions at the conclusions of their activities, and to identify the personal meaning of their own experiences. This study therefore concentrated on children from Year 6 onward, who were still within the seldom-studied primary school-aged group. Participants in this study were in Years 6-8 at school (i.e. approximately 10 to 12 years of age).

3). This study was limited to students whose schools were taking part in a residential multi-day camp at MERC. The reason for this was to allow children a sufficient period at the centre to experience their own outcomes, and to begin to make meaning of them.

Key Terms Used in this Study

Adventure activities are those that deliberately expose participants to an element of risk, in either natural or constructed environments (Priest, 1990; Ministry of Education, 2009).

Education outside the classroom (EOTC) is a generic term used to describe curriculum-based learning and teaching that extends the four walls of the classroom (Ministry of Education, 2009). A wide range of activities fall under the umbrella of EOTC, from museum visits to outdoor pursuits.

Outdoor education is education in, about and for the outdoors (Donaldson & Donaldson, 1958). It focuses on particular aspects of outdoor learning including outdoor pursuits, adventure activities, and education for sustainability (Boyes, 2000).

Outdoor pursuits involve moving across natural environments by non-mechanised means, and include such activities as tramping, rock climbing, kayaking, sailing, rafting and caving (Blanchard & Ford, 1985; Boyes, 2000; Lynch, 1993; Ministry of Education, 1999, 2009).

Choice of Methodology

The methodology employed in this study was grounded theory, underpinned by the theoretical position of symbolic interactionism and guided by a constructivist/ interpretivist paradigm (Charmaz, 2014; O'Donoghue, 2007). Qualitative methods

grounded in the constructivist/interpretivist epistemological traditions were apt because the nature of an outdoor education experience is deeply personal and influenced by context, background, and individual perception. Consequently, the understanding of reality in this context is both socially constructed and individually interpreted.

Grounded theory was appropriate because little is known about the area of study, and a theory with explanatory power was desirable (Birks & Mills, 2011; Charmaz, 2014). Grounded theory findings can be used to develop understanding in areas that are minimally researched, such as the outcomes of education in outdoor centres. Not only is the methodology able to provide an explanation of processes, it may also provide insight to the context and consequences of behaviours (Strauss & Corbin, 1990), a potentially useful understanding for educators looking to ensure the best outcomes for students.

Within this study, the children's experiences were primarily gathered mainly through in-depth conversations. Observations during their outdoor experiences, and document analyses, were also carried out to support an understanding of the constructed environment surrounding their outdoor education camp. An underpinning assumption in constructivist grounded theory is that people actively construct each relationship and experience (Charmaz, 2014). Since each formally taught group outdoor experience is a shared one with multiple influential players, activities, and conditions, the result may be a different experience for every participant, on every occasion. This study considered what outcomes were achieved for children, and how these may have come about given the significant potential for variation.

Researcher Position

This research is a natural extension of my professional and personal interests and experiences. I currently work in tertiary-level outdoor education in Auckland, New Zealand. Prior to holding this position, I had been employed in various roles as an outdoor education facilitator, instructor, and centre operations manager for a total of 11 years.

Reflecting upon my formal outdoor education roles of the past 18 years, it was apparent that ideas and philosophies around outdoor activities are constantly evolving, albeit gradually at times. Yet many outdoor centres continue to operate largely within the constraints of traditional, pursuit-focussed practice. Drawing upon my outdoor education background, I am cognisant of the specialty knowledge and skills required of educators in the field, and of the limitations and standards to which outdoor centres tend

to adhere. In particular, I have observed the reticence of educators in outdoor centres to provide activities outside their own field of knowledge (such as those with an environmental leaning), and the tension for centres between economic survival and idealistic contemporary practice. Therefore, I question if outdoor centres are able to reliably provide the outcomes anticipated by teachers and the curriculum: social and personal development, personal responsibility, environmental understanding, and pursuit skills (Ministry of Education, 2007; Zink & Boyes, 2006). Because outdoor centres are a common source of outdoor education at primary school level, this raised questions to my mind about the outcomes of programmes and activities on offer. In summary, this research came from a desire to better understand what was taking place in the field, and to consider ways to improve outdoor education practice.

Significance for Outdoor Education

A study such as this is necessary, given the lack of research in this context, and the large proportion of teachers who report visiting outdoor centres (second only to those who utilise their own school grounds). Without knowing what outdoor centres achieve or understanding the processes by which they do so, it is difficult to prepare both centres and new educators-in-training for the changing future of outdoor education. This research sought to identify concepts and relationships central to outdoor education and its provision within centres. The explanation of the underlying processes may aid in identifying strategies that can be of use to education providers in the outdoor sphere.

While the resultant theory was specific to MERC, the intention was that it may inform further research, aiding in the development of formal theory relating to outdoor disciplines. The findings may contribute to professional development for outdoor education providers and encourage further investigation in this field of study.

Structure of the Thesis

This thesis is presented in six chapters:

In Chapter One, the research was briefly introduced. The background to outdoor education in schools was outlined, and the questions, aim, and purpose are stated. The

chosen methodology was explained. The researcher position has been presented, and finally, the significance for outdoor education outlined.

In Chapter Two, relevant literature is reviewed, and the purpose of a literature review in a grounded theory study will be briefly explained. The chapter considers what constitutes outdoor education. Anticipated outcomes and mechanisms are examined, with reference to outdoor education theories.

Chapter Three outlines the methodological framework of grounded theory. It provides a rationale for the chosen methodology and explains the general methods of data collection/ generation and analysis associated with grounded theory. Ethical aspects of the research are discussed.

Chapter Four describes the practical methods applied by the researcher within this specific study. This includes site selection and study participants, data collection/ generation, and analysis.

Chapter Five presents the findings of this study in written and diagrammatic form, demonstrating the core categories as developed, and their relationships to each other. The outcomes of the outdoor education programme under study are described, and a possible explanatory theory behind these outcomes and experiences is presented.

Chapter Six provides a critical discussion, outlines the limitations of this study, identifies implications for outdoor centres, and makes recommendations for future development and further research. The conclusions of this thesis are presented.

Appendices follow the chapters.

Conclusion

This chapter has provided the reader with a brief background to outdoor education in New Zealand schools, and key themes surrounding its efficacy. This has set the scene, identifying that there is a need for research around outdoor centres and their programmes for children. It has been argued that centres currently hold a strong position in outdoor education, but that their outcomes are poorly understood for younger participants. Describing their effects and explaining and understanding the processes that bring these about is a necessary step in allowing centres to adapt their practice to our changing world. An appropriate methodology to generate knowledge in this area is grounded theory.

Chapter Two explores the literature relevant to outdoor programming, including the theories and knowledge behind this mode of education. It also positions the literature within this thesis and explains its contribution to a grounded theory study.

Chapter Two: Literature Review

Introduction

To begin this chapter, the role of the literature review in a grounded theory study (and in this research in particular) is explained, and existing precedents for the use of grounded theory methodology within outdoor education research are presented. The chapter will then provide a brief overview of outdoor education in New Zealand. Research discussing the potential outcomes of outdoor programming and the mechanisms behind them are considered. The review then explores contributing factors that may influence the success of outdoor education for children.

The Role of the Literature Review in Grounded Theory

In grounded theory methodology, the literature review fulfils a function that differs from the classic literature review and is completed at a different stage of research. It is thus pertinent to first describe the role and form of the literature review within a grounded theory study, with a particular focus on the constructivist style of this research.

Glaser and Strauss (1967) described Grounded Theory methodology, and it has since evolved and morphed into various forms. The primary variant within this research is Constructivist Grounded Theory, after Charmaz (2014). This methodology is unique due to the claimed divergent epistemological underpinnings of the styles of grounded theory and leads to unique research processes and end-products (Charmaz, 2014; O'Connor, Carpenter, & Coughlan, 2018).

Charmaz (2014) argues that reality is changeable depending upon how the individual constructs it, which is in turn influenced by their own experiences and knowledge. It is therefore subjective and represented not by a single knowable version of reality, but instead by the version constructed which depends on who is 'doing' the construction. Thus, in Constructivist Grounded Theory, an observer cannot be truly objective whilst trying to understand reality because they are part of its construction. In this way Charmaz (2014) argues that a researcher does not separate themselves from their preconceptions. Instead, they acknowledge them and even use them as a starting point for data analysis. However, the ideas the researcher holds prior to analysis do not become part of the analysis unless supported by the data (Charmaz, 2014).

By contrast, Classic Grounded Theorists hold that the researcher's preconceptions are irrelevant since they will be managed by the research process itself (Glaser, 1998), therefore there is no need to acknowledge prior understanding if the process is closely adhered to. Since this research is worked primarily in the constructivist style, I have acknowledged my particular bias brought about by many years of engagement with the sector under study. I have used this information to assist me in guarding against the potential to force conclusions from the data, and in developing theoretical sensitivity.

The role of the literature review within a study is closely related to the consideration of preconceptions. Classic Grounded Theory seeks to explore an area of study with no preconceived research questions, to allow the emergence of whatever data should be discovered without the filter of prior knowledge (Glaser, 1978). Since a literature review would likely influence the formation of questions in the mind of the researcher, carrying one out in the early stages of research would counteract this aim, potentially forcing the data to pre-existing findings. Such a review is therefore performed at a later stage than would be considered usual in a formal research setting.

In contrast to this, Charmaz (2014) argues that researchers are unlikely to lack experience or understanding in their field of interest, and therefore cannot be truly free from preconceived ideas. Charmaz therefore advocates conducting a literature review at an earlier stage, enabling the researcher to use this prior knowledge to aid in the development of theoretical sensitivity. However, both Glaser (1978) and Charmaz (2014), agree that the final version of the literature review should be adapted so that it complements the study and its findings (O'Connor et al., 2018). In either case, the review is not completed until near the end of the research, regardless of the stage at which it is begun.

As I embarked on this research, I believed that the prior knowledge inevitably held by a researcher, who has worked within their field of study (as I have) for nearly two decades, would unquestionably be difficult to truly separate from oneself as a scholar. I therefore considered that:

a). Constructivist Grounded Theory was a better fit than Classic, given my assumptions about the nature of knowledge (to be discussed in further detail in the methodology chapter) and the understanding of the field I already possessed; thus,

b). The literature review would be begun early in the research process but would be refined toward the end of the study congruent with common grounded theory methodology. This would allow me to compare my findings and assumptions to other related knowledge, whilst also building theoretical sensitivity.

Grounded Theory in Outdoor Education Research

Allison and Pomeroy (2000) suggested that the human dimensions and the processes at play in outdoor education ought to be studied through qualitative enquiry. Such strategies would allow the human perspectives of many participants to come to the fore, enabling deeper consideration of what is 'going on' for them in the field from their own point of view. Grounded theory is one of many potential qualitative methodologies that could be employed to facilitate this understanding.

The usage of grounded theory methodology to conduct research in the outdoor field has traditionally been lacking but has become increasingly common in recent years. Kacoroski, Liddicoat, and Kerlin (2016) employed grounded theory to investigate the use of iPads in outdoor environmental education settings. As occurs at MERC, the programme studied by Kacoroski et al. (2016) utilises activities that require children to work collaboratively in order to decide upon solutions, so that the participants must reflect upon the social experience as well as their own understanding. Whilst the specific area of research differs from this current thesis, the study demonstrates the use of grounded theory methodology in outdoor settings with children.

Conlon, Wilson, Gaffney, & Stoker (2018) investigated the process of change for adolescents involved in wilderness adventure therapy programmes. Using grounded theory to analyse interviews with adolescent participants, they identified factors that contributed to personal development in the context of wilderness therapy. A key point of their research in common with this study is the focus on gaining information from the participants' own perspectives. The adventure therapy participants were generally older than those taking part in MERC programmes, had complicated life histories contributing to their presence on the course, and were taking part in residential and outdoor activities over 10 weeks or more (Conlon, et al., 2018). Despite these differences, grounded theory proved itself to be a valuable tool in identifying key processes and influences at work, as well as detecting some long-standing traditions (such as solo time) that may be less important than previously assumed. Acquiring information from the participants' points of view therefore allows researchers to reconsider long-held assumptions, resulting in the potential to improve practice.

Other recent studies have employed similar approaches to develop new theories. Richmond, Sibthorp, Gookin, Annarella, and Ferri (2018) used grounded theory to assess the value and effectiveness of extended outdoor adventure programming in the promotion of non-cognitive factors in adolescents. These methods allowed them to delve into the

contribution of out-of-school experiences to student success in and away from school. Bobilya, Lindley, Faircloth, & Holman (2017) added a qualitative element to the Outward Bound Outcomes Instrument when it became clear that some questions could not be adequately addressed through the primarily quantitative data, the instrument previously sought. Their analysis, carried out using acknowledged grounded theory methods within their mixed-methods study, resulted in a clearer understanding of the experiences of participants than they would otherwise have gained.

The limited number of outdoor-related grounded theory investigations, and the recent years in which the existing have been produced, demonstrate the contemporary elevation and increasing acceptance of grounded theory as an accepted methodology within this field.

What is Outdoor Education?

For over half a century, attempts have been made to answer the question 'what is outdoor education' in a useful manner. Sharp (1943) and Smith (1963, as cited in Ewert & Garvey, 2007) expressed that the outdoors was a medium for curriculum enhancement, or a context for learning. In contrast, Donaldson and Donaldson (1958) defined outdoor education as "education in, about, and for the outdoors" (p.17), suggesting it to be a standalone subject. Debate has persisted globally and within New Zealand between these viewpoints, with proponents on each side (Boyes, 2012; Potter & Dyment, 2016).

In response to criticisms about the accuracy of these definitions, Priest (1986) proposed a resolution: That outdoor education is an experiential method of learning based primarily in the outdoors, that employs the senses, is interdisciplinary, and is centred around relationships between people and the natural world (Priest, 1986). Further to this definition, Priest envisaged outdoor education as a tree, within which two approaches existed. The first, environmental education was concerned with ekistic and ecosystemic relationships. The second, adventure education, addressed inter- and intra-personal relationships (Boyes, 2012; Priest, 1986). This definition has been well-used since its proposal (e.g. Martin, Cashel, Wagstaff, & Breunig, 2006; Miles & Priest, 1999; Priest & Gass, 2005; Prouty, 2007).

However, as Quay and Seaman (2013) would later point out, Priest's definition, while useful, effectively still separated the human relationship aspects from the environmental, and the subject matter (adventure) from the context (environment). Some

twenty years after Priest advanced his definition, Gilbertson, Bates, McLaughlin and Ewert (2006) suggested that experiential learning in outdoor education was a vehicle through which physical skill development, interpersonal relationship growth, and knowledge of ecosystemic relationships could be imparted. This description once again argues that outdoor education may be a medium rather than a discipline in its own right.

More recently, Potter and Dyment (2016) have specifically sought to encourage debate and consideration regarding whether outdoor education could, in fact, be considered a discipline at all, or if rather more work is required to reach such a lofty description. Furthermore, defining outdoor education becomes increasingly difficult because practices and needs are continually evolving (Boyes, 2012). This occurs by necessity. Beames, Humberstone, and Allin (2017) suggest that the educational worth of adventure education programmes is questionable if they are not responding to the wider circumstances (social, political, environmental etc.) within which they take place. A programme that lacks the ability to adapt and change is likely to be out of step with the needs of the current generation of participants, given their experiences of the modern world. One might expect that such a lack of response would be unintentional. As acknowledged by Beames et. al. (2017), outdoor programming for children is a difficult task, and in the 21st century would be expected to provide a wide range of opportunities to diverse clientele in an inclusive fashion, whilst attending to environmental responsibilities.

In addition to being continually evolving in response to contemporary contexts, outdoor education methods are also contestable. Boyes (2012) states that educators' own beliefs and values are a product of the fields to which they subscribe, and their practices will reflect these. Taken together, the challenges previously discussed suggest that attempts to define outdoor education will be ongoing and may affect the methods and practices utilised. As acknowledged by Zink and Burrows (2008), and Potter and Dyment (2016), a definitive answer (to the question 'what is outdoor education') therefore remains contested and complex.

As can be seen, outdoor education can be variously defined and takes many forms in practice. Schools deliver a wide range of activities within a variety of settings. The term outdoor education is therefore perhaps an imperfect one that is still not well-defined and remains broad in its possible meanings. The commonality within the broad term 'outdoor education' lies in the outdoors as a setting. This study addresses a specific context and form of outdoor education; however, this is one of many.

Outdoor Education for New Zealand Schoolchildren

Since 1849, when Robert Huntley opened his school for boys and included in the syllabus camping, tramping, and woodcraft, outdoor education for children has persisted in New Zealand in a more formalised fashion than that of adventure clubs and optional activities (Stothart, 2012). The appointments of Nature Study, Physical Education, and Agricultural instructors, alongside the appearances of outdoor clubs, Boy Scouts, and the first sanctioned school camps during the early-to-mid 20th century (Boyes, 2012; Stothart, 2012), were early indications that education in the outdoors was growing in favour.

During the 1980s the term Education Outside the Classroom (EOTC) was adopted (Boyes, 2000; 2012), and the Department of Education released a draft policy around EOTC for comment (Stothart, 2012). As defined in the introduction, EOTC includes any learning that takes place outside the four walls of the classroom, including but not limited to outdoor education (Ministry of Education, 2009; 2016). Outdoor education, however, does tend to feature as a prominent component of EOTC (Ministry of Education, 2009; 2016), and EOTC is a commonly employed term within primary education settings for outdoor education programmes. Since the 1980's therefore, outdoor education has formally been a feature of school life for the most students.

Today, as stated in the introductory chapter, outdoor education is one of seven key areas of learning under Health and Physical Education in the New Zealand Curriculum (Boyes, 2012; Ministry of Education, 2007; Zink & Burrows, 2008). As such it is a requirement that students engage with it until Year 10 at school. Within the curriculum, there is a clear endorsement of activity or outdoor pursuit-based outdoor education, with the stated aims of personal and social development, outdoor skills and safety, and environmental care (Boyes, 2012; Ministry of Education, 2007; Zink & Burrows, 2008). Specifically, the Ministry of Education (1999) presented outdoor education as a variety of experiences in the outdoors, usually adventure-based, that required the use and development of such skills as co-operation, problem-solving, communication, leadership, and reflection (Ministry of Education, 1999; Zink & Burrows, 2008). Whilst the precise nature of outdoor education may remain undetermined, the Ministry guidelines above represent a clear picture of what might be expected under its guise.

Beyond existing as a stand-alone subject within schools, outdoor education is regularly engaged as a context for other major subjects, particularly Health and Physical

Education, Science, and Social Studies (Haddock, 2007a, 2007b; Zink & Boyes, 2006). In fact, curriculum enhancement is the major motivation for engagement with the outdoors, particularly in primary schools (Zink & Boyes, 2006); this is followed by the attainment of personal and social outcomes as described by the Ministry of Education (2007) and subsequently by skill development (Zink & Boyes, 2006).

Residential multi-day camp programmes for children have become common in New Zealand (Boyes, 2012; Lynch, 2006). Despite this, most programmes offered by primary schools are non-residential and take place during school hours, while secondary schools are more likely to participate in residential camps away from their everyday environment (Zink & Boyes, 2006).

Health and safety laws have changed, particularly in response to high-profile incidents (Stothart, 2012; Zink & Boyes, 2006), bringing their own challenges to providers and schools alike. The requirements of the curriculum combined with health and safety expectations may encourage schools to outsource their outdoor education programmes to centres such as MERC. For time-poor school staff, the advantages associated with external parties taking a major portion of responsibility and administrative work are likely to incentivise this type of school-provider relationship.

Potential Outcomes of Outdoor Education

During the last century, a variety of outcomes have been postulated, or associated, with outdoor experiences. Until relatively recently however, our understanding of effects was based not upon empirical research but largely on anecdotal evidence. As a consequence, exploration of the potential benefits (or lack thereof) lacked a participant's voice or perspective. The Ministry of Education (2007) provides a summary of commonly-stated claims amongst its set of aims for outdoor education within the curriculum: personal and social development, outdoor safety and skill development, and increased understanding of and care for the environment. These aims fit with the model of Gilbertson et al. (2006) and are therefore not without support (the students within this study were taking part in outdoor education consistent with the New Zealand Curriculum).

Inter-Personal and Intra-Personal Growth

Personal development, also known traditionally as 'character building' as noted by Brookes (2003a), has long been considered a key result of outdoor adventure education theory (Brookes, 2003a). Within New Zealand, Zink and Boyes (2006) concluded that outcomes relating to social and personal development were amongst those considered of greatest importance to teachers. Haddock (2007a, 2007b) echoed these findings within the broader context of EOTC. Taken together, these studies (Haddock, 2007a, 2007b; Zink & Boyes, 2006) demonstrated expectations of improvement in social and communication skills, the ability to work with and relate to others, and greater self-confidence and self-esteem. These are empirical findings, however the low participation rate in each of the aforementioned studies weakens their merit. Further support is, however, provided within the Australian context. Lugg and Martin (2001) studied Victorian schools, and Polley and Pickett (2003), South Australian schools. They found that amongst outcomes, personal and social (group) development were ranked by teachers to be the most important in school outdoor education programmes.

Claims to personal and social development have been studied over an extended period. Self-confidence, perseverance, and social belonging have been noted by various authors as likely or possible benefits (Hattie, Marsh, Neill, & Richards, 1997; Priest & Gass, 2005; Sibthorp, Furman, Paisley, & Gookin, 2008). For example, Richmond et al. (2018) demonstrated that outdoor adventure experiences shared by students from a single school led to improvements in non-cognitive factors, such as self-efficacy, leadership, and social connectedness. They concluded that outdoor programming possesses the potential to deliver outcomes that are important in supporting student success inside the classroom.

Humberstone and Stan (2011) carried out ethnographic research at a charity-run outdoor residential centre catering to primary-aged children. The same array of people (centre staff, teachers, and students) were present as would usually attend MERC. The research employed participant observation and group interviews with children as well as interviews with staff. The setting differs to MERC in that it would be considered 'countryside' rather than being a marine protected area, and some activities are facilitated by teachers. Most children experienced this as the first time away from their families and were nervous about this. Some children articulated that they experienced new activities but also simple novelties such as unfamiliar foods. Common threads amongst the comments of participants, however, were that they made new friends, improved existing

friendships, and learned to work with others (and enjoyed doing so). This study is of significance because there is scant research into primary-aged children in outdoor settings, particularly studies allowing the participants to voice their own concerns, opinions, and perceptions. This is a gap that this study aimed to fill in the New Zealand context, albeit in the form of a case study of a single outdoor education centre.

Despite the personal benefits to participants claimed by many (e.g. Priest & Gass, 2005; Richmond et al., 2018; Sibthorp et al., 2008;), some authors (e.g. Brookes, 2003a) have raised questions about the validity of such beliefs and findings. As stated by Brookes (2003a), a foundation of outdoor adventure education theory lies in the assumption that character traits are able to be obtained wholly during an outdoor experience, and further that those traits will then be carried to other settings. He argues that character-building on a mountain does not imply that the same character has been built, for example, for use in business settings. Brookes drew on character trait research from psychology (e.g. Ross & Nisbett, 1991) and applied it to outdoor education. His findings were that trait-related behaviour is situational and individuals have a range of behaviours; and that 'character traits' therefore change during OE experiences because individuals react to situations in which they find themselves. Consequently, situational behaviours exhibited during an OE experience cannot reliably predict behaviours in other situations – because the individual will react with different behaviours in response to the situation at hand.

Brown (2009; 2010) takes this a step further, questioning the concept of transfer in outdoor education discourse and practice, and its achievement through facilitation. Brown suggests that lofty claims such as personal growth are abstract and difficult to attribute to a specific outdoor education activity, while on the other hand more modest claims (such as learning to cook) might be realistic and measurable.

Other authors have carried out site-specific research, also with less than convincing results. For example, Christie, Higgins, and McLaughlin, (2014) employed a mixed-methods approach to consider the experiences of school-aged youth in Scotland taking part in a residential outdoor programme. The study was a substantial one: over 800 pupils across 26 schools incorporating longitudinal data and control versus intervention groups. Whilst most students did not show negative results in either data set, the qualitative and quantitative data did not concur on positive results and the study was statistically inconclusive. A few students in fact questioned the benefit of the experience.

Sheard and Golby (2006) investigated the effectiveness of an outdoor adventure education degree curriculum on a selection of positive psychological constructs. The

experimental group did demonstrate some improvements across various measures; however, these did not meet the threshold of statistical significance. Neither was the difference between control and experimental groups found to be statistically significant. In addition, students appeared not to develop hardiness until their second year of study. Although this study was carried out with a relatively small sample size, it does demonstrate a common difficulty in outdoor education research: a potential lack of substance in findings.

Similarly, Scrutton (2014) carried out a study, once again in Scotland, with similar students to those within this present research: children 10-12 years old attending a one-week residential outdoor adventure experience. Scrutton sought to obtain quantitative data around personal and social outcomes, and to examine the robustness of such evidence. He measured a small benefit immediately (attributed to euphoria) that was lost within 10 weeks (attributed to an absence of integration of outcomes into everyday schooling).

The findings of these studies support the ideas of Brookes (2003a) and Ross and Nisbett (1991). Furthermore, Brookes (2003b) represents the affirmative findings of some researchers as suffering from acute confirmation bias or a lack of convincing evidence, because such research is often carried out by practitioners who cannot help but look for evidence that their approach is effective in achieving its aims – a viewpoint also strongly suggested by Jones and Oswick (1993). Studies such as the aforementioned suggest that anticipated personal outcomes may appear to eventuate, but that if they do, they may be unreliable or unenduring.

Whilst his findings showed that no long-term personal or social benefits were gained, Scrutton (2014) suggested that qualitative methods may be more reliable than quantitative in such settings. This point provides support for the use of qualitative methods such as grounded theory in outdoor education, particularly because children are able to express their own ideas rather than fit the pre-existing categories that dominate quantitative studies. However, it also suggests that a cautious approach is necessary. There is a genuine possibility that expectations of long-term change after such interventions are asking too much of the experience. Researchers must take care to ensure data are not unintentionally forced in qualitative studies to meet preconceived expectations. Clearly, the meaning and potential of residential, multi-day outdoor education experiences for children require ongoing exploration.

Outdoor Safety and Skill Development

Skill development is of less importance (or lower expectation) to teachers than are personal or social outcomes, or environmental awareness (Hill, 2010). Nevertheless, the development of practical skills clearly occurs through outdoor education (Hill, 2010; Zink & Boyes, 2006). These may include technical, pursuit-based competencies required to carry out activities, or more general practical skills such as managing one's own equipment. One might expect that where practical pursuit skills are taught, but are secondary to other aspects of the experience, they will be less prominent in resultant outcomes.

Environmental Understanding and Care

Lynch (2006) posits that by the 1980s the presence of environmental education had declined within the wider field of outdoor education due to the increased interest in outdoor pursuits. As earlier noted, Priest's (1986) attempt to define outdoor education further emphasised that environmental education was for learning about the surrounding world, whilst adventure education was for learning about and developing ourselves. Irwin and Straker (2015) suggest that pursuits provided the 'attractive' and 'exciting' elements of outdoor education used to market the product to potential clients making environmental education more of an anticipated by-product, if considered at all. Furthermore, as suggested by Hill (2013), the use of remote, pristine sites may in fact be counter-productive when attempting to argue that outdoor education substantially incorporates sustainability.

Over time, the phrase 'outdoor education' therefore became progressively more associated with outdoor pursuits and less so with environmental education (Lynch, 2006). The above suggests that providing environmentally focussed outcomes to children may have been an afterthought in some quarters, during times when pursuits were seemingly at their most attractive. Hill (2013) argues that there is considerable distance between the oft stated aims of mainstream outdoor education (predicated on risk, challenge, and personal development) and educating for sustainability, and asks whether some outdoor experiences might actively work against sustainability goals. One might, therefore, question the assumption that environmental learning and care results from participation in outdoor education.

Hattie et al. (1997) carried out a meta-analysis of outdoor education research. Only one of the many outcomes they identified suggested that those taking part in outdoor education gained any benefit related to their understanding of the environment. Other literature suggests several possible reasons why this may be the case, one being that the outdoor pursuit-based roots of many outdoor educators may not necessarily bestow on them relevant environmental education knowledge. According to Grossman (1995), outdoor educators (like other teachers) tend to teach to their own strengths and knowledge, while deemphasizing the areas in which they are less confident or knowledgeable. Educators require a base of ecological literacy if they are to feel confident enough to impart the knowledge to students (Martin, 2008; Zink, 2007). The above suggests (in agreement with Grossman (1995), Martin (2008), and Zink (2007)) that without this base of environmental knowledge outdoor educators may avoid teaching on the subject.

There appears to be no specific plan within the New Zealand Curriculum (Ministry of Education, 2007) for the provision of environmental education, and as noted by Irwin & Straker (2015), it remains incidental (or accidental), usually attached to other subjects. This may not be an effective strategy, as the literature does not suggest that awareness of environmental issues leads directly to environmental action. However, although knowledge alone may not be sufficient to motivate people to behavioural change, the potential to provide the impetus through effective programming does remain within outdoor education (D'Amato & Krasny, 2011; Haluza-Delay, 2001; Hanna, 1995; Kellert, 1998; Kollmuss & Agyeman, 2002; Nicol, 2014). The concern is not that it cannot happen; simply that it *may not* occur coincidentally. The implication for programmes that are activity or pursuit-centred (such as those of MERC and many other outdoor providers) is that the provision of outcomes centred around environmental care or understanding may be minimal, because activities centred upon the environment may be marginalised by the focus on appealing pursuits.

Factors Influencing Outcomes

In 1983, Ewert stated that outdoor education worked, but 'why' it worked remained unknown. In 2000, McKenzie commented that mechanisms by which outcomes arise were rarely addressed, demonstrating how little progress was made in this area of research. Much of our understanding of the factors that influence outcomes (and how

they do so) is based on theory, grounded in assumptions, and lacks participant input (McKenzie, 2000). Ewert acknowledges that the relationships between outcomes and factors such as staff or activities are unknown (Ewert, 1983). McKenzie (2000) recognises that a small number of studies have since considered these relationships (e.g. Hattie et al., 1997; Witman, 1995) but states that a better understanding would allow educators to consider them when designing their programmes, potentially allowing greater efficacy. It is appropriate at this juncture to consider factors that may be influential in the attainment of outcomes in outdoor education.

Activities

As Brown (2008) and Hill (2010) note, the perceived challenges and physical risks inherent in outdoor activities are often identified as the factor influencing change for participants. Cosgriff (2008) suggested that the emphasis on outdoor pursuits may be self-perpetuating if personal and social development outcomes are anticipated, or if schools focus on assessment of technical skills. The assumption that risky activities lead to personal and social outcomes means that those activities may be selected for. However, as Marsh, Richards, and Barnes (1986) suggested, it may not be the pursuits themselves, but the quality and delivery of the activities that lead to outcomes.

According to McKenzie (2000), specific outcomes are rarely linked to specific activities. If true, this has implications for the MERC process, whereby teachers or children select activities to attain the outcomes they believe they will gain, and selections are often based upon perceptions of appeal. The literature suggests that the quality of delivery of the activity will be key, rather than the nature of the pursuit it entails.

Processing/ Facilitation

Facilitators encourage varying levels of reflection and discussion in groups through guidance and feedback (McKenzie, 2000), largely determined by the context and conditions in which they are working. Time-poor or 'taster' activity programmes (such as those at MERC and other centres) may have less time for processing, meaning that participants will need to make their own meaning of activities in their own time.

Processing may contribute to programme outcomes (McKenzie, 2000) however in the case of children there is little definite evidence that this should be the case.

Brown (2008) questions the wisdom of expecting outdoor leaders to effectively facilitate or assist in processing with some participants without clinical training and enquires whether in some cases the assumption that they are able to do so may in fact be dangerous. Davis-Berman and Berman (2002) point out that outdoor leaders may heighten risk-perception associated with their programme, causing unacceptable levels of anxiety and pushing participants beyond their coping abilities. Zink and Leberman (2001) concur and point out the potential for negative effects for both individuals and groups. Facilitation and processing therefore may possess the potential to affect outcomes, however these may or may not be positive. Much will rely on the skill, time, and commitment applied by the outdoor leader involved, which as noted above, in the case of a centre environment may by necessity be limited.

Physical Surroundings

The importance of the physical environment (in which activities take place) has been discussed broadly across several decades. However, there appears to be a divide in the literature around the turn of the 21st century, with respect to the significance of one's surroundings and how best to employ the physical world in order to attain outcomes. With this in mind, the following discussion will first consider 20th century literature, and will then turn to more recent research.

Walsh & Golins (1976) suggested that contrasts between the everyday environments of participants and unfamiliar settings during their outdoor education experiences could encourage participants to gain new perspectives. Kimball and Bacon (1993) added that participants are afforded the opportunities to employ new personal strategies, when faced with novel environments. Within the literature, the accepted wisdom appeared to suggest that removing a participant from their usual surroundings led to consequent outcomes. Nadler (1993) attempted to explain this association, arguing that unfamiliar environs heighten risk-perception and anxiety. Overcoming these obstacles may then lead to the development of personal outcomes such as self-belief and self-concept (Nadler, 1993; Walsh & Golins, 1976).

Prominent authors (e.g. Hattie et. al., 1997; Kimball & Bacon, 1993; Walsh & Golins, 1976) further contended that optimal conditions would be best provided by a

wilderness-based environment. They claimed that such a setting requires participants to learn and develop self-responsibility through the provision of natural consequences. Hattie et. al. (1997) also suggested that wilderness settings have a spiritual quality that contributes to one's personal state. In summary, literature of the late 20th century discussing physical surroundings would appear to argue that spending time in unfamiliar, special, or remote locations would bring about personal change for participants.

More recent literature, however, has taken a turn toward mindful place-based education. As previously mentioned in our consideration of the perceived importance of activity types, Hill (2010) noted that perceived physical risk is often considered an important influencer of personal change. However, Mannion and Lynch (2016) suggested that outdoor experiences are becoming more firmly grounded in place. Furthermore, Wattchow and Brown (2011) observe that the emphasis is shifting away from the activity itself and onto the physical context in which it occurs. Leather and Nicholls (2016) suggest that this movement may be able to provide participants with a different set of benefits to those previously conceived, such as connection to other participants and communities and a deeper sense of responsibility for and connection with the place itself.

In the New Zealand context, research regarding the relevance of location in relation to children's outdoor education needs attention, and this need may grow as communities become more urbanised and separated from their surroundings. Place-based research has the potential to reconnect people with their locales and the communities within them (Brown, 2012). In addition, if the costs or difficulties involved in out-sourcing outdoor education become restrictive, schools may look to provide more programming 'in their own backyard', making an understanding of the significance of place imperative.

Group Dynamics

Groups, their characteristics, and the dynamics within have the potential to contribute to the success of an outdoor experience, for the group as a unit, and for individuals. Groups progress through various stages in their development, which are often observable in outdoor education settings. In 1965, Tuckman suggested that four stages existed in the cycle of team development: forming, storming, norming, and performing. Within this model, teams pass through relatively unproductive and uneasy phases and must learn to

properly settle concerns and issues within the group before they are able to become a fully functioning team. The group must navigate process (how the group settles its tasks), content (what the team must do), and feelings (how the team members relate amongst themselves). The success of the team's progression through the cycle can be influenced by its size, pressures exerted from other sources, or the types of activities in which they are taking part. Some groups will never reach the performing stage, whilst others will back-track or simply take an extended period to advance. A fifth stage, adjourning, was later added to the model as the final act (or de-grouping) for the team (Tuckman & Jensen, 1977). Although Tuckman's model originated in the sphere of psychology, it is highly applicable to groups in outdoor settings, and despite its age remains a pertinent model for group development.

Experiential learning and outdoor education models echo Tuckman's findings. The realisation that a group needs its members contributes to an increasingly supportive group environment over time (Kimball & Bacon, 1993). Gaining the support of peers and helping and caring about peers are important to group members (Witman, 1995). The resultant group bonding leads to a novel sense of belonging (Walsh & Golins, 1976) which contributes to growth outcomes. Group size affects outcomes since the group must include enough participants for (healthy) conflict to occur through group diversity, but few enough students for resolution to follow (Walsh & Golins, 1976). There is clear support, both in outdoor education research and in external fields, for stages of group development and their effects on team performance. However, the factors that are most influential, in either a positive or negative direction, remain ill defined.

Significant Adults

There are few purposeful studies considering the influence that attending adults have on the outcomes of outdoor education for children. Humberstone and Stan (2011), however, provide an illuminating insight into the importance of adult behaviours where children are concerned. During their study of a residential outdoor education programme, they witnessed and have referred to a 'critical incident'. The incident involved the interruption of a centre-staff led activity that children were enjoying, by teachers who chose to publicly reprimand a group of children at that time. The researchers explained the teachers' behaviour as apparently trying to exercise control over students. The centre staff believed the interactions to be inappropriate, and that the children were scared and

tense, and were unable to return to their activity with their former gusto. As a result, leaders and researchers felt that the children were learning about anger, and that the experience as a whole was in fact, detrimental to the children. This incident highlights the critical nature of the interactions between adults and children in the residential outdoor environment. Further research is required in this area.

Participants

A small number of studies exist concerning various characteristics of participants that influence outcomes. For example, short-term results for adult participants are greater than for youth (Hattie et al., 1997). This may be because adults are voluntarily taking part (children are more likely to be compelled to take part due to the place of outdoor education in the curriculum (Hattie et al., 1997). By contrast, Witman (1995) suggested that older adults gain less from ropes challenge courses than younger adults, possibly because they find them less mentally challenging than younger people do. Walsh and Golins (1976) and Hopkins (1982) suggest participants' prior expectations of the experience may have a part to play in gaining outcomes. There is little conclusive evidence about how characteristics of participants may influence their outcomes, and more research is needed in this area.

Conclusion

A number of gaps in existing literature have been identified. There exists a dearth of research relating to outdoor education for primary school children. Anticipated outcomes remain unconfirmed, and there has been scant research regarding the relationships between potential factors, or the mechanisms that influence outcomes. In addition, research surrounding outcomes and processes has not been carried out at Sir Peter Blake MERC. Grounded theory has not been widely used in outdoor education research, nor has it been employed in these particular circumstances in the New Zealand context. This grounded theory research will therefore seek to address these gaps, providing knowledge of the experiences of primary school-aged children in outdoor education. It will aim to identify outcomes of MERC programmes, and the processes and intervening factors influencing those outcomes, and to present a theory that explicates the relationships

between these. Chapter Three will describe the methodological framework upon which this study is constructed.

Chapter Three: Research Methodology and General Grounded Theory Methods

Introduction

Elements of a research study requiring articulation and understanding include epistemology, theoretical perspective, methodology, and methods (Crotty, 1998). Clarifying these components aids in demonstrating that the research process is rigorous and the findings are credible.

In Section A, this chapter addresses methodological assumptions underpinning the grounded theory used in this research. It explores the rationale for and suitability of a qualitative grounded theory approach for investigating outcomes achieved through outdoor education, and the processes that bring these outcomes about. This research has been guided primarily by Charmaz (2008, 2014) and Birks and Mills (2011).

In order to provide a clear understanding of the methodological framework, Section B of this chapter provides an overview of the practical considerations involved in managing such a research process, including particular procedures and terminology associated with grounded theory.

The specific method applied within this study is described in Chapter Four. This chapter concludes with a discussion about reliability and rigour, and how these are evaluated within a grounded theory study.

Section A: Methodology

Methodological Positioning

Grounded theory is a research approach through which the inquirer develops a general explanation of a process, an action, or an interaction shaped by the views of a number of participants (Creswell, 2013). The resultant theory of such a study will be grounded in data from the participants who have experienced the process (Charmaz, 2014; Strauss & Corbin, 1998). A close relationship between the eventuating theory and the data is achieved through the systematic employment of data collection and analysis procedures (Charmaz, 2008; Strauss & Corbin, 1998). A grounded theory study therefore provides an analysis which is demonstrative of rigour, but one that can still address issues of sensitivity and emotion (Creswell, 2013).

Grounded theory is valuable when investigating phenomena influenced by human complexity, such as the experiences of children taking part in outdoor education. It is aptly employed in the absence of sufficient theory to explain or understand a process (Birks & Mills, 2011) whether due to a want of available theories relating to the specific population or case under study, or the inadequate fit or completion of existing theories. It supports the development of theory to explain an event, and how people are experiencing it, and consequently is able to provide direction for both practice and further research. Thus, it is particularly advantageous if little is known about a phenomenon or specific case (such as that of MERC), or when a causal relationship is suspected (Creswell, 2013), both of which are true in this research.

Grounded theory aims to produce an interpretive depiction of a studied phenomenon – or to generate an emergent theory from data, that accounts for that data (Charmaz, 2008, 2014). It is an inductive-deductive approach, beginning with specific or individual cases and moving toward the more general result of theory (Charmaz, 2008; Corbin & Strauss, 2008). Its emergent nature means the form of the study and data collection methods often transform as the analysis advances. The procedures are directed toward construction of concepts and categories, rather than purely description of the studied phenomena. The result of this ongoing conceptualisation is a theoretical explanation that contributes to a new understanding of the phenomena of interest (Birks & Mills, 2011). The development of theory may then inform practice and provide a basis for further research.

Early grounded theory was prescriptive and highly structured. Glaser and Strauss (1967) developed a set of systematic procedures which answered the demand for scientific acceptability, in a highly positivist environment. Since this first publication however, grounded theory has been continually revised and adapted for use with varying philosophical frameworks, and now spans the spectrum between structure and creative flexibility.

Corbin and Strauss (2008) have maintained systematic procedures for grounded theory, although they suggest that researchers should attend to their own instincts, rather than direct an unwavering focus toward processes alone. The explicit nature of Strausserian grounded theory has been critiqued by Glaser (1992) as being too structured and prescribed, leaving little room for creativity and intuitive leaps of logic. Furthermore, Charmaz (2014) argues that focus and flexibility are in fact gained by the application of general principles, guidelines, and strategies, rather than through rigid adherence to formulaic prescriptions.

As a novice researcher, my intention is to systematically employ defining methods and emphases of grounded theory. Whilst doing so, it is desirable to be true to the data, retain flexibility and creativity, and maintain attentiveness to what is occurring within the data.

Rationale for Use of Grounded Theory

Despite a growing body of research in outdoor education, recreation, and pursuits, the processes behind behavioural change and personal outcomes are rarely studied and remain poorly understood. Furthermore, there is a need to consider outcomes and processes for children who are essentially compelled through the curriculum to participate in the outdoor education context, and therefore are unlikely to have a prior bias toward potential gains. Moreover, it is rare for children to be given occasion to articulate their own thoughts on such an experience, whatever those thoughts might be, without a requirement to select their responses from preordained outcomes.

Grounded theory offers a unique opportunity to develop an understanding of the experiences of children in outdoor education. It allows the generation of theory grounded in data communicated directly by individuals experiencing the event, from the perspective of those participants and with consideration for their actual terminologies (Charmaz, 2014). It is therefore able to offer insider insight to the experience, enhancing our understanding of what is happening for participants. This, in turn, allows meaningful action and guides adaptation of practice in order to better meet anticipated outcomes in outdoor education.

Methodology

Methodology can be defined as the fundamental design, strategy, or process underlying the selection and employment of a method (Crotty, 1998). Human interaction is astonishingly complex and, at times, mysterious. Layer upon layer of covert communication and subtle social expectation create a multitude of potential realities and unanticipated reactions to seemingly straight-forward stimuli. Quantitative research can provide some valuable insight through testing. However, in the exploration and explanation of human social complexity, the methodology required will also be complex

(Corbin & Strauss, 2008). In such situations, qualitative studies are appropriate. Qualitative research is apt if inadequacies in current knowledge exist and theory generation is desirable, if statistical analyses will be insufficient to address a problem, or where the context of a setting might influence findings (Creswell, 2013). Each of these conditions is present within the setting under study, therefore qualitative investigation is appropriate in this case.

Grounded theory is a rigorous research method in which theoretical analysis is derived from data, aiming to avoid preconceived ideas or hypotheses of what 'ought to be' prior to the emergence of the theory (Glaser, 1992). The analytic categories and resultant theory developed by the researcher are therefore 'grounded in' the data. It is an inductive-deductive methodology, commencing with individual cases and extrapolating their shared patterns to develop a conceptual category (Charmaz, 2014). Grounded theory was developed by Glaser and Strauss (1967), who exchanged extensive notes and ideas concerning their data throughout their exploration of death and dying. During this process, they established a series of systematic procedures and strategies (with an emphasis on methods of analysis) that would allow researchers to follow their lead in other fields of study, and which would improve the scientific acceptability of such works in a predominantly positivist environment.

When carrying out grounded theory studies interviews are the most common origin of information, however data such as those obtained by observation and document study can also be utilised and are valuable. Codes and categories are developed from the data rather than from logically deduced, preconceived hypotheses. Data collection and analysis are concurrent, focussed, systematic, and inform each other, rather than an initial collection of a large amount of data followed by a distinct phase of analysis. Theoretical sampling is employed once tentative categories begin to emerge.

The researcher interacts continuously with their data through an iterative process, advancing their analysis at each stage and utilising the rigorous methods of constant comparative analysis (Glaser & Strauss, 1967). Each subsequent set of data is compared with all that has previously been obtained and analysed. Differences, similarities, contradictions, and conditions are discovered through this constant comparison, enabling the construction of an emergent theory with explanatory power incorporating process, action, and meaning. Memo-writing is used as a tool to advance analysis and assists in forming an audit trail. The emergent and flexible nature of grounded theory means it is appropriate for exploring context-dependent or dynamic phenomena (Charmaz, 2008). It is concerned not only with a description of results or outcomes, but also and primarily

with the process behind those results, that is, developing a theory to explain how the results have arisen (Charmaz, 2014; Glaser, 1992).

Although grounded theory methodology has been further developed and adapted to suit various philosophical and research backgrounds, the intent and many of the essentials remain unchanged (Bryant, 2002; Charmaz, 2003, 2008; Clarke, 2003; Glaser, 1992; Corbin & Strauss, 2008). The many writings and versions now available are useful to novice researchers in clarifying methods of data collection and analysis, and allowing the flexibility required to adapt grounded theory to study in a wide range of fields.

Constructivist Grounded Theory and the Methodological Source

Charmaz (2006) argued for a constructivist and interpretive approach and has become an important influence in grounded theory methodology. Constructivism has emerged mainly since 2000 to become a major modern grounded theory approach and is based on the ontological assumption of multiple realities co-constructed between and by individuals and shaped by experience (Charmaz, 2008; Creswell, 2013). In addition, constructivist grounded theory views all that a researcher brings to their work as potentially affecting the finished product. Whereas Glaser (1992) held that a researcher must remove his or herself to gain an objective view, constructivists consider that it is not possible to remain entirely uninfluenced by their disciplines, lives, and prior understandings. They therefore seek instead to make these influences explicit within the investigation. In constructivism, grounded theorists' perspectives have the potential to alter or develop as they engage with their data, thus both the form and the content of the inquiry are emergent (Charmaz, 2008).

Where there is little prior research, or if there is reason to believe there is a causal relationship, constructivism allows the researcher to study the process taking place and the meanings individuals construct toward certain phenomena. As is true of other forms of grounded theory, the researcher employs inductive-deductive logic to construct a theory rather than building on an existing theory (Creswell, 2013).

A constructivist grounded theory approach within the interpretivist paradigm is appropriate in this study because it incorporates the researcher's ontological, epistemological, and axiological assumptions (multiple realities shaped by experience and constructed by individuals and their interactions with others, as well as the inability of any individual to entirely separate oneself from one's own biases and values). In

addition, the gaps in outdoor recreation research involving New Zealand children and the site under study, the dearth of available (and applicable) theory on which to base further study, and the poorly understood nature of the processes involved in developing experiences into actions further justify the use of a grounded theory method.

The methodological source given particular regard within this work is Charmaz (2003, 2006, 2008, 2014), in the constructivist vein. Charmaz however argues against the need for formulaic prescription of the method, and allows for the incorporation of techniques from other sources. In this present study, the concern has been to ensure an effective use of important grounded theory methods. This research therefore also draws upon Birks and Mills (2011) to assist in providing this clarity. The constructivist grounded theory approach stands upon the foundations laid by Glaser, Strauss, and Corbin (Corbin & Strauss, 2008; Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998). It is, however, less prescriptive than some of these earlier works, while retaining the emergent nature of grounded theory.

Ontology

Ontology is concerned with the nature of reality and its characteristics (Creswell, 2013). Based upon professional and personal experience, the researcher contends that each person's experience of reality, the world, and any event to which they are party is individual and personal. The strong and divergent opinions held within any group are a reflection of members' individual and collective experiences. The author therefore concludes that a range of realities exist, and that they differ between individuals.

Furthermore, it can be postulated that not only is each individual's reality unique, but it is continually evolving and is a product of their life to that point; social, cultural, experiential, and interpersonal. As an individual proceeds from one event to the next, their perspective may be transformed as they interact with each new encounter or entity. In addition, personal experience suggests that each human may experience different realities, as they move between discrete spheres of their lives; for example those of a parent, student, teacher, or spouse.

The ontological assumption therefore, upon which this research is based is that there are multiple realities and viewpoints which differ between and for individuals, and that these are influenced and altered by experiences and interactions; thus, a qualitative study is apt. These multiple realities are apparent in this research in the varied forms of

evidence (interview, observational, and document study), and demonstrated through the authentic words of a number of different individuals, whose diverse perspectives are presented in the findings.

Epistemology

Epistemology relates to what knowledge is, how knowledge claims are justified, and the nature of the relationship between the researcher and that being researched (Creswell, 2013). That is, how do we know what we know? This study is based upon the assumption that knowledge and reality are co-constructed between individuals, and are founded on subjective evidence from all involved which is shaped through individual experiences. Constructivist grounded theory acknowledges the subjectivity of human influence in research, and therefore is highly appropriate in this context.

Minimisation of the distance between the researcher and subject is key when we consider reality to be constructed and interpreted by individuals. The researcher cannot be removed to an objective position, since their understanding of what they observe will also be subject to their own interpretation. Therefore, in order to gain the most accurate information possible, they must seek instead to form an insider's perspective.

Minimisation of distance between researcher and subject can be accomplished through on-site fieldwork. Sufficient time in the field develops the first-hand knowledge of the researcher to a point comparable with that of the participant, providing the researcher with context for understanding what the participants are actually saying (Creswell, 2013).

Throughout this study, the researcher has been the primary data-gathering instrument, and the main tool used was semi-structured in-person interviews, with the secondary tools of observation and text analysis. This study included significant time in the field in an environment and situation with which the author is already familiar, and the focus was on developing rapport with participants, and insider knowledge from their perspective. This is reflected in this study through the presentation of quotes and the clear collaboration of the researcher and participants in generating evidence.

Axiology

Axiology is concerned with the role of values (Creswell, 2013). The interpretivist approach takes the stance that perspectives and points of view provide the filters through which people see the world, and against which they make sense of it (Charmaz, 2014; Corbin, 2009; O'Donoghue, 2007). In turn, constructivism acknowledges that prior experience and understanding cannot be separated from the individual (Charmaz, 2008). This implies that the backgrounds of all involved parties (researcher, participants, and others related to the research subject) will influence understanding and interpretation throughout the research. Personal history, culture, and beliefs are pertinent to the study and its outcomes. The axiological assumption then is that research is value-laden and bias is ever-present. In this study, the researcher is positioned in the research by acknowledging and articulating their own bias and values, and their own interpretation is included in conjunction with those of participants. The values that have assisted in shaping the narrative are openly discussed.

Desired Outcomes of a Grounded Theory Study

The intention of a grounded theory study is to go beyond description of a phenomenon, to generation or discovery of a theory with explanatory power toward that phenomenon (Birks & Mills, 2011; Corbin & Strauss, 2008; Creswell, 2013). Within the context of outdoor education, the phenomenon to be described will be the outcomes obtained by children, however explaining the mechanism or process leading to these outcomes is the greater purpose. It is an appropriate methodology for this research, since children compelled to participate in school camps are rarely studied, and processes behind outcomes are poorly understood. The intended result is a theory concerning not only what is 'going on' for the children under study – but also why, how and when it occurs, and under which conditions it holds true.

Section B: General Grounded Theory Methods

Method Described

Methods are practical procedures used to generate and analyse data (Birks & Mills, 2011). Data collection methods including interviews, observations, and text analysis are commonly used in grounded theory (Creswell, 2013). Despite their differences, the major forms of grounded theory feature a number of shared hallmark processes, namely: coding, theoretical sampling, memo-writing, and theoretical saturation (Birks & Mills, 2011; Charmaz, 2008). Within and amongst these processes, the researcher employs concurrent data collection and analysis, interviewing as a primary data collection method, consideration of theoretical sensitivity, and constant comparative analysis (Birks & Mills, 2011). These characteristics all appear within this study.

The Research Question

The investigation begins with a query identifying the problem under study, and its context. In a grounded theory study the researcher does not presume to predetermine what data will be uncovered, thus the initial question is somewhat broad. This allows the freedom and flexibility to examine a topic in depth, and to allow data and meaning to emerge in as unrestricted a fashion as possible. The initial research question in this study was:

"What happens for children taking part in an outdoor education camp at MERC?"

Data collection began with this research question. The initial data obtained in response to this query suggests direction and focus for subsequent data collection, allowing more refined and directed enquiry to take place. Grounded theory requires that the data from each collection phase be analysed, and then compared with all other incoming data. This process, known as the constant comparative method (Glaser & Strauss, 1967), occurs at every level of analysis throughout the work under study. Data generation and analysis therefore take place concurrently and continuously during the research. Initial, provisional hypotheses will emerge as categories from early data. These theories direct further sampling, which in turn allows the researcher to verify their

hypotheses, to uncover further information about the categories, or to redirect their focus during subsequent data collection (Strauss & Corbin, 1998).

Within this study, the research question proceeds primarily from the author's background and interest in outdoor education. Initial interviews in grounded theory are relatively unstructured and use general questions such as: *"Can you tell me about your experience/s here at camp?"; "What did that mean for you?"; "What was it that made the experience (what it was)?"* The questions are broadly framed but it is evident that the focus is on the experiences of children during the outdoor education camp.

Sampling

The initial sample is based upon the need to answer the research question. The participants are purposefully selected as those most likely to address the studied phenomenon. This research considers the experiences of children taking part in an outdoor education camp at MERC, therefore it begins with the selection of exactly such participants for the initial data collection. Further sampling is responsive to the data already collected and analysed (Corbin & Strauss, 2008). Initial data collection is followed by the initiation of analysis and coding, which then leads on to theoretical sampling.

Theoretical sampling means sampling to construct theory rather than to aim for a representative population (Charmaz, 2014). Beginning once tentative categories emerge, it examines concepts, and questions the meanings in the emerging theory, guiding further data collection using the researcher's notes and memos and the findings to date to direct decisions (Birks & Mills, 2011; Charmaz, 2008). As a researcher proceeds through their analysis, queries will occur to them such as why or how a phenomenon is occurring. These questions will lead the researcher to return to the data or to further data collection, with the aim of discovering answers to satisfy their inquiries. Theoretical sampling answers the questions posed by the constant comparison applied in grounded theory (Birks & Mills, 2011; Charmaz, 2006; Glaser & Strauss, 1967; O'Donoghue, 2007).

Data Gathering

Interviewing is a significant data collection method in grounded theory, but participant observation, journals or memos, document analysis and other forms of data generation may also be used to help develop the theory (Charmaz, 2014; Creswell, 2013). Glaser and Strauss (1967) state that interviewing, observation, and document studies tend to occur simultaneously. For example, an interviewer who actively spends time in the field will also notice interactions, body language and tone of voice, events or incidents, and other notable aspects that would be missed if interviews were carried out in a sterile and removed environment. It is therefore important to minimise distance between the researcher and subjects, by entering the field in order to collect data.

Initial grounded theory interviews are semi-structured. Respondents speak freely, and the researcher only begins to direct their questioning once the theory begins to emerge (Glaser & Strauss, 1967). Research questions asked during interviews are open-ended, general, and focussed on understanding phenomena of significance in the study. Questions are refined after each interview to provide the direction necessary to add depth to the study. Keeping memos throughout the process provides credibility to the analysis, by encapsulating emerging concepts and direction at each stage. Making detailed notes of the analysis and resulting theoretical sampling provides an audit trail of the decisions made during theory development (Strauss & Corbin, 1998).

Observation is an important research method within the interpretivist paradigm; one that allows clarification and elaboration on stated perspectives, and provides an opportunity to investigate inconsistencies between intentions or perspectives, and actions (Charmaz, 2006; O'Donoghue, 2007). Observation is the act of noting a phenomenon in the field setting through the five senses of the observer, and recording it for scientific purposes (Angrosino, 2007). In field work, the researcher often literally sees relationships between concepts taking place (Glaser & Strauss, 1967), thus assisting in the development of theory. Observations may be made during explicitly managed activities, for instance, interactions between group members, however they may also include those incidents and moments that occur during interviewing, such as periods of thought, interrupting moments, or uncomfortable body language. The setting, participants, interactions, conversations, activities, and the researcher's own responses can all be seen as observational data (Creswell, 2013). During this study, the researcher fulfilled differing observational roles depending upon circumstances, never acting

completely as a participant, but otherwise ranging from participant observer to external observer.

Documents include recorded visual images and written texts. They may be elicited, for instance participant journals produced in response to a research request, or extant, such as organisational documents produced for some other purpose than the research at hand. Consideration may be given to the purpose of the documents, what or whom they affect, or how they may be interpreted. Document analysis may reveal unintended bias or consequences, or allow for action or inaction within an organisation (Charmaz, 2014). In this instance, organisational documents were created for specific purposes such as the management of activity sessions, and were utilised in support of interview and observational data. They were an important source in considering the stated objectives of the programme in relation to the described outcomes of participants. Comparing field notes and written documents can spark insights about the relative congruence, or lack thereof, between words and deeds (Charmaz, 2014).

Data Analysis

Data analysis is accomplished through coding of data from each source, identifying and questioning concepts, and making comparisons between data (Corbin & Strauss, 2008). Coding begins with the initial data set, and each phase takes place prior to subsequent data collection. Concepts, categories, properties, and dimensions will arise for consideration throughout the process. The researcher works to develop sensitivity to the data as they proceed (Strauss & Corbin, 1998). The objective of theory development is achieved through the constant comparative method (Charmaz, 2014; Glaser & Strauss, 1967). Throughout, concepts and ideas are checked against preceding data in order to build a theory with depth. The concepts and theory become increasingly abstract as analysis advances (Charmaz, 2014). The process and decision-making is documented in memos.

Concepts and Categories

Data analysis generates conceptual categories and identifies their properties, then seeks relationships among the categories and their properties (Glaser & Strauss, 1967). Concepts are words that represent groups of data which have some common specifiable

properties and boundaries (Charmaz, 2014; Corbin & Strauss, 2008). Concepts are constructed from raw data by conceptualising it and then labelling it accordingly. New data are then compared to these concepts.

Categories are groups of codes representing higher-level similar concepts. Each category may be its own conceptual element of a theory (Glaser & Strauss, 1967). Their dimensions and properties are specified by constantly comparing each subsequent new set of data against the concepts and categories already developed - that is, using constant comparative analysis (Creswell, 2013; Glaser & Strauss, 1967). Comparisons are made between and amongst incidents, codes, and categories, and memos provide the catalyst to gather more data, achieved by theoretical sampling (Birks & Mills, 2011; Charmaz, 2006; Glaser & Strauss, 1967; O'Donoghue, 2007). Each element of the theory is constructed essentially in this manner. Concepts and categories once developed are checked, and re-checked, against new data, and/or by discussion with participants. This ongoing process of revision, verification, and refinement of concepts and categories lends credibility to the developing theory, and guards against the effects of bias.

Multiple perspectives about categories are represented by properties (or subcategories); these are characteristics that define and give meaning to a category, while dimensions are the range that a property demonstrates (Birks & Mills, 2011; Creswell, 2013; Glaser & Strauss, 1967).

Coding

Coding is the analytic process of taking data apart, defining what these same data are about, and labelling the result accordingly. Codes are short labels constructed by grounded theorists that depict what is happening in the data (Charmaz, 2014). Data are aggregated into small grouped segments of information, and then each of these segments is assigned a label, that is, a code. Evidence for the code is sought from different databases in the study. Grounded theory coding usually identifies actions, processes, or interactions underlying a phenomenon (Charmaz, 2014; Creswell, 2013).

Grounded theory codes are emergent (Charmaz, 2014; Creswell, 2013; Glaser & Strauss, 1967). This means they arise from what the researcher sees in the data as they interact with it, rather than being preconceived. They may arise from two sources: in vivo codes taken from the exact words of the respondents, or codes composed by the researcher based on their own understanding (Birks and Mills, 2011; Creswell, 2013).

Charmaz (2014) advocates coding in gerunds – the noun form of verbs - as a way of preserving action and process within the theory.

In constructivist grounded theory, data analysis incorporates a minimum of two stages of coding. The first stage of data analysis develops concepts from the data using initial coding. The second stage interconnects the concepts into categories through focussed coding. Although the types of coding are distinct, their start- and end-points are often less clear and a researcher will move back and forth between them (Charmaz, 2008, 2014; Corbin & Strauss, 2008). Unlike earlier forms, constructivist grounded theory incorporates flexibility in deciding when analysis is complete - initial coding is followed by focussed coding, which in turn may be succeeded by higher integration and theoretical storytelling if appropriate, but this is not always required (Charmaz, 2014). Coding is carried out on all types of data, beginning with interview transcripts. Initial coding begins immediately upon generation of the first data set, and analysis then continues concurrently with data collection.

Initial Coding

In initial coding, the researcher develops categories of information about the phenomenon under study by segmenting data (Charmaz, 2014; Creswell, 2013). To begin, each item of data is read-through in hard copy format. Data are compared incident to incident, word by word, line by line, or paragraph by paragraph for recurring "incidents", such as important or repeated words, phrases, sounds, explanations, and experiences (Birks & Mills, 2011; Charmaz, 2014). Concepts or apparent phenomena underlying the incidents are identified and an apt label is applied to each concept. To achieve this, notes are made directly on the hard-copy of the data, some of which may become initial codes. The most significant and frequent of these codes are eventually subjected to focussed coding.

The coding process develops as analysis progresses, into integration of categories and their properties. The dimensions and properties of each category are then established. Subcategories are developed from each category. Each subsequent new set of data will be compared against the incidents, codes and categories already developed (constant comparative analysis).

During coding, memos form a record of the path of data analysis and assist the researcher in discovering concepts and categories. Glaser and Strauss (1967) recommend that as researchers recognise a point of conflict in their thinking, they should stop coding and record a memo about their ideas, analysis, and interpretations, carrying their thinking

to its logical conclusion. This supports the researcher to think broadly, and to identify questions that will direct future data collection.

Focussed Coding

Focussed coding scrutinises the codes to evaluate which ones best interpret or explain the phenomenon. Patterns and relationships will be observed, and gaps in theory will again direct data collection. This will continue until appropriate categories and sub- categories are conceptually well-developed, their properties and dimensions are articulated, and they are therefore judged theoretically saturated (Birks & Mills, 2011; Charmaz, 2006, 2008; Strauss & Corbin, 1990).

The core categories selected should be extensively discussed by participants, or of conceptual interest because they seem central to the process being studied – concepts must 'earn' their way into the developing theory (Charmaz, 2014). The researcher then returns to the database or collects new data to identify categories that relate to the core categories, and to provide further insight into them. The result is an analysis which is able to explore causal conditions, specify strategies used by those involved in the situation under study, identify the context and intervening conditions (i.e. the narrow and broad conditions that influence the strategies), and delineate the consequences of the strategies used (Charmaz, 2008; Creswell, 2013).

Ongoing Conceptual Development

Following focussed coding the researcher may write a storyline that connects or explains the categories, or propose hypotheses or statements that are then checked against data to discover the most plausible explanation for the phenomenon (Birks & Mills, 2011; Creswell, 2013). Once the analyst has the coded data, a series of memos, and a theory in mind, it is appropriate to write the theory (Glaser & Strauss, 1967).

Memo-Writing

The theory emerges with the help of memo-writing, in which the researcher writes down ideas about the evolving theory throughout the processes of coding (Creswell, 2013). Memos provide an important aid for decision-making, throughout data collection and analysis, and during the generation of the theory (Birks & Mills, 2011). Memo writing

assists in elaborating on, specifying properties of, and defining relationships between categories, in addition to identifying gaps (Charmaz, 2006; Glaser & Strauss, 1967).

Memos encompass thoughts, ideas and insights, decisions and reflections, data, and problems and concerns (Birks & Mills, 2011). They provide an audit trail in the decision-making process because they trace the progress of a category, and can be a rich source of data in themselves (Birks & Mills, 2011; Charmaz, 2008).

Theoretical Sensitivity and the Role of the Researcher

The researcher develops theoretical sensitivity throughout the study whilst working with the data. Theoretical sensitivity is insight into meaning and significance in the data and the ability to recognise and investigate bias and assumptions – it aids theory development, increases as the researcher grows in ability, and is influenced by the researcher's own history (Birks & Mills, 2011; Glaser & Strauss, 1967). The researcher's own experiences, general knowledge, reading, and others' stories provide useful data and comparisons. Anecdotal evidence is a valuable resource, and varied sources may make generalisations possible and more accurate (Glaser & Strauss, 1967). There are inherent challenges in the type of analytical process used in grounded theory. Whilst the investigator must set aside where possible their own theoretical ideas or notions so that the theory can emerge, they must also determine when a category is theoretically saturated or the theory is sufficiently detailed (Creswell, 2013). This requires that the researcher continue to develop their sensitivity throughout their work.

Strengths and Limitations

The concurrent data collection and analysis that is characteristic of grounded theory may be seen as a strength, in that each phase of data collection proceeds from the analysis already carried out, and the emerging analysis has therefore originated within the data. This provides a valuable opportunity to truly allow participants to express themselves, in their own words. The author contends that in allowing others the creative freedom to muse over, explain, describe, and illustrate their own experiences, a more accurate rendering of the event is gained from their perspective than would be by assigning an outsider's words of significance to the event for the participant to select from.

A challenge to meet, on the other hand, is the bias held by researchers toward their subject when attempting to produce an interpretive rendering of that subject. Remaining open-minded to the data aids in meeting the requirement that the data not be forced (Strauss & Corbin, 1998). This is appropriate advice, but at times may be difficult to implement and it requires a conscientious effort by the researcher to do so. As a novice researcher, there is awareness of the professional and personal experience and knowledge held by the author regarding the field in which this study is positioned. The employment of constructivist grounded theory in this study allows the author to retain this awareness and to acknowledge its potential impact in the finished product.

Corbin and Strauss (2008) allow that this knowledge can be used constructively, and it is possible to work with this sensitising information in order to formulate questions and research problems. It remains for the researcher to be alert to their bias, to recognise how they may be influencing the emergence of the analysis – and in the case of constructivism, to make these concerns explicit.

Time is a potential limitation in a grounded theory study such as this. The development of a complete theory depends upon saturation in categories. In this research, it is anticipated that the findings will provide an illustration of what is happening for children in outdoor education at the study site. The theory constructed from the experiences, stories, and circumstances of the participants should be highly relatable to others interested in the study subject, provided that sufficient variation and depth is captured within the data. Grounded theory is capable of presenting accurate portrayals of reality and as such, is an exciting interpretive option for use in outdoor research. However, with too little time, it is possible to produce a theory lacking the required degree of saturation.

Rigour

Rigour suggests quality in research. Birks and Mills (2011) identify that rigour is affected by researcher expertise, methodological congruence, and procedural precision. Researcher expertise develops over time and with experience. Methodological congruence is accomplished if there is alignment between the philosophical position, stated aims of the research, and the approach used to carry out the research. Procedural precision can be attained through paying careful attention to the rigorous application of grounded theory methods (Birks & Mills, 2011; Cooney, 2011). This is achieved through

thorough management of data and resources, logical application of procedures, and the maintenance of an audit trail regarding decisions made and the path followed.

Charmaz (2014) acknowledges that there are varying models for the evaluation of grounded theory (and recognises Glaser, 1978 as particularly useful), but argues that these criteria will depend upon who is carrying out such an evaluation and what purposes they invoke. She suggests four main criteria for the evaluation of a study: credibility, originality, resonance, and usefulness. The criteria are interrelated rather than discrete, standalone units; for example, credibility and originality together build resonance and usefulness, while usefulness may also by influenced by intelligent use of literature and positioning of the theory. Nevertheless, they form a useful model for consideration of rigour in a grounded theory study and this research will seek to address these criteria.

Credibility

Credibility refers to the faithfulness of the study in its description (Guba & Lincoln, 1989). The research should have achieved intimate familiarity with the setting or topic (Charmaz, 2014). This study aims to meet guidelines to enhancement of credibility suggested by Birks & Mills (2011), Charmaz (2014), Cooney (2011) and Creswell (2013).

Firstly, a clear and sound description and application of methodology and methods is required. Comparisons amongst data and within the analysis must have been systematically made (Charmaz, 2014) and the research should reflect this. A clear documentation of the chain of interpretations throughout the study allows others to judge the trustworthiness of the meanings and findings arrived at (Birks & Mills, 2011). Secondly, consensual validation (from participants or knowledgeable others) should be sought regarding the accuracy of descriptions and interpretations, and feedback incorporated where appropriate (Creswell, 2013). Thirdly, credibility requires a sufficient weight of evidence from multiple data sources and types, which may be corroborating or critical (Creswell, 2013). Sufficient data will be demonstrated by an appropriate range, number, and depth of observations, and the categories should cover a wide range of empirical observations (Charmaz, 2014). Strong, logical links should be apparent amongst the data, argument, and analysis, and enough evidence should be present to allow a reader to form an independent assessment agreeing with the researcher's claims (Charmaz, 2014).

Originality

A grounded theory study aims to challenge, expand, or improve contemporary thought, concepts, and practices (Charmaz, 2014). In doing so, it may provide an enhanced understanding of the specific subject under investigation, or add to the wider field of knowledge, and thus encourage further research into or consideration of the efficacy of policy, education and practice. Novel perspectives may be formed, based upon the insights the work provides and the analytic categories and concepts developed within. Evidence for originality is provided through fresh understanding demonstrated within a new interpretation of the subject.

Resonance

In a vivid and credible portrayal, participants would be able to recognise their own experience within the account. In addition to developing an accurate interpretation of participants' meanings, however, written interpretations must also resonate with their non-participant readers, and be compelling, powerful, and convincing (Creswell, 2013). The rendering should illustrate the richness and depth of the experience it is intended to portray. Underlying meanings and insights, as well as those more palpable, should be illuminated, and links made to the wider lives and social structures of participants and individuals (Charmaz, 2014).

Usefulness

Usefulness is the ability of the work to offer interpretations that people can apply in their everyday worlds (Charmaz, 2014). This study aims to be useful in two main areas. Firstly, it is intended to be particularly useful to outdoor educators and practitioners. In order to accomplish this, the investigation was carried out as systematically and open-mindedly as possible, but with practical necessity and applicability in mind. As a result, the study not only seeks to discover what is 'going on' for children, but also specifically works to address current issues within outdoor practice, and to identify ways in which that practice may be improved. Secondly, it is the intention of this research to provide a useful foundation for further investigation.

Achieving transferability to other sites or situations is made easier through rich, thick description, which allows readers to make informed decisions around the adaptability of the method or findings (Creswell, 2013). However, such transferability is not the main aim of constructivist grounded theory.

Chapter Summary

This chapter has presented an overview of grounded theory. It has described the methodology and acknowledged its origins. The study rationale and outcomes were discussed, and the method, process, and terminology associated with grounded theory were detailed, with particular regard to a constructivist approach. A model was put forward for the evaluation of the quality of a grounded theory study. From this platform, Chapter Four elucidates the specific processes the author used while conducting this piece of research, in detail. Much of the required information for evaluation of the credibility of this work and the adequacy of the process is therein contained.

Chapter Four: Method Applied

Introduction

Grounded theory provides rigour through a systematic method for data collection, analysis, and theory generation. However, it does not consist of a linear series of finite and distinct steps. Instead, a grounded theory researcher moves back and forth between data collection and analysis, refining their ideas and collecting new data as they proceed. The purpose of this chapter is to explicate the use of the grounded theory methods in this particular study.

Following on from chapter three: research methodology and methods, this chapter provides detail of the specific procedures and techniques employed in carrying out this research. Examples have been drawn from this study to illustrate the use of the method. Firstly, the ethical considerations of this research are explained. Recruitment of and access to the participants is then described, followed by a study site and contextual description of Sir Peter Blake MERC. The practical methods of concurrent data collection and analysis within this investigation are detailed, encompassing constant comparative analysis, memo-writing, and theoretical sampling. To conclude the chapter, the maintenance of credibility and challenges faced within this study are discussed.

Ethics

Ethical approval for this research was sought from the Auckland University of Technology Ethics Committee (AUTEC). Approval was received on 30th October 2013 (refer Appendix A). According to AUT (2017a), the process of ethical approval is guided by seven key principles:

- Informed consent and voluntary participation
- Respect for privacy and confidentiality
- Minimisation of risk
- Truthfulness (and limitation of deception in research)

- Social and cultural sensitivity, including obligations under the Treaty of Waitangi
- Research adequacy
- Prevention and management of conflicts of interest

These key principles were adhered to throughout this research. In addition, respect must be demonstrated for potentially vulnerable participants and toward property (AUT, 2017a).

Informed and Voluntary Consent and Assent

The subjects of this research were children aged 10-12 years, and thus were considered a vulnerable group for ethical approval purposes. Special consideration was therefore needed, with an emphasis on full and appropriate consent processes and careful management of risk. Due to their age, these participants were not able to give informed consent. Accordingly, they were instead asked to assent to participate in the research, whilst consent was requested of their parent/guardian. Consent and assent forms (Appendix A) were obtained for each prospective participant before any data collection involving that respondent took place. In order to ensure they were fully informed, participants and their parents/guardians were each provided with information sheets. These were written in clear language appropriate to the age of the intended audience, and each was checked by test-readers beforehand to ensure they were comprehensible.

The information sheets provided details of the study including the management of confidentiality and privacy, and addressed expectations of the research. The voluntary nature of the study and the right of any participant to decline or withdraw without penalty were explained. The potential use of the information gained was also described.

Meetings between researcher, participants, parents/guardians and school staff were offered, allowing opportunities to provide further information where required. Interviewees were also invited to ask questions at the beginning of data collection. Care was taken, to ensure children were comfortable with the research process and were aware of the ways in which their data may be used.

Privacy and Confidentiality

Direct comments made by participants are expressed anonymously in this thesis. No participant, school, or MERC staff member is identifiable through their representation within this study, in order to protect the confidentiality and anonymity of contributors. In addition, the concept-driven nature of grounded theory research de-emphasises the characteristics of individuals, thereby increasing anonymity. Data management practices were designed to maintain security of information.

The researcher was the sole person to see the data associated with each participant. Names and details of the participants were exclusively accessible by the researcher and were stored electronically in a password-protected file. Each school was assigned a numerical code and participants from that school a related sub-code. Data associated with those schools or participants was from then on managed by its code rather than participant name. Consent and assent forms were stored separately from the data, each in locked and secure cabinets, in accordance with AUT protocols. All the above information and documentation will be stored for six years as required by the ethics process, before being securely destroyed.

Coded data, interviews, and memos generated during the research were stored primarily in a secure electronic file. Each data entry was dated and named by code, and multiple entries relating to a single path of analysis were identified accordingly with reference to each other. A master list was created to catalogue all data entries, to allow ease of access and use. Printouts were produced to aid in sorting and in documenting the research process as the analysis progressed. A concept map was generated demonstrating concepts and their relationships as the analysis emerged.

Risk Management

Risk may be physical, psychological, or social (AUT, 2017b). Outdoor education carries an inherent element of risk, the complete elimination of which is neither possible nor desirable. MERC staff managed physical risk to participants. I was not a full participant in activities. However, the centre staff and management were aware of my outdoor background and familiarity with the environment surrounding this research, and were therefore comfortable with my being both present and able to manage my own safety in

the studied setting. I wore a MERC 'visitor' badge on each occasion with an AUT uniform shirt, and ensured that I was appropriately attired and equipped at all times.

Guidance was sought from a member of AUTEC regarding data collection with respect to children. As a result of this discussion, it was considered unlikely that the nature of the interview questions or observational methods would cause undue distress to participants. However, protocols were developed for the provision of school support, should it be required. Due to a grounded theory study's emergent quality, the exact questions to be used throughout the research could not be stated explicitly at the beginning. Indicative questions and data collection protocols were therefore provided as part of the process (Appendix B), with acknowledgement that these would develop and adapt during the research.

Risks to MERC, including commercial sensitivities, were minimised through adherence to ethical protocols and appropriate outdoor education practices. I aimed for respectful management of the relationship with the centre at all times. Documents provided by MERC remained their property. These were treated as confidential, and parties other than the researcher were not provided access to these texts or other data.

Truthfulness and Limitation of Deception

This research did not include any deceptive elements such as concealment or covert observation. Information sheets provided to all potential participants stated that interviews and observations would be carried out, and these participants were further informed in person as to how this would be achieved. Obtaining well-informed consent helped ensure that participants were neither coerced nor deceived. In addition, I offered to share the findings of this research with participants so that transparency and trustworthiness were demonstrated and maintained. I ensured that during data collection I was introduced in such a way that participants were aware of my presence and purpose within their camp. This study did not require the use of a control group.

Social and Cultural Sensitivity and the Treaty of Waitangi

This research did not specifically target any ethnic, social, or cultural group, or any particular iwi[1], since MERC serves groups that represent great diversity across these characteristics. Instead, various viewpoints were collected from children attending the camp with a number of different schools and school philosophies. The resultant theory reflects common threads discovered across these varied groups, making it widely applicable. Nevertheless, cultural awareness needed to be maintained, and at all times, an effort was made to approach each group or individual in an appropriate and respectful manner. This was made simpler through my previous career connections to the participating schools, since I had prior experience working with many and therefore understood their varying needs of care. In addition, being of mixed Māori descent, I am particularly aware of the relationship between Māori and their surrounding world. This awareness influenced my own practice when building respectful relationships with Māori and non-Māori alike.

Research Adequacy

A study is considered to meet research adequacy requirements if it has clear goals, an appropriate design, and an expected contribution that outweighs the cost or risk (AUT, 2017c). The goal of this research was to describe and explain the outcomes of outdoor education amongst children attending a camp at Sir Peter Blake MERC. The grounded theory design employed in this investigation allowed these outcomes to emerge from the data collected, so that the result was true to the data rather than to preconceived theories. In addition, grounded theory encourages researchers to focus on process, enabling them to build a theory that possesses explanatory power. This study was intended to be a useful contribution to my own research and education, as well as to the outdoor education field and to MERC. The level of risk, whether psychological, physical, or social, of the research itself was low. Furthermore, MERC's own outdoor professionals managed risk that was inherent in their outdoor activities. The benefits of this study therefore exceeded the associated risks brought about by the research process.

[1] Iwi is often translated as 'tribe'. It refers in Maori culture to the largest recognised social unit. Its meaning is close to the 'people of a geographical area'. Each iwi is distinguished from other iwi by their lines of descent (whakapapa), cultural practices (tikanga) and language (reo).

Conflicts of Interest, and Minimisation of Relationship Effects

A potential conflict of interest was identified, due to the pre-existing MERC-researcher relationship. However, as part of the ethical approval process, advice was sought from a member of AUTEC, and the concern was assessed to be minimal. The employment relationship existed some years prior to the study, and there was little contact between parties at the time (excluding this research). To further minimise conflict, attention was paid throughout the research to the management of potential bias. This will be discussed later in this chapter.

Throughout data collection, I was cognisant of the potential for some respondents to express views that they might have perceived to be 'correct', that is, to give answers they might suppose that one wished to receive. My prior career experience suggests that many children came to hold their instructors in high regard; a situation in which giving desired answers may have become more likely. I consequently resolved to identify myself primarily as an independent scholar who held knowledge about MERC. In doing so, the intention was that students would feel able to speak freely about their experiences, and this appeared to hold true. Furthermore, I suggested to children that their honest responses would aid MERC in providing an improved programme to future groups. This strategy seemingly encouraged participants to articulate and discuss in detail many aspects of their experience. This approach also served on each occasion as a timely reminder of my own purpose, since accurate information is required as a baseline if wishing to make improvement in any area. It aided in maintaining an open mind, seeking useful and genuine data, and putting aside pre-conceived notions to hear what participants wished to express.

Recruitment

The research participants were children aged 10-12 years, attending MERC for a residential school camp and taking part in outdoor education activities. Although at the outset of a grounded theory study it is not possible to state exact participant numbers, it was anticipated that a range of 10 to 20 children would be included in this research. This would be manageable within the bounds of this thesis, yet provide sufficient information and opportunity for theory development in the research process.

Since its opening in 1990, in addition to school camps MERC has provided off-site journeys for specific purposes such as Project K youth development programmes. However, youth development in general (and Project K in particular) has been the target of considerable prior research (Furness, 2013; Hollis, Deane, Moore, & Harré, 2011; Qiao & McNaught, 2007; Schulman & Davies, 2007). Consequently, and since these programmes were not the core business of MERC, they were excluded from this study. In addition, at the outset of this research consideration had been underway of a number of alternative sites for the development of a second MERC centre. However, at the time of data collection, MERC operated only the single Long Bay site, which was therefore the focus of this study.

Upon gaining ethical approval, MERC management provided a list of school groups who would fit the requirements of this study (as had been previously agreed). Schools with students eligible to participate were invited depending upon their fit with the initial criteria and later, the needs of the emerging analysis. Each school was initially contacted by electronic mail. An invitation email was sent to the school principal, with a formal letter of introduction attached (Appendix A). The proposed study and its ethical principles were outlined, and permission and participation of the selected school was requested. If permission was granted, the organising staff member of the camp was then contacted. When a school declined to take part, a further selection and request was made. If a school principal (or representative) did not respond to the initial invitation, a follow-up phone call was made 10 - 14 days later. All prospective schools were contactable within this time frame.

Each school that accepted the invitation to take part subsequently provided contact information for their organising teacher. I then emailed this camp organiser to confirm details such as the dates of their stay at MERC. Consent and assent forms and information sheets (for participants as well as their parents/guardians) were provided electronically to the organising teacher (Appendix A). The organising teacher then provided copies of these documents to the parents/guardians and children, accompanying the school's usual provision of camp information. This process minimised the disruption and confusion that might have resulted, had multiple permissions processes (i.e. those related to children attending school camp, as well as those related to this research) been taking place from two independent sources simultaneously. The completed consent and assent forms were collected in hard copy in person, prior to data collection taking place at MERC. Some students (or their parents/guardians) declined the invitation to take part, and it was explained that this would in no way be detrimental to their time at camp.

At the beginning of each phase of data collection, I offered participants a further opportunity to ask questions or cite concerns. I recapped the purpose and aims of the study, and the voluntary participation and right of withdrawal at any stage. I explained how data collection would take place, and checked that audio recordings or photographs were acceptable to those involved prior to taking these. Once I had ascertained that participants were indeed prepared and willing to be involved, we moved on to the interviews or observations.

Congruent with grounded theory methodology and methods, research began with the interview of a single student, and continued with others across a variety of viewpoints and backgrounds. Interviews and observations were carried out during each selected school camp. As categories were formed from data, theoretical sampling led the continuing study direction, and therefore the invitation of further study schools and participants. A variety of schools, cultural and socioeconomic origins, and school philosophies were advantageous to the study, and were therefore sought throughout the selection process as required to gain the depth and breadth of information required. Each interviewee would be spoken to only once; therefore, later interviews were adapted to check the developing concepts and theory.

As is appropriate for grounded theory, each subsequent school was selected once analysis had been carried out upon the previous data. This required careful forethought whilst planning for data analysis and subsequent collection. MERC was at its highest operational levels during the warmer months, but then became considerably quieter during winter. Data were therefore most readily collected in spring, summer, and autumn, excluding December and January and any other school holiday periods. Data collection consequently commenced in summer and continued through the winter until sufficient information was obtained to fulfil the needs of this study. This had the advantage of providing a variety of schools, since lower decile and smaller schools attended camp more commonly in school terms two and three, and higher decile and larger schools in terms one and four. Most schools were happy to participate, thus data collection was manageable despite the inevitable difficulties involved with delaying invitations until each subsequent phase of analysis was carried out.

Study Site

This study was based at MERC: The Sir Peter Blake Marine Education and Recreation Centre. MERC is situated on the North Shore of Auckland, New Zealand. Its site is at the southern end of Long Bay beach, directly adjacent to both the Long Bay-Okura Marine Reserve and Long Bay Regional Park. Its remaining boundary is formed by cliffs, above and behind which sits the residential suburb of Torbay.

The centre is designed to be a highly accessible and yet compact site. It consists of bunkroom accommodation, kitchen and dining facilities, and a beachside hall. High and low ropes activities and a purpose-built rock and abseil wall are located directly on-site. Whilst many activities take place within the walls of MERC, the beach, sea, and Regional Park are each also utilised which allows the considerable expansion of MERC's outdoor education capabilities. MERC's proximity to the large population base of Auckland, the variety of its clientele, its wide range of activities and its locale in Long Bay allowed for a diverse range of study situations within a relatively contained area. Its location also provided simple communication and resource access.

The broad variety of MERC activities operate within pre-set session structures and times. A standard day's programme would consist of three sessions, each of two hours' duration. A school group staying from Monday to Friday would therefore experience up to 15 activities selected from the range available, depending upon their arrival and departure times. School groups are programmed into a provisional camp timetable prior to their arrival, allowing for the early organisation of all parties.

Activities may be water-based (such as sailing or kayaking), land-based (for example, climbing or archery), environmental (e.g. rocky shore studies), or team-centred (such as group problem-solving challenges). A standard school camp stay would include each of the above categories. MERC staff take complete responsibility for the children during activities, operating with groups of up to 12 students at a time, with extra staff allocated for certain activities that require greater levels of supervision (such as kayaking). At the conclusion of the final activity each day, and during morning tea and lunch breaks, the children are returned to the care of school staff and parents. School care remains in place from 4pm until 9am the following morning, when the activity programme recommences.

Sample Group

Sampling for this study began with the schools who had agreed to participate. Sequencing of data collection was determined primarily by the dates of their camp at MERC. Children were drawn from those attending the school camp. The sample group for interview was comprised of 15 children who met the inclusion criteria. A summary of the interview sample group is provided in Table 1.

Table 1.

Sample group of interviewees

15 Interviewees		**Age (years)**			**Total**
		10	**11**	**12**	
Length of stay (activity days)	**3 Days**	1 male	1 male	0 male	**2 male**
		1 female	0 female	1 female	**2 female**
	4 Days	1 male	0 male	0 male	**1 male**
		0 female	1 female	0 female	**1 female**
	5 Days	0 male	3 male	1 male	**4 male**
		1 female	2 female	2 female	**5 female**
Total		**2 male**	**4 male**	**1 male**	**7 male**
		2 female	**3 female**	**3 female**	**8 female**

The children were all participating in an outdoor education school camp. Four students resided at camp for three days (two nights). Two interviewees visited for four days (three nights). The remaining nine attended camp from Monday to Friday inclusive, a stay of five days, and four nights. Seven interviewees were male and eight were female.

The groups involved in the sample were drawn from schools representing a range of New Zealand school decile ratings. School deciles indicate to what extent a given school draws their students from low socio-economic communities: Decile 1 indicates the highest proportion of students from low socio-economic communities, whilst decile 10 indicates the lowest proportion of these students (Ministry of Education, 2017). However, this research did not seek to specifically test differences between school deciles, but instead primarily sought the common factors and threads amongst the variety of participants. Thus, the importance of socio-economic status, cultural or ethnic

conditions, and other individualistic characteristics surrounding participants became increasingly diminished throughout the analysis. The description and examination of these factors are therefore limited in this thesis.

All interviews took place at MERC during the participants' school camps, and at the conclusion of their penultimate activity day (after 4pm). This allowed time for the participants to gain familiarity with the experience of which they were a part. In addition, observations were made during each of the visits from which the above children were drawn. These observations took place during both organised activity sessions and break times. Alongside extant documents provided by MERC regarding objectives and structure, observations suggested discussion points and afforded opportunities to reconcile the statements of interviewees with the apparent occurrences and interactions that were noted.

Methodological Procedures: Data Collection and Analysis

This section describes the methodological techniques employed in this grounded theory research including data collection and sampling, memo-writing, coding, management of investigator bias, and validation.

Interview

Semi-structured interview was the primary data-gathering method. An interview protocol guided data collection on each occasion (Appendix B). The precise format of each subsequent interview was adapted to reflect the emerging analysis. Face-to-face interviews took place on-site at MERC, in a quiet area toward the beachfront access and away from interruptions. The site of interviews was in view of others but not in their path where the interviewee might be easily distracted from the task. Each session was electronically audio-recorded (subject to participant consent) and later transcribed.

Interviews began with a brief introduction, during which a relaxed approach was emphasised. I explained what was to occur, and reiterated interviewees' voluntary participation and right to discontinue at any time. Participants were reassured that their free and honest answers would be valuable for the research, MERC, and future students, and that there were no right or wrong responses. Each interview was of up to one hour's duration.

The purpose of the earliest interviews centred on understanding how a participant experienced and interpreted their outdoor education camp, and in doing so generating multiple codes representing concepts (Appendix C). These concepts in turn guided and influenced subsequent data collection. For example, a broad primary question I asked at the beginning of the interviews was "I understand that you've been here at camp for a few days now. Can you tell me about your experience?" Each phase of data collection continued to be guided by the research question, however as the study progressed and concepts and categories began to emerge, the emphasis of the interviews became increasingly specific. After several interviews, I began to ask questions such as, "Something that has been mentioned is feeling safe to try new things. Can you tell me about this?"

Observation

My role varied between participant observer (enabling me to gain insider views and subjective data), and external observer (watching and taking field notes, recording data with no direct involvement). In some situations, it was necessary to move between these two roles in order to gain a variety of perspectives and build rapport with the children; in these cases, I usually began as a participant observer. Observations were formally carried out during MERC activities and break times, but also sometimes occurred during interviews and spontaneous interactions.

An observational protocol was employed to assist in recording descriptive and reflective notes in the field. The protocol included the date, place, and time of observations so that data could be filed and retrieved easily. Included in these data were portrayals of participants or their activities, the physical settings, events, or interactions that occurred, and my own reactions. The aim was to describe what happened and reflect on these happenings (including personal reflections such as insights, ideas, confusions, hunches, initial interpretations, and breakthroughs) as suggested by Creswell (2013). Full notes were prepared as soon as possible after each observational session so that I worked with the data while still close to it. Giving a rich description of the people or events under observation is more effective while the event is fresh in the observer's mind (Creswell, 2013). The notes describing observational data were also coded for concepts. They were then compared to the interview and documentary data to build a fuller picture of the events under study, and to discover consistencies or lack thereof, amongst the varied data.

Extant Document Study/ Textual Analysis

MERC possesses a lesson plan for every session of each educational programme. These plans describe the information each instructor must provide to the student group, and the expected structure of each session. The session plans provided data important to this research, such as areas of concern for MERC, objectives, key ideas, and themes.

These were then coded, analysed, and compared to the data generated via other methods. In addition, MERC provides detailed information about potential activities to prospective schools, and in return requests objectives and aims from visiting schools for their camps. These extant documents were useful sources of data that provided comparisons, for example between intended objectives and outcomes. No study documents were elicited from participants specifically for this research.

Managing Investigator Bias

Early in the research process, I became aware that during my years of professional contact with the outdoor sector a number of assumptions had emerged. These suppositions were widespread amongst outdoor educators (among whom I include myself) yet appeared to lack an evidential basis. In order to elucidate and manage any bias I as a researcher might hold, I wrote passages acknowledging my own beliefs, as well as claims that I had heard or seen made. I recognised these preconceived ideas in memos, along with a self-prompt that carried me through all of the data collection:

> "I care genuinely about the outdoors, centres such as MERC, and the people taking part in outdoor programmes. I need to remain alert to the presence of hopes, ideals, and preconceptions, and set them aside to find out what is really 'going on' for these children. The key is, if we have not asked the children, then how do we know what they are getting, and if we do not know then how can we do better? Keep that in mind!"

Acknowledging prior beliefs made it possible to look at interview questions and other data collection with a critical eye. It resulted in immersion in the actual data, and an awareness of a researcher's ability to shape participants' answers through their questions. Through this process I was sensitised to my own conceptual ideals and preconceptions and was therefore able to recognise and avoid seeking them out, demonstrating the development of theoretical sensitivity. Consequently, participants' perceptions of significant factors were able to emerge, rather than my own.

The ultimate result of this self-examination was the requirement that I alter my own long-held beliefs and ideals for the outdoors. The strongest evidence (of this consideration) that I am able to offer is borne in the title of this very thesis. Its initial focus assumed that certain environmental outcomes would be present; it has since been renamed to reflect the transformation to an open-minded stance that took place during this research. This will be discussed later in this thesis, for it became useful in constructing the analysis, providing a looking glass through which I was able to consider the findings of this study.

Initial Sampling

The initial sampling in this study involved moving from participant to participant (or group to group), aiming to sample those who would provide the greatest prospect of answering the research question. Therefore, the earliest participants were the most broadly selected, being those who would fit the inclusion criteria of this study: 10-12 years of age, taking part in an outdoor education school camp at MERC, which included a residential stay. Early interviews were of around 45 minutes to one hour in duration. Observation periods would take place during the course of several hours during the activity day, but required no extra commitment from the children involved. Initial coding took place once the initial data set was obtained.

Initial Coding

Upon completion of the first interview, its transcript was read-through in hard copy. I worked through the data line-by-line, identifying key and recurring concepts and incidents in each line and section (Appendix C). Possible initial codes (i.e. labels for the concepts or incidents) were written in the margins or directly on the transcript. Where possible, action and process were retained within the codes using gerunds, and many codes were in vivo, taken from the words of participants. Observational notes and documents relating to the first participant and school were subsequently coded in the same manner. This process produced a set of codes representing the concepts within the data.

A further two data collection phases (encompassing interviews as well as associated observations and documents) were carried out and analysed using the same

techniques. The coded concepts were then compared across all the data collected to that juncture, and examined for similarities and differences. Using these properties as a reference point, related codes were gathered together into higher conceptual groups, and each group was assigned a code (label) that in turn described the concepts within that group. The initial coding process produced 24 different codes for concepts from the first three data sets, which through comparative analysis were further sorted into five main conceptual groups that I believed to be potential emerging categories.

Memos and Theoretical Sampling

Once the initial categories had begun to emerge, memo-writing and theoretical sampling were employed to guide further data collection. Memos were written after each phase of data collection, analysis, and at any other time when further ideas occurred to me. The memos encompassed my reflections on the data and emerging ideas, hypotheses or queries that might be pursued, and critique of the application of methods and techniques during the research. Memos included comparative analytic work on codes, concepts, categories, and data, and they demonstrated and recorded the trail of reasoning through which the analysis was constructed. For example, in one memo I examined the meaning of the concept of developing self:

> "Developing as I understand it from the children has multiple connotations. It implies the descriptive processes of evolving, emerging, increasing, or growing which may appear passive – something that happens to the children. It also suggests the verbal sense of acquiring or actively working to make gains, such as when one makes a definite choice to attempt a challenge – something the child does. 'Self' carries various meanings too, articulated by the participants. It includes physical, intellectual, social, and emotional aspects of a person, but also seems to mean 'who I am'. I need to ask more questions to work out how this development of self happens: what is causing it, what drives it, what causes it to be disrupted, how big is it?"

Within memos, ideas were developed about meanings and concepts. Subsequent participant selections, interview questions, and data collection strategies were then adapted to answer queries that arose. This process of theoretical sampling was carried out with each ensuing episode of data collection and analysis. Theoretical sampling employs notes, memos, and the findings to date to direct data collection decisions (Birks

& Mills, 2011; Charmaz, 2008). Its aim is to gather sufficient information to construct theory from the data (Charmaz, 2014).

Focussed and Further Coding

Having identified five possible categories, I examined the evidence for or against them. I identified the most consistently discussed and mentioned of the categories, and considered first whether it explained the data I had collected. In addition, the categories were all compared to each other, to assess whether others were in fact more likely to be central (Appendix D). This confirmed that the initial selected category appeared to be key to each experience.

I returned to data collection once again, seeking to identify properties of these categories: the magnitude of effects; causal factors; strategies employed by those involved; contextual and influential conditions; and the consequences of the processes underlying the conceptual categories (Charmaz, 2014; Creswell, 2013). Data collection methods were adapted in order to gain the desired information, that is, using theoretical sampling. Through the continual and iterative employment of constant comparative analysis, memo-writing, and theoretical sampling, I was able to confirm the appropriateness of these categories within the analysis, and to build detailed information about their properties. Some of the codes for these categories were refined, because new data led to a better understanding and explanation of each category. Through the analysis of a further five interviews, the categories became well developed.

Upon being satisfied that a central category and four other related categories had been identified, I drafted a diagrammatic representation of the possible relationships between categories based on comparison of their properties. This was a complex and creative process. A whiteboard and markers were utilised, and a day was spent drawing and discarding various charts, until a diagram was constructed that combined all the categories in a manner that appeared to fit and explain the data. I then discussed my visualisation with a colleague and with my supervisor, who provided feedback that allowed me to reflect on the analysis I was developing.

After refining the conceptual diagram, I returned to data collection once again, completing a further five interviews. Through these, I aimed to fully develop the categories (that is, achieve theoretical saturation) by gaining enough information to be able to explain the properties of each category in depth. My own developing theoretical

sensitivity was required to assist in judging saturation. I asked, at times, very specific questions of the interviewees, relating to properties of and relationships between the categories. I was then able to construct a theoretical understanding of a central outcome and its associated processes for the experience of a MERC camp.

During the three remaining interviews, I checked my analysis with the respondents, in order to confirm that the findings were reliable. These interviews were approximately 15 minutes' each in length. The first two of these provided further feedback, which was considered in relation to the theory. After the final interview, I was satisfied that the theory was sufficient and explanatory.

Credibility

This research is a product of the intimate familiarity held with the topic, both in the outdoor education field and in the context of MERC. The employment of constant comparative analysis within this study was methodical and detailed. The methods were systematically applied, however regular critique of their application also formed part of the process, and this was recorded in memos. The interpretations within the analysis were carefully documented. This audit trail is provided with the findings of the study in order that the reader may judge the trustworthiness of the conclusions at which I arrived.

Consensual validation was sought from colleagues and participants during this research. Each participant was interviewed only once. In lieu of re-interviewing individuals, adaptations to data collection and questions were made and later contributors were able to confirm or provide feedback on the analysis as it developed. The final interviews allowed participants to review the findings and provide responses, which were considered and incorporated where appropriate. Sufficiency of evidence was gained through many and varied data sources utilised within the manageable boundaries of this thesis. This study employed interviews, observational data, and analysis of extant documents relating to 15 participants drawn from a multitude of differing schools and contexts.

Challenges

During the early stages of this research, I had considered that I was producing a grounded theory study of the effects of an outdoor education programme on environmental perceptions. Environmental care is an oft-repeated anecdotal benefit of outdoor education programmes. However, grounded theory requires approaching the subject with an open mind and avoiding the forcing of data into theories that one might already hold (Charmaz, 2014).

Throughout this research, I developed greater skill and sensitivity in recognising and acknowledging prior beliefs and ideas, and became aware of the many conversations previously had with fellow outdoor educators. I came to understand that it would be necessary to let 'environmental' outcomes (if any) emerge at participants' will rather than my own. This understanding and the resultant analysis brought about a change in both focus and name in this thesis, as well as a considerable shift in my own thinking.

The constant comparative analysis used throughout this research, and the careful application of methodological procedures, provided a check on my enthusiasm for outdoor education as well as upon my unintended bias and preconceptions. If a researcher continually and assiduously returns to the systematic grounded theory methods, bias will be reduced and the emergent theory will be grounded in the data. Each concept and category must 'earn' its way into the final analysis (Charmaz, 2014). If a concept did not emerge from the data whilst also providing sufficient evidence of its significance and appropriateness, it would not be advanced to higher conceptual levels of analysis. Thus, it would not appear in the developed theory. Whilst the resulting analysis challenged my ideals and expectations, the rigorous grounded theory approach assured me of its dependability.

Chapter Summary

This chapter has detailed the methods applied in this study. It has discussed the ethical concerns of this research and their management. Due to the age of participants, they were considered to be a vulnerable group and therefore ethical process was a major concern within this investigation. The study site was then described, as was the process used at MERC when programming for school groups. The participants and their recruitment

were explained, beginning with contact with each school and proceeding to data collection. The overall sample group and their characteristics were described.

The practical methods used to collect data were explained, including interview, observation, and document study. This investigation included initial and theoretical sampling, initial and focussed coding, memo-writing, and simultaneous data collection and analysis. These methods were detailed as the steps taken during the study were retraced. The techniques employed to improve credibility have been described, and challenges were discussed. Chapter Five presents the findings of the analysis throughout the process explained here.

Chapter Five: Findings

Introduction

The primary objective of this study was to develop an explanatory theory which explicates the relationship between the developmental outcomes for outdoor education participants and the factors that contribute to this development.

The primary questions I sought to answer within this research were *'What are the outcomes of outdoor education for children?'*, and *'Through what process (or processes) do these outcomes arise?'* These enquiries were made in the context of primary- and intermediate- school aged children attending an outdoor education camp at Sir Peter Blake MERC. During the study, secondary questions arose, including: *'What factors influence the magnitude of the outcomes or the effectiveness of the process?' 'How do children participate in the process?'* This chapter seeks to answer these questions.

Firstly, it provides a brief overview of the *theory of assisted reflection*, in the form of an explanatory story. The findings of this research (i.e. the various components of the story) are then presented as categories and sub-categories, and I delve further into the meaning of these categories. Chapter Six will then advance the *theory of assisted reflection*, the primary process identified within this study, and the substantive theory resulting from this research.

Overview

The major categories that emerged during data collection were developed, considered, and re-examined in pictorial form, until a model emerged that appeared to both fit and explain what interviewees had experienced. This was then reviewed in conjunction with participants to assess the accuracy of the explanation, adjusted when necessary, and reviewed again. The resulting pictorial model (see Figure 1, Chapter Six) depicts the 'story' which held true for children attending MERC. In addition, advice was sought from outdoor sector peers, who confirmed that the story 'made sense' in light of their own observations and experiences. The story allows readers to easily identify the most significant and relevant data and demonstrates the relationship between these data by relating categories and sub-categories to the central idea (Corbin & Strauss, 2008). Developing a story and corresponding pictorial model within this study was therefore a

useful method for presenting data back to children and outdoor sector peers as it aided in clarifying the salient points.

The central explanatory category within this story is *assisted reflection* and represents the process by which children gained outcomes. Reflection did not occur in isolation for the interviewees. Participants attended an outdoor education camp, under conditions with which most possessed minimal prior familiarity due to their age, school stage, and limited life-experience. The challenges experienced therein created opportunities for children to participate in a process of self-reflection. This reflection occurred in the context of their prior experiences and expectations and was frequently triggered by emotional responses to events, and subsequently encouraged or facilitated by their instructional staff. The nature, direction, magnitude, and limits of change were strongly influenced by the social dynamics of the event. Children unconsciously adopted one of several strategies during the process of reflection, based upon their interpretation of their success or failure during each episode. The primary outcome of the reflective cycle was largely personal to each student, and suggested personal change. The cycle was ongoing, returning to its beginning after each episode of assisted reflection. The individual's newly-acquired learning then augmented the inputs to create an expanded set of life experiences against which to carry out their reflections. This led to an ever-increasing circle of boundaries for participants.

The Categories

Six major categories were eventually discovered through data analysis. Each of the six concepts contained sub-categories identified within the data. The categorical breakdown is presented in Table 2. A deeper description of each category and its data follow.

Phenomenon: Encountering Novel Experiences

The conceptual category (upon which the various other elements of this study stand) is the phenomenon of *encountering novel experiences*. This refers to the demanding, challenging, and thought-provoking episodes and encounters to which the participants were exposed during their camp event; episodes that triggered the process of *assisted reflection* which in turn led to the outcomes children attained. *Encountering novel experiences* and its subcategories are shown in Table 3.

Table 2

Categories and Sub-Categories Relating to The Theory of Assisted Reflection

	CATEGORY	SUB-CATEGORIES
PHENOMENON	Encountering Novel Experiences	Participating in camp activities
		Discovering new social situations and activities
		Being away from home
		Coping with new anxieties
CAUSAL CONDITIONS	Age and Stage of Schooling	Possessing limited prior life experience
		Being used to a formal schooling environment
		Lacking familiarity with the outdoors
CONTEXTUAL CONDITIONS	Camp Environment	Physical Environs
		Outdoor Activities
INTERVENING CONDITIONS	Experiencing Social Influences	Teachers and parent helpers
		Peers
		Instructors
		Self
Strategy/ Action/ PROCESS	Assisted Reflection	Perceiving success as success
		Perceiving failure as success
		Perceiving failure as failure
		Perceiving success as failure
		Practicing Avoidance
CONSEQUENCE	Growing as a Person	Gaining assurance in self
		Gaining assurance in relationships

Table 3

Sub-categories of Encountering Novel Experiences

	CATEGORY	SUB-CATEGORIES
PHENOMENON	Encountering Novel Experiences	Participating in camp activities
		Discovering new social situations and activities
		Being away from home
		Coping with new anxieties

Sub-Category: Participating in Camp Activities. During the day (9am to 4pm), participants were the responsibility of MERC instructors, who led them in a selection of outdoor pursuits, each session being two-hours in duration. MERC staff managed these sessions according to prescribed plans, designed to convey enough information to allow safe and enjoyable participation in outdoor activities[2]. Children took part in up to 13 different outdoor education activities during the course of their camp, some of which provided inherent challenges that participants needed to overcome:

> "We've tried heaps of new things... like... abseiling, kayaking. And climbing the tree. That was...scary. I've never climbed such a tall tree and when I got to the top it felt like I was swaying. My favourite was kayaking because I've done it before. And surfing because I was the best at that in my group. I stood up nearly every time but the other people in my group couldn't stand up and get their balance" (Interview 3[3]).

> "I didn't like the abseiling. Well... I sort-of did... But it was really freaky at the top. Just that bit when you have to go over the edge at the top. I felt like I was, literally, going to fall and I nearly had to go back to the pole [at the top of the abseil tower]. It was hard. I'm never doing that again" (Interview 7).

[2] Every MERC activity is taught according to an official, prescribed session plan. These plans are based upon a two-hour period, and include objectives and learning points for students, information and skills to be imparted, activities and games to be carried out within sessions, and preparation and safety management information for instructors. Instructors teaching activity sessions are required to follow the set procedures, guidelines, and structure set out in the plan so that experiences are consistent between participants.

[3] Interview quotes are numerically labelled according to the transcript from which each is drawn.

Sub-Category: Discovering New Social Situations and Activities. As interviews progressed, children began to describe social aspects of their experience. Some simply related to the conditions one might expect to encounter during any camp event:

> "Sleeping in a big room with everyone else is pretty hard. Everyone was talking and no-one wanted to go to sleep the first night. So I was really tired the next morning and then we had to do all the activities!" (Interview 2).

Between the hours of 4pm and 9am the following day, the children ate communal meals, played games requiring interaction with peers, school staff, and parents, and slept in bunkroom-style accommodation (shared with dozens of other children). These experiences afforded many opportunities to socialise:

> "So far it's been really fun. Better than I thought it would be. I've gotten to know people I wasn't friends with and that, and tried heaps of new things. The best part is being on camp with my friends and all sharing a room, and having heaps of time to hang out when we're not doing activities" (Interview 3).

MERC instructors were absent during these overnight periods and responsibility was with the adults (staff and parent-helpers) attending camp with the students. Of the many memorable experiences recounted by the interviewees, the most regularly occurring was in fact a phenomenon that appeared time and again during these 'down times' – the evening 'talent show'. These events allowed students opportunities to gain a new appreciation of their surrounding adults as individuals outside of a classroom or home environment. The requirement to participate in the talent show tested many nerves but was a safe setting in which to step outside their usual comfort zones:

> "My favourite part of camp so far is the talent show. I haven't been in one of those before, and it was funny because the teachers dressed up and did an act too. They were jumping on the mattresses and pretending to be superheroes and stuff. I've never seen them do things like that. I was really nervous though about doing ours in front of everyone but it was ok. We didn't win though" (Interview 2).

Sub-Category: Being Away From Home. Home routines are an integral aspect of children's lives, and by the age of ten to twelve years they are well-versed in these structures:

> "Normally at home every day our family is like… we all have to get up and go around doing stuff in the mornings to get ready, and then school. And then, after school, it's like homework and stuff. Just normal things" (Interview 13).

Upon arriving at MERC however, participants discovered and absorbed a new (potentially very different) set of expectations and routines:

> "It's all different here, different things we have to do and… but heaps of time to hang out with friends when we're not doing activities. We get to like… spend more time together with heaps of people. But we also have to look after our own stuff and things like that" (Interview 13).

Many of the children in this study had never previously been separated from their families. For some, the idea of being away from home was identified as a challenge in and of itself:

> "I was really nervous about coming to camp, because we just did days in Year 5 so it's my first time away at a camp like this" (Interview 1).

> "I was a bit scared about being away from my Mum and Dad, and my baby sister. I thought I would get homesick. I thought I'd, like, miss my family heaps and want to go home" (Interview 9).

Sub-Category: Coping with New Anxieties. Some children articulated emotional concerns relating to their performance in activities in which they would be taking part:

> "It's really hard to try stuff when you're scared. You're like... you don't want to do something in case you get hurt or you do it wrong" (Interview 9).

> "I was really worried before I went about what would happen if I couldn't do something. Like one of the activities after the teachers told us what we would be doing at camp…Like I got scared to go to rock climbing because I didn't know what would happen if I didn't make it to the top, like maybe I would fall. So for a while I didn't even want to go to camp because I was worried about it" (Interview 11).

Other fears were more tangible and physical:

> "I'm so scared of sharks! I didn't want to go in the water to do any activities in case they were there. So when we went sailing I was always looking in the water and kept thinking I was going to fall off. And then

> when the boat went on a big lean… I thought I was going to die (laughs)" (Interview 5).

Yet, anxiety was not the only emotion experienced prior to the camp:

> "I was so excited. I couldn't wait and I was, like, counting down the days before we left. I was looking forward to spending some time with my friends and doing fun things" (Interview 7).

Causal Conditions: Age and Stage of Schooling

Children experience their camp as a series of novel events due primarily to their age, and the stage of schooling associated with that age. As life advances, knowledge and experience is gained against which to measure new experiences. The sub-categories of *Age and Stage of Schooling* are shown in Table 4.

Table 4

Sub-categories of Age and Stage of Schooling

	CATEGORY	SUB-CATEGORIES
CAUSAL CONDITIONS	Age and Stage of Schooling	Possessing limited prior life experience
		Being used to a formal schooling environment
		Lacking familiarity with the outdoors

Sub-Category: Possessing Limited Prior Life Experience. As demonstrated within the sub-categories of *Encountering Novel Experiences*, most aspects of school camp were foreign to participants. Not only had most of the children in this study never been away from their family, but they had also never been away from their home and school for any significant, continuous length of time:

> "It's the first time I've been away from my family for a week, like I've only ever been away overnight before" (Interview 1).

Children reported never having slept in a room with others, never having heard the sea overnight, and never having made their own lunches:

> "I've never shared a room with such a big group of people before, like all the boys are in one dorm and it's kind-of cool, except we got told off when everyone woke up early and all started jumping off the beds" (Interview 13).

> "For a while I couldn't sleep the first night, because there was a really loud whooshing noise, and I thought it was the wind or something. But then I found out it was the sea even though there were no waves. Then I got nervous because I thought it was going to come right up to the building, but once I got used to it, it was okay" (Interview 9).

> "Having to make my own lunch and wash my plates after dinner and that, I didn't like that much" (Interview 2).

In addition, they discovered a variety of peculiar equipment, the purposes of which they could only begin to guess at:

> "I hadn't worn a climbing harness before so I didn't know how to put it on or where anything went and it took ages. I thought they just tied the rope around or something. And then we got given carabiners and I did mine up really tight and the instructor had to help me get it undone" (Interview 11).

Sub-Category: Being Used to a Formal Schooling Environment. By the time of their arrival at MERC to participate in an outdoor education camp, the children in this study had been participating in formalised, school-based education for four years or more. Furthermore, for most, all of this time was at a single school.

Routine is an integral part of every school day:

> "At school we have certain things we have to do, like we start school at a certain time, then we do maths for like an hour, then we go and do P.E., or we do tech, and we wear a uniform and stay with a teacher. And sometimes it's fun and sometimes it's not so fun. But it's what we do every day… and the teacher puts the list of what we are going to do in the day on the board in the mornings. Here it's not like that. Well, it kind-of is, but it's different. We get told what we are doing next and that but we aren't with our teacher and it's more… sort-of… fun so it isn't like being in a classroom at school. It's a bit more relaxing like you don't have to worry about what you are wearing and you don't have to write heaps so it's not like you're doing schoolwork. It was hard to get used to at first." (Interview 12).

Sub-Category: Lacking Familiarity with the Outdoors. The type of education received by a child in a formalised school environment appears to provide little to which a pupil is able to 'pin' their new experiences in outdoor education:

> "I haven't done anything like these activities before so I didn't know how it was going to go and whether it would be alright. It made me scared to try some things but then when I did it was okay in the end." (Interview 13)

Very few experiences at primary school would require a child to, for example, learn to manage their own safety via a rope and harness system whilst simultaneously coping with an oppressive fear of falling:

> "While I was waiting for the abseiling I was so scared, and I was sitting against the wall. I was really scared that I wouldn't be able to remember how to do it [use the figure 8] because I couldn't follow the instructions because I was so nervous, and I was afraid I'd end up falling. I didn't though." (Interview 10).

Others lacked a more basic familiarity with the environment:

> "We don't really live near the sea and it's like, big surf near where we live so I don't go in there. I didn't know there were beaches where it was so… flat. So I haven't really swum in the sea before and I was nervous about it, but it was so nice." (Interview 6).

In situations such as these, novel experiences may provide a level of perceived risk well beyond the personal boundaries of the child.

Contextual Conditions: Camp Environment

Each outdoor education camp takes place within a given physical environment, and includes activities which provide a variety of different experiences (Table 5). These two main factors provide contexts to the student experience, and it is within these contexts that the outcomes occur.

Table 5

Sub-categories of the Camp Environment

	CATEGORY	SUB-CATEGORIES
CONTEXTUAL CONDITIONS	Camp Environment	Physical Environs
		Outdoor Activities

Sub-Category: Physical Environs. The surrounding environments provided challenges for the children in this study. As noted in earlier sub-categories, simply existing within the camp environment with classmates was a new experience and sometimes was a cause of anxiety. Most participants noted that sleeping in a room full of people was a strange experience, and that the very human sensory experiences and tensions inherent in such an arrangement caused sleeping issues, particularly during their first evening. The children were very conscious that they had, for the first time, been removed from familiar home and school environments, and they expressed concerns they had felt about parting from their families and homes prior to the event.

For some, the close proximity of the marine environment to MERC, and their continual involvement with it during the day, was somewhat intimidating. While a few children had spent some substantial periods of time in, on, or around the sea, others considered it to be foreign since their families rarely ventured to the beach. Even those for whom it was familiar expressed surprise over the constant noise of the sea, regardless of the presence or absence of wave action. On the stillest of nights, the sounds of the sea remained an ever-present background noise, and some participants discovered that sleeping adjacent to it required some effort initially.

In addition to those areas already addressed however, another aspect of the physical environment is key within the programme of MERC: the centre is based beside a marine reserve and this provides the setting for many of the activities students experience:

> "I loved the sailing even though I thought we were going to tip out, it was exciting. I haven't really been in a sailing boat before, but I've been like boogie-boarding and swimming and stuff. We got to learn how to do it and our instructor let us all have a turn. I tried to go way out to sea but I had to turn around" (Interview 2).

Some children reported that the marine reserve itself and its nature were key:

> "I've been to the beach lots but it's really cool to be at a reserve and learn about what things are there. I've gone up to Goat Island before, well, this isn't like that but maybe one day it might be. It's nice to stay where we are so close to a special place and know it's all protected" (Interview 8).

Exciting experiences were to be had that children often attributed to the reserve:

> "The best thing about the marine reserve is…yesterday we saw killer whales. They weren't even very far away. And someone yelled out 'there's killer whales' and suddenly everyone stopped their activities and ran to the edge to watch them. We just stood there until they went past. And most people didn't get to finish their activities after that but I didn't care" (Interview 4).

Many children took part in activities that allowed them to meet nature up close:

> "We went snorkelling on Tuesday. That was my favourite. We saw kina in holes and the instructor showed us how they pull bits of seaweed and even like an old coke can over themselves to hide. There were lots of starfish and one group saw an octopus. I didn't realise there were such cool things here" (Interview 15).

Sub-Category: Outdoor Activities. Every multi-day programme at MERC included a range of outdoor activities. These encompassed rope and harness options, beach and boat activities, and environmental awareness opportunities. Each new experience was a task requiring the acquisition and use of a new set of knowledge and skills:

> "We did Dinghy Games which was like a lot of little challenges that we had to do in a sailing boat, but we didn't have the sail. The instructors stood in the water next to the boat. We played games on the beach so we learned the bow and stern and that, and then we went in the boat in the water. We had to like, all go to the bow and see what happened and the water came in. Then we all had to go to one side. And we found out about sitting down rather than standing up and balancing up the boat. After that the instructors did this thing where they rock the boat until it fills up with water and we thought it was going to sink" (Interview 2).

> "I didn't like wearing a wetsuit. I've never worn one before and I accidentally put it on backwards so it was really uncomfortable. But we had to wear them so we didn't get cold and then they are really hard to get off"(Interview 6).

> "Every time I tried to paddle my kayak I kept getting all mixed up and at first I couldn't keep up with everyone" (Interview 1).

The range of activities experienced by participants was broad:

> "We've done so many different things. Outdoor survival where we learnt about what to do to stay safe and survive. I liked Stack 'Em, we had to stack up the plastic boxes and stand on them and then try to get to the top. I didn't like the team games very much. People in my team were talking heaps and nobody was listening so I was frustrated. But we've done heaps of different things" (Interview 12).

Some students, however, felt that there could have been more depth in certain areas:

> "They showed us this video about the rubbish island. It was so sad. I wanted to cry and when I looked around other people looked sad too. There were little chicks hatching in all this rubbish and stuff, it was gross. When it was finished, they didn't tell us what to do or how to help and I felt like I wanted to know how to stop it from happening. Like I wish we had talked about it more and been able to do something about it. But it just sort-of… finished and they said to think about it before we drop rubbish or anything, and then we went outside" (Interview 15).

> "We did the rocky shore activity and the tide was in really far so we couldn't go down there. So instead we did a beach clean-up. Which was kind-of boring. And then we just played games. I'd heard the rocky shore was cool because one of my friends saw an octopus" (Interview 2).

> "I thought we were going to like, learn about the environment and stuff, I didn't expect it to be like this sort of thing, well… not just the activities anyway, I thought we would do, like… things about the animals and that as well as the activities. We did talk about the marine reserve when we arrived, I think, just to say that we are not allowed to take anything away from the beach or anywhere. But that's all I can think of "(Interview 8).

Intervening Conditions: Experiencing Social Influences

In every camp, social conditions were able to influence the outcomes in magnitude or direction. There were a number of aspects to this, as seen in Table 6. Children taking part in outdoor education are affected by relationships. A participant's experience of an event is not constructed solely by the individual, but also through their connections with others.

Table 6

Sub-categories of Experiencing Social Influences

	CATEGORY	SUB-CATEGORIES
INTERVENING CONDITIONS	Experiencing Social Influences	Teachers and parent helpers
		Peers
		Instructors
		Self

Sub-Category: Teachers and Parent Helpers. Participants spoke of seeing a different side of the teachers they see almost every day at school:

> "It was cool how our teacher was running around and throwing water at people and things like that. Usually at school they are really serious, so it was fun to be able to have games with them and have them help us with our activities" (Interview 2).

> "We had a big water fight and everyone was trying to get Mr. N-----. Then one of the cooks gave us a big bag of flour and when everyone had got him with water we threw flour on him too. He promised to get us all back, it was so funny" (Interview 5).

Although they were not responsible for managing the outdoor activities, teachers and parent helpers alike provided much-needed support to participants:

> "All the parents and teachers are so supportive. When I was struggling with kayaking Mr. S [parent] stayed with me the whole time and helped me. He was so encouraging and nice and because of that I kept trying. And when I did abseiling, one of the teachers was there all the time talking to me and making me laugh, and that helped me to not get too nervous. I never thought I'd be able to do it but I did" (Interview 11).

Sometimes, the presence of significant adults had other unintended effects:

> "I was okay about the abseiling while I was waiting for my turn, but then my mum came back from an activity and I suddenly got all nervous when she was watching me. She hasn't been with our group this week" (Interview 6).

However, in general children were able to sense the enthusiasm of the adults around them and this aided their performance:

> "Miss P [teacher] was telling us about what it would be like and how much fun it would be before we came here. And she's been going around all the activities and joining in with heaps of things. It makes me feel more confident about trying things when our parents and teachers are like that, so I'm not as afraid to give hard things a go (Interview 15).

Sub-Category: Peers. Participants acknowledged the challenges of working closely with peers they had rarely spoken to despite having attended the same school for several years:

> "It was kind-of hard at the start of the week because I was in a group with people I didn't know very well, and sleeping all in one room with like, people I don't know and stuff. It felt really weird" (Interview 2).

However, the children described gaining support from their peers:

> "At first I was a bit worried about trying things in case I couldn't do them very well. But actually, my group has been really good. We've all tried really hard to encourage each other all the time and that makes it easier to try new things. And when you get something wrong, everyone is really nice about it, and says 'good try' and things like that. Nobody says anything mean and I've tried things I never thought I would (try)" (Interview 15).

For some, peer interactions in their day-to-day lives created anxiety:

> "At school some people tease heaps and are really harsh when you aren't very good at something or do something wrong. So I really didn't want to do some things here because I thought they would be the same. I didn't really want to come to camp actually in case that happened" (Interview 15)

Strong school leadership, however, set clear boundaries and created a safer environment for students:

> "Before we left school, our teachers told us that anyone who was bullying other people would go home straight away. We had a big talk about it. So we all knew what would happen and I didn't really hear anyone hassling others at all. Everyone was really good" (Interview 5).

The children discovered their own and others' strengths and challenges through working in groups:

> "I found out that I'm really good at rock climbing even though I haven't done it before. I don't do sports and stuff at school so I didn't think I would be good at any of the MERC activities. Everyone is good at different things and everyone is good at supporting other people, you just have to try things to find out what you are good at. It was cool to see what different people can do" (Interview 6).

New friendships were formed through their shared experiences, and support was sometimes found in unexpected places:

> "Now that I've got to know the people in my group, that I wouldn't normally hang out with, they are really nice. I didn't realise they would be as nice as they are. I feel like I've made friends with people that I didn't think I could be friends with. That's been my favourite thing about camp"(Interview 7).

Sub-Category: MERC Instructors. Participants expressed their appreciation for the efforts of the MERC staff during their visit:

> "The instructors were so supportive and nice, it made it easier to try things. I don't think I would have done any of these things without their help, that I've done. I've achieved things I didn't think were possible for me before we came here" (Interview 15).

The instructors' interests and attitudes had the potential to be influential upon the participants' interests and attitudes:

> "We didn't go to see the rocky shore, but I didn't mind because our instructor told us we'd be doing something more fun anyway. So we went out into the park and played heaps of games, instead" (Interview 4).

> "Our instructor was the best I think. He told us surfing was his favourite activity. It was so cool when we tried it because he taught us how to stand up, and paddle, and to see when waves were coming. I would like to keep surfing when I go home" (Interview 2).

The skills and knowledge of the instructors affected the experiences of the children:

> "I'm glad we spent the week with D [Instructor] because he knew about so much. Sailing was so fun because he took us way out and taught us heaps about it. He was really patient with the abseiling too and helped me

understand how to do my best. Some of the other groups didn't do the same things we did (like go out so far)" (Interview 6).

Sub-Category: Self. Some students made a conscious choice to participate to the best of their ability, believing (or having been convinced) that this would provide the best outcomes for them:

> "I was really nervous about what camp would be like but I knew that I should try hard to do everything so I would learn as much as I could and it would be more fun that way. Our teachers encouraged us all to try really hard before we came" (Interview 11).

Others were less keen to participate of their own accord:

> "I didn't actually want to come. I've never done anything like this (these activities) before and I find some of the things quite scary. My family convinced me to come. It's been okay but… I don't want to do abseiling. I'm not looking forward to that at all. And when we were in the water I was really worried about like… sharks and things like that. We've got a talent quest tonight and we all have to do something and I'm really nervous about it. So I'm kind-of looking forward to going home. I have enjoyed it more than I expected to and I've done things I didn't think I would be able to do but I'm really tired now" (Interview 9).

Many children described a lack of prior knowledge about either MERC or outdoor education:

> "We didn't really get any sort of… information about what we would actually be doing on camp until a few weeks ago. Ages ago they told us we'd be going to camp but we didn't know what we'd be doing. But then before we came we had to decide what activities we would want to do. Some of them we didn't know what they were. Like abseiling. I thought it was like sailing but it was way different… So it was hard to make choices because we didn't know what activities were. And I thought bodyboarding was body surfing. Don't know why. I thought boogie boarding was the one with the boards. So we had to look at the descriptions of activities and try to decide what to do" (Interview 15).

> "I didn't actually even know MERC was here. I was like… I've been to the beach here before but didn't notice it. So it was like how did I not know?" (Interview 6).

> "What does MERC stand for? Um… the Marine Environment Research Centre? I'm not sure how we are doing that so maybe not. I'm not sure" (Interview 9).

> "My Dad kept joking that we were going to like… a car place… so I was really confused for a while. Until we started to find out at school what we were doing" (Interview 5).
>
> "Sir Peter Blake… my teacher said he was like a famous sailor and got shot by pirates… I don't really know anything else about him" (Interview 4).

As a result, children did arrive with preconceived expectations but they were based upon various sources:

> "I didn't know to expect until our teachers started telling us what camp would be like. And we had some people in class that went last year and they told us about it too" (Interview 1).

Strategy/Action/Process: Assisted Reflection

Assisted Reflection is the major process through which students work during their experiences, and by which they gain outcomes. This process will be presented in the final section of this chapter as the theory developed through this research. The sub-categories of *assisted reflection* are described below.

The Strategies

As shown in Table 7, children identified three main strategies or 'ways of doing' that brought about the outcome of *growing as a person*: perceiving success as success, perceiving failure as failure, and perceiving failure as success. Other strategies occasionally employed by some children included perceiving success as failure, and avoidance of either success or failure through avoidance of risk.

Sub-Category: Perceiving Success as Success. Children verbalised certain concrete perceptions of success based upon completion of an activity to its logical end:

> "I 'got down' the abseil" (Interview 6).
>
> "I was so glad I made it to the top of the tree" (Interview 15).
>
> "(Whilst surfing): I stood up nearly every time but the other people in my group couldn't stand up and get their balance" (Interview 3).

These finite conclusions to events each brought their own natural sense of achievement to the students, particularly when not every student experienced these 'successes'.

Table 7

Sub-categories of Assisted Reflection

	CATEGORY	SUB-CATEGORIES
Strategy/Action/Process	Assisted Reflection	Perceiving success as success
		Perceiving failure as success
		Perceiving failure as failure
		Perceiving success as failure
		Practicing Avoidance

Sub-Category: Perceiving Failure as Success. Some children perceived that there was a form of success and learning even in apparent failure:

> "I didn't make it to the bottom of the abseil, but people were really supportive and told me I did well to do what I did. I think I tried my hardest. (Having my group's support and that) it felt good. And I felt better about trying things after that because people were nice and encouraging about trying" (Interview 5).

> "When we did raft building our first raft fell apart as soon as we got in the water. And there were only a few people working on it because most people didn't get listened to when they had ideas. So then our instructor made us all talk about it and decide what to do. After that it was better, we made another raft and almost got everyone on it… we needed to work as a group to do it properly" (Interview 15).

> "The team games were really hard because everyone was fighting and arguing about what to do and nobody was listening. (What I learned from that is) you can't do team things if people aren't listening to each other and making a plan" (Interview 4).

> "I'm glad I gave it a go, now I know I can try even if I don't, like… make it" (Interview 15).

Sub-Category: Perceiving Failure as Failure. Children were well aware that in some activities, the purpose was to 'get to the other end', such as those activities mentioned in accepting perceived success as success. They sometimes took 'incomplete' participation as failure:

> "I didn't make it down the abseil because I was too scared so I didn't really do that" (Interview 14).

> "I felt a bit sad that I only made it to the top of the ladder when we did the tree climb. My whole group had to come back down because of me and then go back up. I felt like I let them down but I couldn't go up" (Interview 9).

In expressing this perspective, the children were very clear about defining success as completion. However, there were opportunities for these perceived failures to be framed as a series of smaller steps, each of which had its own measure of success and achievement :

> "I felt a bit bad about not getting down the abseil wall but D [Instructor] told me that I had learned about the harness and the other equipment, and that I went under the bar and right to the edge of the wall. He said not everyone can do that so I felt better after that, like I did more than I thought I could have" (Interview 6).

The children in these situations did not see or recognize the many steps they had in fact succeeded in, thereby accepting the entire activity to be a failure as a whole, because they had not 'completed' it. In such instances intervention from instructors was required in order to reframe the experience as a success.

Sub-Category: Perceiving Success as Failure. For a small number of students, a sense of their perceived lack of ability was stronger than their sense of achievement, even in an activity completely new to them. While their participation was perceived as success by their instructors, for these students it was perceived as failure:

> "I tried but I couldn't hit a bullseye (during archery). No I haven't done it before. But we had to play a game at the end and my team came last. We didn't get many points. I'm not very good at that" (Interview 9).

> "When we went kayaking, Mr. D [parent] had to tow me because I couldn't go in a straight line. It was really hard… so that was my least favourite activity. And we ended up just like, paddling around in circles. We tried to swap boats but I kept falling in the water" (Interview 13).

Sub-Category: Avoidance. Based upon observation, a few children appeared to demonstrate well-honed avoidance tactics to negate the risks involved. Examples of such strategies included taking part but distracting themselves from the task at hand and therefore only taking a cursory part, pleading multiple injuries and illnesses over the course of several days whenever certain types of activities came up, and attaching themselves to their own parent if at camp when an anxiety-producing activity arose. The latter often resulted in the parent offering to 'look after' their child so that others didn't miss out.

Consequence/Outcome: ***Growing as a Person***

The consequence of the process of *Assisted Reflection* is a personal outcome of change. The subcategories are shown in Table 8 and relate to gaining assurance in self and in relationships with others.

Table 8

Sub-categories of Growing as a Person

	CATEGORY	**SUB-CATEGORIES**
CONSEQUENCE	Growing as a Person	Gaining assurance in self
		Gaining assurance in relationships

Sub-Category: Gaining Assurance in Self. Within the sub-category of gaining assurance of self, two main areas of growth were described: attempting new things and discovering capabilities. Children were aware of their growing acceptance of new challenges:

> "I can't believe how much I have done. There are so many things I never thought I would do, or could ever do, like climb a huge tree to the top" (Interview 15).

> "Actually, I think my favourite thing was getting to know new people. I really only had two best friends before we came but now I know other people and I've made some new friends. I don't really talk to people I don't know at school so I thought I wouldn't like being with my group or

> having to be around new people for a whole week. Now I know it's not as hard as I thought… Yes I'll be trying to talk to people more at school now" (Interview 9).
>
> "What have I learned? Um… I've learned that it's okay to try new things. That sometimes it's just important to give it a try and sometimes it doesn't work but that's okay. Sometimes you just have to keep trying and not give up even if it's hard. It can still work out, and sometimes it's easier than you think it's going to be" (Interview 5).
>
> "I think the biggest thing I've learned so far, is I can do more than I thought [I would be able to]. There were heaps of things I didn't want to try but I'm glad I did. Like the abseiling; that was scary. And the sailing when I thought there might be sharks. I was really scared at first, but after a while I realised nothing bad was going to happen to me. And then I just… tried more. I feel more confident now just to try things. And I know the people in my group will like, help me more than I thought if I get scared" (Interview 5).

Many children also expressed surprise at discovering capabilities that they had not previously realised they possessed:

> "I found out that I'm really good at rock climbing. Like, I've never done it before but I found it really fun and easy. I'm going to ask if I can go rock climbing this weekend. I didn't expect that" (Interview 6).
>
> "I was really nervous about getting up in front of everyone and doing a skit last night. But it was so fun and we won the talent show, and heaps of people said after how good my part that I played was. So now I don't feel as scared about doing things in front of people. I don't normally do things like that" (Interview 13).
>
> "My favourite activity at camp was the kayaking because I found out I was good at it, and I liked that. And I stayed at the front the whole time. My favourite bit was when we had to stand up and I fell in, and I started falling in on purpose all the time. Before I came I was kind-of nervous about trying things like that but it was more fun… easier than I expected it to be" (Interview 3).

Sub-Category: Gaining Assurance in Relationships. Within the sub-category of gaining assurance of relationships, two main ideas emerged: getting to know others, and feeling supported. Children enjoyed the time spent with people they didn't already know well:

> "I feel like I've got heaps more friends now than I had before so that's been the best thing about camp for me" (Interview 9).

> "I enjoyed getting to know the teachers more. Like, yeah, at school they're so serious but here they were running around and doing everything with us… It was fun. I was trying to splash them when we went canoeing and then they splashed me back so it was cool to do that. It was like… they weren't like our teachers here" (Interview 5).

The children reported feeling supported in their efforts by peers, instructors, parents, and teachers alike:

> "It just felt… it felt like it was alright to try things and it didn't matter if I didn't do something right, everyone was encouraging. I usually wait till last to do things but I did some things here first because I knew people would be supportive" (Interview 13).

> "The thing that was nicest was that everyone was so supportive. Like I didn't expect everyone to be so nice to everyone. My group was so nice and the instructors… they are really supportive and encouraging. The teachers… and the parents. Just … everyone. So I really enjoyed spending time with everyone" (Interview 15).

> "When I did one of the activities (with the ropes and stuff), but I was climbing up and I couldn't go any higher and I sort-of fell. Well not right down, but, you know… I got scared because I felt just… like I was hanging in the air. And I wanted to come down. And then the instructor and all my group started this big chant and it took me ages but I finished it. And I felt proud of myself. But if they hadn't been so encouraging I probably would have come down straight away because I wanted to" (Interview 5).

Chapter Summary

This chapter has provided interview data for the children involved in this study. Within this data, children have described their lack of familiarity with many aspects of their outdoor education camp. They have acknowledged challenges they faced and emotions they grappled with. They have identified factors that influenced their outcomes, and their learning from their experiences. I have collated and considered their descriptions and developed a theory explaining the process as it occurs for children: The Theory of *Assisted Reflection*. Chapter Six details this theory and discusses the findings in light of the available literature.

Chapter Six: Discussion and Conclusions

Introduction

This study was brought about by a desire to understand the outcomes children gained from outdoor education. In the introduction and literature review it was established that almost all school children in New Zealand will have exposure to outdoor education as part of the curriculum, as a key learning area. It was also ascertained that the outcomes of outdoor education for children are poorly understood. Therefore, this study sought to identify the outcomes children experienced in the context of MERC, and to investigate the mechanisms by which these outcomes might have been attained.

Chapter Five (Findings), determined that children experienced novel situations and activities, many of which tested their boundaries. They were subsequently encouraged to participate in a cycle of *assisted reflection*. Through this process children were able to examine new experiences against their known boundaries, apply strategies, and then expand those boundaries. This enabled them to experience growth. Reflection was a continuous and cyclical process that occurred in response to each new challenge. The magnitude and direction of change was heavily influenced by the social conditions surrounding the children during these novel experiences, and encouraged through the assistance of others.

In this final chapter, the key elements of the theory of *assisted reflection* are illuminated for the reader. This phase of theorising is an important part of the interpretive process, through which an explanatory theory emerges, and the key concepts and their inter-relationships are systematically integrated (Charmaz, 2014; Strauss & Corbin, 1998).

Firstly, the outcomes, process, and immediate (micro) conditions uncovered in the findings will be explored in relation to existing knowledge. The anticipated outcomes that did not eventuate are briefly discussed in light of the literature. The implications of the findings of this research will then be discussed, and recommendations made. The strengths and limitations of this study are then considered. The chapter closes with the conclusions of this thesis.

Outcomes

Growing as a Person

As described in Chapter Five, the major outcome experienced by children was personal growth. This fits with the desired outcomes of teachers described by various authors (Lugg & Martin, 2001; Haddock, 2007a, 2007b; Polley & Pickett, 2003; Zink and Boyes, 2006). It also provides one of the aims stated within the New Zealand curriculum (Ministry of Education, 2007), personal and social development. The other curriculum aims of environmental care, and outdoor skills and safety were not overtly supported by the data, despite being stated in centre aims and observed to some degree within the instructional methods. The finding that children experience personal and social growth is supported by existing literature (Hattie et al. 1997; Humberstone & Stan, 2011; Priest & Gass, 2005). The primary categories within '*Growing as a Person'* in this study were gaining assurance in self, and gaining assurance in relationships.

Gaining Assurance in Self and Relationships

Over time, each individual develops an understanding of who they are, along with their own capabilities and challenges. Initially, each individual taking part in the outdoor education experience at MERC arrived with pre-formed perceptions of their capabilities. This was reflected in comments many children made about achieving more than they had believed themselves capable of. For some, shifting these pre-formed perceptions required a significant amount of self-reflection and a preparedness to amend their prior understanding of self.

A lack of familiarity with the specific conditions imposed by outdoor education, such as the range of new skills and knowledge they would need to acquire during their stay, also made their experience more challenging. For instance, the specialist set of equipment required for each activity often bore little resemblance to that previously encountered in the school environment. Managing a paddle in order to create forward movement, or practicing effective self-arrest techniques whilst simultaneously dealing with the fear of falling required the use of skills that were novel to them. At times, the development of these skills required significant support from others, as well as 'leaps of faith' and a willingness to make an attempt, on the part of the child. The participants recognised that when they were able to grasp a new skill, it was a moment of success.

They commonly stated feelings of greater capability than they had previously thought they possessed.

During their time at MERC, children reported feeling surprised by the supportiveness of some peers at camp. In a few cases due to their day-to-day experiences at school, children were so concerned about the anticipated teasing that they were hesitant to attempt new activities, and even to attend camp at all. However, almost all of these stated their appreciation for their peers in the camp environment. They also verbalised their appreciation for the level of support and care they experienced in the hands of the MERC instructors, and from their parents and teachers. These support structures (constructed almost entirely during the camp, in most cases) allowed the children to reach for goals outside of their known comfort zones, with the expectation that a metaphorical safety net existed, should they 'fall short'.

The Theory: *Assisted Reflection*

Assisted Reflection (Figure 1) is a substantive theory revealing the process children engaged in, in order to gain the outcome of *Growing as a Person* through outdoor education. The major components of the theory are the outcome – what they work toward, the process – how they achieve the outcome, and the conditions that influence the overall process.

The Outcome

Growing as a Person is the outcome towards which children are working. They achieve this through engaging in a series of activities and challenges throughout their outdoor education camp. As they do so, participants bring to bear their prior experiences, and their own constructed self and relationships, against which they contrast and evaluate multiple novel experiences. The children in this study identified two main categories within the outcome of *growing as a person*: gaining assurance in self and gaining assurance in relationships.

The Process

Assisted Reflection is the process by which children worked toward the outcome of Growing as a Person. While participating in *assisted reflection*, children were experiencing cycles of risk (whether perceived or absolute, physical, psychological, or emotional). The risk experiences led to an outcome, either an obvious success (such as completion of an exercise), or an understanding about themselves ('I can try and even if it doesn't work, it will not be the end of the world'). The learning or success created a reward which then encouraged the children to accept engagement with further risk.

During the process of *Assisted Reflection*, children perceived three main perspectives around success or failure, for which different strategies are required in order to *Grow as a Person*. The strategies employed affect the result of their efforts. In addition, two other perspectives were identified which did not contribute positively to the growth as a person, seeing success as failure, and avoidance. The nature of *Assisted Reflection* is dynamic. The cycle was repeated multiple times each day, in multiple contexts. It applied not only to experiences of physical risk, but also emotional, social, and psychological risk.

Reflection is a continuous process, encompassing all activities, and representing childrens' repeated (assisted) efforts to examine, test, and expand their personal boundaries. Children participated in the process repeatedly throughout the camp, with each new risk experienced. Risk-taking occurs in many contexts of human lives and in this case, in many contexts within the outdoor education camp. While taking part in this process the children were constantly encouraged to compare the novel to the known, and to re- evaluate their own capabilities and understanding of risk as they progressed through the challenges of their camp. Figure 2 shows the cycle of reflection within the core process, whilst figure 3 represents the expansion of boundaries as a consequence of this process.

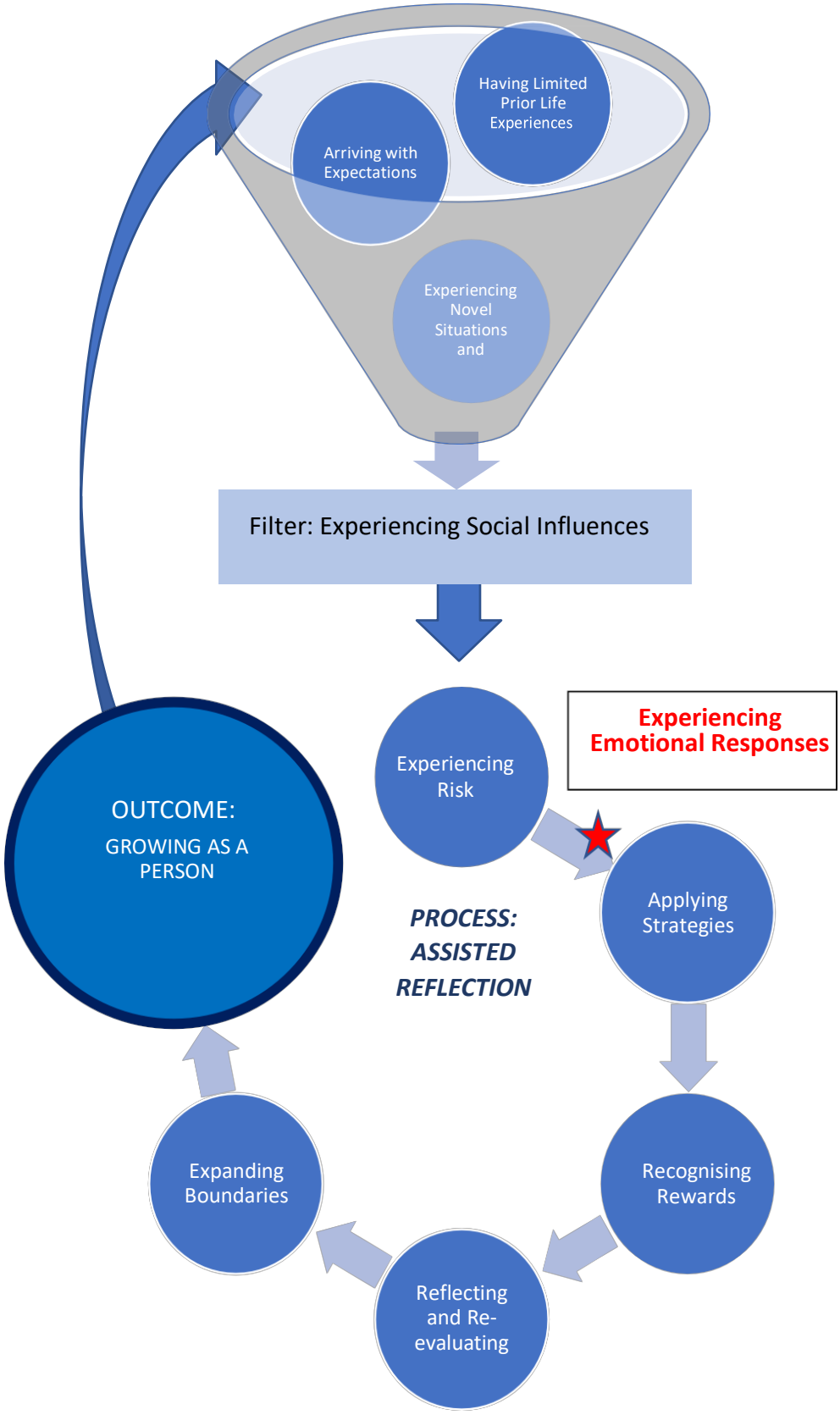

Figure 1:

The Theory of Assisted Reflection.

As shown in Figure 2, participants experience an inherent risk whilst taking part in a novel experience. They overcome challenges in order to deal with the risk. Doing so tests their previous boundaries, as they recognise and test their limitations. Feelings of vulnerability and uncertainty can arise, triggering participants to develop coping strategies. Amongst these strategies is the recognition of success or reward in various forms. Children then reflect on the risk they have taken and the success or otherwise of that risk, comparing it to their previously accepted boundaries. They then re-evaluate those boundaries and reconstruct them in view of their new experience (as shown in Figure 3). The cycle begins again with the next risk to be experienced. This creates a self- perpetuating process of personal growth through boundary expansion.

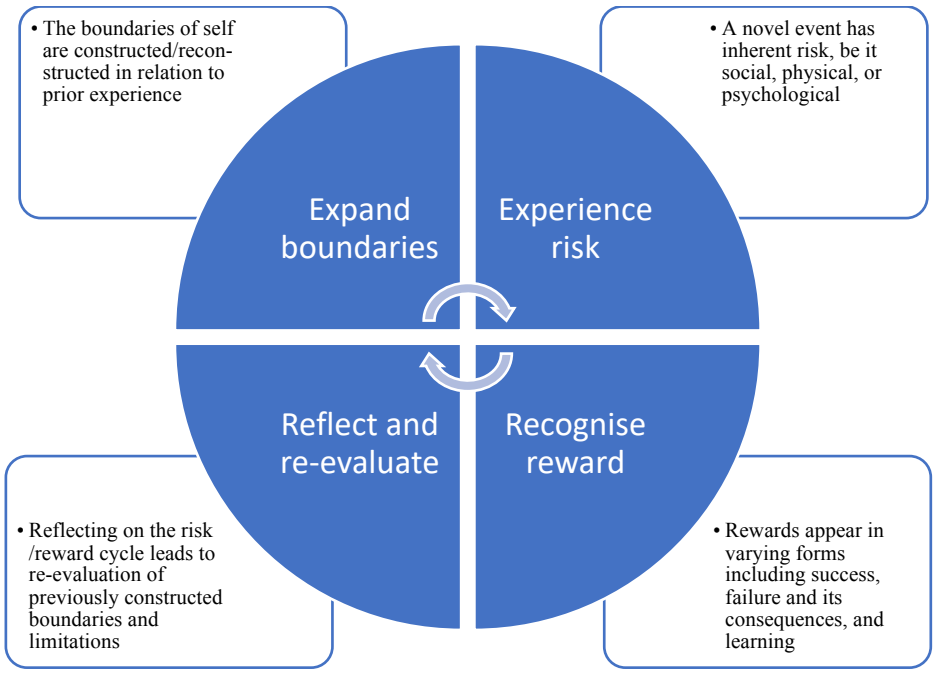

Figure 2:

Diagrammatic representation of Assisted Reflection.

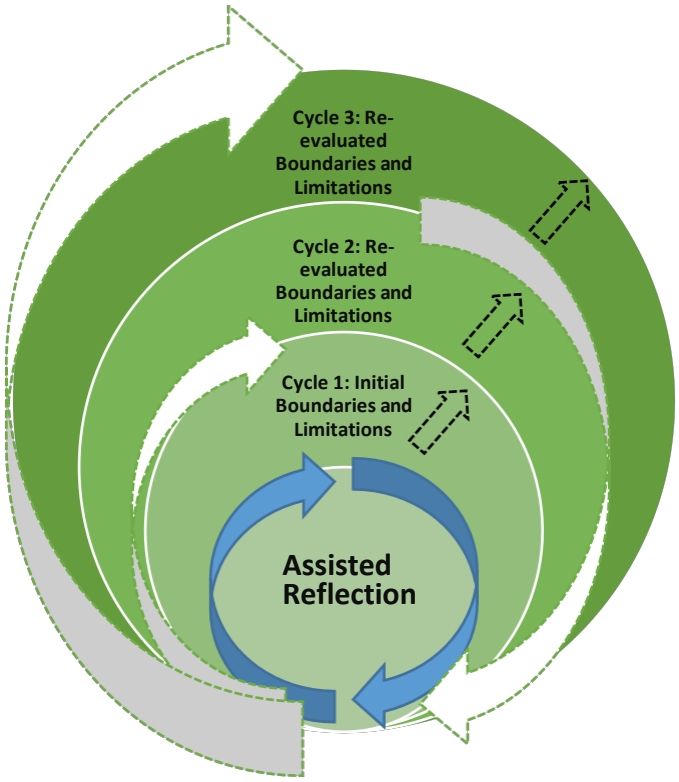

Figure 3:

Expansion of personal boundaries and limitations.

Boundaries and limitations are represented by each circle in Figure 3. Black arrows demonstrate each successive expansion of boundaries or comfort zones. The process is ongoing in nature, a continual test-and-repeat sequence. The cycle of Assisted Reflection (Figure 2) is occurring constantly in the midst of this boundary expansion (blue arrows).

Factors Influencing the Magnitude of the Outcomes

As shown in Figure 1, the intervening conditions that influence the magnitude and direction of outcomes are related to Experiencing Social Influences. In many cases, students reported that their feelings of success were in large part due to the support of peers, instructors, or other significant adults. Lack of such support, conversely, left students with an undue sense of failure. Therefore, social influences provided the filter through which events were experienced, and the level of success ascribed them by the children concerned. Social influences were found to be of greater importance (to perceptions of success) than the level of 'completion' of a given activity; that is, properly

and overtly framed, success can be found anywhere, and the cycle of boundary growth can continue regardless of the level of 'completion' of an activity.

In the naming of this core process, *Reflection* is deliberately used in two ways. The first refers to the reproduction or replication of the cycle. When children take a risk that led to a success, and are assisted in their reflections upon their experience, they proceed in such a way as to produce further successes, ensuring the continuous replication of the cycle.

The second aspect of *Reflection* refers to the cognitive process: contemplating successful outcomes and recognising a connection between these and their own behaviours and responses. During assisted reflection, children compare the personal outcome (of each novel experience) to their prior constructions of themselves; their boundaries, previous experiences and understandings, and their capabilities. With each new positive comparison, they are able to 'push out' their constructed boundaries and limitations.

Risk is the potential to lose or gain something – a chance that is taken or not. Acceptable levels of risk are highly personal, and relate to the individual's own perceived boundaries and understanding of the world. *Risk* is also influenced by relationships that an individual has with others around them while they are operating in the risk-taking environment.

Reward is employed here as the 'return' on each child's 'risk investment'. Rewards may include a feeling of success, achievement, or accomplishment, or simply a greater understanding of themselves. However, just as risk encompasses the potential to both lose and gain, the returns may also be negative if a child is unable to gain learning from perceived failure. In such a case, relationships with others are key in framing the event to assist the child in identifying a positive return, or reward.

Learning Theories

Whilst reflecting upon the experiences of the children within this study, I considered Kolb's (1984) experiential learning cycle. In this model, participants experience a concrete event, actively investigate the concept, reflect on the experience, and generalise the relationship to previous experience. I felt that Kolb's model was a fit with many of the steps that the study participants were seemingly taking, but did not fully consider the ability of outside factors to influence the direction or magnitude of change. My

impression was that children sometimes needed significant guidance to assist in their reflection, and that the cycle they were going through was guided, and not completely intentional where the students were concerned.

Neither is Mezirow's (1997) transformational learning theory a fit with the observations of this current research. It is a learning theory generally considered applicable to adults. The reason for this is that children and youth were considered yet to have fully acquired the skills to actively carry out such a process (Mezirow, 1997), whereas my research suggests that children do carry out the process of reflection, albeit under guidance. In children, both the ability and the disposition are still developing to recognise cause and effect, make generalisations, be aware of their emotions (and control them), show empathy, construct imaginative narratives, and think in an abstract manner (Mezirow, 1997). Within my study, by the age of 12 years many children were well-developed along this pathway of thought but required the support of adults to make some connections. In adults, the process is a conscious and rational approach of reflection, planning, testing, and transformation (Mezirow, 1991; Walter, 2016).

This last point is the very difference that I noted between transformative learning theory and the theory of assisted reflection. Although the children within this study were of an age where they were largely able to make sense of their experiences and learnings, the process was clearly less intentional, rather it was guided and partly intuitive. This was demonstrated through comments made by children explaining that they had considered their response to an event to be a failure until an adult guided them to a different understanding. They were able to process the new perspective once made aware, but were not always able to see that a new perspective existed, unaided. There are therefore available learning theories that fit some aspects of the results of this study, but imperfectly.

Immediate (Micro) Conditions

The main intervening conditions that directly influenced the magnitude and direction of outcomes were related to Experiencing Social Influences. In many cases, students reported that their feelings of success were in large part due to the support of peers, instructors, or other significant adults. Lack of such support, conversely, left students with an undue sense of failure. Therefore, social influences provided the filter through which events were experienced, and the level of success ascribed to them by the children

concerned. Social influences were found to be of greater importance (to perceptions of success) than the level of 'completion' of a given activity; that is, properly framed, success can be found regardless of the level of 'completion' of an activity, with associated boundary expansion. These findings are supported by other studies. Witman (1995) stated that it is naturally important to group members to support and help their peers, while Walsh and Golins (1976) suggested doing so leads to a sense of belonging. This cohesiveness improves growth outcomes for group members (Walsh & Golins, 1976). The group environment becomes increasingly supportive as time passes and groups realise that their chances of success are greatest with all members involved (Kimball & Bacon, 1993).

McKenzie (2000) stated that processing may aid in the attainment of outcomes, but that there was no particular reason that this should be the case where children are concerned. The findings of this research challenge this, suggesting that basic processing when it occurred could be instrumental to the reflective process and outcomes children gained. Some children felt that they were 'failing' activities until this guided reflection took place. However, it should be noted that the session times and structures as they were occurring at MERC during the time of this study were short and highly prescriptive. This left instructional staff with very little time to carry out deep processing, and much of the debriefing or reflection consisted of a 'thumbs-up, thumbs-down' type of activity to gauge enjoyment.

Humberstone and Stan (2011) demonstrated the significant influence that teachers can have on children's outcomes – which as they showed may be positive or negative. By contrast, children within this study spoke regularly about the enjoyment they were experiencing in getting to know their teachers out of school, being helped and supported by them, and being able to play levelling games with them (such as water fights). Whilst the experiences related by these interviewees were mostly positive, the potential for the opposite to be true will always exist. Significant adults should remain aware of their potential influence, and seek to create positive environments in which children are able to reach their potential.

What is Missing from the Findings?

Potential outcomes identified in the existing literature, and within the curriculum, were personal and social growth (e.g. Hattie et al., 1997), outdoor skills and safety (e.g. Hill, 2010), and environmental understanding and care (e.g. D'Amato & Krasny, 2011; Ministry of Education, 2007). Whilst the findings did demonstrate personal and social outcomes, there was very little evidence of environmental or skill outcomes.

The lack of environmental gains is particularly interesting. Anecdotally, as an outdoor professional of many years' experience, I have heard many suggestions of environmental behavioural change from instructors. However, neither the existing research (e.g. Hattie et al., 1997) nor the findings of this study suggest that these gains are in fact occurring very often at all. The reasons for this are likely to be varied. For example, Grossman (1995), Martin (2008), and Zink (2007) have put forward that many outdoor instructors do not possess a deep base of ecological knowledge. They are therefore apt to de- emphasise the environment (whether intentional or accidental) within their work.

The literature review showed that as well as various social aspects, the physical environment and pursuit activities have been put forward as possible drivers of outcomes (Hill, 2010; Walsh & Golins, 1976). I am unable to conclude that either of these is influential in the case of MERC. The participants rarely mentioned either of these other than if asked specifically which activities they had experienced. When asked directly what they believed was driving change for them, children spoke at length about the effects of people and relationships. I therefore concur with McKenzie (2000), that there were no specific activities that led to specific outcomes. In addition, I agree with Cosgriff (2008) and Hill (2010) that activities that might be perceived by teachers to provide the personal and social development outcomes they desire (Zink & Boyes, 2006) are likely to be selected for within MERC programming. If MERC were to attempt to change their programming activities and processes to attain more directed outcomes, they may need to take the freedom of activity choice away from teachers.

Recommendations and Implications:

In light of the findings of this study, I put forward here a number of implications and recommendations. Some are relevant to the outdoor sector as a whole, while others are specific to Sir Peter Blake MERC. I also consider further research opportunities.

Recommendations to MERC

To MERC specifically, I would recommend a change to the process of camp organisation. Through experience, I am aware of staff efforts to develop programmes in a new direction, with perhaps less emphasis on individual pursuit activities, and more on the overall experience and outcomes. These intentions have the potential to be stifled through uncertainty, and I believe especially that of schools. Understandably, schools may choose centres due to their convenience, ease, the range of taster activities, or habit. However, this research suggests that it is not the nature of the pursuits that is important, but the conditions surrounding them. It may therefore be necessary for MERC to embark on a programme of proactive discussion with schools. This would allow MERC to work toward its own stated aims and outcomes (for example, environmental education) by providing license to build these within the programmes they design. These can then become a natural, everyday part of the fabric of every camp, rather than an add-on activity.

A second recommendation I would make to MERC would be to create stronger links with other community organisations (such as local schools, other outdoor providers with similar values) and seek to develop staff as a community that fit many needs. As detailed in the literature review, staff may be reticent to teach in areas in which they feel they lack knowledge. The benefit to MERC could be realised through providing support to varying staff development but also working with other organisations to ensure the employment and retention of staff within the local sector.

This reduces the cost to any single organisation of retaining staff in off-peak periods, yet over time develops a reliable pool of potential employees, builds goodwill, improves staff development, and reduces year-to-year induction and training. As staff gain a greater breadth of experience, their facilitation skills will improve and their ability to provide outcomes will consequently be enhanced.

Further Research

Firstly, I contend that grounded theory has shown itself to be a useful methodology for investigating processes and outcomes for outdoor education. Further grounded theory investigation into other areas to improve core knowledge of what is really 'going on' for participants, but also staff and other involved parties, would be highly valuable.

Secondly, in the initial stages of this research, the possibility of transferring to a larger study was considered. Having now completed this study, I am considerably more aware of the importance of this broader research. Taking the example of MERC, the process of a group attending the centre can in fact occupy a year or more, from booking to camp. During this period, there are multiple communications between the centre and school, further correspondence between the school and parents, and varying relationships between children and their school or parents. No single area of this process truly operates in isolation. An illuminating study would be to consider the thematic implications of these communications to discover what messages are being transmitted, either overtly or inadvertently, prior to as well as during the camp. To put this into the broader context, this present study is, I believe, a very small area inside a large sphere of events.

Thirdly, there is a surprising lack of research regarding children in outdoor education in New Zealand, yet they are arguably its largest consumers. It would be apt to look in more detail at other centres providing outdoor education to children, and additionally to compare centres, groups, areas of New Zealand, and so on. Furthermore, both qualitative and longitudinal studies would be of some use in beginning to understand how outcomes could be retained by children.

Strengths and Limitations

The fit of a theory with existing literature can support its legitimacy (Nayar, 2009). A major strength of this theory is its fit with research both within and outside the sphere of outdoor education. The outcomes uncovered within this study are supported by outdoor education research (e.g. Grossman, 1995; Hattie et al., 1997; Humberstone & Stan, 2011; Martin, 2008; Zink, 2007). In addition, the process of *assisted reflection* bears some resemblance to Kolb's experiential learning cycle, albeit in a guided manner. Where this research diverges from existing research is two-fold; it brought together an assessment of outcomes with a potential mechanism for their provision, and it asked participants to

articulate their own outcomes rather than providing pre-determined options from which they should choose. As a result, this research is grounded in participants' genuine responses yet supported by literature and I believe that its legitimacy is borne out by these two factors combined.

A limitation faced within this study was the inability to re-check the emerging theory with previous participants. Whilst the removal of such re-checking was an ethical recommendation, it required the development of other strategies for verification of the findings. In response, a two-step process was employed. Later participants substantiated the developing theory (through their data and by consideration of the model). This was supported through discussion of the model with experienced peers within the outdoor sector who were able to confirm that it 'made sense' in light of their observations, thereby bearing out the claims of the theory as much as possible within these limitations.

This study has begun to develop an understanding of childrens' experiences in outdoor education camp contexts. Assisted reflection was a frequently-employed process allowing children to consider their new experiences in light of their prior knowledge, and then to adjust their personal boundaries accordingly. The outdoor environment within this case study was a condition within which children were operating, yet the greatest key to their development was human relationships. The specific nature of the pursuit activities was of relatively little importance in the process, rather they provided the opportunities in which social interaction and growth took place. This emphasises the significance of interpersonal dynamics, and de-emphasises the importance of specific pursuits, suggesting that the activities themselves could be drastically altered yet still provide similar (or more targeted) outcomes. This finding has the potential to be applicable across the outdoor sector, but particularly amongst the many centres providing similar camp environments to that of MERC.

This research has been carried out in order to develop a Master of Philosophy thesis. There are consequent limitations within this process. Firstly, the number of participants was necessarily limited to 10-20 out of potentially 2000 students (or more) per year. Although I sought to gain as much depth and understanding as I was able with each interview, at times it seemed it would be possible to continue interviewing almost indefinitely. As a result, I needed to employ judgement in deciding when 'enough was enough'. Although my grounded theory familiarity was growing, I was grateful that I possessed enough 'insider knowledge' to develop theoretical sensitivity and assist me in this decision-making process. Nevertheless, a different researcher might call a halt to proceedings at a different stage.

Secondly, as the sheer volume of data grew, it became clear that my focus was on a single cog within a very large machine of human understanding – a machine that is switched on a year before most students arrive at camp. This was a necessary reality of writing a thesis at this level however I am cognisant that there are many other steps within this process that could be studied which I believe would influence these findings. I have discussed some of these within the implications/ recommendations section of this chapter. Consequently, the findings should be applied with care to other situations until such time as this knowledge can be further developed.

Conclusions

In conclusion, this study has demonstrated that outdoor education (in the particular case of MERC) provided positive personal and inter-personal outcomes for children within the client base of the provider. These outcomes are somewhat supported by existing knowledge, but did not fully encompass the anticipated range suggested by the literature. Whilst the context within which the outcomes were attained was one of outdoor education, this study suggested that the central part of that context contributing to the outcomes was in fact the camp environment encompassing social aspects and separation from their familiar space. The pursuit activities themselves in fact had limited influence upon the outcomes. The keys to the success of strategies employed to provide outcomes would therefore be the quality of facilitation and instruction, and the development of a positive social environment around children at camp.

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Appendix A Ethics Approval

AUTEC
SECRETARIAT

11 October 2013

Mark Jones
Faculty of Health and Environmental Sciences

Dear Mark

Ethics Application: 13/279 The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.

Thank you for submitting your application for ethical review. I am pleased to advise that the Auckland University of Technology Ethics Committee (AUTEC) approved your ethics application at their meeting on 7 October 2013, subject to the following conditions:

1. Removal of the Consent process for Schools, since the Schools are not participants in the research. They should however be providing permission to access the students for the research, but are not required to give an informed consent for this.
2. Amendment of the PIS (students) as follows:
    a. Removal of the process by which the children read and edit their transcripts as the committee feels that this is unnecessary given the low risk nature of the interview questions.

AUTEC suggested that the students have the opportunity to meet the children prior to the camp, perhaps at a presentation at the school, in order to help the children feel comfortable with the research process.

Please provide me with a response to the points raised in these conditions, indicating either how you have satisfied these points or proposing an alternative approach. AUTEC also requires copies of any altered documents, such as Information Sheets, surveys etc. Once your response is received and confirmed as satisfying the Committee's points, you will be notified of the full approval of your ethics application. Full approval is not effective until all the conditions have been met. Data collection may not commence until full approval has been confirmed. If these conditions are not met within six months, your application may be closed and a new application will be required if you wish to continue with this research.

To enable us to provide you with efficient service, we ask that you use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

I look forward to hearing from you,

Yours sincerely

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Camelia Collins

Auckland University of Technology Ethics Committee
WA505F Level 5 WA Building City Campus
Private Bag 92006 Auckland 1142 Ph: +64-9-921-9999 ext 8316 email ethics@aut.ac.nz

24 October 2013

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Dear Kate

Ethics Application: 13/279 The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.

Thank you for advising us of the status of this ethics application.

The following conditions were recommended for approval:

1. Removal of the Consent process for Schools, since the Schools are not participants in the research. They should however be providing permission to access the students for the research, but are not required to give an informed consent for this.
2. Amendment of the PIS (students) as follows:
    a. Removal of the process by which the children read and edit their transcripts as the committee feels that this is unnecessary given the low risk nature of the interview questions.

AUTEC suggested that the students have the opportunity to meet the children prior to the camp, perhaps at a presentation at the school, in order to help the children feel comfortable with the research process.

In light of the above we have made the following amendments:

1. Removal of the school consent process as recommended, while still requesting permisssion for access to students.
2. Amendment of the Participant Information Sheet for Students to remove the need for students to read and edit transcripts.
3. Provide a presentation/ meeting opportunity at the school prior to the camp.

The amended participant information sheet for students is attached.

I look forward to hearing from you,

Yours sincerely

Mark Jones
Faculty of Health and Environmental Sciences

Cc: Camelia Collins

AUTEC
SECRETARIAT

30 October 2013

Mark Jones
Faculty of Health and Environmental Sciences

Dear Mark

Re Ethics Application: **13/279 The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.**

Thank you for providing evidence as requested, which satisfies the points raised by the AUT University Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 29 October 2016.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online throughhttp://www.aut.ac.nz/researchethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 29 October 2016;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 29 October 2016 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at ethics@aut.ac.nz.

All the very best with your research,

Kate O'Connor
Executive Secretary
Auckland University of Technology Ethics Committee

Cc: Camelia Collins camelia.collins@aut.ac.nz

Auckland University of Technology Ethics Committee
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29/09/2014

Camelia Collins
AUT Outdoors
School of Sport and Recreation
Faculty of Health and Environmental Sciences
AUT University, North Shore Campus
Private Bag 92006
Auckland 1142
New Zealand

Re: Research participation request

Dear Craig,

My name is Camelia Collins. I am writing to request your school's participation in a Master of Philosophy research project during their upcoming visit to the Sir Peter Blake Marine Education and Recreation Centre (MERC).

I am a student at AUT University specialising in Outdoor Education. This project will be the basis of my thesis contributing to the degree of Master of Philosophy.

The title of this research is

> "*The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.*"

The study is based on interviews and I may also be observing a few sessions while the group is at MERC. Prior to the camp, I would request permission from the parents/ legal guardians and the students concerned.

My presence at MERC will cause no safety concerns as I have worked there for an extended period (most recently as Operations/ Assistant Centre Manager). I now work with the AUT Outdoors team. I am a qualified outdoor instructor who is well known to MERC staff and management, and may also be familiar to your own staff. I am therefore comfortable that I can conduct this research without compromising your group's MERC experience.

If you are happy for your school to take part in this research, or would like further information, please do not hesitate to contact me.

I look forward to hearing from you.

Kind regards,

Camelia Collins

Outdoor Co-ordinator
AUT Outdoors
Email: camelia.collins@aut.ac.nz
Ph: 09 921 9999 ext 6613

Parent/Guardian Information Sheet

Date Information Sheet Produced:

06 September 2013

Project Title

The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.

An Invitation

My name is Camelia Collins. I am completing a Master of Philosophy degree at AUT University. I specialise in Outdoor Recreation and have a background in Environmental Science and Management. I am particularly interested to know what (if any) effects a camp at MERC might have on children's ideas about the environment.

This is an invitation to your child to take part in this study during their time at MERC.

Participation is voluntary and any student can withdraw at any time while I am collecting data. They won't be disadvantaged in any way by doing so.

What is the purpose of this research?

This research will become a thesis for the Masters degree I am working towards. I hope it will also bring further study in outdoor recreation and education, and contribute to the publication of journal articles. Research is important because it helps improve the way things are done and this study aims to fill an identified knowledge gap.

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

I contacted MERC to express my interest in carrying out this study. With MERC's assistance, I went on to contact each school for permission, explaining the research. Only those schools that have expressed an interest, and whose students fit the target group, have been invited to take part.

Your child's school has very kindly permitted me to carry out the study during their time at MERC.

Your child has been identified as part of the target group:

- attending MERC for a camp including activities and an overnight stay, and;
- aged approximately 10-12 years.

Not all of the participants will be interviewed – only a very small number will. The rest will simply be part of groups whose activity sessions are being observed.

What will happen in this research?

This research has two parts that might involve your child – interviews with a very small number of individuals, and observation of the MERC activities.

I will hold an interview with at least one student while your child's school is at camp. Interviews will happen in a comfortable and safe place, such as on the beach or grass in front of MERC. We will be easily visible but away from interruption. The best time to do this would probably be at 4pm once activities are finished, but we can negotiate this to suit.

I will audio-record and make notes during the interview, to be transcribed afterwards.

I will also observe some activity sessions. These won't interrupt your child's activity or cause any safety concerns – I have a long history both with MERC and as an outdoor recreation instructor, and will be able to work in with minimal disturbance. I will be making notes about things like how the session runs, what is taught, what the outcomes are, and what happens during the session.

What are the discomforts and risks?

Some initial discomfort about a one-to-one interview with an adult is to be expected.

Children may be concerned about confidentiality.

I wish to ensure that no emotional harm comes to any participant.

Children, as well as parents/ guardians, need to be fully informed about the research and their rights.

How will these discomforts and risks be alleviated?

A relaxing and private place to talk is extremely important in reducing discomfort. This will be a safe area, clearly visible to MERC but away from interruptions. If permitted I will provide biscuits during interviews, to help build a more natural and conversational atmosphere.

Children are entitled to 'pass' on any question or to stop the interview, and participation remains voluntary. They will be reminded of these rights at the outset. The privacy and confidentiality of the participants will be maintained at all times. Any information collected will be protected, and destroyed once university time limits allow.

The topic in question would not be expected to upset or disturb participants in any way. No personal questions will be asked of students.

I have provided information sheets to both you and your child, to ensure everyone knows what to expect. There will also be an opportunity to ask questions if you have any.

What are the benefits?

This research may influence how outdoor recreation centres and camps manage some parts of their programmes – potentially programmes that your children will take part in. Students have an opportunity to have a real say in what they get out of camp. I hope that some time in the future, outdoor recreation instructors will be able to provide both outdoor pursuits and environmental information in ways that are effective and still fun.

I also wish to gain the degree of Master of Philosophy and the resulting thesis will contribute to this.

How will my privacy be protected?

Interviews will be confidential.

No personal information will appear in the final thesis or any articles, and confidentiality will be maintained throughout the process. Information will be securely stored and eventually destroyed in accordance with AUT University's requirements.

No personal information will be sought other than that provided on the consent forms.

What are the costs of participating in this research?

I anticipate that no child would have to give more than an hour of their time at camp – in most cases it will be much less than this for an interview. We would negotiate the timing of this to cause minimal impact to the MERC experience.

Observations will not require any time commitment from a participant.

What opportunity do I have to consider this invitation?

This depends a little on the date of your child's camp, but I expect that you will have one to two weeks to consider whether you agree to your child taking part. During this time, I will make myself available for you to ask questions if you have any.

How do I agree to participate in this research?

You will need to complete a "Parent/ Guardian Consent Form" for your child to take part. Your child will also need to complete an ''Assent Form" to say that they are happy to join in with the study and they understand what to expect. I will provide you with these forms.

Will I receive feedback on the results of this research?

You can request a copy of the final report once the research is complete. If you wish to have a copy, I will provide this using the contact details you supply on the Parent/ Guardian Consent Form.

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, Mark Jones, mark.jones@aut.ac.nz, 921 9999 ext 7272.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz*, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Camelia Collins, camelia.collins@aut.ac.nz, 921 9999 ext 6613.

Project Supervisor Contact Details:

Mark Jones, mark.jones@aut.ac.nz, 921 9999 ext 7272.

Approved by the Auckland University of Technology Ethics Committee on *30 October 2013*, AUTEC Reference number *13/279*.

Participant Information Sheet

Date Information Sheet Produced:

06 September 2013

Project Title

The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.

An Invitation

My name is Camelia Collins. I am a student at AUT University. I invite you to help me in a project I am doing as part of my studies in Outdoor Recreation.

You do not have to take part. If you do agree to, you can still stop at any time while information is being collected. It is okay to say 'yes' or 'no' – your choice will not affect how much you enjoy yourself at camp or the other things you do there.

What is the purpose of this research?

I will be writing a thesis for a Master of Philosophy degree. A thesis is like a book, and a degree is like a university certificate. When my thesis is finished, experts will decide how good it is.

I would also like to write shorter articles about it that will be published in journals. Journal articles are a bit like magazine reports. They hold a lot of information about one subject, but in a small number of pages. People at universities use journals a lot to help them find information, the way you might look for it in a non-fiction library book.

Why am I being invited to take part in this research?

Because my project is about MERC, I will be talking to people who are going there for a school camp. I am interested mostly in what people aged around 10 to 12 years have to say. I am inviting you because you are in this age group and going to a camp at MERC.

I contacted MERC and they gave me permission to contact your school, to ask if students coming to camp could help.

What will happen in this research?

I will come to MERC some time while your group is there. Mostly, you will just carry on as usual at camp.

I want to know what people think about the camp they go on, and whether being at MERC makes them think about anything special. To do this I need to do two things: interview one or two people who are at your camp, and observe some of the MERC activities running.

The best place for interviews is somewhere relaxing like the beach in front of MERC, or the grass out the front. It will be somewhere that is close to MERC where we can see and be seen, but where people won't be walking around us.

To get our interview going, I will ask some questions. There are no right or wrong answers or things to say. I want to know what you really think. Your honest ideas and thoughts will help me, MERC, and other people doing the camp in future. I will record what we talk about (with a few notes and a sound recorder), so that later I can be sure I have it right.

When I am observing activities you will see me around MERC. I will make notes about each activity I watch, such as how it goes, and what happens during that time.

What are the worries and risks?

It may feel a bit strange to have an interview about what you think of the camp. If you feel like that, it's okay.

You might be a bit worried about who will see or hear the things you say during interviews, or what you do during activities.

Maybe you are concerned that the questions I ask will be personal or upsetting.

You might be feeling unsure about what to expect or what to do.

How will these worries and risks be handled?

To make the interview easier, we will find a good spot close to camp where you feel comfortable. If you need to stop talking, don't want to answer a question, or anything like that, that is okay.

The things you say or do won't be shared with others such as parents, teachers, or classmates. Even when it is time to check the notes from the interview, only you will see those. When I write the thesis, I won't include your name, or add things that will tell people you were involved.

The sorts of questions I will be asking won't be about personal things. They might include things like what you thought about coming to MERC, what activities you wanted to do, or whether you might like to do anything different when you go back to school.

I'm giving you as much information as I can now, and you'll also have a chance to ask questions, so that you understand what is happening in the study.

What are the benefits?

For me, of course, you will be helping me to get my degree. For MERC and others coming to camp (maybe even you, if you come again), you could make a real difference to what happens at camp and what people get out of it. It's even possible that you could change the way things are done at other camps.

How will my privacy be protected?

Nobody else will be told what you have said or done.

Things you say might appear in the thesis I am writing, but there will be no personal information about you.

If you do give me any personal information, it will always be carefully protected, and not shared. Forms you fill out (like your assent form) are locked away in a safe office at AUT University. They have to be kept for a while locked up, and then will be safely disposed of.

How long will it take to help with this research, if I participate?

This study could take up to one hour in total, if you are one of the people who do an interview, but it will most likely be shorter than that. My observations won't take extra time for you because you will just be carrying on with activities.

How long do I have to think about this invitation?

This will depend a little on what date your camp is, but if possible I'd like you to have a week or two, to decide if you are happy to take part. During this time, I will make sure I am available to answer questions if you have any.

How do I agree to participate in this research?

You will need to complete an ''Assent Form" to say that you are happy to join in with the study and you understand what to expect. Your parents or guardians will also need to sign a "Parent/ Guardian Consent Form" for you to take part.

I will provide you with these forms.

Will I be given any results from this research?

Your parent/ guardian can ask to receive a copy of the final report when the whole study is finished. If they ask for a copy, I will provide this using the contact details they supply on the Parent/ Guardian Consent Form. With it I will send you a letter/ email explaining the main things I have found out.

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, Mark Jones, mark.jones@aut.ac.nz, 921 9999 ext 7272.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, *ethics@aut.ac.nz*, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Camelia Collins, camelia.collins@aut.ac.nz, 921 9999 ext 6613.

Project Supervisor Contact Details:

Mark Jones, mark.jones@aut.ac.nz, 921 9999 ext 7272.

Approved by the Auckland University of Technology Ethics Committee on *30 October, 2013*, AUTEC Reference number *13/279*.

Parent/Guardian Consent Form

Project title: ***The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.***

Project Supervisor: ***Mark Jones***

Researcher: ***Camelia Collins***

- ○ I have read and understood the information provided about this research project in the Parent/ Guardian Information Sheet dated 06 September 2013
- ○ 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 some MERC activities may be observed, and notes will be made about the activities.
- ○ I understand that I may withdraw my child/children and/or myself or any information that we have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- ○ If my child/children and/or I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.
- ○ I agree to my child/children taking part in this research.
- ○ I wish to receive a copy of the report from the research (please tick one): Yes○ No○

Child/ children'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 30 October 2013, AUTEC Reference number 13/279.

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

Assent Form

Project title: ***The effects of an outdoor recreation programme on children's environmental perspectives: A grounded theory study of the Sir Peter Blake Marine Education and Recreation Centre.***

Project Supervisor: ***Mark Jones***

Researcher: ***Camelia Collins***

- ○ I have read and understood the Participant Information Sheet 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 during the interviews and that they will also be audio-taped (sound recorded) and transcribed.
- ○ I understand that some MERC activities may be observed, and notes will be made about the activities.
- ○ I understand that while the information is being collected, I can stop being part of this study whenever I want and that it is perfectly ok for me to do this.
- ○ If I stop being part of the study, I understand that all information about me, including the recordings or any part of them that include me, will be destroyed.
- ○ 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 30 October 2013, AUTEC Reference number 13/279.

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

Appendix B Data Collection Tools

Protocols for data collection and generation

1. Interview protocol

- Interviews will take place in a safe, comfortable, and uninterrupted area. Ideal spaces at Sir Peter Blake MERC include the grass area at the front of the main hall, or the beach in front of MERC, if weather permits. Suitable indoor venues include the MERC hall and MERC library. Both are visible within the boundaries of the centre, while still private and comfortable.
- Interview areas will be visible to centre and school staff.
- Biscuits may be provided if schools and parents/ guardians permit.
- Each interview will be audio-recorded.
- Interviews are semi-structured. As a participant considers a subject, the role of the grounded theory interviewer is to seek deeper meaning and clarification (Charmaz, 2006). Questions have been prepared as a guide, however it is not expected that all of these will be asked during an interview.
- Each interview will progress through five main stages:
    i. Introduction
    ii. Initial open-ended questions
    iii. Intermediate questions
    iv. Ending questions
    v. Concluding statements.

Interview structure and indicative questions

i. Introduction

1. The researcher will reintroduce herself.
2. A reminder of the purpose of the study will be given.
3. The rights of the participant will be reiterated (confidentiality, voluntary participation, the right to pass on any question, the right to withdraw).
4. The interviewee will be encouraged to be as truthful as possible and told that there are no “right” or “wrong” answers.
5. A reminder about the recording and transcription of the interview will be given.

ii. Initial open-ended questions

1. What did you think about or feel when you heard you were coming to camp at MERC?
2. What does the word M.E.R.C. stand for? What does (each word: marine, education, recreation) mean to you?
3. When you hear the word ‘environment’, what does it mean to you and what do you think of?
4. Did anyone influence what you thought or felt about coming to MERC? If they did, who, and how did they influence you?
5. Were there any activities you hoped you would do, and if so, which activities? Why?
6. Were there activities you did not want to do, and if so, which? Why?
7. Which activities have you taken part in so far, at MERC?
8. Before you came to MERC, what did you think or feel about the sea?
9. Before you came to MERC, what did you think or feel about the environment?
10. How would you describe the things you did (before you came to camp) that you think might affect the environment?
11. Tell me what things you knew about the sea or the environment before you came to camp.
12. What, if anything, did you know before camp, about caring for the sea or the environment?

iii. Intermediate questions

1. **If appropriate to the camp experience:** Tell me what you thought and felt when you were learning about (name of MERC environmental activity).
2. **If appropriate to the camp experience:** What happened in your (MERC environmental activity) session?
    a. Who was with you? What did they do?
    b. Would you change anything about that activity?
3. If you have learned anything about the sea while you've been at MERC, what have you learned?
4. If you have learned anything about the environment or how to care for it since you arrived at MERC, what have you learned?
5. If you have learned other things while you have been at MERC, what are they?
6. Imagine you are back at home when camp is over. Is there anything you think you would do differently after camp?
7. Imagine now that you are back at school. Is there anything you think you would do differently at school, after camp?
8. Think about your time at MERC so far. What are the things that are biggest/ stand out most in your mind? What is important to you about (each of these)?
9. Describe the most important things you've learned so far at MERC.
10. Who has been the most helpful while you've been here, and how?

iv. Ending questions.

1. If your family or friends ask you about your time at MERC, what things would you like to tell them about?
2. If someone else was coming to MERC, what would you say to them? What advice would you give them?
3. If you could write a letter to any grown-up about the sea, who would it be and what would you say?
4. If you could write a letter to any grown-up about the environment, what would you say? Who would you write to?

5. Is there anything else you have thought of that you would like to say?
6. Is there anything else you think it would be good for me to know?
7. Is there anything you would like to ask me?

v. Concluding statements.

Well, thanks so much for your time, it's been really useful. I'm going to turn off the recorder now. I am very grateful to you for sharing your thoughts and feelings about your time at MERC. Thanks for being honest and reflecting on these experiences. I am looking forward to analysing your helpful comments. Do you have any questions about how I will be using this interview information or what will happen next with this research?

Thanks again it's been valuable for me having you share these reflections with me. Bye.

2. Audio-recording protocol

- Interviews will be recorded throughout on an electronic digital audio-recording device.
- Potential interviewees will be informed prior to giving consent that such recording will occur.
- After each interview, the device will be plugged into the researcher's computer, where it will be played back and the transcription of the material from the interview will take place.
- The completed transcription will be provided to the interviewee for approval.
- The researcher will be the only person who hears/ transcribes the interviews and confidentiality will be maintained at all times.
- Transcripts of audio-recordings will be used for analysis throughout the course of the research. Following completion of the study, data will be safely stored for the required period of six years, and then securely destroyed.
- Should a participant choose to withdraw, any recordings that are relevant to that participant will be destroyed.

3. Observation protocol

This research includes participant observation – limiting focus to only one aspect of life (Charmaz, 2006). It does not develop into ethnography and as such, will not involve following a particular group for any extended period.

Field notes will be detailed and include anecdotes. Grounded theory observation relates to a phenomenon or the processes at work. Areas of focus will include:

- Use of language
- The apparent outcomes of the session for the participants, and consideration of what they may see as problematic or interesting
- Individual and collective actions
- Significant processes occurring in the setting of the activity
- Placing the participants and actions within scenes or contexts

Should a participant withdraw, observation data relevant to that participant will be destroyed.

4. Document study protocol

Extant texts will be used as a supplementary source of data.

Documents provided for study by Sir Peter Blake MERC are under copyright, and their use must be managed accordingly. They will not be reproduced without permission from Sir Peter Blake MERC, nor will they be provided to third parties.

Articles and other texts will be properly and completely referenced.

No texts are to be elicited from participants.

Following the guiding principles of Charmaz (2006), analyses of texts may include:

- Consideration of the facts or sources of the information, and who is behind the texts
- The intended audience
- The purpose and structure
- What may be left out
- Use of language
- Comparisons between texts on the same topic
- How the documents affect actions and/ or reflect a reality.

Appendix C Exemplar Initial Coding

Exemplar of Initial Line by Line Coding
Student Interview 1 (Anonymised name and date)

(Researcher/ Interviewer = I)
Student = S1

Excerpts from Student Interview 1 (Name and date removed due to identifying information).

Researcher memo:
During this, my first interview, I wished to try to gain as much information as possible about a number of areas, including whether participants might have known about MERC beforehand, what they might take the name MERC (Marine Education and Recreation Centre) to mean, and what they would expect to do there. I wanted to develop as much base information as I could.

I was surprised to find that Student 1 expected a great deal more environmental education than was had, and had no expectation at all of pursuit-style activities. I will continue to follow these leads up. The student also had no prior knowledge of MERC, talked about the emphasis on safety, and felt that the 'special environment' (marine reserve) resulted in a peaceful place.

Particularly because this was my first interview, I chose to code my own questions as well as the participants, to try to keep check on leading the participant. I felt particularly that I needed to try to relax more as I felt very nervous. As I had been expecting some environmental outcomes (prior assumptions), I asked a lot about them of this student who seemed to want to talk about them. In future interviews, I will be careful not to lead in this aspect.

Excerpt 1:	**Initial Codes:**
I: Do you know what MERC stands for?	(Asking about MERC name)
S1: Um Marine Education Recreation Centre?	Knowing the full name of MERC
I: Yep, and so when you hear that... or when... Did you know what MERC was before you came here?	(Asking about prior knowledge of MERC)
S1: No (shakes head)	Not having prior knowledge
I: So, when you hear that name, what would you think, or what would you expect to find here or what would you expect to do here?	(Hearing the name MERC) (Expecting to find what?) (Expecting to do what?) Having a beach Having a swimming pool and gym

S1: Like a beach, and like maybe like a swimming pool and, like a gym, for like the recreation	Recreating
I: yeah, that's cool, ok. So um, did you... so what did you think you would do then, when you came?	(Expecting to do what?) (Coming to MERC) Having ideas about what we'd do Going swimming and learning
S1: I thought we were just gonna go like swimming and then learn about the environment and, yeah.	Learning about the environment
I: Yep. So you thought you would learn about the environment here?	(Learning about the environment?) Affirming expectation
S1: Yeah	(Learning about the environment?)
I: And have you done that?	Learning a little bit
S1: Um...A little bit... We...We watched a movie yesterday about an island two thousand miles from any land, and there was a photographer there, um, like, taking pictures of the insides of birds cause they had so much plastic inside them, and I found it really sad.	Watching a movie about an island Being far away Taking pictures Seeing the inside of birds Feeling sad (Feeling sad, why?)
I: Yeah, and why do you think you felt sad?	Feeling bad Putting things in the rubbish
S1: I think they felt ...bad, for like, just putting things in the rubbish to go to, like, landfill.	(Instructors showing movie) (Instructors informing children?) (Explaining the issues?) (Having actions to take?) (Putting things in the rubbish)
I: Yeah, ok. So when the instructors showed that movie, did they talk about what you guys about the movie or how that damage happened? Or what you could do, like you've mentioned about the rubbish…	Instructors informing children Reusing rubbish Not explaining things Telling story about another school Making a mural of rubbish
S1: Sort-of, I mean, they told us we could like, reuse them again and stuff like that but they never really like, explained like, anything huge. But they did say one school, a couple of years ago, did a mural out of bottle tops.	(Pointing out the mural) (Seeing the mural?) (Learning about what?) (Learning what at MERC?)
I: Yeah, in fact it's in there (pointing to hall), did you see it?	(Being at MERC)
S1: Yeah, yeah	Learning Being safe in the water

I: Ok, so, what have you learned about then, the most, so far at MERC, what sort of things have you learned while you've been here? S1: I've probably actually learned like, why it's so important to stay safe in the water and to tell someone. Cause it's been like... yeah. I: Has that been something that's been said in a lot of sessions? S1: Yeah cause we've been told in dinghy games, sailing, surf kayaking, surfing, bodyboarding... I: Ok, so what do you think is the best thing about MERC? S1: Um... it's kind of hard to put a finger on it since it's all really good like... It's never been one thing. We have to wait like half an hour to do the next thing. It's always been, this, a snack, then this, so we've all been really tired at night.	Telling someone (Being talked about in sessions?) Being safe talked about in many water activities (Best things about MERC?) Trying to decide Enjoying everything Waiting Doing the next thing Having snacks, doing next activity, being tired
Excerpt 2: I: That's cool. And is there anything you would like to do more of at MERC, or see more of at MERC if you could come again? S1: I would... probably... like have maybe a session just learning, about all the, like, native stuff and how we can protect it. To be honest, just watching one... one two-minute movie, like I don't think that was enough compared to what it's like called, because it's marine education... so it's like half of it... I suppose (laughs). I: Ok, so thinking about that then, what does the word 'environment' mean to you, when you think of the environment? S1: Flora and fauna I: Ok. And so what do you know about caring for the environment?	**Initial Codes:** (Wanting to do or see more of?) Thinking Learning Protecting native stuff Watching short movie Not being enough compared to the name of the centre Learning only half of what I expected to (Thinking about last comments) (Environment meaning what?) Meaning plants and animals (Caring for the environment?)

S1: I know... not to just dump everything into the ocean or out in a big field, you've got to protect the trees. And whenever I go hiking in the Hunuas, whenever there is like the Kauri dieback stuff, I always put that on. Just because, yeah.	Not dumping Being outdoors Protecting trees, Hiking Being in the forest Protecting trees
I: So you scrub your boots and that sort of stuff?	(Scrubbing boots?)
S1: Yeah	Affirming
I: And do you do that sort of thing very often?	(Going outdoors often?) Being busy Asking Dad to take me
S1: Um... sometimes we're a bit busy but I like to always ask Dad whether he can take me out. Yeah	(Enjoying doing things outdoors?) Affirming
I: So you like doing things in the outdoors? S1: (nods) I: That's great to know. So are there... is there anything else that MERC does do you think, that encourages people to think about the environment, other than the movie that you've mentioned?	(Thinking about MERC?) (Encouraging people?) (Doing other things?) Standing out as too little Learning about marine things Talking for ten minutes
S1: Um... not really...because....yeah,... that kind-of stood out for me, like not having as much... as much marine education time as I thought, because that was only like ten minutes we talked about it.	(Hearing 'Marine Education') (Confirming, thinking of environmental stuff?)
I: So when you hear marine education you think of environmental stuff?	Thinking of the ocean
S1: Yeah, like about the ocean and that	(Asking about prior knowledge)
I: That's really good to know. So have you been to Long Bay before?	Not having prior knowledge
S1: No	(Doing things in special environment?)
I: So, what has it been like doing your surfing and stuff in a marine reserve?	Having peace Getting out
S1: Its been quite cool, not having all of the boats that you sometimes get. Because usually it's like, um, it's like I get out, and	Being at a normal beach Hearing boats and motors

when it's not a marine place and all you hear is like rrrrrrr (motor sound), of the boats. I: So if...if MERC were going to do more environmental things, what do you think they could do? There are rocky shore activities and things here but are there other things? S1: Hiking I: You'd like to go hiking? S1: Yeah like maybe they could, like, sort of make a track, um there (points) like, where the trees are, like hanging off... and just like, have like a couple of signs there, and make it like a loop, so it goes like round.	(Doing more of what?) (Doing more environmental activities?) Hiking (Confirming hiking?) Making a hiking track Being by the trees Having signs Making a loop track

Appendix D Exemplar: Comparing Codes

Exemplar of Incident to Incident Coding
(Anonymised names and dates)

Excerpts from Student Interviews 1 and 2
(Names and dates removed due to identifying information).
Researcher codes omitted.
Similar codes in bold.

Researcher memo:
Having now completed and coded two initial interviews, and refined those codes, it was time to begin to compare codes between interviews. I was interested to see how much similarity, and difference, would be apparent between these first interviews. My impression was initially that the two students had vastly different experiences, but there could be any number of reasons for this. This will therefore be something to begin to tease out of the data with further interviews.
I continue to expect that there will be change as my technique improves, and as data begin to emerge and I start to see what is going on.

Student 1:	**Student 2:**
Knowing the full name of MERC	Not knowing what MERC stands for
Not having prior knowledge of MERC	**Not having prior knowledge of MERC**
Expecting a beach Expecting a swimming pool/ gym Recreating being **fitness**	Expecting **fitness**
Expecting to be going swimming and learning Expecting to learn about the environment	**Expecting to swim** a lot
Learning only a little bit Watching a movie about an island Being far away from the island Seeing the inside of birds Feeling sad	Learning that Long Bay is clean Picking up rubbish Seeing Orca Seeing dolphins Seeing stingrays
Feeling bad for putting things in the rubbish	Going out further than meant to with instructor
Instructors informing children a little about reusing rubbish Not explaining things Telling story about another school Seeing a mural of rubbish	Having fun Going way out in deep water Leaning over to touch water (from boat) Making friends **Being encouraged**
Learning Being safe in the water	Spending time with friends Finding activities scary

Telling someone (where going) Being safe talked about in many water activities **Being encouraged** Enjoying everything Waiting Doing the next thing Having snacks, doing next activity, being tired	Being scared but happy Enjoying the water activities Wanting to do scary things more