‘Amazing Carefree-Awesomeness’
A Realistic Evaluation Exploring the Perceived Effect of Outdoor Residential Education on the Psychological Wellbeing of Primary-Aged Pupils.

By
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Dedication

To Elaine, for bringing me into the world of educational psychology, for giving me the confidence to take the next step and for the nurturing support throughout a journey of ecstatic highs and devastating lows. There aren't enough 'thank yous' in the world.

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Thank you to my mum and dad for your continued encouragement, which has helped me to keep going.

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Abstract

The aims of this study were to examine whether pupils attending a programme at a residential outdoor education centre experienced an increase in psychological wellbeing and to explore the underlying mechanisms behind any increase.

This was achieved through the use of a mixed methods framework, based on a Realistic Evaluation approach (Pawson and Tilley, 1997). A Realist Synthesis was carried out to derive tentative programme theories from the extant literature. These tentative programme theories were then tested based on data collected from focus groups with pupils and residential centre staff, interviews with school staff, pre- and post- intervention measures of pupil psychological wellbeing, and observations, recorded as field notes during the residential.

The results suggested that pupils experienced a small, but non-significant increase in psychological wellbeing. Four final programme theories were developed, concerning Risk and Challenge, The Natural Environment, The Supportive Community and Independence. Limitations of the research are discussed, along with directions for future research. Implications for the role of the educational psychologist are highlighted.

Contents

Abbreviations:

LA: Local Authority

DfE: Department for Education

EFA: Education Funding Agency

REC: Residential Education Centre

RES: Residential Education Service

OE: Outdoor Education

OAE: Outdoor Adventure Education

FSM: Free School Meals

PPF: Pupil Premium Funding

LAC: Looked after child

CMOCs: Context-Mechanism-Outcome Configurations

ORE: Outdoor Residential Education

PPF: Pupil Premium Funding

WHO: World Health Organisation

SDT: Self-Determination Theory

RE: Realistic Evaluation

RS: Realist Synthesis

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Chapter One:
Introduction

In my second and third year as a trainee educational psychologist on the Applied Educational and Child Psychology Doctoral Programme at the University of Birmingham, I was on placement within a Midlands Local Authority (LA), which is referred to using the pseudonym 'Valleywell' throughout this thesis. The volume of work represents the first volume of two which comprise my thesis and reports a small-scale, original empirical study carried out with approval from Valleywell LA. The study considers the impact of outdoor residential education (ORE) on pupil wellbeing and uses a methodology based on Realistic Evaluation (RE) (Pawson and Tilley, 1997). This approach allows for the underlying mechanisms and processes to be examined in order to investigate how the ORE programme works for the specific group of pupils identified, within the particular context in which it was implemented.

1.1 Rationale for the Study

1.1.1 Local Authority Interest

There has been an increasing emphasis on pupil wellbeing both within the national government agenda (see Section 1.4.1) and as part of ongoing development plans in Valleywell LA. In the latter case, this included the development of a wellbeing charter mark for local schools, which was piloted during the school years 2015-2016 and 2016-2017. Interest in participation in outdoor education programmes had also been steadily growing within Valleywell LA, with an increasing number of schools giving their pupils access to activities run by 'forest schools' or developing their own-on site programme (see Section 1.3.1, for a brief explanation of the forest school movement).

Valleywell LA has a Residential Education Service (RES) and planned to incorporate this into the well-being charter mark. Therefore, an investigation of the benefits of taking part in the programmes offered by this service was considered capable of providing evidence to help support this. In parallel to these developments, there was a risk that changes and planned cuts to the LA budget could negatively affect Valleywell LA's capacity to run and maintain its residential education centres (RECs). Consequently, staff from the RES were seeking new ways to promote their centres

to schools and other organisations. Senior staff within the RES were also keen to gather data to support anecdotal evidence of the benefits of participation to children's mental health and wellbeing. In particular, staff were interested in exploring which aspects of the service are especially beneficial, or working well towards this goal, to enable increased selective use of these strategies.

Another area of interest for the RES was the possibility of providing programmes specifically targeted towards pupils who are entitled to Pupil Premium Funding (PPF), which would give schools an alternative option when considering how to support these children and young people. PPF is a government strategy which aims to narrow the achievement gap by targeting additional funding to pupils from 'disadvantaged' backgrounds (Demie and Mclean, 2015). According to the Department for Education (DfE) and the Education Funding Agency (EFA) (2016) pupils are considered to be eligible for PPF if they are entitled to 'free school meals' (a means-tested benefit based on family income) or have been entitled within the previous six years. However, as pointed out by Gorard (2016) this criterion can only be a proxy measure of disadvantage and it is perhaps too heavily relied upon due to its administrative convenience. Looked after children (LAC) are also entitled to PPF as are those who have previously been looked after and have been adopted or children who have a parent in the armed forces (DfE and EFA, 2016). PPF is allocated to schools on the basis that it must be used to provide activities which raise the attainment of pupils in the identified groups (DfE and EFA, 2016). Although Gorard and See (2013) suggest that PPF is likely to have a beneficial impact for pupils, the scheme is not without criticism. Of particular note is the assertion by Goodman and Burton (2012) that the focus on raising attainment for 'disadvantaged' pupils through PPF, serves to overlook the underlying cause of the disadvantage and therefore does nothing to address social inequality.

1.1.2 Researcher Interest

From a more personal perspective, I am a great believer in the benefits of participation in outdoor activities and in the importance of this for supporting the development of children and young people. I was lucky to grow up in an area surrounded by green spaces, but this is not the case for many children and young people within the heavily industrialised Midlands region, where this study took place.

It was my aim that, by contributing to the evidence base for outdoor residential education, I would be able to offer empirical support for the promotion of participation in outdoor education experiences for children and young people who would not otherwise be able to experience such opportunities.

1.2 Psychological Wellbeing: Evidence from the Literature

1.2.1 Mental health in school children

According to Humphrey & Wigelsworth (2016), 1 in 10 children and adolescents will experience mental health difficulties. Furthermore, in a recent report, levels of child wellbeing in the UK were found to be rated 16th within a group of 29 developed countries (UNICEF, 2013). This report also suggests that when considering the individual aspects of wellbeing measured by study, the UK ranks only 24th for educational wellbeing, this being comprised of two components: participation and achievement (UNICEF, 2013). Coupled with the ongoing and severe cuts to mental health services for children and young people (Young Minds 2013) there is the potential for their mental health and wellbeing needs to remain unmet, due to a lack of appropriate and evidence-informed provision to support these. Because of this, Humphrey and Wigelsworth (2016) argue that schools are an ideal setting for the provision of universal mental health interventions as a way of bridging this gap. Indeed, the DfE (2016) asserts that schools have a role to play in supporting the mental health of their pupils.

1.2.2 Defining General Wellbeing

The measurement and improvement of general pupil wellbeing within education is being afforded increasing attention within research and government policy. However, the term ‘wellbeing’ has no universally accepted definition (Dodge et al. 2012). For example, Humberstone and Stan (2009) refer to an holistic definition of wellbeing based on the presence of good physical, mental and social health. In an attempt to solidify the construct of wellbeing, Dodge et al. (2012) suggest that wellbeing is achieved through a balance between psychological, social and physical resources and challenges. However, Gillett-Swan and Sargeant (2015) criticise this suggestion, pointing out that it offers a purely subjective view of wellbeing. Instead, they argue that the development of wellbeing should be viewed as a process of accrual which sits alongside the traditional idea of subjective wellbeing (Gillett-Swan and Sargeant

2015). It is however beyond the remit of this thesis to attempt to settle this disagreement and I will now begin to focus on the particular area of wellbeing that is of interest within this study: psychological wellbeing.

1.2.3 Mental Health and Wellbeing

Despite the confusion and debate surrounding a definition of general wellbeing, there appears to be a growing trend for the term 'wellbeing' to be used as an alternative descriptor for mental health (Liddle and Carter, 2015). Weare (2010) argues that this shift reflects an effort to overcome the stigma and negative connotations surrounding the term 'mental health.' Furthermore, Liddle and Carter (2015) point out that this also represents a move to promote positive mental health, as opposed to the more traditional deficit view of mental illness. Some researchers are now tending to focus on the psychological aspects that make up this new view of wellbeing, particularly in the area of positive psychology. However, there continues to be a dichotomy within the literature, with two distinct understandings of what wellbeing is. Firstly, 'hedonic' or 'subjective' wellbeing includes the presence of positive emotions and life satisfaction, alongside an absence of negative emotions (McDowell, 2009). On the other hand, the eudaimonic view of wellbeing consists of aspects such as self-acceptance, personal growth, autonomy, relatedness, mastery and purpose (e.g. Ryff and Keyes, 1995). Despite these differences, it is suggested that these need not be seen as opposing views of wellbeing. For example, Shah and Marks' (2004) definition of wellbeing includes satisfaction, happiness, personal development, fulfilment and contributing to the community. More recently, Seligman (2011) posited that wellbeing comes about from the combination of positive emotion, engagement, meaning, positive relationships and accomplishment. Indeed, Thorburn (2015) suggests that an amalgamated theory of wellbeing is useful within the educational context. Furthermore, Liddle and Carter (2015) argue that the two views of wellbeing can be combined to create an holistic understanding of wellbeing, which they term 'Psychological Wellbeing'. They link this to the World Health Organisation's (WHO) definition of positive mental health; "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2014, p. 1). It is this definition that is referred to when the term psychological wellbeing is used throughout this paper.

1.2.4 Contributors to Psychological Wellbeing

A recent briefing paper produced by Public Health England (2014) presented evidence to suggest an important link between academic attainment and pupil health and wellbeing. This, alongside the previously discussed concerns surrounding children and young people's mental health, highlights the need for consideration of ways to promote pupil psychological wellbeing. It is therefore necessary to explore the factors which are thought to contribute to psychological wellbeing. WHO (2012) identified thirteen protective factors which can promote positive psychological development for children and young people and therefore contribute to psychological wellbeing. These are divided into three key areas; social circumstances, environmental factors and individual attributes (see Table One).

Table One. Protective factors contributing to psychological wellbeing, as presented by WHO (2012).

Social Circumstances	Environmental Factors	Individual Attributes
Social support of family and friends	Equality of access to basic services	Self-esteem and confidence
Good parenting/family interaction	Social justice, tolerance, integration	The ability to problem-solve and manage stress or adversity
Physical security and safety	Social and gender equality	Communication skills
Economic security		
Scholastic achievement	Physical security and safety	Physical health and fitness

There is significant agreement between researchers, in support of the protective factors highlighted above, particularly those within the category of individual attributes. For example, Myers et al. (2003) emphasise the importance of self-esteem as a contributor to psychological wellbeing. Coverdale and Long (2015) suggest that the presence of good quality social relationships is among the most important factors for psychological wellbeing. Finally, Aldridge et al. (2016) examined

the contributors to psychological wellbeing within the school setting and found that life satisfaction and resilience mediated the effect of the school climate. Interestingly, as illustrated in Chapter Three, resilience is an area of particular focus within the OE research. Therefore, it is perhaps timely to suggest a definition of the concept, in order to clarify what is meant by resilience. Masten (2001) defined resilience as a "class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development" (p.228). This definition is often further refined to refer to an individual's ability to cope and achieve despite adversity (e.g. Aldridge et al. 2016). However, it should be noted that there is continued debate within the literature as to a clear and fixed definition of the concept of resilience (Kaplan, 1999).

Interestingly, researchers have also identified a number of factors which are thought to contribute to children and young people's psychological wellbeing, not highlighted by the WHO (2012). For example, Ussher et al. (2007) found a link between low levels of physical activity and poor psychological wellbeing. However, it could be argued that this relates to the differences in physical health and fitness. Furthermore, recognition of the potential for other factors, such as family, community and cultural norms and practices which may have either an enabling or a diminishing effect on children's wellbeing, is clearly important. Huppert (2009) suggests that individual attitude, or having a positive outlook is a contributor to psychological wellbeing. Furthermore, Craven and Marsh (2008) argue that the multi-faceted construct of self-concept (the way an individual thinks about their own abilities in a range of domains, e.g. academic, physical and social), is central to psychological wellbeing and is far more useful than focussing on self-esteem as a singular dimension.

Self-Determination Theory (SDT) (Ryan and Deci, 2000) outlines ways in which psychological wellbeing can be promoted and resonates within the more recent research discussed above. SDT posits that the experience of a sense of autonomy, competence and relatedness all contribute to an individual's psychological wellbeing. Interestingly, the DfE (2016) identifies that a sense of belonging within school can enhance pupil psychological wellbeing. However, it should be noted that the evidence they cite to support this is based on a single study which examined a specific intervention delivered in schools in the USA.

1.3 Outdoor Education: Evidence from the Literature

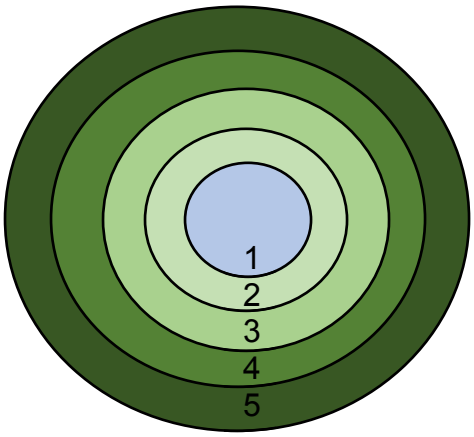
1.3.1 Background to Outdoor Education Activities

The view that time spent in the outdoors is valuable for children and young people has significant historical origins (Simpson 2007). Within the 20th century, this thinking had a direct impact upon educational opportunities for children and young people within the UK. Most notably, outdoor education was incorporated into the 1944 Education Act, meaning that schools had a statutory duty to provide outdoor learning opportunities in their curriculum. Kurt Hahn is considered a pioneer of the modern outdoor education movement, introducing movements such as Outward Bound and helping to establish the Duke of Edinburgh Award in order to increase participation in outdoor activities for children and young people (Hattie et al. 1997).

Outdoor education (OE) is a continuously expanding, international movement, which encompasses a wide range of programmes and experiences (Bowen et al. 2016). Perhaps because of this, Straker (2008) points out that there continues to be a level of ambiguity surrounding the use of the term ‘outdoor’ in the context of education. Some examples of this include: outdoor leadership courses (e.g. Shooter et al. 2010), wilderness therapy (e.g. Somervell & Lambie 2009), youth expeditions (e.g. Allison et al. 2012) and outdoor adventure education (OAE) (e.g. Baena-Extremera et al. 2012). More specific to the UK, forest schools have grown in popularity and been harnessed by increasing numbers of schools and other settings (O’Brien 2009). The forest school movement originated in Scandinavia, during the 1950s and gives children the opportunity to engage in nature-based learning, including using natural materials to create art and build structures (Rickinson et al., 2004). According to Knight (2009), forest schools first began to appear in the UK in 1995 and continued to grow in popularity ever since, particularly in Early Years settings.

Beames et al. (2011) proposed a model to describe the four ‘zones of outdoor education’, which children and young people might progress through during their time in education: school grounds, local neighbourhood, day excursion and overnight stays, residentials and expeditions. It is notable that Beames et al. (2011) highlight this gradual progression as the ideal, but also acknowledge the likelihood that pupils will jump between the inner and outer zones. However, I disagree with the grouping of overnight stays, residentials and expeditions within the same zone. Having

reviewed the literature on the range of outdoor education opportunities available for children and young people, I have noted significant differences between residentials and expeditions, including, but not limited to geographic location and type of accommodation. For example, residentials tend to take place within the child or young person's home country and accommodation is generally a permanent building. On the other hand, expeditions appear to take place much further from home and many involve camping out in the 'wilderness'. Therefore, I suggest that Beames et al. (2011)'s model requires some alteration; the outer zone should be reduced in scope and a further fifth zone added (see Figure 1.) to highlight the differences between these outdoor education opportunities.



Key:
Zone 1: School grounds
Zone 2: Local neighbourhood
Zone 3: Day excursions
Zone 4: Overnight stays and residentials
Zone 5: Expeditions

Figure 1. The Five Zones of Outdoor Learning, adapted from Beames et al (2011).

1.3.2 Research on outdoor residential education

Another change to come about following the 1944 Education Act was that local authorities began opening their own residential outdoor education centres (Simpson 2007). Based on survey data gathered from a sample of 249 English primary schools, Williams (2013) concludes that approximately 95% offered residential trips to their pupils. However, as noted above, Waite (2010) points out that the current economic climate threatens to reduce the availability of these trips, both as a result of families being unable to afford to send their child away and the reduction in LA budgets to run such centres. Furthermore, Williams' (2013) findings suggest that schools with lower Ofsted ratings are less likely to offer a range of residential experiences. However, Williams (2013) also notes that this apparent relationship became insignificant when the number of pupils eligible for FSM was controlled for. The author suggests that this is perhaps due to schools with a higher proportion of

pupils from disadvantaged backgrounds struggling to raise sufficient funds to support a residential trip (Williams, 2013).

Alongside a dearth of literature examining the impact of outdoor residential education, it is also apparent that there is lack of research into the underlying mechanisms contributing toward any reported improvements in wellbeing, following outdoor education activities and researchers have begun to call for action to address this gap in knowledge. For example, MacKenzie et al. (2014) acknowledge that outdoor education programmes have been anecdotally credited with supporting positive psychological changes in pupils, but why these changes have taken place has yet to be reported.

1.4 The Policy Context

1.4.1 Psychological Wellbeing

As noted in Section 1.2.4, above, Public Health England (2014) presented research evidence which indicated a strong link between the health and wellbeing of pupils and their levels of attainment within school. In light of this evidence, there has been a resurgence of interest in the promotion and improvement of mental health and psychological wellbeing for children and young people in education within government policy in England. In particular, the government appears to have chosen to focus on the element of resilience as a mechanism for improving psychological wellbeing. For example, PHE (2015) provided guidance on ways to increase resilience and therefore, foster positive mental health and wellbeing. Similarly, the DfE (2016) provides guidance on strengthening pupil resilience within educational settings, as well as promoting the importance of early intervention to identify and provide support to pupils who are experiencing difficulties with their mental health and wellbeing. Whilst this increased emphasis on improving pupil psychological wellbeing is positive, I would argue that the decision to focus on resilience serves to overlook the wide range of other elements, which all contribute to psychological wellbeing, such as those identified in Section 1.2.4.

1.4.2 Outdoor Education

The emerging evidence to support the benefits of OE, may have informed a number of UK policy documents which have promoted access to such activities as a way of

encouraging positive outcomes in education. For example, Ofsted (2004) found that the existing provision of OE activities was of good quality and recommended that all pupils should be able to access the benefits gained by taking part in OE. Furthermore, an Education and Skills Select Committee Enquiry (2005) highlighted the positive impact OE can have for pupils and emphasised the importance of increasing funding, to enable more schools to provide such activities. This led to the publication of the 'Learning Outside the Classroom Manifesto' (DfES, 2006), which asked for signatories from organisations involved in working with children and young people, to pledge their support to increase access to OE opportunities. More recently, Ofsted has produced guidance documents to promote good practice in outdoor teaching (Ofsted, 2012). However, despite such promising beginnings, there appear to have been very few developments within government policy to follow this up. Indeed, when the 2013 revision of the national curriculum for England (Department for Education, 2013) came into force in September 2015, there was no specific mention of OE, other than a suggestion that as part of Physical Education, children and young people in Key Stages Two, Three and Four "should be taught to…take part in outdoor and adventurous activity challenges" (DfE 2013, p. 261).

1.5 The Local Authority Context

This research took place within Valleywell, a West Midlands LA, located within a large multicultural metropolitan borough, which has a population of over 300,000 people, with 105,992 being children and young people under the age of 25 years. Since 2012, Valleywell LA has prioritised the social, mental and emotional health of all children through a strategic initiative.

1.5.1 The Local Authority Residential Education Service

At the time of this study, Valleywell LA ran four Residential Education Centres, three of which had a focus on outdoor learning opportunities. These RECs were available for use by schools and other groups, both from within the LA and from further afield. The Valleywell RECs were highly valued by the LA and were viewed as an important resource for the children and young people of the borough, who might not otherwise have the opportunity to experience the rural settings and range of activities on offer. The RECs offered a range of activities, allowing groups to tailor their experience to meet specific requirements or priorities.

The REC featured in this research was open to school groups in Key Stages One, Two, Three and Four, as well as groups from Post-16 settings. According to their website and promotional material, the REC aims to offer an holistic learning experience, providing children and young people with a range of skills, which will be useful when they return to everyday life. The residential centre had facilities available for groups of up to 60 pupils to stay overnight, with full catering provided and school groups most commonly visiting for four nights. School group visits were generally funded by the parents of participating children, but could also be subsidised from the school budget and PPF.

The REC was legally required to comply with the regulations of the Activity Centres (Young Persons' Safety) Act 1995 and the Adventurous Activities Licensing Regulations 2004. The REC was licensed to operate by the Adventure Activities Licensing Authority and was subject to regular inspection in order to remain certified. In Appendix A, I provide a brief timetable of the planned activities for each day of the residential for Key Stage Two pupils, which I attended and which forms the primary focus of this research. This is provided with the intention of giving an insight into what each child would have experienced during their trip, however, as noted by Gee (2010) "there is no such thing as a typical day on a residential fieldtrip. Every trip is totally unique, dependent upon numerous factors including the participants, the places visited and incidents arising. On any given trip all days are also different, in terms of content, format, experiences and relationships between individuals (p.27)."

1.6 The Primary School

The Primary school featured in this research, which is referred to using the pseudonym 'Forest Hall', is located within the South of the borough and had approximately 450 pupils on roll at the time of this study. School data suggested that there were 183 children on roll who were entitled to PPF. According to a recent Ofsted report (Ofsted 2016), this was a higher than average proportion of children when compared to the rest of England (43.6% of pupils have been eligible for Free School Meals within the last six years. Source: gov.uk) and the number of pupils with an identified Special Educational Need was also above the national average. This same report showed that 88% of pupils were achieving the expected rate of progress in literacy (reading and writing) and 83% were achieving the expected rate of

progress in maths. Based on data published in December 2016, when compared to the local and national data for progress in reading, writing and maths, pupils at Forest Hall primary made average progress in reading and writing and above average progress in maths (see Table Two). The school's prospectus emphasised the importance placed on pupils spending time outdoors on a daily basis and mentions their outdoor learning curriculum, including forest school. Each year, the children in the Year 5 group were given the opportunity to take part in a visit to one of Valleywell LA's RECs.

Table Two. Progress of pupils at Forest Hall Primary compared to local and national data for reading, writing and maths (Source: gov.uk).

	Reading	**Writing**	**Maths**
Forest Hall	+0.6	+1.7	+4
Local Data	0	+0.6	+0.9
National Data	0	0	0

1.7 Researcher Identity

My identity as a trainee educational psychologist and my previous experience as an assistant psychologist and a learning support practitioner helped to form the epistemological position of this study and so had an influence on the approach taken. Additionally, prior to this, whilst studying for my undergraduate degree I began to appreciate the benefits of using a mixed methods research design. This approach to research presented an alternative option, which addressed doubts I held about the emphasis placed on a purely experimental design approach, in particular the so called 'gold standard' Randomised Controlled Trial. On writing about the benefits of mixed methods research, Onwuegbuzie and Leech (2005) note the futility of the so-called 'paradigm wars' and suggest that this has created a false dichotomy between qualitative and quantitative research. In response to this, they assert that it would be more useful to subdivide research into exploratory and confirmatory methods to enable the two types of data collection to be utilised together to contribute to a richer and more holistic literature base. Onwuegbuzie and Leech (2005) highlight this holistic approach as a key tenet of pragmatism, which enables the researcher to select methods based on their value in answering the research question at hand.

As a pragmatist I do not align myself with a particular epistemological position, as I believe that there is both an objective reality, but that individuals interpret this reality in their own unique way, as argued by Morgan (2007). A pragmatic approach also emphasises the importance of selecting the most appropriate tools for the job, rather than a strict adherence to a specific epistemological position (Moore, 2005). With this in mind, I explored a range approaches which may be appropriate for this study. One approach that particularly stood out and appeared to fit well with the aims of the study (see Section 4.1) was Realistic Evaluation (RE), as devised by Pawson and Tilley (1997). As the name suggests, RE presents an approach to the *evaluation* of social programmes and has a basis in realist ontology, which asserts that reality is objectively measurable (Thomas, 2009). However, within RE, Pawson and Tilley (1997) acknowledge that there is a need to delve below the directly observable inputs and outputs within social programmes, to ask why a programme works, with particular emphasis on who it works for and under what circumstances. In RE a social programme is considered to be a social system, which seeks to address a social problem or bring about social change (Pawson and Tilley, 1997).

Chapter Two:
Methodological Framework

2.1 Introduction

As a reflection of my own epistemological view and in line with common practice within educational psychology (Burnham 2013), I have applied a pragmatic approach to designing this research. Williams (2013) argues that within a pragmatic approach it is possible to acknowledge the existence of both an objective reality and an individual reality, based on a person's unique construction. This approach disregards epistemological assumptions in favour of applying the research methods most suited to what the researcher wants to find out (Thomas 2009). With this in mind, and as discussed earlier in Section 1.7, a Realistic Evaluation (RE) approach was selected as an appropriate research design through which to address the aims of this study, particularly the aim of identifying the underlying mechanisms which mean that ORE leads to an improvement in psychological wellbeing.

It has also been suggested that RE draws on many of the existing skills demonstrated by EPs and Trainee EPs, within their day to day work (Bozic and Crossland 2012). Hence, this approach not only allowed me to utilise skills gained throughout my training and placement practice, but also to develop these skills and apply them to a larger scale research project. Furthermore, Bozic and Crossland (2012) point out that RE is well suited to the evaluation of programmes where the outcomes are not well defined. As discussed in Chapter one (Sections 1.2.2-1.2.4), the definition of psychological wellbeing continues to be a contentious issue, along with the factors that are thought to contribute to it. Additionally, as can be seen throughout Chapter three, the literature on OE and ORE demonstrates effects on a wide range of aspects of psychological wellbeing. Therefore, an RE based approach was selected as an ideal methodology with which to underpin this study.

2.2 Realistic evaluation as a research methodology

The aim of an RE approach is to allow researchers to investigate how 'social programmes' work to achieve a given outcome. The term 'social programmes' refers to programmes which aim to enable positive social change by addressing social problems or needs (Pawson & Tilley 1997). Within this study, the social programme

is the programme offered by the REC, which aims to address the need to improve outcomes for pupils within Valleywell LA. In order to understand the complexities of a social programme, RE provides a framework to support the development 'programme theories' about the way in which the programme works. Refinement of these programme theories leads to the generation of 'programme specifications', which outline 'what works, for whom and in what circumstances' (Davies, 2011). Furthermore, RE is interested in identifying the mechanisms (M) for change in a given situation and recognises that the interplay between the Ms within a 'programme' (P) and the 'context' factors (C) create unique outcomes (O) (Pawson & Tilley 1997). Table Three shows the definition of C, Ms and Os as used throughout this study. The interplay between these factors is known as a context-mechanism-outcome configuration (CMOC). It is recognised that an intervention programme will not always have the same impact and depends upon a wide range of contextual aspects. Furthermore, Pawson and Tilley (1997) suggest that it is this difference in context that can mean similar programmes yield different results. Timmins and Miller (2007) go so far as to suggest that RE is an ideal framework to apply to research assessing programmes within the field of education, because of this recognition of the importance of context.

Table Three. Definition of Contexts, Mechanisms and Outcomes within the current study.

Factor	Definition
Context	The resources within a programme which support its aims, e.g. physical setting, skills, experience and knowledge of staff, ethos
Mechanism	Things that happen within programme participants, e.g. attitudes, feelings, thoughts
Outcome	What a programme sets out to change or improve, e.g. psychological wellbeing

It is suggested by Pawson (2013) that an RE approach which relies solely on qualitative data is flawed and that outcomes should be conceptualised and measured both pre- and post-intervention (programme). Furthermore, Garst et al.

(2001) points out that a focus on only quantitative methods within OE research runs the risk of missing the underlying influences behind any measurable effects. They also present a worked example of the use of a mixed methods design as a way of addressing these concerns in their own OE research.

Additionally, Williams (2013) points out that a mixed methods design has the advantage of providing the quantitative evidence that he argues is likely to have a greater influence on policy makers, alongside the richer description gained from qualitative methods. Therefore, I used a mixed methods approach within the current research. However, Pawson and Tilley (1997) also point out the importance of ensuring that the appropriate method is applied to the appropriate research task. I feel that this aligns well with my own stance as a pragmatist and serves as a reminder that the methods selected must be capable of addressing the research questions being asked. Quantitative data was collected to identify any change in pupil wellbeing and qualitative data was collected to enable the exploration of how this change might have taken place. Therefore, linking back to Onwuegbuzie and Leech's (2005) argument, as discussed in Section 1.7 in Chapter one, the study was both exploratory and confirmatory, as it explored the impact of ORE on psychological wellbeing for pupils attending the LA REC, as well as testing extant theory regarding what is behind this change.

The previous two paragraphs and my discussion in Section 1.7, outline the reasons behind my decision to select a mixed methods RE approach as the framework for this study. However, it is important to note that a number of alternative methodologies were considered, prior to making this decision, including a purely exploratory approach and a purely confirmatory approach. Furthermore, I contemplated the use of a number of potential frameworks for the current research, such as ethnography (e.g. Gee, 2015) and a traditional evaluation approach (e.g. Donnelly, 2013). However, these were discounted as an RE framework appeared to be the best fit to meet the aims of the research.

2.3 Realist Synthesis

As pointed out by Pawson and Tilley (1997) within an RE approach, it is only when a researcher knows precisely what they are studying that they are able to select the

appropriate method for studying it. Furthermore, Pawson (2006) suggests that a good starting point in RE is to begin to develop hypotheses concerning the programme theories which are purported to be at work within a social programme. There are a number of examples of ways this has been carried out within previous research. For example, through exploration of the experiences of key stakeholders (e.g. Chadwick 2016), review of the existing literature (e.g. Davies, 2011) or a through a combination of these methods (e.g. Birch, 2015).Therefore, developing an understanding of existing theory is necessary in order to decide on how data is to be collected. With this in mind, a RS was initially carried out in order to derive existing theory, from the available literature, on the ways in which OE and ORE have been found to effect wellbeing. As noted by Davies (2011), use of an RS approach could be subject to criticism due to its lack of standardisation, which renders it unreplicable and provides low accountability. However, Pawson et al. (2004) advocate for RS as a valid alternative to the systematic review approach on the grounds that it is underpinned by the expectation that findings will be subject to constant scrutiny and critique as a way of refining theory, which they highlight as being transient in nature.

2.3.1 Search strategy

Database searches were carried out in November 2015, January and June 2016 and May 2017 in order to ensure that all contemporary publications of relevance to this study were included. The following combination of search terms was used for all searches; ‘outdoor education’, ‘outdoor’, ‘residential’, and ‘wellbeing’ (including common variations: ‘well-being’ or ‘well being’). The articles identified as a result of the above searches were examined, based on their title in order to determine whether they met the inclusion and exclusion criteria for the RS. The inclusion criteria specified that the articles should (a) be published in English, within academic, peer-reviewed journals, (b) be based on human subjects and (c) make reference to OE within the title. Literature was excluded if it focussed on ‘environmental education’, ‘teacher education’, ‘physical education’ or children in the early years. Table Four shows the databases searched and the literature identified, including the publications that were found to be relevant. Due to the limited yield of these searches, in their direct reference to ORE, further searches were carried out using google scholar, the University Library Catalogue and the electronic library (‘ebrary’).

Additionally, ancestry searches of the reference lists of identified publications were examined for other relevant studies.

Table Four. Details of database searches carried out and literature identified.

Database	Search Terms	Results	Relevant Papers
Proquest Social Sciences	'Outdoor education' or 'outdoor' and 'wellbeing' or 'well-being' or 'well being.' Additional use of the search term 'residential' retrieved 0 results.	2	2
EBSCO Child Development and Adolescent studies	'Outdoor education' or 'outdoor' and 'wellbeing' or 'well-being' or 'well being' and 'residential.'	427 papers	135 papers
Psychinfo	'Outdoor education' or 'outdoor' and 'wellbeing' or 'well-being' or 'well being.'	14 papers	3 papers

2.3.2 Generation of programme theories

In order to begin to build tentative programme theories (TPTs), a critical synthesis of the identified literature was undertaken and the findings presented in the form of CMOCs. As noted by Timmins and Miller (2007), it can be difficult to differentiate between Cs and Ms when examining the findings presented within studies. They suggest that in these situations it is necessary to use practitioner knowledge and the information presented to support decision-making (Timmins and Miller, 2007). Another important issue to note was that I was solely responsible for identifying the Cs, Ms and Os from the literature. As argued by Cohen et al. (2011), this lack of inter-rater reliability could potentially have a negative impact on the reliability of the findings of the RS. However, a range of other data collection methods was used within this study, and this triangulation of data increases reliability of the overall

findings (Robson, 2011). Table Five, adapted from Davies (2011), shows the process undertaken to generate TPTs from the synthesis.

Table Five. Action taken at each stage in the generation of TPTs.

Stage	Action Taken
1	Key papers regarding general OE and ORE specifically, identified using planned search strategy (see Table Four, and Section 2.3.1)
2	Papers were read at least twice with potential Cs, Ms and Os identified and entered into a table under the relevant heading. Separate tables were used for general OE and ORE papers.
3	The two tables were then further refined, including careful consideration of what constituted a C, M or O.
4	For both tables, the key Cs, Ms and Os were identified and collated.
5	Collated Cs, Ms and Os were used to develop TPTs for aspects general OE and the key ORE studies.
6	All TPTs were then amalgamated (see Table Nine) and further refined to produce overarching programme theories related to ORE.

The development of a programme theory is an iterative process, with initial hypotheses being formed and then tested until a programme theory is finalised. The TPTs, developed through this RS were initially tested and refined based on my own field notes, which were recorded within a research journal during the week of the Forest Hall pupils' trip to the REC (see Chapter Five). These TPTs were then further interrogated and refined based on data gathered from a group interview with pupils, individual interviews with school staff and a group interview with staff from the REC (see Chapter Seven).

Chapter Three:
A Realist Synthesis derived from the literature relating to general outdoor education and outdoor residential education

3.1 Introduction

As noted in Section 1.3.2, there is a dearth of research which has a specific focus on ORE settings. Therefore, the search was expanded to include a wider range of outdoor learning opportunities, such as OAE and more general OE approaches. The findings of this expanded search provide a foundation upon which an exploration of the extant literature specific to ORE programmes is then built. Section 2.3 provides a detailed explanation of the way in which the realist synthesis was carried out for this study, including the search terms used. Throughout this RS Chapter, literature regarding OE and ORE is examined and the relevant contexts (C), mechanisms (M) and outcomes (O) are identified and explored in order to begin to explicate CMO Configurations (CMOCs). These CMOCs are later developed into TPTs, which are presented throughout this Chapter.

As discussed in Section 1.2.4, the concept of psychological wellbeing comprises a wide range of contributing factors. Therefore, in order to consider the ways in which OE and more specifically ORE may influence psychological wellbeing, research that considers these contributing factors was considered, alongside any which measures psychological wellbeing as whole. This also means that when considering potential CMOCs, these individual elements of psychological wellbeing can be seen as outcomes, which contribute to the overall aim of the programme: to improve psychological wellbeing.

3.2 Psychological Wellbeing and General Outdoor Education

There is a growing body of research to suggest that access to outdoor education activities is viewed as highly beneficial to children and young people. For example, Ross et al. (2007) suggests that teachers see the promotion of social skills, confidence building and time away from the urban environment as important effects of OE. However, Ross et al. (2007) also points out that these benefits are often overlooked in favour of curricular outcomes when teachers attempt to justify the costs (both in resources and financial terms) of OE experiences. Waite (2010)

outlines the wide range of potential benefits that have been found to be produced when children and young people access outdoor education experiences, such as increased concentration, increased physical activity and increased enthusiasm for learning (see Section 3.1.2 for a more detailed examination of these findings). However, Waite (2010) also identified a number of perceived barriers to incorporating the outdoors into education. Perhaps most notably when considering outdoor education are the issues of risk and safety and a lack of funding. Interestingly, Leather (2013a) critiques the tendency within the extant literature, to attribute positive psychological changes (e.g. improved self-esteem) to OE programmes, as he argues that these outcomes tend not to be well defined or substantiated. Therefore, when exploring the literature, it was important to carefully examine the methods used and the way in which results are interpreted.

Dillon et al. (2005) points out that the outcomes of OE are subject to significant variability, due to the wide range of purposes, settings, durations and individuals involved. On the other hand, Hattie et al. (1997) argue that the age of participants has little impact on the potential benefits of taking part in OE. Therefore, when considering which studies to include within this RS, age of participants did not form part of the inclusion or exclusion criteria (see Chapter two for further information on the searches carried out for this RS).

Following their review of the literature on outdoor learning, Rickinson et al. (2004) identified four areas of impact that pupils might experience when taking part in OE opportunities;

- Cognitive effects
- Affective impact
- Physical aspects
- Interpersonal / social outcomes

These four areas provide a useful framework when considering the benefits of general OE, which, I now apply to an up to date review of the literature on OE and OAE, with a focus on the aspects of psychological wellbeing related to each area.

3.2.1 Cognitive effects

3.2.1.1 The Learning Experience

Kolb's Experiential Learning Theory (ELT) (Kolb, 1984) is often referred to in the research around general outdoor education programmes as an explanation of the process of change brought about by the outdoor experience (e.g. Li et al. 2012). This is perhaps because the informal nature of the outdoor learning environments is thought to promote the freedom to explore, learn new skills and develop existing knowledge (e.g. Falk and Dierking, 2000). Kolb (1984) suggested that learning is a cyclical process of experiencing, thinking, reflecting and acting which involves a transaction between the person and their environment. Based on the work of John Dewey, who promoted the value of authentic and contextualised, hands-on learning (e.g. Dewey, 1944), ELT highlights the dual meaning of the term 'experience' to refer to both the subjective (internal thoughts and feelings) and objective (environmental) (Kolb, 1984). Therefore, when applied to the OE context, ELT proposes that an individual's learning is enhanced through a cycle of thought, reflection and action in response to the experience. However, in recent years, the concept of experiential learning has been the subject of criticism, due to its gradual move away from the underpinning historic and philosophical origins, as it has developed into a theory (ELT), to be applied in a wide range of settings (Schenck and Cruickshank, 2015). Furthermore, researchers have begun to highlight an apparent lack of clarity of the typologies within Kolb's experiential learning model (e.g. Bergsteiner et al., 2010).

3.2.1.2 Facilitated Reflection

As referred to in the previous paragraph, reflection is a central tenet within ELT, which, it is argued, enables ideas to be formed and reformed to develop learning (Kolb, 1984). It could therefore be argued that opportunities for good quality reflection are essential in order for learning to take place. Li et al. (2012) point out that this facilitation must not only encourage participants to take the next step in the activities undertaken, but also support quality reflection, in order for the learning experience to be optimally beneficial. The authors also argue that a mediating factor in the influence of experiential learning is the quality of the facilitation provided, e.g. from an activity leader. Therefore, the learning experience available to participants taking part in OE appears to not only result from the direct experience, but also the informal learning environment and the facilitation provided. However, it is important

to note that activities based on OE formed only a small part of the programme within this study. Interestingly, Rea (2006) suggests that there may be cases where programme leaders do not routinely facilitate opportunities for reflection as they view the outdoor learning experience as being sufficient for promoting self-reflection in participants. On the other hand, Rea (2006) also found that participants in an OA programme reported engaging in reflective thought without being directed. Interestingly, Li et al. (2012) points out that in order for the learning to be maintained, there should be opportunities for participants to recall, reflect and apply what they have learned. However, there is a dearth of literature concerning the ways in which this might take place after the OE experience has come to an end.

3.2.1.3 Engagement and Motivation

There have been a number of studies presenting evidence to suggest that OE opportunities can have positive impact on academic engagement and progress in learning, particularly in those who are already disaffected (e.g. Leather, 2010 and Fox and Avramidis, 2003). Furthermore, Garst et al. (2001) provides an example of cognitive changes that can come about following participation in OE opportunities. The author found that youths who took part in an ORE programme, which did include ongoing facilitated reflection, experienced a positive increase in self-report ratings of their self-perception. Garst et al. (2001) suggests that this is due to both the novelty of the OE environment, which enables individuals to perceive themselves and their surroundings in a different way and to the physical and mental challenge presented by the activities provided. As proposed by Harter (1988), self-perception is related to the more global concept of self-esteem and is closely linked to the domains of scholastic competence, among others. Therefore, it could be argued that by taking part in OE which includes the element of ongoing facilitated reflection, individuals can experience benefits to their learning and cognitive changes, which have a positive effect on their psychological wellbeing.

3.2.1.4 Flow

Boniface (2000) discussed the links between the experience of flow and outdoor adventure activities such as rock climbing. Table Six describes the nine characteristics of flow, as identified by Csikszentmihalyi (1990). Of particular relevance when considering cognitive effects of OE is the characteristic of

concentration. According to Csikszentmihalyi, (1990), concentration appears to increase during adventurous activities, which enables an intense focus on the action being undertaken. This increase also means that the individual is able to disregard external stimuli in favour of the focus activity (Csikszentmihalyi, 1990).

Boniface (2000) suggests that in order for an individual to experience flow, they must achieve a state of balance between achievement and risk. Therefore, it could be argued that flow can only come about through the development of an in depth understanding of one's own skills and limitations. The author also notes that taking part in adventurous activities activates a state of flow by producing feelings of competence and intrinsic motivation. However, Smith et al. (2011) dispute this and present evidence to suggest that a state of flow achieved is likely to be more intense when the challenge is slightly beyond the individual's perceived skill level. If this is the case, then it could be suggested that feeling a high level of competence in a challenging activity may actually be detrimental to the experience of flow and therefore intense concentration. Despite this debate, authors seem to agree that taking part in adventurous activities has the potential to produce flow states, which lead to more intense concentration than other types of physical activity (e.g. Boniface, 2000, Jackson and Eklund, 2004 and Smith et al., 2011). Interestingly, Boniface (2000) also notes that these experiences can lead to a state of flow being achieved in other areas of learning, however, Smith et al. (2011) is more cautious, suggesting that further research is required before such conclusions can be drawn.

Table Six. The nine characteristics of flow (adapted from Csikszentmihalyi, 1990).

Characteristic	Description
Challenge-skill balance	The balance between perceived ability and the demands of the task
Action-awareness merging	Activity becomes spontaneous, the self becomes one with the activity being performed
Clear goals	Goals are clearly defined, leading to a strong sense of what is to be done
Unambiguous feedback	Feedback related to the set goals is clear and immediate
Concentration on the task	Focus is narrowed with total concentration on the task at hand
Sense of control	Control is exercised without effort and without concern that control will be lost

Loss of self-consciousness	Loss of concern for the self in becoming one with the activity
Transformation of time	A sense of losing track of time or time standing still
Autotelic experience	A deep sense of enjoyment gained from the activity with no external reward

3.2.1.5 Therapeutic Facets

CBT has been found to have benefits in a number of aspects of psychological wellbeing. For example, CBT can produce an increase self-esteem (e.g. Taylor and Mongomery, 2007) and has a positive effect on self-concept (e.g. Arip et al., 2011). However, it should be noted that these studies are based on populations experiencing clinically defined mental health difficulties. Hence, it is with caution that I argue the possibility that by promoting an increase in positive cognitions and therefore an improvement in self-theories, outdoor interventions, such as adventure therapy, which include a CBT based approach, can be beneficial for the psychological wellbeing of participants. Furthermore, considering that adventure therapy is built upon ideas from both cognitive psychology and experiential learning theory, as discussed earlier in this section, it is perhaps not surprising that parallels can be drawn between the theoretical frameworks underlying the two. Most striking, as can be seen in Figures 2 and 3, is the shared focus on thinking and behaviour (or 'active experimentation' in Kolb's model). It could therefore be argued that there may be key characteristics of adventure therapy, beyond the basic similarities of the outdoor environment and adventurous activities, at work within more general OE experiences. In particular, the self- or facilitated reflection (as discussed previously in this section) which forms part of the experiential learning cycle could lead to an increase in positive cognitions and therefore positive changes to an individual's self-esteem and self-concept, resulting in improved psychological wellbeing.

Adventure therapy is a particular branch of OE, which concerns the delivery of therapeutic interventions to address a wide range of psychological difficulties (Fletcher and Hinkle, 2002). Within adventure therapy, cognitive models, such as Cognitive Behavioural Therapy (CBT) (e.g. Kim et al., 2009) and Adventure Based Counselling (ABC) (e.g. Fletcher and Hinkle, 2002) are often drawn upon to provide a framework for programming. According to Beck (1976) the key tenet underlying

CBT is the recognition that internal cognitions (thoughts) mediate behaviour. Within CBT, the emphasis is on identifying inaccurate and negative cognitions, as these are thought to contribute to a cycle (see Figure 3.) of negative feelings and maladaptive behaviour (Willner and Lindsay, 2016). Furthermore, CBT provides strategies for testing, challenging and restructuring these negative cognitions, order to overcome negative emotional states and trigger positive emotions and behavioural responses (e.g. De Castella et al., 2015).

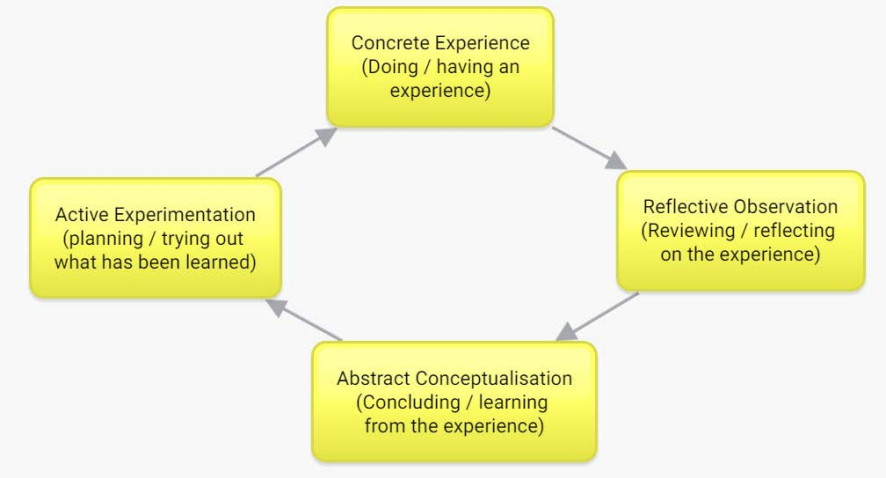


Figure 2. Experiential Learning Model. Adapted from Kolb (1984).

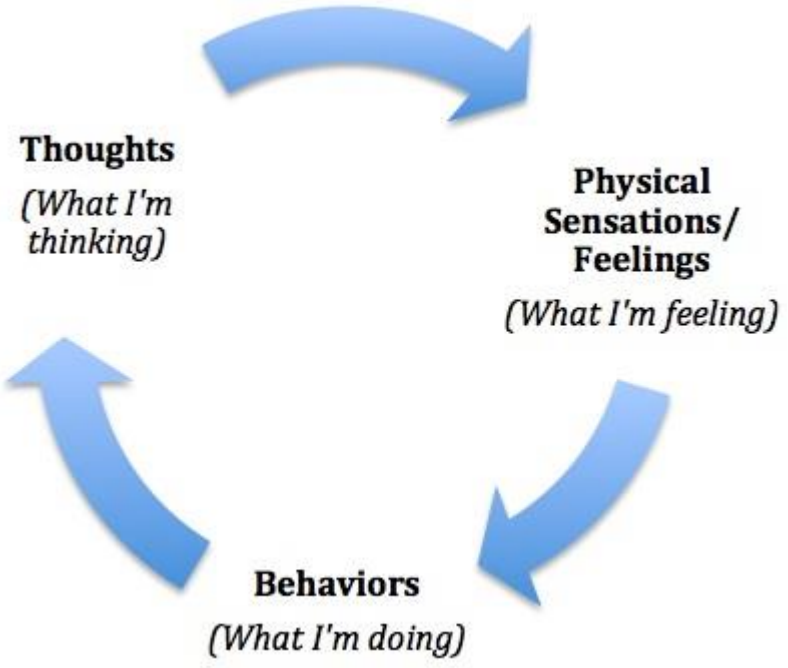


Figure 3. CBT Cycle. Adapted from Beck et al. (1983).

An OE programme which contributes to psychological wellbeing through the experience of improved self-perception, self-concept and self-esteem (O) will include experiential learning activities, which activate a state of flow and provide facilitated opportunities for reflection (C), enabling participants to achieve increased concentration and make positive changes to their internal cognitions (M).
Box 1. Outdoor Education TPT One.

3.2.2 Affective impact

Dweck (1999) is a well-known proponent of the argument that the positive engagement in activities involving risk and challenge can result in positive psychological changes, such as increased self-esteem. This 'Development-by-Challenge' philosophy is thought to be at the heart of OE programmes (Neill and Dias, 2001) and has been recurring theme with the OE research. However, the idea is by no means new, having first been discussed by Kurt Hahn, the founder of the Outward Bound Movement. Hahn believed that exposure to risk and challenge is key to character building and personal development and that OE was an important way for individuals to experience this (Hahn 1957). This idea appears to be well supported by a large number of studies. For example, Beames (2005) found that individuals who were able to overcome challenge during an overseas expedition appeared to experience an increase in mental resilience and a greater understanding of the self.

Durr (2009) expanded the idea of beneficial risk and challenge exposure to include situations of 'optimal' risk. According to Durr (2009), during Adventure Therapy (AT) only risk experienced at an optimal level contributes to positive affect, with sub-optimal risk having no benefit. In AT programmes this is reliant on the facilitator assessing the participants' risk levels accurately, which Durr (2009) suggests they are not always sufficiently skilled to do. However, Davis-Berman and Berman (2002) suggest an alternative view of the role of the facilitator in OE programmes. They argue that in order to achieve positive psychological outcomes in OE, course leaders place emphasis on the steps taken to ensure participant safety and security. This has the effect of providing reassurance to participants and thus ensures that they don't feel they are stepping outside of their 'comfort zone,' by engaging in adventure activities. This view comes from the positive psychology movement, which dismisses

the assertion that positive psychological change must come about following a challenge to the individual's equilibrium.

Interestingly, despite the focus on the challenging nature of the activities undertaken during OE and OAE programmes, there appears to be little consideration of the participants' actual experience of them. However, this does occasionally receive a brief mention. For example, Braun and Dierkes (2016) point out that enjoyment of the activities can result in the experience of positive affect. This is also mentioned by Lekies et al. (2015), who highlight that participants commented on their enjoyment of the nature-based activities.

An OE programme which contributes to psychological wellbeing through the experience of positive affect and measureable gains in self-esteem and resilience (O) will provide challenging activities overseen by staff who are skilled in achieving a balance between optimal risk and the promotion of safety (C), enabling participants to gain a sense of achievement by overcoming the challenges presented (M).
Box 2. Outdoor Education TPT Two.

3.2.3 Physical aspects

As with the REC within this study, it is common for OE programmes to include elements of adventurous or challenging outdoor activities. A number of studies have investigated the impact that this can have those taking part. For example, Whittington et al. (2016) found that resilience levels in a group of adolescent girls had significantly increased following participation in an outdoor adventure programme. Furthermore, this increase was found to be maintained at a one month follow-up. Lekies et al. (2015) also argues that being presented with such activities can be viewed as an emotional challenge to participants, leading them to have to overcome their anxieties, in order to achieve. In another study, Beightol et al. (2012) found that children aged 10-11 years, taking part in challenging adventure activities, such as a high ropes course experienced increases in measures of self-efficacy over time and self-reported gains in confidence. The study also found that these children scored higher on measures of resilience, as echoed more recently by Whittington et al. (2016). Interestingly, the authors also noted a gender difference in these increases, with girls appearing to benefit significantly more than boys. The authors

suggest that this may be due to a difference in the way that the children approached the challenging activities, as interviews with their teachers revealed an observation that girls would more readily move outside of their 'comfort zones'.

This idea links well with a proposal put forward by White (2012), who points out that a mediated learning approach, including consideration of a learner's 'Zone of Proximal Development', can be applied to the challenging and adventurous activities undertaken during OE programmes. White's (2012) study provides evidence to suggest that the implementation of an OAE programme, based on mediated learning opportunities can result in significant improvements in global self-concept. He also notes that the children in the study, aged 12-13 years, reported experiencing an increase in feelings of trust and group cohesion at the end of the programme. However, the programme within this study took place within three distinct stages and three different contexts (school based sessions, a stay at an REC and an outward bound experience), meaning that it is not clear whether the same effect might be seen in programmes operating in only one context or the extent to which the challenging activities were responsible for the changes observed. Indeed, Sheard and Golby (2006) reported no significant change in aspects of positive psychology (mental toughness, hardiness, dispositional optimism, self-esteem, self-efficacy, positive and negative affectivity) measured following a programme of OAE activities undertaken by a group of foundation degree students. The authors suggest that this may in part be due to the short time frame of the intervention. These mixed results suggest a complex picture in terms of the way in which adventurous or challenging activities may impact upon psychological wellbeing in OE. Interestingly, Chalman (2013) points out that in order for challenging activities to have a beneficial impact for participants (e.g. increased resilience) it is vital that they have the opportunity to practice strategies for coping and that the level of challenge is optimal.

As the name suggests, time spent outdoors is an integral part of any OE programme, however, there is a growing body of research to suggest that benefits to psychological wellbeing come about due to a particular type of outdoor environment. More specifically, researchers seem to agree that it is time spent within a natural setting that is responsible for any change. According to Wells and Evans (2003) the presence of natural vegetation in close proximity to an individual's place of residence

is linked to a reduced level of life-stress. The authors argue that this then has the knock on effect of improvements to psychological wellbeing. Knight (2009) took this thinking a step further and applied it to an educational setting. Knight (2009) found that children who have access to learning opportunities in a natural environment, such as forest schools, demonstrate improved progress in their social and emotional development. Furthermore, Kuo & Taylor (2004) found that time spent outdoors, in what they refer to as 'green space', resulted in improved concentration and behaviour in children diagnosed with ADHD. This suggests the possibility that having access to green spaces could have similar benefits for typically developing children. Kardjono (2013) similarly reports improvements from taking part in a hiking programme resulted in improved emotional control (anger and anxiety) in students aged 18-20 years. Kardjono (2013) posits that this is due to "an experience of active meditation" (p. 87) and increased reflection, as a result of taking part in OE activities.

In fact, a theory proposed by Kaplan (1995) known as Attention Restoration Theory (ART), seeks to explain the cognitive benefits of time spent in natural environments. Within ART, Kaplan (1995) posits that the urban environment exerts non-stop intense stimuli on directed attentional resources. This high level of cognitive effort leaves little opportunity for restoration, meaning that the attentional system is constantly 'on the go'. Conversely, when in a natural environment there is a much higher level of activation of the involuntary attention systems. Therefore, when spending time in a natural environment, the cognitive demand is lower and restoration can take place. Korpela et al. (2014) use ART as a basis for their study on emotional wellbeing and nature-based recreation. They present evidence that the cognitive restoration experienced when spending time in green space results in improved emotional wellbeing (Korpela, 2014). This was a very large scale study, with more than 3000 participants, ranging from 15-74 years, which suggests that the benefits of time spent in natural environments can be beneficial at any age. On the other hand, the large scale of the study also means that it is not possible to examine the specific types of environments visited and whether they had differing impact, e.g. visiting a city park, compared to the rural countryside.

Another hypothesis about the way in which time spent outdoors can have a positive impact on psychological wellbeing is associated with physical activity. Studies, such

as de Vries et al. (2011) have presented evidence to suggest that there is a positive correlation between access to green space and the amount of physical activity undertaken. Taken with the literature confirming the positive psychological impact of physical activity (e.g. Lubans et al., 2016) this suggests the possibility that psychological wellbeing is improved due to the increase in physical activity that occurs when spending time in natural environments. Furthermore, Mitchell (2013) argues that undertaking physical activity in a natural environment affords greater benefits for psychological wellbeing than physical activity alone.

Finally, Zhang et al. (2014) describe the phenomenon of a sense of connectedness with nature. In their study, the authors found that the more connected to nature an individual feels, the higher their self-esteem and life satisfaction is likely to be (Zhang et al., 2014). However, they also point out that this is only the case when an individual becomes emotionally engaged with the beauty of nature. Applying this directly to ORE programmes, Braun and Dierkes (2016), found that pupils experienced a sustained increase in their sense of 'nature connectedness', which they defined as a feeling of being integrated with nature. This effect was found to be especially powerful for pupils taking part in programmes that were five days in duration. Of particular relevance to the current study is that this increase was most notable in primary school pupils. Therefore, it may be that taking part in activities in a natural environment leads to an increase in feelings of 'nature connectedness', which then has the impact of improving self-esteem and life satisfaction. However, Lekies et al. (2015) suggest that it can take several years to develop this appreciation for nature, meaning that repeated exposure to natural environments, over an extended period of time may be necessary before it is possible to fully benefit from this 'nature connectedness.' Lekies et al. (2015) also notes the importance of the way in which messages about the natural environment are communicated to participants as this appears to influence attitudes regarding ways to engage with nature.

An OE programme which contributes to psychological wellbeing through an increase in self-esteem and life satisfaction and improvements in emotional control and emotional wellbeing (O) will take place within a natural environment, with access to 'green space', which has a reduced cognitive load (C), where participants are enabled to take part in physical activity and experience cognitive restoration (M). Such a programme will also allow participants to become engaged with nature (C) and develop a sense of 'nature connectedness' (M).

Box 3. Outdoor Education TPT Three.

3.2.4 Interpersonal / Social outcomes

The social nature of OE is another area which has been subject to particular focus within the literature. In their seminal study, Neill and Dias (2001), found that young people's self-reported levels of resilience significantly increased due to their perceptions of social group support. Interestingly, the authors note that the best predictor of this increase was actually the group's rating of the least supportive member (Neill and Dias, 2001). Therefore, this suggests the possibility that improvements to resilience levels (see Section 1.2.4 for a critical discussion of the concept of resilience), as a result of taking part in OE opportunities are dependent upon all group members becoming involved in mutual support. It also appears that taking part in OE can support the development of particular social skills. For example, Cooley et al. (2013a) found that OE opportunities led to improvements in higher education students' interpersonal group work skills, but also an increase in positive attitudes towards group work tasks and their self-efficacy beliefs around taking part in group work. The authors also found that these improvements were sustained three months post intervention but with some reduction compared to measures immediately after the intervention (Cooley et al., 2013a). However, they provide no hypothesis for what factors might contribute to these improved skills.

A study discussed in the previous section might point to a possible explanation. As noted above, White (2012) found an improvement in group cohesion and interactions with peers for Year 8 pupils who displayed social and emotional difficulties. However,

White (2012) also noted improvements to wider social interactions, which continued after the intervention. This suggests that taking part in OE can lead to general improvements in social skills, which then may have the impact of enhancing more specific group work skills. It is however, important to note that, as previously stated, the intervention carried out in White (2012) had a particular focus on mediated learning and therefore involved a high level of interpersonal communication, which is likely to have been important in the development of social interaction skills. Leather (2013b) argues that the combination of communal living, including the sharing of living space and chores, such as food preparation and shared outdoor activities stimulates talk between those involved in ORE programmes. Interestingly, the author found that in his study, some of this talk turned to issues of social justice. Leather (2013b) argues that such talk can support in the development of morality in participants, which in turn can contribute towards the achievement of 'self-actualisation' as described within Maslow's Hierarchy of Needs (Maslow 1970).

As I began to plan my research, I also began to have conversations with staff in schools, who would share their anecdotal observations, based on their experience of ORE. A common feature within their comments was that the ORE experience allows school staff to see a different side to the pupils' personality or witness them demonstrating previously unknown skills. These observations have also been noted in the literature on OE. For example, O'Brien and Murray (2007) identified the theme 'new perspectives' in their qualitative study, which evaluated the forest school programmes of three different school settings. They suggest that teachers developed a better understanding of pupils' skills and strengths having observed them during OE activities (O'Brien and Murray, 2007). It is perhaps likely that this new perspective might be taken into account when planning for teaching, even if only slightly, meaning that the curriculum could become more personalised upon return to the classroom.

An OE programme which contributes to psychological wellbeing through the improvement of resilience, self-efficacy beliefs and existing relationships (O) will include group work activities, a mutually supportive atmosphere and the necessity to share tasks, space and/or resources (C) in order for participants to feel supported and develop their group work and wider social skills (M). Such a programme may also allow for participants to demonstrate previously unseen skills (C), which will then lead teachers to have a better understanding of the pupil upon return to the school setting (M).

Box 4. Outdoor Education TPT Four.

3.2.5 Summary of general OE

To summarise, the literature exploring the impact of OE and OAE highlights a range of potential benefits for psychological wellbeing, within the four areas suggested by Rickinson (2004). However, this also highlights the complexity of OE programmes, especially considering the wide variation in key features, such as settings, activities and programme length. Table Seven provides a brief outline of the TPTs for general OE, which have been developed through synthesis of the evidence from the literature summarised above. These are shown in the form of CMOCs.

Table Seven. CMOCs for the areas of Cognitive, Affective, Physical and Social impact.

Area of impact	Context	Mechanism	Outcome
Cognitive	Experiential learning activities Activation of state of flow Facilitated opportunities for reflection	Increased concentration Internal cognitions become more positive	Improved self-perception, self-concept and self-esteem

Affective	Challenging activities Experienced and skilled programme leaders able to balance of optimal risk and promotion of safety	Opportunities to overcome challenge and have a sense of achievement Experience of optimal risk with confidence of safety	Improved self-esteem, mental resilience and understanding of self Positive affect
Physical	Natural environment with 'green space' and reduced cognitive load Opportunities to engage with nature	Opportunities to take part in physical activity Restoration of cognitive capacity Develop a sense of 'nature connectedness'	Increased self-esteem and life satisfaction Improved emotional control
Social	Mutually supportive atmosphere Group work activities Sharing of tasks, space and resources Opportunities to demonstrate unseen skills	Feeling supported Development of group work skills Development of general social skills Teachers develop a better understanding of the pupil	Increased resilience Improved self-efficacy beliefs Improved relationships with peers and staff Improved relationships in school

3.3 Outdoor Residential Education

The evidence discussed above suggests the ways in which general OE and OAE might contribute towards enhancing psychological wellbeing. However, I would suggest that whilst these factors may still be relevant, it is also necessary to explore the research on Outdoor *Residential* Education in more depth. This is reflected in a statement made by the Department for Education and Skills (2006); 'Staying away for a few days or more is a powerful way of developing key life skills, building confidence, self-esteem, communication and team working' (p. 5). In contrast to the wealth of literature highlighting the benefits of access to general outdoor activities, as discussed above, Christie & Higgins (2012) point out that there is currently only a small body of research exploring the impact of residential outdoor education. Despite

this lack of evidence, taking part in residential outdoor education programmes is generally considered to be a ‘good thing’ (Christie & Higgins 2012). A report by the Centre for the Use of Research and Evidence in Education (CUREE) suggests that this lack of available research is likely to be due to schools and local authorities not taking steps to monitor or evaluate the outcomes of these programmes (CUREE 2010).

There is even less research available on the impact of residential outdoor education on psychological wellbeing. Instead, the focus of research tends to be on benefits to academic outcomes and links to the curriculum (e.g. Hattie et al. 1997 and Beames et al. 2009). Furthermore, much of this research is based on contexts outside of the UK, particularly in North America and Australia (Rickinson et al. 2004).

Telford (2010) highlighted the lasting impact of the ORE experience as described by adults who had taken part in a programme several years previously. Telford (2010) suggests that the opportunities undertaken during ORE enabled learning in the areas of personal achievement, independence, social skills and relationships with nature, which has continued to be significant into adult life.

3.4 Key ORE Studies

As discussed previously, ORE has a long and rich history, both within the UK and in many countries across the world. Despite this, there appears to be only a small number of studies exploring the outcomes and effects for pupils taking part in an ORE programme. Table Eight provides an outline of the five identified studies, including an overview of each study and its key findings. Due to the small number of studies and their direct relevance to the current research, these will now be discussed in depth.

Table Eight. Key Outdoor Residential Education Studies.

Study	Outline	Sample	Key Findings
Williams (2013) 'Woven into the fabric of experience: residential adventure education and complexity.'	Mixed methods study grounded in complexity theory, investigating how pupils change following a residential adventure education experience and how this change relates to their experience. Attainment data collected via survey. Interviews carried out with head teachers and parents. Questionnaires completed by pupils who had completed an ORE programme.	Survey data from 249 English primary schools. Interviews with ten head teachers and five parents. Questionnaires completed by 232 pupils, aged 9-11 years	Change resulting from ORE comes about through a complex system. Children in 'socially deprived' areas have reduced access to ORE opportunities. Changes in attainment were positively correlated with pupils' perceptions of the ORE programme. Pupils experienced a significant improvement in pro-social behaviour and significant reduction in hyperactivity
Humberstone and Stan (2009) 'Well-being and outdoor pedagogies in primary schooling: The nexus of well-being and safety'	Ethnographic approach used to explore the perceptions of young children and their carer's regarding their experiences of risk and safety with a focus on the way ORE opportunities affect pupil wellbeing. Based around one school's trip to an REC. Interviews were carried out with teachers during the trip and a group interview with mothers took place after their children had returned.	Individual interviews with three primary school teachers from one school. Group interview with six mothers of pupils who attended a residential.	The ORE opportunity was perceived to have had a positive influence on holistic pupil wellbeing. The study highlights issues of conflict between opportunities and risk and links this to teachers' controlling pedagogic style.
Amos and Reiss (2006) 'What contribution can residential field courses make to the education of 11-14 year-olds?'	Evaluation of the effects of 'residential field courses' for pupils in Key Stage 3. Questionnaires completed by pupils both pre- and post-residential. Focus groups were carried out with pupils after the trip. Pre- (via the telephone) and post- (face-to face) interviews were carried out with the lead teachers for each residential. The researchers visited the REC during three of the residentials	Participants recruited from thirteen different residentials. Questionnaire completed by 428 pupils, aged 11-14 years. Interviews carried out with thirteen teachers.	Pupils and teachers reported levels of motivation and participation to be high for adventurous activities. Pupils reported that they had exceeded their expectations of achievement. Levels of trust in others and pupil self-confidence were seen as being higher than in school by pupils and teachers. Teachers also noted that pupils developed teamwork skills. Pupils reported having built or maintained positive

	and recorded their observations in the form of field notes and photographs.	3-6 pupils took part in five focus groups.	relationships with their peers as well as teachers and centre staff.
Gee (2010) 'An Ethnographic Case Study of a Residential Field Study Centre'	Ethnographic approach to exploring the perceptions of 'community' during a residential fieldtrip. Participant observation took place during intense immersion in the experience. Interviews were carried out with pupils throughout the trip. Teachers and some of the pupils were interviewed following the residential.	Residential attended by 36 pupils from one secondary school, all in Year 12. Interviews carried out with 17 pupils and three teachers.	Identified several factors central the formation of a 'temporary community': use of space, informality, shared adversity, teacher influence and common purpose. This is suggested to result in changes to social relationships, including the formation of new friendships, consolidation of existing relationships and strengthened group cohesion.
Fuller et al. (2016) 'Making gains: the impact of outdoor residential experiences on students' examination grades and self-efficacy'	Mixed methods study concerning the role of ORE on attainment and the sense of efficacy of under-achieving pupils from a socially disadvantaged background. Longitudinal study focussed on a three-year project. An intervention group took part in two weekend residentials per year over three years, while a control group did not attend residentials. Annual face-to-face interviews were carried out with the participants. Observations were carried out during three residentials. Attainment data was collected prior to the study as a baseline and again at the end based on participants' GCSE results.	Two matched groups of 12 pupils, in year 9 when the study began. Socioeconomic status was determined by parent occupation and/or eligibility for FSM.	Attending residentials appeared to result in increased confidence and sense of self-efficacy for pupils. There was also a statistically significant positive impact on attainment for pupils who had been part of the intervention group.

3.4.1 Williams (2013)

Williams (2013) used complexity theory to investigate the ways in which primary school pupils' classroom behaviour changes following an ORE programme and how these changes relate to the activities and experiences undertaken. The study utilised a mixed methods design and data was collected during three distinct phases. Phase one involved gathering quantitative data from 249 primary schools. In phase two, interviews were carried out with ten head teachers and 5 parents. Finally, phase three consisted of an impact questionnaire which was completed by 232 students, all between 9-11 years of age, all of whom had attended a five day ORE course during summer 2011. This phase also included a comparison of pupil attainment before and after the programme from a subset of 34 pupils, as well as pre- and post-intervention scores from the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 2001) from a subset of 31 pupils. The findings of phase one indicate that participation in an ORE programme, may have a positive impact on school Ofsted ratings, but this relationship is far from clear and was highly influenced by the number of pupils eligible for FSM.

Despite this complex initial finding, Williams (2013) points out that the results of phases two and three provide evidence of a number of positive impacts on pupil development. For instance, improvements were found in pupils' self-perceptions of hyperactivity (O) and pro-social behaviour (O) and school staff noted a positive change in pupil confidence (O) and intrinsic motivation (O). Williams (2013) also outlines four distinct categories of 'impact' drawn from pupil responses at phase three; 'living with others', 'challenge', 'teacher relationships', 'learning about self'. These categories and the findings from phases one and two are drawn upon to suggest that the intense social interaction of living together in a group (C) leads to increased mutual support and positive feedback loops (M) (Williams 2013). It is also proposed that opportunities to try new and challenging adventure activities (C) is beneficial when the level of challenge is presented as being achievable (M). However, having further examined the impact questionnaire (see Williams 2012, which also provides a more in depth description of how the categories were formed), it is difficult to unpick how these may relate to C, M or Os, as they are made up of a range of statements concerning pupils' perceptions of the activities, actions, thoughts and feelings they experienced during their residential. Furthermore, Williams himself

identifies the variation in the statements used to make up each of the components and suggests that they are each potentially recursive and mutually reinforcing (Williams 2013). Another criticism of this study is that it provides very little detail regarding the individual ORE programmes accessed by the schools involved. It is therefore impossible to explore in detail the activities undertaken, locations visited and the types of accommodation the pupils stayed in. Despite these issues, the study does provide evidence which can be drawn upon to develop a TPT.

An ORE programme which contributes to psychological wellbeing through the improvement of pro-social behaviour, reduced hyperactivity and increased confidence and intrinsic motivation (O) will include challenging activities and an intense level of social interaction (C), which will lead to mutual peer support and the development of positive feedback loops to encourage participation and a sense of achievement (M).

Box 5. TPT for ORE (A) based on Williams (2013).

3.4.2 Humberstone and Stan (2009)

Humberstone and Stan (2009) used an ethnographic approach to explore the experiences of a group of pupils of risk, safety and wellbeing while visiting an ORE centre. The visit lasted five days and the residential centre was situated within the English countryside. The researchers carried out semi-structured interviews with three teachers (one male head teacher and two female class teachers) and a semi-structured group interview with six parents (all mothers) of children that had been on the trip. Data were also collected in the form of detailed field notes, participant observation and collection of relevant documents, however the researchers state that the primary source of data came from the interviews (Humberstone and Stan 2009).

The authors noted a distinction in the way that wellbeing was defined between the parents, class teachers and head teachers. Parent participants within the study appeared to agree that the visit to an ORE centre had had a positive effect on their child's wellbeing via an increase in confidence (O) and independence (O), through

time away from siblings (C) and by building character (O). The parent participants also saw time spent outside (C) and time away from technology (such as TV and video games) (C) as an important aspect of the residential, which encourages engagement in exercise (M) and engagement with peers (M), which in turn results in improved communication skills (O). The head teacher's views appeared to echo this idea that pupil wellbeing is linked to increased engagement with peers. However, he expanded on this to suggest that increased social cohesion and teamwork (M) occur during ORE opportunities. He also cited these improvements as leading to benefits in classroom learning, following the pupils' return to school.

Humberstone and Stan (2009) suggest that the two class teacher participants within the study had a view of wellbeing which was much more focussed on the safety and physical health of the pupils. They appeared to see the ORE trip as being beneficial for pupil wellbeing, but only if the pupils are well protected from risk (C). However, Humberstone and Stan (2009) argue that an over-emphasis on safety in ORE can result in a negative impact on participant wellbeing. It could then be concluded that there is an optimum level of safety within ORE (C), which if not reached, or if over emphasised can negate any potential improvements in wellbeing. Humberstone and Stan (2009) suggest that the views of teachers and activity leaders within ORE, concerning levels of safety, shape their behaviour in terms of the distribution of power and control. Therefore, within the Context of optimum safety, a teacher or activity leader would feel it appropriate to relinquish control and power to the pupils (M), enabling improvements in wellbeing (O) to occur. Despite this study identifying

An ORE programme which contributes to psychological wellbeing through increased independence and confidence and improved communication skills (O), will require participants to spend time outside, away from technology, with an optimum level of safety (C), leading to opportunities to engage in physical exercise, improved group cohesion and teamwork and a sense of having power and control (M).

Box 6. TPT for ORE (B) based on Humberstone and Stan (2009).

a number of possible outcomes for children attending the residential centre, it is interesting to note that the researchers did not seek the views of those children.

3.4.3 Amos and Reiss (2006)

Amos and Reiss (2006) evaluated the effect of attending a science based residential fieldwork course for 428 pupils in Key Stage 3, from 10 different schools in London. Pupils completed questionnaires both before and after the course and a small number from five of the schools also took part in focus groups. Interviews were also carried out with the lead teacher before and after the course. Finally, the researchers visited the residential centres for a period of 1-2 days during three of the schools' trips and used field notes and photography to record their observations. Amos and Reiss (2006) divide the residential fieldwork courses into two distinct categories; 'curriculum focused' and 'eco-adventure.' In the former, most activities were heavily classroom based and included some visits to relevant fieldwork locations, while the latter were focused on physical activities outdoors, with little or no time spent in the classroom.

In their discussion, Amos and Reiss (2006) identify that pupils felt they had developed academic skills specific to the subject which formed the focus of the course. However, the researchers also noted that school staff had not made plans for how to follow up these skills upon their return to school. Both pupils and teachers observed an increase in motivation, even after returning to school (O). The researchers suggest that this was particularly the case when the course included 'adventurous' activities (C). The study identifies a link between exposure to challenge (C) and pupils experiencing a boost to their self-esteem (O). The researchers identify a potential mechanism for this in that pupils' achievements surpassed their own expectations (M). Finally, both the pupils and teachers highlighted an increase in self-confidence and levels of trust in others (O). The researchers link this to pupils' development of teamwork skills and the building or maintenance of positive relationships between the pupils themselves and between pupils and staff (M).

Despite making the distinction between the two categories of courses undertaken by the participants, Amos and Reiss (2006) rarely differentiate between these when

discussing the identified benefits for pupils. This makes it difficult to draw conclusions about how the CMOC's might relate to the ORE trip within the current research. However, a number of shared element of the two types of course, e.g. a rural setting, shared living arrangements and social interaction outside of school, mean that the findings are still useful in uncovering potential programme theories.

An ORE programme which contributes to psychological wellbeing through an increase in participant confidence, self-esteem, trust and motivation (O) will include exposure to challenging adventurous activities with peers (C), which enable achievement beyond expectations and the development and maintenance of positive relationships between peers as well as staff and peers (M).

Box 7. TPT for ORE (C) based on Amos and Reiss (2006).

3.4.4 Gee (2010)

Gee (2010) utilised an ethnographic approach to study the phenomenon of 'temporary community' during a residential geography fieldtrip. He conducted interviews and kept field notes throughout the residential and used these to identify several factors which appeared to be central to the ways in which a temporary community was formed (M). These factors were use of space, informality, shared adversity, teacher influence and common purpose. Gee (2010) argues that the availability of shared space (C) enabled opportunities for informal social networking (M). The informality of the relationships between staff and pupils (C), including seeing a different side to teacher personalities created a sense of fun (M). Gee (2010) also highlights humour as being central to the experience of shared adversity (C), which leads to a feeling of togetherness (O) due to the mixed emotional response (M). Gee (2010) proposes that teacher influence, or power (C), may have contributed to this shared adversity, whilst also encouraging the formation of new relationships among the pupils through the allocation of groupings and dormitories and by placing restrictions on the use of social networking technology (C). Finally, Gee (2010) observed that a common purpose or goal (C), even if it was just an aim

to ‘have fun’ helped the pupils to feel part of a ‘community’ during their residential (M).

The focus of the study was a geography fieldtrip, meaning that the pupils spent the majority of their time completing classroom style activities or topic related fieldwork. Therefore, the example of ORE, presented by Gee (2010) does differ somewhat from the residential trip considered in the current study, however, it could be argued that the residential element is an important commonality. In this way, Gee (2010) provides a useful and in depth insight into the lived experience of a residential and indicates a potential CMOC, which may be active within the ORE experience.

An ORE programme which contributes to psychological wellbeing by providing a feeling of togetherness (O), will include elements of shared space and shared adversity, such as limitations placed on use of social media and power imbalance (C), which will provide opportunities for informal social networking and support the development of a ‘temporary community’ (M). Such a programme may also include informal interaction between staff and pupils (C), which leads to pupils seeing a different side to their teachers (M).

Box 8. TPT for ORE (D) based on Gee (2010).

3.4.5 Fuller et al. (2016)

Fuller et al. (2016) explored the impact of outdoor residential experiences on self-efficacy and GCSE attainment of secondary aged pupils, over a three year period (from Year 9 to Year 11). The study comprised of 24 participants, 12 of whom attended the residential trips while the remaining 12 served as a control group. The residential trips consisted of six two-night stays at an REC over the course of three years. The authors carried out interviews with participants in the experimental group following each residential trip. The study also included an ethnographic element as the researchers attended the residentials and took part in activities alongside the participants, which allowed informal observations to take place, with a focus on participant behaviour and interactions.

Baseline attainment data was collected for all participants at the beginning of the study and again at the end of Year 11. Fuller et al. (2016) found that pupils reported experiencing an increase in self-confidence (O), linked to their academic ability and self-efficacy concerning their ability to succeed in the future (O). Based on their observations and the findings from interview data, the authors suggest that this increase may be due to three key factors. Firstly, the experience of 'Mastery' (M), following success in activities with an element of risk (C), resulted in an increase in self-efficacy beliefs. Secondly, the formation of strong new social relationships with peers (M), which continued into school led to increased confidence in participants' communication skills (O). Finally, the authors suggest that participants own beliefs about how the residential trip would affect them, effected the impact it had, i.e. participants who believed an activity would have a positive impact on their learning or skills, were more likely to experience a beneficial changes in this area. However, the researchers note the possibility of a Hawthorne effect as participants were aware of the subject of the research. Additionally, the authors note that the high number and frequency of the residential trips undertaken by the participants is very unusual when compared to average pupil experience. Nevertheless, this study contributes a potential explanation for what might take place during an ORE programme.

An ORE programme which contributes to psychological wellbeing via an increase in self-confidence and an improvement in self-efficacy beliefs (O), will include opportunities for social interaction and activities involving an element of risk (C), which will enable participants to form strong social relationships with peers and experience a sense of 'mastery' (M).

Box 9. TPT for ORE (E) based on Fuller et al (2016).

3.5 Overarching ORE programme theories

As a final stage of the RS, the TPTs derived from the general OE literature and the key ORE studies were combined to develop a collection of overarching programme theories for ORE. These are presented below, along with a table (see Table Nine) providing references to show the supporting literature for each CMOC.

Table Nine. CMOCs for each of the identified TPTs and the supporting literature from which they were derived.

TPT	Context	Mechanism	Outcome	Supporting Literature
(i) Natural environment	Natural environment, with access to 'green space'. Reduced cognitive load. Limited access to technology. Opportunities to engage with nature.	Participation in physical activity. Experience of cognitive restoration. Sense of 'nature connectedness.'	Increased self-esteem and life satisfaction. Improvements in confidence, emotional control and emotional wellbeing.	Knight (2009) Kuo and Taylor (2004) Kardjono (2013) Kaplan (1995) Korpela et al. (2014) Vries et al. (2011), Mitchell (2013) Zhang et al. (2014) Braun and Dierkes (2016) Lekies et al. (2015) Williams (2013) Humberstone and Stan (2009) Gee (2010) Fuller et al. (2016)
(ii) Temporary Community	Intense level of social interaction. Group work activities. Shared tasks, space and/or resources. Opportunities to demonstrate previously unseen skills.	Improved sense of group cohesion. Shared experience of adversity. Development of group work and wider social skills. Teachers develop an improved understanding of pupils' skills.	Improved self-efficacy beliefs and existing relationships with peers and staff. A feeling of 'togetherness'. Increase in confidence.	Cooley et al. (2013a) White (2012) O'Brian and Murray (2007) Williams (2013) Humberstone and Stan (2009) Gee (2010) Fuller et al. (2016)
(iii) Risk and Challenge	Challenging activities. Opportunities to achieve a state of flow. Staff skilled in achieving a balance between	A sense of 'mastery and achievement beyond expectations. Experience of increased positive cognitions	Improved self-esteem, self-perception and self-efficacy. Increased confidence, motivation, mental	Kolb (1984) Garst et al. (2001) Boniface (2000) Beck (1976) Li et al. (2012)

	optimal risk and the promotion of safety. Facilitated opportunities for reflection.		resilience and trust in others.	Lekies et al. (2015) Whittington et al. (2016) Beightol et al. (2012) Dweck (1999) Beames (2005) Durr (2009) Davis-Berman and Berman (2002) Williams (2013) Humberstone and Stan (2009) Amos and Reiss (2006) Fuller et al. (2016)
(iv) Mutual Support	Mutually supportive atmosphere. Challenging activities. Intense level of social interaction with shared space and resources.	Building and maintenance of positive relationships. A sense of peer support. Positive feedback loops.	Increased resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour. Improved relationships with peers and staff. Increased trust in others.	Neill and Dias (2001) Williams (2013) Amos and Reiss (2006) Gee (2010)

An OE programme which contributes to psychological wellbeing through an increase in self-esteem and life satisfaction and improvements in confidence, emotional control and emotional wellbeing (O) will take place within a natural environment, with access to 'green space', which has a reduced cognitive load, including limited access to technology (C), where participants are enabled to take part in physical activity and experience cognitive restoration (M). Such a programme will also allow participants to become engaged with nature (C) and develop a sense of 'nature connectedness' (M).

Box 10. TPT (i) concerning the natural environment.

An OE programme which contributes to psychological wellbeing through the improvement of self-efficacy beliefs and existing relationships with peers and staff (a feeling of 'togetherness'), as well as an increase in confidence (O) will be underpinned by an intense level of social interaction, which includes group work activities and the necessity to share tasks, space and/or resources (C) in order improve the sense of group cohesion, with a shared experience of adversity in which participants develop their group work and wider social skills (M). Such a programme may also allow for participants to demonstrate previously unseen skills (C), which will then lead teachers to have a better understanding of the pupil upon return to the school setting (M).

Box 11. TPT (ii) concerning the 'temporary community'.

An OE programme which contributes to psychological wellbeing through improved self-esteem, self-perception, self-efficacy, along with an increase in confidence, motivation, mental resilience and trust in others (O) will include activities of a challenging nature which enable participants to achieve a state of flow and are overseen by staff who are skilled in achieving a balance between optimal risk and the promotion of safety (C), enabling participants to gain a sense of 'mastery' and achievement beyond their expectations by overcoming the challenges presented (M). Such a programme will also include facilitated opportunities for reflection (C), which will lead to an increase in positive cognitions (M).

Box 12. TPT (iii) concerning risk and challenge.

An OE programme which contributes to psychological wellbeing through an increase in resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour and improvements in existing relationships with staff and peers, including increased trust (O) will include a mutually supportive atmosphere with exposure to challenging activities and an intense level of social interaction, e.g. shared space and/or resources (C) in order for participants to build and maintain positive relationships and feel supported by their peers through the development of positive feedback loops (M).

Box 13. TPT (iv) concerning mutual support.

Having identified the TPTs derived from the RS, a process of refinement took place based on data gathered from a number of sources. The process of data gathering is discussed in Chapter Four and the findings of this can be found in Chapters Five and Seven.

Chapter Four:
Empirical Data Collection

4.1 Aims and research questions

As discussed in Chapter One, there is a lack of good quality research into the impact of ORE for school pupils and even less to provide an explanation of the underlying mechanisms behind any benefits. Therefore, the aims of this study were to explore the effect of taking part in an ORE programme on psychological wellbeing for pupils and what mechanisms might be underlying this change. Within the RE framework, CMOCs derived from the extant literature were examined in relation to the context of a specific REC. The views of key stakeholders were sought to test and refine these CMOCs, in order to develop a programme theory of what works, for a particular group of pupils and why.

In order to meet the above aims, this study addresses the following research questions:

1. What is the perceived effect of taking part in an outdoor residential education programme on psychological wellbeing for pupils in a mainstream primary school?
2. Does taking part in an outdoor residential education programme have any additional benefit to pupil psychological wellbeing for pupils eligible for PPF?
3. What are the underlying mechanisms underpinning any changes to pupil psychological wellbeing?

4.2 Sample and recruitment

Pawson et al. (2004) point out that social programmes are embedded within social systems. This means that any changes linked to taking part in the programme are the result of the interactions within and between the layers of social relationships surrounding the programme (Pawson et al., 2004). Therefore it is important to take these layers into account when carrying out realistic evaluation, rather than simply focusing on the experience of the individual. Within the current study, this was addressed by gathering the views of participants inhabiting a range of levels: pupils, school staff and REC staff.

A purposive sampling approach was taken to identifying participants to take part in this study. According to Cohen et al. (2011) a purposive sample is one which the researcher selects participants on the basis of particular characteristics. As stated, there were three target populations for this study, the first two being pupils and staff from Valleywell primary schools who were due to attend a five day residential to one of the three LA RECs during summer term 2016. Based on information provided by the Valleywell RES, it was identified that there were a total of six school groups which met this criteria. Initial contact was made via telephone calls to each of these six schools in an attempt to identify a key point of contact within the school and explain the aims and planned procedure of the study. The Head Teachers of two of the schools declined to take part in the research due to their involvement in existing, but unrelated projects. Secretaries from another two of the schools advised that I make contact with the Head Teacher via email. Emails were sent giving a brief outline of the study and requesting contact via email, telephone or face to face. However, I received no response to these. This left two schools from which members of the senior leadership team had expressed an interest in taking part in the study. The deputy head from one of these schools, Forest Hall, appeared particularly enthusiastic and provided a very swift response to arranging a face to face meeting, whereas the contact with staff at the other school was limited. Therefore, Forest Hall Primary school was selected as the focus of the study.

Once the school had been identified, letters were sent out to the parents of the fifty pupils due to attend the residential trip. These letters included an information sheet outlining the research, parental consent forms and contact details for myself and my university and placement supervisors (see Appendix B). This resulted in a total of twenty-six signed parental consent forms being returned, all of which gave consent for these pupils to take part in the quantitative element of the study. Of these twenty-six pupils only two declined to take part, leaving a total of twenty four pupils to participate in this part of the research. For the qualitative element of the study, parental consent was received for eighteen of the pupils and of these, eleven pupils gave their own consent to take part. All the pupils taking part were in Year 5 at Forest Hall Primary School and were aged between 9-10 years. Nineteen of the

pupils were female and school data indicated that twelve pupils were eligible for PPF.

As stated earlier in this section, the second target population was school staff. In order to recruit school staff to take part in the study, letters were sent to the four members of staff who had attended the trip to the REC. Of these, two members of staff agreed to take part in an interview. These were both female and of white British ethnic origin. They were also both employed as Learning Support Practitioners (LSP) within the school and had attended a number of residential trips during their time at the school. One of the LSPs also had an additional role as the school's Forest School leader.

The third target population was staff from the REC. Recruitment was carried out via a key contact at the REC, who distributed information sheets to centre staff. This resulted in three members of staff volunteering to take part in a group interview. These consisted of one female and two males, all of whom were of white British ethic origin. One of the males was the Head of Centre and the two other staff members were members of the tutorial team who lead the day to day activities at the centre.

It should also be noted that I attempted to gather the views of the parents of pupils who had attended the residential trip. However, despite sending two rounds of letters and two text message reminders, via the school, no parents chose to attend a group interview session.

Francis et al. (2010) raise an interesting point regarding adequate sample size within research which uses theory-based interviews as a method of data collection. The authors suggest that the number of participants is sufficient when data saturation (a point at which no new ideas emerge) is achieved. However, due to the cumulative effects of time constraints and limited participant interest, it was not within the remit of this study to meet this standard.

4.3 Ethical Considerations

Prior to commencing this study I took time to carefully consider the ethical challenges which would need to be addressed in order to ensure that the safety of

participants was paramount. A significant amount of thinking about ethics took place to contribute to an application for ethical approval from the University of Birmingham's Research Ethics Panel. BPS (2014) highlights risk of harm to participants as a central consideration when planning research. This was an ongoing aspect of consideration throughout my research to ensure that there was no risk that participants would be subject to physical or psychological harm. Issues of consent were of particular significance due to the inclusion of children within the study. Consent forms for all data collection activities can be found in Appendix B, including parental consent forms for the pupil participants. Another area requiring careful consideration was the way in which collected data would be presented, in order to preserve participants' confidentiality and stored in line with the Data Protection Act (1998) and the University of Birmingham's Research Code of Practice.

The ethnographic element of this study (see Section 4.4.2.1) also raised a number of ethical issues, which required ongoing thought and reflection both during the residential and after (Dennis, 2010). In particular, I was aware of the 'covert' nature of the notes made in my research journal and that this created a notable grey area in the opportunities for participants to decline participation. Gee (2010) points out that such issues are inherent within ethnographic research. However, by avoiding the use of direct quotes, names or identifying features within the notes made in the research journal, I feel I was able to overcome these issues, at least to an extent.

A further area in need of consideration was what would be done with the findings, once the study was complete. This was especially important as there had been a cost to participants, in terms of their time. Therefore, if the study results were not utilised to develop or improve practice in some way, this would result in the unethical consequences of the participants having wasted their time (BERA, 2011) and having their contributions devalued (BPS, 2014). BPS (2014) also advises that appropriate debriefing is provided to participants upon completion of a study. A plan to provide feedback in the form of a debriefing session was built into the study and information on this included in the information and consent forms.

4.4 Methods

4.4.1 Quantitative Data Collection

Pupil psychological wellbeing was measured using the Stirling Children's Wellbeing scale (SCWBS) (Liddle & Carter 2015). This was considered alongside a number of similar measures (see Table 10). The SCWBS was selected for use in this study for a number of reasons. Most importantly, the SCWBS is a self-report measure, which is freely available and takes a relatively short time to complete. As the SWCBS was administered when the pupils were in school, this final point was of particular significance due to my awareness of the time pressures faced by teachers to deliver a full curriculum within the school day.

The SCWBS has been specifically designed for use with children and young people aged 8-15 and aims to measure psychological wellbeing (Liddle & Carter 2015). When completed, the SCWBS provides an overall score for wellbeing. Scores derived from the SCWBS can also be further broken down into two sub-components of psychological wellbeing; positive outlook and positive emotional state. The inclusion of these sub-components is important as some researchers (e.g. Leather, 2013a) have critiqued the use of measures which cover the broad area of wellbeing.

Pupils whose parents had provided informed consent for their participation in the study and who had themselves given their assent to take part were asked to complete the SCWBS both prior to attendance and after returning from the residential. This took approximately 10 minutes and a regular class staff were available to support the pupils with completing the questions. The pupils each had their own paper copy of the SCWBS (see Appendix C) to complete, which was labelled with an individual code to preserve participant anonymity. Appendix L provides a timeline for all data collection activities within this study.

Table 10. Comparison of identified wellbeing measures.

Name of Measure	Availability	Administration	Number of Items	Constructs Measured	Age Range
Kidscreen-10/27/52 Ravens-Sieberer et al. (2004)	Can be purchased for use	Self-report	Ranges from 10-54 items	Physical Well-being, Psychological Well-being, Autonomy and Parent Relations, Peers and Social Support, and School Environment	Children and young people aged 8-18 years
Multidimensional Students Life satisfaction Scale (Huebner, 1994)	Freely available	Self-report	40 items	Individual well-being Relationships with family, friends School satisfaction Living environment	Children and young people aged 8-15 years
Stirling Children's Wellbeing Scale (Liddle & Carter 2015)	Freely available	Self-report Includes items to detect social desirability	12 scaled items	Emotional and psychological wellbeing	Children and young people aged 8-15 years
The School Children's Happiness Inventory (Ivens, 2007)	Freely available	Self-report	30 scaled items	Positive and negative subjective wellbeing in school	Children and young people aged 8-15 years
Warwick-Edinburgh Mental Wellbeing Scale (Tennant, 2007)	Freely available	Self-report	14 scaled items	Subjective Wellbeing and psychological functioning	Young people aged 13-15 years

4.4.2 Qualitative Data Collection

According to Pawson and Tilley (1997) investigations based within a realist approach (such as RE), not only rely on "broad hypotheses culled from the background literature" but also incorporate "the 'folk wisdom' of practitioners" (p. 107). This is the assumptions held by stakeholders within a programme about what needs to be done to solve a social problem and why the action will address the problem (Chen 2014). Indeed, Martin et al. (2003) points out that individuals are capable of making sense of their experiences in the world and, as suggested by Bozic and Crossland (2012) it is through this sense-making that participants in a programme form an understanding of the changes to their thinking and actions, which result from taking part. Furthermore, Pawson and Tilley (1997) critique the traditional way in which theory and understanding is developed out of view of the research participant, only to be revealed when the research is published. The authors argue that this can result in the researcher exerting their own preference over the way in which the data is interpreted. RE seeks to overcome this by employing an iterative practice of checking theory with those considered to be most knowledgeable on the topic, i.e. those taking part in the social programme (participants) and those delivering it (practitioners) (Pawson and Tilley, 1997). Therefore, in order to develop a rich picture of how participants are affected by the programme offered by the REC and the mechanism behind this it was vital to gather the views of those directly involved. With this in mind I chose a range of methods, outlined below, to collect data from a range of key stakeholders; the pupils, school staff and REC staff.

4.4.2.1 Research Journal

The design of this research includes an element of ethnography as I attended the residential trip as a 'participant observer' (Thomas, 2009). Thomas (2009) points out that the rationale behind ethnographic research is based on engagement, participation and understanding. By becoming immersed as a participant observer within all aspects of the residential trip, I was able to develop a rich understanding of what was going on for the pupils during their time at the REC.

Throughout the week, I noted the types of activities undertaken by the group, the pupils' response to these, themes of conversations relating to wellbeing and my own reflections at the end of each day. A more detailed description of this process,

including an extract from the research journal and an explanation of the resulting changes to the TPTs derived from the RS can be found in Chapter Five. In line with the information provided to all participants and the pupils' parents, all information recorded within my research journal during the residential was anonymised and no direct quotes were included.

4.4.2.2 Interviews

Four separate interviews were carried out to collect the views of key stakeholders and to test the theory derived from the RS. These consisted of a group interview with pupils, individual interviews with two members of school staff and a group interview with staff from the REC. All of the interviews were semi-structured in nature, which afforded the dual advantage of giving the participants greater opportunity to express their views, whilst also enabling me to clarify and query the points that they made (Thomas, 2009).

For the staff interviews, a realist interview (Pawson and Tilley, 1997) approach was used in order to support the process of conceptual refinement. Pawson and Tilley (1997) suggest that a key tenet of the realist interview approach is the 'teacher-learner function.' This involves sharing the theoretical background of the research with participants, so that they can apply it to their own knowledge and experiences. Within the interviews carried out for this study, a slide-show presentation was used to display the tentative CMOCs derived from the RS and I provided further explanation of these. A second important element of a realist interview approach is 'conceptual refinement function', in which participants share their own thinking about the theory presented (Pawson and Tilley, 1997). Within this research, this was achieved by asking the participants to comment on the tentative CMOCs, based on their own experience and understanding of the programme. This technique is commonly used within research based on an RE approach as it enables participants to falsify, confirm and refine each theory presented to them (e.g. Frykman et al. 2017). When constructing the presentation I gave careful consideration to ensuring that the language used was accessible for all those taking part. I deemed this to be important as the CMOCs had initially been derived from academic texts and I was unsure whether all of the participants would be able to understand fully the information at this level. Indeed, the importance of the participants being able to

understand the theory being discussed within a realist interview approach is emphasised by Pawson and Tilley (1997).

All of the interviews were recorded using an electronic dictaphone and I personally transcribed all of the audio files.

4.4.2.2i Group interview with pupils

Walford (2001) acknowledges the unusual nature of an interview for those not familiar with the research process. As this was particularly likely to be the case for the pupil participants within this study, I decided that a group interview format would help to create a more comfortable and supportive atmosphere (as discussed in Humberstone and Stan (2009)). The group interview was carried out with five pupils in the week following the residential trip. These pupils were selected to take part by their class teacher from a list of pupils whose parents had provided consent for them to take part and who had given notice of their interest in participating.

At the beginning of the group interview, pupils were provided with a copy of the information sheet (see Appendix B) and asked to confirm their assent to take part. The interview then commenced with an explanation of the planned procedure and purposes behind the research (see Appendix E). Pupils were informed of their right to withdraw at any time along with their right not to answer questions if they did not want to. The pupils were reminded of the importance of maintaining the confidentiality of the information shared within the group and of having respect for the opinions of others.

Smith et al. (2012) provide an example of the use of photo elicitation to enhance the interview experience of pupils in their evaluation of an OE programme. This method was applied in the current study as a way of supporting the sharing of ideas during the group interview. During the residential trip, a number of pupils had volunteered to suggest key areas of the REC, which they thought had changed their wellbeing, to be photographed. The pictures included the bedrooms and areas accessed during free-time and were supplemented by a small number of photos, which I sourced from the internet to compensate for aspects that could not be photographed at the time. The pupils were asked to talk about each of the photos in order to illustrate how

aspects of the trip might have influenced their psychological wellbeing. A sample of the slides presented can be seen in Appendix D. A semi-structured interview schedule was developed (see Appendix E), which included open questions and an opportunity for the pupils to rate how important each of the presented aspects were for their wellbeing.

4.4.2.2ii Individual Interviews with School Staff

In order to accommodate participant availability, the interviews with school staff were carried out during the summer holidays of 2016. This was while the participants were running a holiday club at the school and was therefore, several weeks after returning from the REC. Two of the four school staff who had attended the residential trip agreed to take part. Informed consent was gathered prior to the interview (see Appendix B). A slide show presentation was shown to the participants (see Appendix F) and questions were asked based on a semi-structured interview schedule (see Appendix G).

4.4.2.2iii Group Interview with REC staff

The group interview with three members of staff from the REC took place in September 2016. Informed consent was gathered prior to commencing the interview (see Appendix B). Similar questions to those used in the school staff interviews were asked, based on a semi-structured interview schedule (see appendix H) and participants were shown the same slide show presentation (see Appendix F).

4.5 Data Analysis

As this study included both quantitative and qualitative data, two significantly different approaches to analysis were used. Briefly, qualitative data was interrogated using a hybrid thematic analysis technique. This is discussed in further detail in Chapter Seven and an explanation of the process is provided in Appendix I.

Once the completed SCWBs had been collected, I scored them by hand and inputted the data into Statistical Package for the Social Sciences (SPSS) (version 24) software. The following analyses were carried out on the data: Checks for normality and distribution, descriptive statistical analysis including means, standard

deviations and ranges, correlations and dependent t-tests. The results of these analyses are presented in Chapter Six.

4.6 Reliability and Validity

Robson (2011) points out that a vital aim in research is to achieve a high level of reliability and validity. It is therefore important to consider the numerous potential threats to this, which may arise from the research methods used. Chapter Three discussed some of the potential difficulties raised by the RE approach and addressed how these were overcome. Further threats to reliability and validity of the methods used in the empirical element of this study are discussed below.

4.6.1 Interviews

Oppenheim (2004) suggests that data collected through interviews can be unreliable and subject to bias from a number of sources. For example, the use of leading questions could affect the responses gained from participants. Conversely, a participant may have a particular agenda that they wish to pursue. To overcome such threats in the current research, a semi-structured approach was taken, meaning that the interview questions were open, but the interview was bounded by a clear framework (Cohen et al., 2011).

Hughes (2016) asserts that any research which involves gathering the testimony of participants on a given topic will be subject to sampling issues, which are likely to affect the generalisability of the research findings. However, as is inherent within research that uses an RE framework, it is not intended that the findings can be applied to make generalisable statements about all ORE programmes. Indeed, the aim of such research is to develop programme theories which develop understanding of 'what works, for whom and in what circumstances' for a specific programme (Pawson and Tilley, 1997).

Another potential threat to reliability relates to the group interview approach. Rabiee (2004) points out that some participants can find the group interview environment uncomfortable and may benefit from having pre-existing relationships with the other group members. The participants who took part in the group interviews within this study already knew each other and it was therefore hoped that they felt comfortable

in expressing their views. However this still leaves the possibility that some individuals might dominate the discussion, which could lead others feel the need to conform with their responses (Kelman, 1958). Therefore, Rabiee (2004) emphasises the importance of careful management of the group dynamics, in order to ensure that all voices are heard. Within the group interviews I carried out, I endeavoured to provide opportunities for all participants to share their views.

4.6.2 Transcription

Mero-Jaffe (2011) highlights a number factors which can influence the quality of the transcription of qualitative data, including the amount of knowledge the transcriber has about the research. The author suggests that transcript quality is less likely to be compromised if the role of researcher, interviewer and transcriber is carried out by the same person. On the other hand, as the researcher, interviewer and transcriber within this research, I felt it necessary to seek independent verification of an excerpt of each of the transcripts as a way of maximising accuracy. Despite this, it should be noted that Mero-Jaffe (2011) argues that a transcript can never be fully representative of everything that is said during an interview.

4.6.3 The SCWBS

An aspect of the SCWBS is the inclusion of items to enable the detection of social desirability bias within participant responses (Liddle & Carter 2015). This is important because, as discussed by Hughes (2016), self-report measures are commonly aimed at drawing out information about which participants may be cautious in disclosing. Therefore, self-report measures are considered most likely to be effected by social desirability bias (Hughes, 2016). Additionally, the SCWBS has been recommended by Public Health England as a validated psychological wellbeing measure to be used with children (Public Health England, 2015).

Chapter Five:
Research Journal

5.1 Introduction

Appendix J presents the research journal I kept during the residential trip undertaken with the pupils from Forest Hall Primary School. The notes were based on my own observations of the experiences offered throughout the week and of the pupils' responses to these. Following the trip, I was able to use these notes to further refine the TPTs derived from the RS. Additionally, my observations led to the development of a new TPT (see Section 5.3), which had not been unearthed by the RS.

5.2 Refinement of TPTs

My observations during the residential trip highlighted a number of ways in which the TPTs could be refined. This included the removal of aspects that were shown to have no relevance for the particular REC and pupils within this study. Table 11 illustrates the changes made to the TPTs (additions are highlighted for clarity) and provides a brief justification of these. The letters in the justification column refer to evidence presented within the research journal.

Table 11. Version one and version two (refined) TPTs and justification for the changes made.

Version one	Version two	Justification
(i) TPT concerning the natural environment: *An OE programme which contributes to psychological wellbeing through an increase in self-esteem and life satisfaction and improvements in confidence, emotional control and emotional wellbeing (O) will take place within a natural environment, with access to 'green space', which has a reduced cognitive load, including limited access to technology (C), where participants are*	**(i) TPT concerning the physical environment:** *An OE programme which contributes to psychological wellbeing through an increase in self-esteem and life satisfaction and improvements in confidence, emotional control and emotional wellbeing (O) will take place within a natural environment, with freedom to roam in a large outdoor 'green space', which has a reduced cognitive load, including limited access to*	The outdoor space offered at the REC was extensive. Pupils were given the freedom to roam and discouraged from being inside during free-play times *(A)*.

enabled to take part in physical activity and experience cognitive restoration (M). Such a programme will also allow participants to become engaged with nature (C) and develop a sense of 'nature connectedness' (M).	*technology (C), where participants are enabled to take part in energetic and imaginative play and experience cognitive restoration (M). Such a programme will also allow participants to become engaged with nature (C) and develop a sense of 'nature connectedness' (M).*	I noted that pupils increasingly chose to engage in energetic and imaginative play activities during their free time *(B)*.
(ii) TPT concerning the 'temporary community': *An OE programme which contributes to psychological wellbeing through the improvement of self-efficacy beliefs and existing relationships with peers and staff (a feeling of 'togetherness'), as well as an increase in confidence (O) will be underpinned by an intense level of social interaction, which includes groupwork activities and the necessity to share tasks, space and/or resources (C) in order improve the sense of group cohesion, with a shared experience of adversity in which participants develop their groupwork and wider social skills (M). Such a programme may also allow for participants to demonstrate previously unseen skills (C), which will then lead teachers to have a better understanding of the pupil upon return to the school setting (M).*	**(ii) TPT concerning the 'temporary community':** *An OE programme which contributes to psychological wellbeing through the improvement of self-efficacy beliefs and existing relationships with peers and staff (a feeling of 'togetherness'), as well as an increase in confidence (O) will be underpinned by an intense level of social interaction, which includes groupwork activities and the necessity to share tasks, space and/or resources (C) in order improve the sense of group cohesion, with a shared experience of adversity in which participants develop their groupwork and wider social skills (M).*	The school staff attending the trip were not from Year five classes and so had little contact with the pupils within school. Therefore, references to the demonstration of previously unseen skills and the affect this might have on the staff members' understanding of pupils was removed. Children spent time all together or in their groups at all times throughout the trip. Bedrooms and bathrooms were shared. Mealtimes took place together. Children had to take turns for many of the activities. Shared sense of adversity demonstrated by negative talk *(C)*.

(iii) TPT concerning risk and challenge *An OE programme which contributes to psychological wellbeing through improved self-esteem, self-perception, self-efficacy, along with an increase in confidence, motivation and trust in others (O) will include activities of a challenging nature which enable participants to achieve a state of flow and are overseen by staff who are skilled in achieving a balance between optimal risk and the promotion of safety (C), enabling participants to gain a sense of 'mastery' and achievement beyond their expectations by overcoming the challenges presented (M). Such a programme will also include facilitated opportunities for reflection (C), which will lead to an increase in positive cognitions (M).*	**(iii) TPT concerning risk and challenge** *An OE programme which contributes to psychological wellbeing through improved self-esteem, self-perception, self-efficacy, along with an increase in confidence, motivation and trust in others (O) will include activities of a challenging nature, where pupils control their level of participation, which are overseen by staff who are skilled in achieving a balance between optimal risk and the promotion of safety (C), enabling participants to feel empowered and gain a sense of 'mastery' and achievement beyond their expectations by overcoming the challenges presented (M). Such a programme will also include facilitated opportunities for reflection (C), which will lead to an increase in positive cognitions (M).*	I observed no situations in which pupils could have been considered to be in a state of flow during the challenging activities and pupils made no comments that would indicate this was achieved. Therefore, references to this were removed. Range of challenging activities provided throughout the week. During some of the challenging activities, I noted that pupils were given control to make decisions about their level of participation *(D)*. Centre staff emphasised safety mechanisms at times and ensured that pupils used safety equipment *(E)* Facilitated reflection opportunities took place at the end of the week *(F)*
(iv) TPT concerning mutual support *An OE programme which contributes to psychological wellbeing through an increase in resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour and improvements in existing relationships with staff and peers, including increased trust (O) will include a mutually supportive atmosphere with exposure to*	**(iv) TPT concerning mutual support** *An OE programme which contributes to psychological wellbeing through an increase in resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour and improvements in existing relationships with staff and peers, including increased trust (O) will include a mutually supportive atmosphere with exposure to*	No changes were made to this programme theory. I noted that staff encouraged pupils to support and cheer each other on throughout the activities and children began to do this spontaneously as the week went on *(G)*.

challenging activities and an intense level of social interaction, e.g. shared space and/or resources (C) in order for participants to build and maintain positive relationships and feel supported by their peers through the development of positive feedback loops (M).	*challenging activities and an intense level of social interaction, e.g. shared space and/or resources (C) in order for participants to build and maintain positive relationships and feel supported by their peers through the development of positive feedback loops (M).*	Range of challenging activities provided throughout the week. Children spent time all together or in their groups at all times throughout the trip. Bedrooms and bathrooms were shared. Mealtimes took place together. Children had to take turns for many of the activities.

5.3 New Programme Theory

The new TPT which was developed based on my observations during the residential can be broadly labelled 'Independence.' Table 12 shows the Cs, Ms and Os derived from these observations.

Table 12. Cs, Ms and Os for the TPT regarding independence.

Area	Context	Mechanism	Outcome
Independence	Away from main carers. Pupils encouraged to take responsibility for self-care tasks and their own belongings. Opportunities to volunteer for general chores.	Pupils become aware that they are able to care for themselves beyond previous expectations. Pupils feel more independent.	Increased confidence in own abilities. Increased independence.

5.3.1 Independence

Throughout the residential, from the moment the pupils arrived at the REC, I noted that there was an expectation that they would be as independent as possible *(H)*. Pupils had to carry out a wide range of activities and chores with only minimal or no adult support. For example, on the first day I noted that the pupils "made their own beds (some for the first time)" and they "unpacked their own bags." I heard a number of children comment that, at home, these things would be done by someone else, e.g. a parent, carer or sibling. Interestingly, a study drawn upon in the RS, Humberstone and Stan (2009), briefly mentions that parents felt their children became more independent following a residential trip and that this was in part due to being away from their siblings. These opportunities for independence continued

throughout the week with pupils eating together without adult involvement, volunteering to carry out chores, such as setting the table and sweeping up and taking responsibility for their safety equipment during activities. I observed that pupils were left to manage self-care tasks, such as dressing and washing and staff only intervened when necessary. I also noted that adults encouraged pupils to “have a go” before providing help in a range of situations. Upon arrival at school at the end of the trip I noted that the majority of pupils chose to carry their own bags and refused offers of help from their parents. This was in contrast to the beginning of the trip where I observed parents and carers carrying bags and cases to the coach for their children. This perhaps suggests that the pupils had become more confident in their ability to be independent.

An OE programme which contributes to psychological wellbeing through an increase in participants’ confidence in their own abilities and independence (O) will include time away from main caregivers and an atmosphere that encourages taking responsibility for self-care and own belongings and the opportunity to volunteer for additional chores (C) leading participants to feel more independent and become aware that they are able to care for themselves beyond previous expectations (M).

Box 14. TPT (v) concerning independence.

The current Chapter demonstrates the way in which TPTs identified in the RS, were refined, based on the data gained from my observations during the residential. These were subject to further refinement, subject to data gained from the interviews with key stakeholders. The findings of this are presented in Chapter Seven.

Chapter Six:
Results of Quantitative Data Analysis

6.1 Introduction

This chapter reports the results of the quantitative data collection element of the study, which sought to measure pupil psychological wellbeing before and after a week-long residential at the Valleywell REC, in order to answer research questions one and two, as presented in Chapter Three. Pupil psychological wellbeing was measured using the SCWBS, which is discussed in detail, including a description of its development and theoretical background, in Section 4.4.1.

The SCWBS was administered to 23 pupils (19 female, 4 male) at time one (T1), one week prior to the residential, and to the same pupils at time two (T2), one week after the residential. Data from three participants was discarded due to incomplete responses, leaving a total of 20 completed SCWBS at both T1 and T2. The steps taken to analyse the data are discussed in depth within the following sections. All statistical analysis was carried out using SPSS (version 24) software.

6.2 Measuring change in overall psychological wellbeing

Research Question One asked what effect participation in an ORE programme has on psychological wellbeing in primary school pupils. In order to analyse whether any change to pupil psychological wellbeing had taken place, the mean wellbeing scores from T1 and T2 were calculated, along with the mean difference between paired scores. This is shown in Table 13. Initial examination of the data indicated the presence of a slight increase of 2.75 in overall wellbeing scores post intervention, with a mean of 41.40 at T1 and 44.15 at T2.

Table 13. Descriptive statistics for overall wellbeing scores at T1 and T2.

	N	Minimum	Maximum	Mean	Std. Deviation
T1	20	23	57	41.40	10.293
T2	20	24	60	44.15	9.103
Difference	20	-16.00	17.00	2.7500	6.67182

Field (2009) points out that an important step prior to the application of a parametric test is to establish whether the data are normally distributed. In order to do this,

histograms were produced for the overall wellbeing scores at T1 and T2 (see Figures 4 and 5). Visual inspection of these histograms revealed no obvious skews or ceiling/floor effects and the data appeared to be in line with what would be expected from such a small sample from a normal distribution. Furthermore, Liddle and Carter (2015) found the SCWBS to produce a normal distribution of scores in their validation of the test. However, it should also be noted that the small sample size meant that it was difficult to draw strong conclusions. Consequently, a Shapiro-Wilk test was applied (see Table 14). This is a technique which tests whether data is normally distributed and is particularly appropriate for use with samples of 50 or below (Ghasemi and Zehediasl, 2012). As the significance value of both scores was above 0.05, the null hypothesis that the data was not normally distributed was not supported.

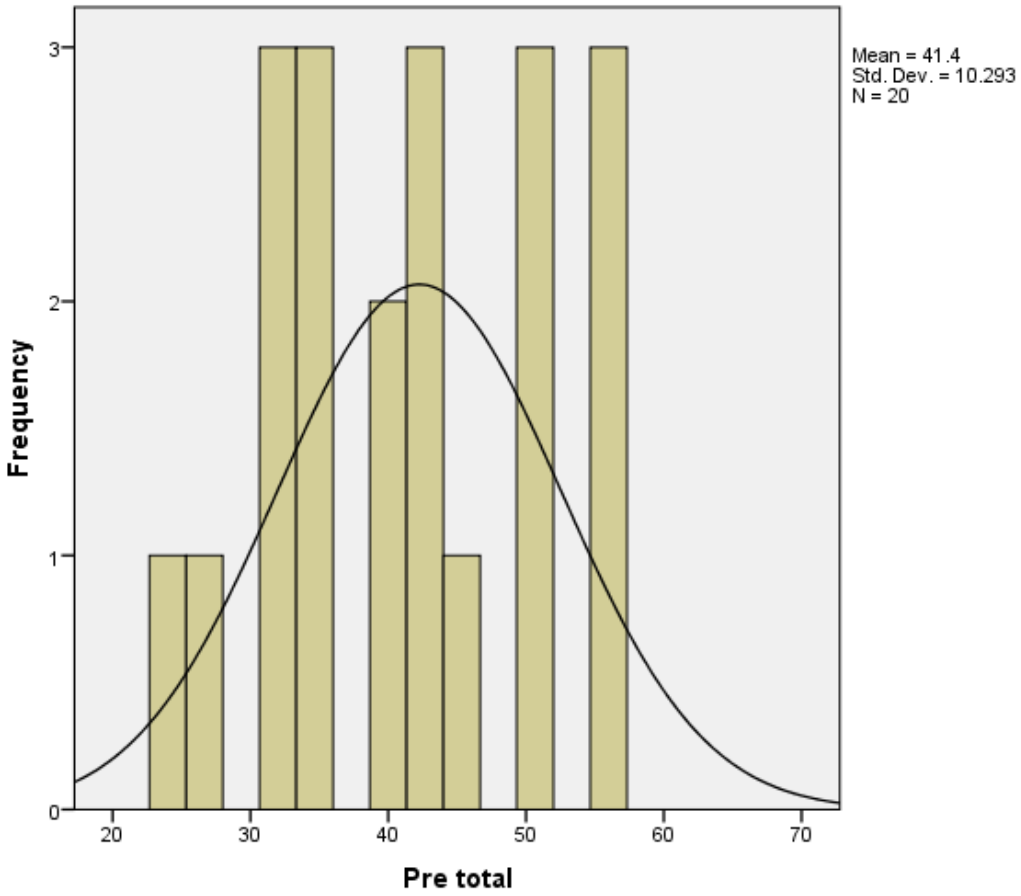


Figure 4. Histogram showing the distribution of overall wellbeing scores at T1.

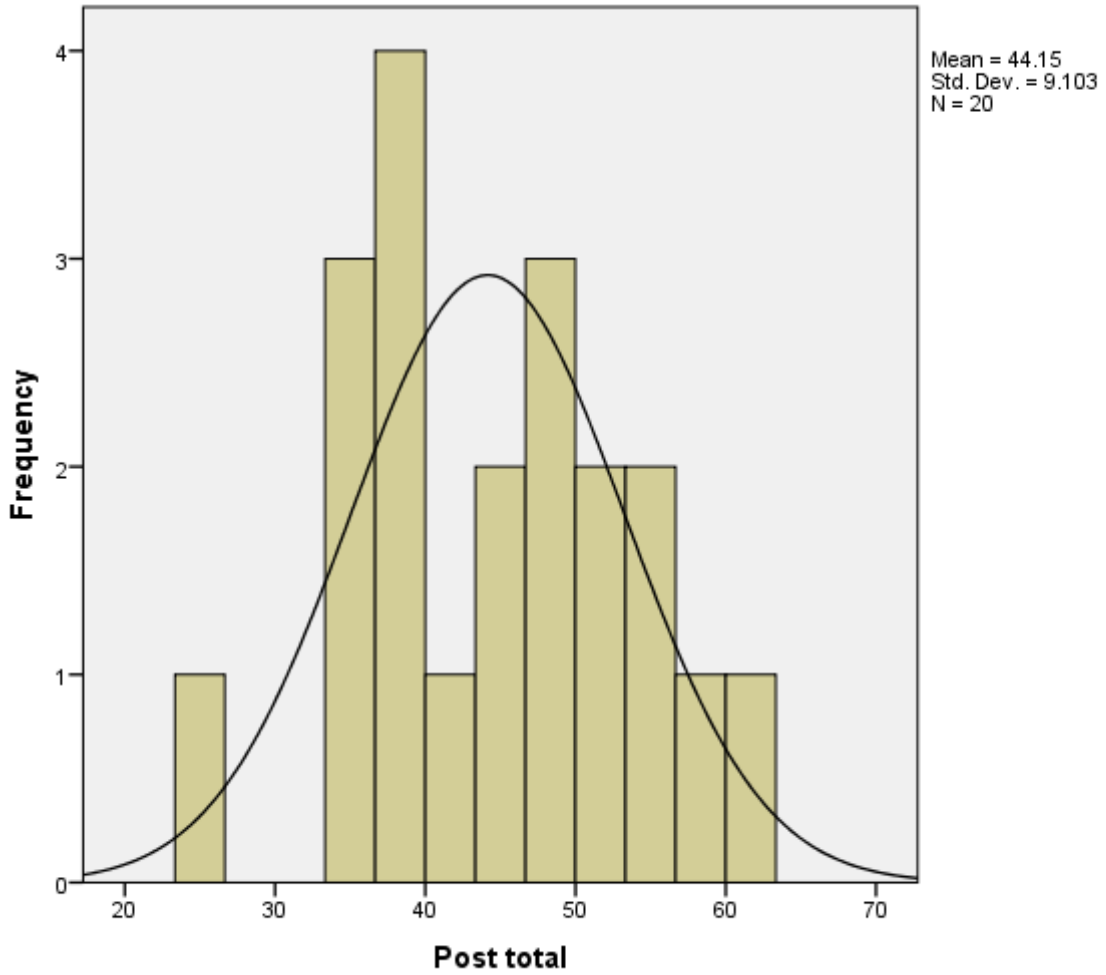


Figure 5. Histogram showing the distribution of overall wellbeing scores at T2.

Table 14. Results of the Shapiro-Wilk normality test for wellbeing scores at T1 and T2.

	Shapiro-Wilk		
	Statistic	df	Sig.
Pre total	.961	20	.569
Post total	.976	20	.877

Field (2009) suggests that once a normal distribution within a set of scores has been established, it is useful to check that the differences between the scores is also normally distributed. With this in mind, one final check, involving the production of a histogram and a further Shapiro-Wilk test, was carried out to examine the distribution of the differences between the paired wellbeing scores (see Table 15 and Figure 6). As with the pre- and post- wellbeing scores, these suggested that the differences between the paired scores were normally distributed.

Table 15. Results of the Shapiro-Wilk normality test for the difference between wellbeing scores at T1 and T2.

	Statistic	df	Sig.
difference	.912	20	.069

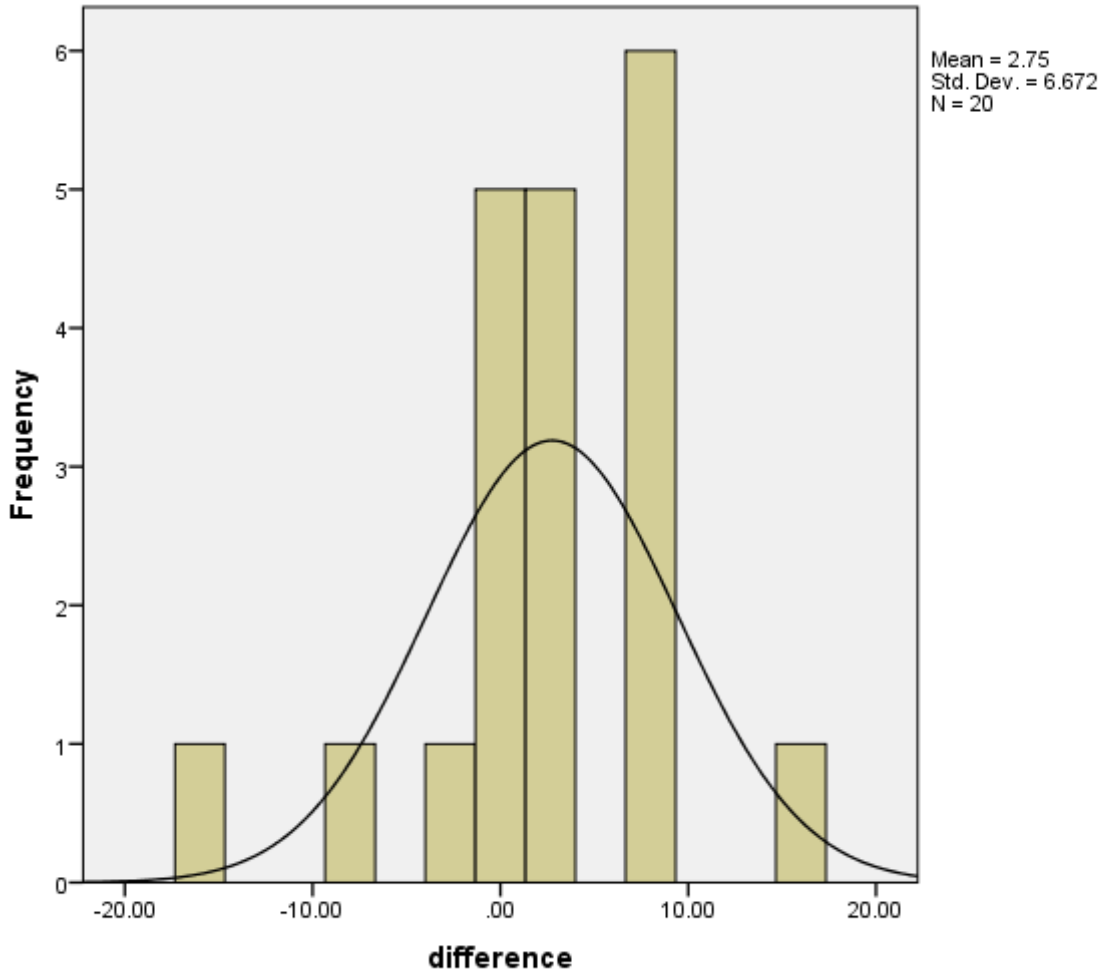


Figure 6. Histogram showing the distribution of the difference between overall wellbeing scores at T1 and T2.

A common way to test the significance of the difference between data collected from a group of participants at two different time points, is a paired samples (related) t-test (Howitt and Cramer, 2008). This test showed that the mean wellbeing score at T1 (M 41.40, SD = 10.293) and T2 (M 44.15, SD = 9.103) did not differ significantly (t = -1.843, df = 19, two-tailed p = 0.081). Therefore, despite there being a slight increase in overall wellbeing scores after the residential, the difference between the two scores is not sufficient to provide certainty that the increase did not come about by chance (Howitt and Cramer, 2008).

6.3 Subcomponents of the SCWBS

As discussed in Section 4.4.1, scores from the SCWBS can be separated to give scores for the two subcomponents of 'positive outlook' and 'positive emotional state.' However, upon examination of the correlations within the data, it appeared that scores on questions within the two subcomponents did not always correlate well, indicating some unreliability within the measure (see Tables 36 and 37 in Appendix K). It is likely that this is due to a combination of the small sample size and the small number of questions within the measure itself. On the other hand, the scores for overall wellbeing were highly correlated, suggesting that it would be more appropriate to focus on overall wellbeing scores. There was however, a high correlation with the scores for the subcomponents and the total wellbeing scores at T1 and T2. This suggests that the subcomponents are picking out a common wellbeing element in addition to the component specific information. Therefore, considering the apparent reliability issues with the measure and the small sample size, I made the decision to focus on the overall wellbeing score. Furthermore, due to having more items and a clear connection with both subcomponents, it could be argued that the overall wellbeing score was able to provide a more reliable measure of psychological wellbeing.

6.4 Social Desirability score

As discussed in Chapter Three, the SCWBS includes three items to aid the detection of scores which may indicate that a participant's responses have been influenced by social desirability (indicated by a score of 3 or above on any individual social desirability question and/or a combined score of 14 or more for the three questions). Consequently, the data collected was examined for this phenomenon and it was found that all of the participants had scored 3 or above for at least one of the social desirability questions and five of the twenty participants had an overall Social Desirability score of 14 or above. It is therefore important to note that this indicates the responses provided by the participants may be a deliberate attempt to conform to perceived social desirability and as such, may not present a true picture of their psychological wellbeing. Because of this, a further visual inspection of the data was carried out, but no evidence of biased response sets was found. However, the precautionary decision was made to remove the data for the five participants who had a social desirability score of 14 or above.

Table 16 presents the descriptive statistics for the remaining 15 participants, which once again indicate the presence of a slight increase in overall wellbeing scores post intervention (3.33), with a mean of 38.80 at T1 and 42.13 at T2. Interestingly, there is a clear reduction in the mean overall wellbeing scores when compared to the initial scores (see Table 13), which suggests that social desirability may have had the effect of artificially increasing the overall wellbeing scores, meaning the choice to remove data from the three participants appears to have been justified. This data was not subject to analysis of significance due to the high standard deviation, relative to the mean difference.

Table 16. Descriptive statistics for overall wellbeing scores at T1 and T2 with high social desirability scores removed.

	N	Minimum	Maximum	Mean	Std. Deviation
Pre total	15	23	57	38.80	10.199
Post total	15	24	57	42.13	8.262
difference	15	-16.00	17.00	3.3333	7.04746

6.5 Psychological wellbeing for pupils eligible for PPF

In order to answer Research Question Two (see Section 4.1), analysis of the data was carried out to examine whether there was any difference between changes to overall wellbeing experienced by pupils eligible for PPF compared to pupils who were not. Initial inspection of the data (see descriptive statistics in Table 17) revealed that there appeared to be very little change in overall wellbeing scores for pupils eligible for PPF, whereas those not eligible for PPF experienced a mean increase of 5.8750. An independent t-test was carried out to test whether the mean differences in overall wellbeing of the two groups were significantly different from each other. This revealed that the mean difference in overall wellbeing scores for pupils not eligible for PPF (M = 5.8750, SD = 5.61726) was not significantly higher (t = -1.569, df = 13, two-tailed p = 0.141) than that of pupils eligible for PPF (M = 0.4286, SD = 7.78582).

Table 17. Descriptive statistics for overall wellbeing scores for pupils eligible and not eligible for PPF.

	Pupil Premium?	N	Mean	Std. Deviation	Std. Error Mean
Pre total	PPF	7	42.29	11.800	4.460
	Not PPF	8	35.75	8.120	2.871
Post total	PPF	7	42.71	8.180	3.092
	Not PPF	8	41.63	8.863	3.134
Difference	PPF	7	.4286	7.78582	2.94276
	Not PPF	8	5.8750	5.61726	1.98600

Interestingly, although it appears that the pupils eligible for PPF experienced no change in their overall wellbeing, their scores at T1 were notably higher than pupils not eligible. An independent t-test revealed this difference to be non-significant (t = -1.264, df = 13, two-tailed p = 0.228), but it is perhaps still worthy of note, considering that Liddle and Carter (2015) reported a mean score of 43.51 during their validation of the SCWBS.

The current chapter has presented the results from the quantitative data collection element of the study. What these results mean and their implications are discussed in Chapter Nine.

Chapter Seven:
Qualitative Data Analysis Findings

7.1 Introduction

This chapter reports the results of the qualitative data collection element of the study, which sought to further refine the TPTs derived from the RS, based on the data gained from interviews with key stakeholders within the ORE programme. Findings from this part of the study address Research Questions One and Three.

7.2 Ratings of the CMOCs

Within research that utilises a realist interview approach, it is common for participants to be asked to rate the CMOCs presented (e.g. Birch, 2015 and Frykman et al., 2017). This was carried out in the current research by asking the staff participants to rate, on a scale of one to ten, how important they believed each of the presented CMOCs to be in improving psychological wellbeing for pupils attending the REC. However, this resulted in all of the CMOCs being rated as either a ten or a nine (in the case of 'temporary community'), indicating that all were viewed as highly instrumental in improving pupil psychological wellbeing. Although this finding is not helpful in identifying any kind of hierarchy, it does suggest that the previously identified TPTs represent an accurate conceptualisation of what is at work within the programme and highlights the enthusiasm that the participants in this study felt for the elements which make the programme work. Indeed, this enthusiasm was also frequently expressed for the programme as a whole and the perceived outcomes for those taking part (see Table 18).

Table 18. The perceived outcomes of the programme.

Source	Extract
Centre staff	"it improves self-esteem and confidence" "Carefree awesomeness!"
School staff	"They come back so proud of themselves. They've achieved so much, yeah, brilliant" **"**It's amazing!" "they come back happy"

Pupils	“More laughful!” “I miss it so much. I wanna go back there” “I wanna be back in the woods!” “it made me feel a lot happier.”

7.3 Refinement of the TPTs

Tables 19, 22, 27 and 29 show the previously identified TPTs, alongside the newly refined theories, with amendments shown in bold. It is however important to note, as also pointed out by Birch (2015), that it was not expected that the data derived from the interviews would enable refinement of all aspects of every tentative theory, due to the relatively small sample size. Therefore, aspects of the TPTs that were not supported or contested by the interview participants have been retained. Furthermore, additional themes identified from the interview data have been translated into Cs, Ms or Os and incorporated into the previously identified TPTs. These are highlighted for clarity. Tables containing exemplar extracts from the data are presented at the end of each section.

7.3.1 Programme theory (i) concerning the natural environment

Table 19. Amendments to TPT (i).

Version two	Version three
Increase in self-esteem and life satisfaction and improvements in confidence, emotional control and emotional wellbeing (O) - Programme takes place within a natural environment (C) - Participants have freedom to roam in a large outdoor ‘green space’ (C) o participants are enabled to take part in energetic and imaginative play (M)	Increase in **self-esteem** and life satisfaction and improvements in confidence, emotional control and **emotional wellbeing** (O) - **Programme takes place within a natural environment (C)** - **Participants have freedom to roam in a large outdoor ‘green space’, within relaxed boundaries (C)** - **limited access to technology (C)**

- Reduced cognitive load, limited access to technology (C) o pupils experience cognitive restoration (M) - participants enabled to engage with nature (C) o participants develop a sense of 'nature connectedness' (M)	o **participants are enabled to take part in energetic and imaginative play (M)** ~~- Reduced cognitive load (C)~~ o ~~pupils experience cognitive restoration (M)~~ - **participants enabled to engage with nature (C)** o **participants develop a sense of 'nature connectedness' (M)**

7.3.1i Relaxed Boundaries

The data gained from the interviews with staff confirmed that the programme provided pupils with freedom to roam, but it also suggests that this freedom is not without boundaries. These boundaries were seen as providing a level of safety and security, which enabled the pupils to explore the environment with confidence. The school staff placed particular emphasis on the boundaries being distinct from what the pupils would experience at home or school and this was also picked up by one of the pupils.

Table 20. Exemplar extracts regarding relaxed boundaries.

Source	Exemplar Extracts
Centre staff	"sometimes that's also true that there isn't a person necessarily out there watching them, being with them. Well there isn't, like, the teacher with them, you know, on a, on a play, free play session."
School staff	"I know there has to be boundaries, but they know what type of boundaries and it's different and it's gonna be different to school, different to home..." "I know at [the] centre they've got the boundaries, but, they, they've got a big massive area, haven't they? So they can roam around more."

School staff cont...	“there are rules and that, but they’re not, it’s nothing structured or set in stone”
Pupils	“And, yeah, it helped because in our forest we don’t wander around. But we, at [name of centre] we do.”

7.3.1ii Increased Cognitive Load?

Based on the data gained from the interviews with participants, it appears that rather than the rural environment providing a reduced cognitive load (C), leading to the experience of cognitive restoration (M), the opposite effect may be in operation. The centre staff in particular highlighted the rural environment as a challenging aspect of the residential experience and made reference to it having an unsettling effect on pupils. Furthermore, the school staff suggested that pupils spend time learning about their new environment. It is possible that it is this process of learning that allows pupils to overcome the experience of being unsettled. Although the pupils made no direct reference to having been through such a process, they did talk about aspects of the environment in a negative way. This indicates that for some pupils, aspects of the rural setting may have presented a challenge. It could therefore be argued that for these pupils, this challenge led to an increase in cognitive load as they had to learn to adapt to their new environment.

Table 21. Exemplar extracts for increased cognitive load.

Source	Exemplar Extracts
Centre staff	“I think for the children that have been brought up in a very urban environment, it actually unsettles their wellbeing.” “Because they, it’s just too much. You know, there’s a lot of green, a lot of cows, a lot of spiders. There’s a, you know, there’s a lot in there for them to process. And that, it unsettles them. [sharp intake of breath] They run around “oh my god, there’s a chicken.” You know?” “Potentially theres a period of them being quite, that being stressful and erm, being negative for their wellbeing”
School staff	“…they’re learning different things aren’t they? They’re learning about the environment.” “…they’ve got to learn the new environment around them don’t they?”

Pupils Pupils cont…	"I felt angry because a couple of days later…came back and the room was just full of mud" "you know my one sock got dirty, and this is the difference [shows difference between the colour of his socks]. Look at that and look at how yellow that is!" "It was horrible, because, there, because, because there was a dead rat in the water." "Cos, like, when you get like, you get covered in water, you've got goosebumps… And you're all sticky." "Oh yeah, me and, me and erm [pupil] found a spider's nest and we saw the mommy spider, it was so scary!"

7.3.2 Programme theory (iii) concerning risk and challenge

Table 22. Amendments to TPT (iii).

Version two	Version three
Improved self-esteem, self-perception, self-efficacy (O) Increase in confidence, motivation and trust in others (O) - activities of a challenging nature (C) - pupils control their level of participation (C) - overseen by staff skilled in achieving a balance between optimal risk and the promotion of safety (C) o participants feel empowered (M) o participants gain a sense of 'mastery' (M)	Improved **self-esteem, self-perception, self-efficacy (O)** Increase in **confidence, motivation and trust in others (O**) - **pupils are adequately prepared for the challenges of the residential (C)** - **activities which present a different type of challenge than that experienced in school or at home (C)** - **pupils are given choices but staff encourage them to push beyond their boundaries (C)** - **overseen by staff skilled in achieving a balance between optimal risk and the promotion of safety (C)**

o participants experience achievement beyond expectations (M) o participants feel they have overcome the challenges presented (M) - facilitated opportunities for reflection (C) o participants experience an increase in positive cognitions (M)	o **participants know what to expect and have a positive attitude (M)** o **participants feel empowered (M)** o participants gain a sense of 'mastery' (M) o **participants experience achievement beyond expectations (M)** o **participants feel they have overcome the challenges presented (M)** - **facilitated opportunities for reflection (C)** o **participants experience an increase in positive cognitions (M)**

7.3.2i Importance of adequate preparation

The school and centre staff made a number of references to the importance of pupils being prepared for the trip to the REC. However, they appeared to disagree on what constituted adequate preparation. In particular, the school staff saw giving the pupils an idea of what to expect and what they would be doing as a way encouraging a positive attitude. On the other hand, the centre staff appeared to feel that this level of preparation is not sufficient, especially for younger children or those who had never experienced being away from home. Thus, a week-long residential creates an additional domain of challenge for this group. The centre staff emphasised the need for a gradual build up in the time spent away from home, in order to overcome this. It therefore appears that 'adequate preparation' is seen as having a mediating effect on the level of challenge experienced and the extent to which pupils are able to engage positively with this challenge during the residential.

Table 23. Exemplar extracts for the importance of adequate preparation.

Source	Extract
Centre staff	"I think we need to, sort of, you know, have a very structured, it's a bigger thing than just when they come to the centre, or what the centre does. But I think actually, there should be a planned programme from the schools and having those children away from home for one night or an overnight in school and then maybe an overnight at a centre, and then maybe a two day residential, then a five day residential. And it's, it's a slower, erm, cause it's the first experience of a away from home, is a five day residential. For a year three, four, god, that's huge. It's massive for them." "A lot of schools do that. In year two they go away for one night, in year three four they go away for two nights"
School staff	"if they didn't know what they were gonna be doing. If they weren't, like, because they have meetings prior to going, which is good, so they know what to expect, what things to take, what things they'll be doing…Children wouldn't be prepared and then they wouldn't have the right attitude as well." "Whereas like, they'd probably go with "oh, it's gonna be boring there", "I'm not gonna like it", "I dunno what we're doing" and the negative. So, knowing what they're doing helps, like, with the, it puts the fear factor out and they don't get negative"

7.3.2ii A Different Type of Challenge

Throughout the interview data, participants made reference to the difference in the type of challenge being offered by the centre, compared to that which pupils usually experience in school or at home. Interestingly, these activities weren't seen as being limited to the adventurous activities, such as climbing or canoeing, which are generally associated with OE. For example, making the beds and other domestic chores were seen as an important area of challenge for pupils. Furthermore, just being away from home was viewed as an area of potential difficulty to be overcome.

Interviewees suggested that different activities may pose or not pose a challenge to pupils, based on their previous experience and existing skills.

Table 24. Exemplar extracts for different types of challenge.

Source	Exemplar Extracts
Centre staff	"Yeah they're being challenged physically and mentally, to a degree, but not the same as at school mentally." "the first thing they do is they get a task to do something for themselves that they don't do at home, you know?" "Because they're great at school, or whatever. Suddenly, they come to a different environment, where they're that fish out of water and unsettling them"
School staff	"I know a lot of those children can't swim. So for them to get in the canoe is a big challenge" "at [name of centre], the whole week, every activity and even, like, making the beds, working, you know, in groups, they're still challenging themselves in different ways" ""so some children probably never been away from their parents, so it's probably harder for them. So, they're quiet, they lose their confidence that first night, they're tired."

On a related note, data gathered from the centre staff in particular appeared to suggest that certain groups of pupils may gain more from the ORE experience than others. Specifically, they pointed out that pupils who struggle academically have an opportunity to achieve and have their achievements recognised in a different domain, which leads to gains in their psychological wellbeing. Conversely, the centre staff also highlighted the significant challenge these activities might represent to those pupils for whom academic achievement is the norm. They talked about the unsettling effect this may have on these pupils, which has to be overcome, in the same way as the wide range of challenges represented by a visit to the centre.

Table 25. Exemplar extracts for non-academic achievement.

Source	Extract
Centre staff	“opening up the children to, sort of, different environment, different way of learning and realising that for them, in terms of their wellbeing is that there are different avenues to, to learning.” “I think you notice that in children that might struggle in the school. You notice it more when they come here that they, they feel like they, like achieve more I suppose. They get more out of it sometimes.” “Because they’re great at school, or whatever. Suddenly, they come to a different environment, where they’re that fish out of water and unsettling them. That’s why, I do see quite a lot of unsettled children…” “Gotta learn to deal with not being good at something."

7.3.2iii A balance between pupil choice and pushing boundaries

An interesting discrepancy arose from the data concerning the extent to which pupils were empowered to make their own choices about participation in adventurous activities. The pupils gave the impression that at times they were forced to take part in activities that they otherwise would have chosen not to and viewed this as a negative experience. This was echoed in statements made by both the school staff and centre staff, who appeared to see pushing pupils out of their comfort zones as an essential part of the residential experience.

On the other hand, all of the staff participants emphasised the importance of supporting pupil choice, with the centre staff highlighting the way in which this is seen as an achievement. Furthermore, the centre staff pointed out that pushing a child too far beyond their boundaries can result in a negative experience for the child and their group. This therefore suggests that the centre staff seek to achieve a delicate balance between the provision of encouragement to push beyond limits and enabling pupil choice, perhaps as part of the overall balance of optimal risk and the promotion of safety.

Table 26. Exemplar extracts for pupil choice and pushing boundaries.

Topic	Exemplar Extracts
Pupil choice	"Yeah, the child's made the choice. They choose what they want their challenge to be and they try and beat it" Centre staff member "I'll be thinking to that staff member "just shut up, because that child might be at that limit already", I'm sort of feeling that they are and I'd prefer them, if they made their decision at that point to go, "I'm coming down now." And they came down, because actually the, they've made that decision. In fact, I've had children who've really never left the ground on a high ropes session and I've had to say to staff, "really happy with that, they've shown me that they can make a decision." If they change, they change, we'll put them up there." Centre staff member "sometimes, with teaching staff, because they're like "get to the top, get to the top!" I'm like "oh no, please don't." Cause they'll get to the top, yeah and then they'll be stuck because they've gone past they're safety cut off zone." Centre staff member "if they didn't wanna do it. Saying, well that's fine, that's ok. You know, "it's your choice", "you've, you know, you've come this far, if you don't want to carry on then." Yeah. Allowing them to do not at all." School staff member "I got half way and then I thought no, I'm not doing it." Pupil
Pushing boundaries	"every one is different and each of their challenge is different. Some might be challenged by some activities and some might not be challenged by others. So, it's a case of, erm, yeah, no, no one is the same, yeah. You know, it

Pushing boundaries cont…	could be completely different. If they're doing the same activity basically, for each child, so you've got to manage it, so that they get the most from it, without being pushed too far, or not enough" Centre staff member "It's almost an art form, to know when that person is actually done, or when it's, whether we can maybe push a touch more" Centre staff member "Well, it's just pushing them into that, like, that level of uncomfort…So, we push them into that, the stretch zone, yeah, the uncomfort zone and erm. Out of their comfort zone, into the stretch zone." Centre staff member "they don't do it so that they're like putting pressure on them, you know? They know how far to take it" School staff member "It was scary 'cause they make you go in" Pupil "First, I was like, I won't go on it. Then they strapped me up, then Miss made me go up. Then, and then I said, I went up to her and said I wanted to get down and they wouldn't let me down till I got to the top. And then I had to go to the top." Pupil

7.3.3 Programme theory (v) concerning independence

Table 27. Amendments to TPT (v).

Version one	Version two
Increase in participants' confidence in their own abilities and independence (O) - time away from main caregivers (C) - atmosphere that encourages taking responsibility for self-care and own belongings (C) - opportunity to volunteer for additional chores (C) o participants feel more independent (M) o participants become aware that they are able to care for themselves beyond previous expectations (M)	Increase in participants' **confidence in their own abilities** and **independence** (O) - **time away from main caregivers** (C) - **atmosphere that encourages taking responsibility for self-care, own belongings and own safety** (C) - **Centre staff create opportunities to take the lead in activities and volunteer for additional chores** (C) o **participants feel more independent** (M) o **participants become aware that they are able to care for themselves beyond previous expectations** (M)

7.3.3i Opportunities managed by centre staff

The centre staff gave numerous examples of the ways in which opportunities to demonstrate independence are created and managed within the programme. These included situations where the pupils were given the illusion of being in control. Such opportunities had also been noted by the school staff. Throughout the interviews, references were made to pupils being given opportunities to take the lead. Many of these were closely linked to a wide range of situations where pupils were expected to demonstrate independence, for example when making the beds or taking responsibility for safety equipment such as helmets and harnesses. This suggests

that opportunities for demonstrating leadership may be another way of promoting independence for participants during the residential.

Table 28. Exemplar extracts for opportunities managed by centre staff.

Source	Extract
Centre staff	"You get the odd child who'll go "oh I do this at home", you know? Well, you go "right, show everyone." You know, help everyone." "I think, the way you run activities, like, with, if you take climbing stuff for instance. We, although we, we are managing it from the out, from, you know. From, from their side of things it looks like, well they are doing the belaying and managing the ropes and stuff when we're not around, so." "I always say, "ask yourself, can you do it? Can a friend help you?" If none of those things, if they really can't, "then you can ask me." "Always ask yourself"" "it's something we, I try and do within all my sessions is to take the adults and say "look, we've given you the information, we've given you the skills to be able to do this, you need to then do it without an adult helping. In fact I'm actually going to take the adults away and let you struggle."""
School staff	"By putting them in charge of equipment. Erm, like you say, setting the tables, that's their job. Making the beds, that's their job." "the walk, they do that, where the person in front, they keep changing the person. Erm, and like, erm, the leader on holding the, the rope for the, for the wire. You've got one in the front, who's the main one, haven't you, who's stuck down and they've got to pull it" "Where the leader said "right, you're taking the role, as a leader." Which, you know, "tell them which way to go.""

7.4 Combining related programme theories

Frykman et al. (2017) describes the process of merging CMOCs which appear to be closely related, based on the data derived from interviews with a realist approach. This aspect of programme theory refinement became particularly important within the current study as the data revealed a complex pattern of relationships between the previously identified programme theories.

7.4.1 Programme theories (ii) and (iv) concerning the 'temporary community' and mutual support

Table 29. Amalgamation of and amendments to TPTs (ii) and (iv).

Version two	New TPT (ii)
(ii) Improvement of self-efficacy beliefs and existing relationships with peers and staff (a feeling of 'togetherness'), as well as an increase in confidence (O) - Intense level of social interaction (including groupwork activities) (C) - shared tasks, space and/or resources (C) o improved sense of group cohesion (M) o shared experience of adversity (M) o participants develop groupwork skills (M) o participants develop wider social skills (M) (iv) Increase in resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour and improvements in existing	Improvement of self-efficacy beliefs and **existing relationships with peers and staff (a feeling of 'togetherness')** including **increased trust (O)** Increase in resilience, **self-esteem**, self-perception, self-concept, confidence and **pro-social behaviour (O)** - **Intense level of social interaction (C)** - **groupwork activities (C)** - **shared tasks, space and/or resources (C)** - **mutually supportive atmosphere encouraged by the centre staff (C)** - **exposure to challenging activities (C)** o **improved sense of group cohesion (M)** o **shared experience of adversity (M)**

relationships with staff and peers, including increased trust (O) - mutually supportive atmosphere (C) - exposure to challenging activities (C) - intense level of social interaction (including groupwork activities and shared tasks, space and/or resources) (C) o participants build and maintain positive relationships (M) o participants feel supported by their peers through the development of positive feedback loops (M)	o **participants develop groupwork skills (M)** o **participants develop wider social skills (M)** o **participants build and maintain positive relationships (M)** o **participants feel supported by their peers through the development of positive feedback loops (M)**

As can be seen in Table 11. the previously identified TPTs concerning mutual support and the 'temporary community' were similar in that they both made reference to intense levels of social interaction. However, the data suggests that the two may be even more closely connected, with an apparent cyclical relationship between the atmosphere of mutual support and the development of the temporary community. Therefore, I made the decision to merge the two, which led to the creation of a new TPT regarding the supportive community (see Table 29). The data revealed that aspects of mutual support seemed to come about as a product of the 'temporary community', but was also central to the formation of this 'temporary community'.

Table 30. Exemplar extracts supporting the amalgamation of TPTs (ii) and (iv).

Source	Exemplar Extract
Centre staff	"Well they're all in the same situation aren't they? They're all in it together, so they'll erm, kind of egg each other on almost, won't they? If that makes any sense."
School staff	"It's being a team. It's being the team network that, the little family, the little group, to support and help each other through." "Because the other children were saying "we can do it, we've done it, so you can do it." And then something must have clicked inside her."
Pupils	"All of us in our room with [name of 1st pupil] and they were just telling scary stories and I was, me and [name of 2nd pupil], we were just trying to get to sleep. And then [Pupil B] got really scared, so came into my bed and [name of 3rd pupil] nearly every night went into [name of 1st pupil]'s bed."

7.4.1i Role of the Centre Staff in Encouraging a Mutually Supportive Atmosphere

During the staff interviews a theme emerged which revealed the role the centre staff play in encouraging a mutually supportive atmosphere to develop. Centre staff talked about being both directive of pupil behaviour and providing a model for them to copy. It was apparent that this modelling was observed by the school staff and the pupils, who pointed out the positive effect the approach has.

Table 31. Exemplar extracts for centre staff encouraging a mutually supportive atmosphere.

Source	Extract
Centre staff	"So you use people to be supporters, to give advice to other people. Say "oh look you two, you're supporting this girl, you're supporting this person. So I think that encourages it as well." "I'll be directive about supporting each other, so you know, I, I'll by example and I'll give examples of how I'll support them and I'll go, you know, "can you?", well the climbing wall's a good example. It's like,

Centre staff cont…	yeah, “can you tell him where to put his foot?” or “can you help him do that?” or, you know? And trying to empower them to do it and just reminding them to do it and then after that, step back, let them do it…” “just positive reinforcement I think. Praising. Praising people that do, do support each other. And the others go “oh, he got praised for that, oh, maybe I’ll do that.” And it, it just build on it, throughout the week.”
School staff	“[The centre staff say] “Well give it a go, cause you don’t know until you’ve tried, have a little go.”” “I think it’s by the staff that’s there and the staff that go. Because they encourage the peers to encourage them to have a go.” “one of the staff who was on really chatted to him; “why won’t you go up?” You know, gave him so much confidence, that he, erm, and he said “just go up halfway.” And he did it.”
Pupils	“[the centre staff] encouraged us to, like, play with each other outside, ‘cause we’d do games some nights.”

Interestingly, the centre staff also identified the possibility for aspects of mutual support to be detrimental to pupil wellbeing, in that encouragement from others to have a go may lead to them over-stretching themselves and having a negative experience. Conversely, they also talked about how attempts by school staff to be ‘supportive’ may result in a pupil not achieving their full potential.

Table 32. Exemplar extracts for the detrimental impact of mutual support.

Source	Exemplar Extract
Centre staff	“This is difficult with staff sometimes, with teaching staff, because they’re like “get to the top, get to the top!” I’m like “oh no, please don’t.” Cause they’ll get to the top, yeah and then they’ll be stuck because they’ve gone past they’re safety cut off zone. Then they’ll just be gripped and holding the top of the wall, or they’ll be holding

Centre staff cont…	the top of the high ropes and I'll be having to talk them down for the next twenty minutes." "We've got the opposite as well, where it's staff, if they don't want to give it a go. They say "don't", "ok, don't", "come and sit back", "she's not doing this activity.""

7.5 Culmination of Tenative Programme Theories

Pawson and Tilley (1997) emphasise the cumulative nature of RE and the way in which this is intended to support specification of derived theory, rather than amassing a growing list of emerging theories. In the current study, the data gained from the interviews provided a wealth of evidence to enable this process of culmination to take place. Furthermore, King (2012) points out that data analysis can unveil themes which integrate a number of other themes, known as integrating themes. Indeed, two such themes emerged within this study; risk and challenge and the role of centre staff.

7.5.1 Risk and Challenge as an overarching programme theory

The TPT concerning challenge appears to have links to aspects of all other identified TPTs. Based on these links, 'risk and challenge' emerged as an overarching element within the programme and therefore the corresponding TPT was promoted to a higher level within the developing programme specification. The quote below (see Table 33) seems to exemplify the central importance of risk and challenge to the effectiveness of the programme.

Table 33. Exemplar extract for the importance of risk and challenge.

Source	Exemplar Extract
Centre staff	"Learning, is, it is, is, will happen anyway. It's just that we have such a short amount of time that we use risk to accelerate that learning. So, we push them into that, the stretch zone, yeah, the uncomfort zone and erm. Out of their comfort zone, into the stretch zone so they're open to more learning, more quickly."

7.5.1i Risk and challenge and the rural setting

As discussed in Section 7.3.1ii, the data revealed that the rural setting of the REC is considered to be a source of challenge for pupils. Participants talked about pupils initially find it difficult to adapt and having to go through a process of learning about the new environment, in order to cope (see Section 7.3.1ii). Indeed, during their group interview, the pupils tended to talk negatively about the aspects of the outdoor environment that they encountered.

7.5.1ii Risk and challenge and the supportive community

As can be seen in Table 29, challenging activities feature as a context factor within the TPT concerning the supportive community. It is during such activities that pupils are encouraged to provide support to their peers and achievement is recognised and praised, through positive feedback loops. Furthermore, the range of difficulties and the element of risk encountered during the residential result in a shared sense of adversity. Consequently, risk and challenge appears to be central in activating the development of the supportive community.

7.5.1iii Challenge and independence

As is discussed in Section 7.3.2ii, the type of challenge offered during the residential appears less important than the fact that it presents an opportunity to succeed at something difficult or new, e.g. getting to the top of the high ropes course or making the bed for the first time. Therefore, being away from home and the range of activities which promote independence, such as taking responsibility for self-care or domestic tasks are seen as a source of challenge.

7.5.2 The role of the centre staff as an integrating theme

As can be seen within Sections 7.3.2iii, 7.3.3i and 7.4.1i, the interviews revealed that the centre staff appear to play a key role in managing opportunities and experiences offered by the programme. Interestingly, the pupils made little mention of this role, indicating the subtle nature of the work carried out by the centre staff.

Chapter Eight:
Final Programme Theories

Figures 10-13, show the final programme theories identified and refined through this study. The identified programme theories address Research Question Three by providing a description of the contexts and mechanisms believed to underlie any change in psychological wellbeing as a result of participating in an ORE programme. An in depth discussion of these programme theories and their implications is provided in Chapter Nine. Additionally, Figure 9 shows the hierarchical structure of the programme theories and the way in which they are connected.

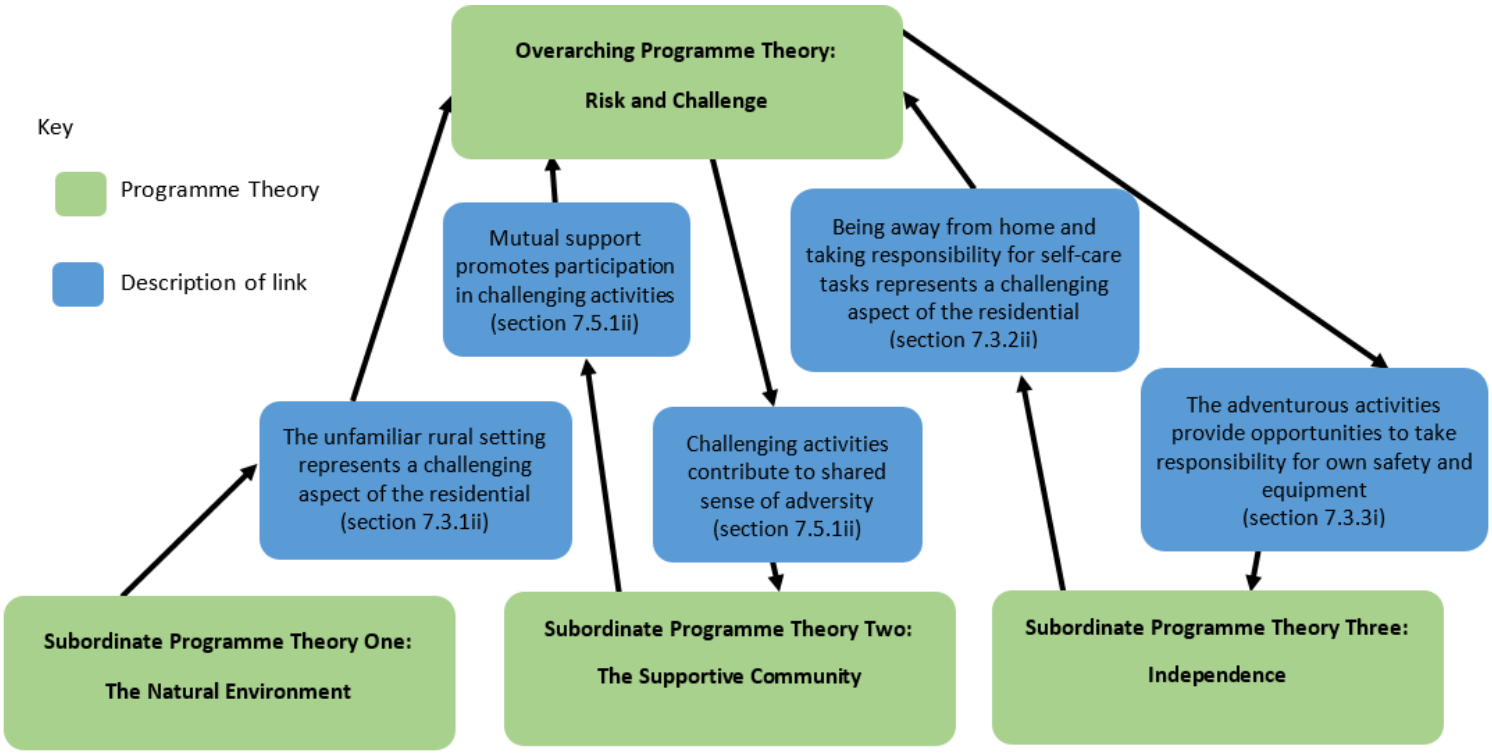


Figure 9. The hierarchical structure of the identified programme theories and the way in which they are connected.

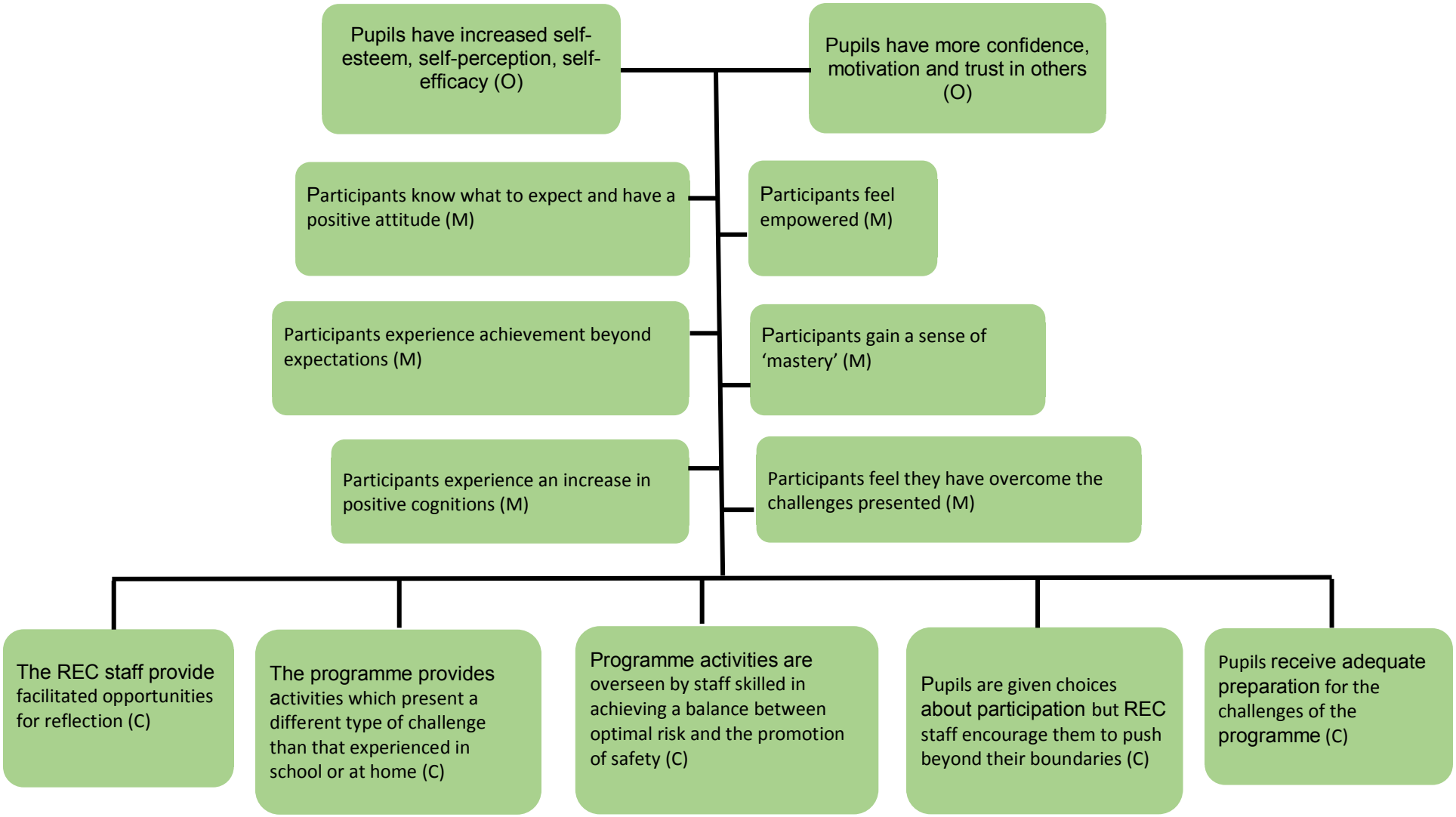


Figure 10. Overarching programme theory: Risk and Challenge.

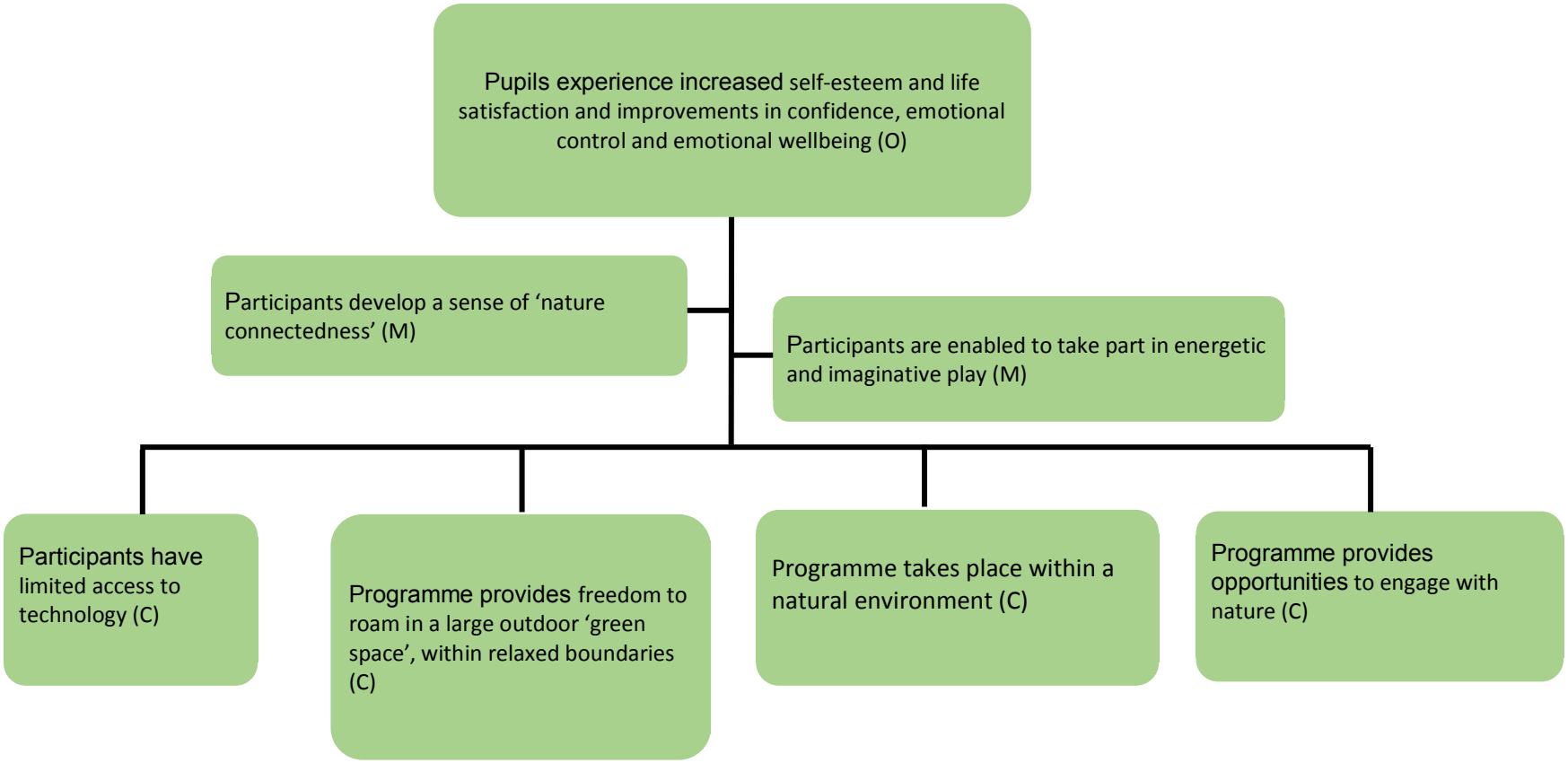


Figure 11. Subordinate programme theory one: The Natural Environment.

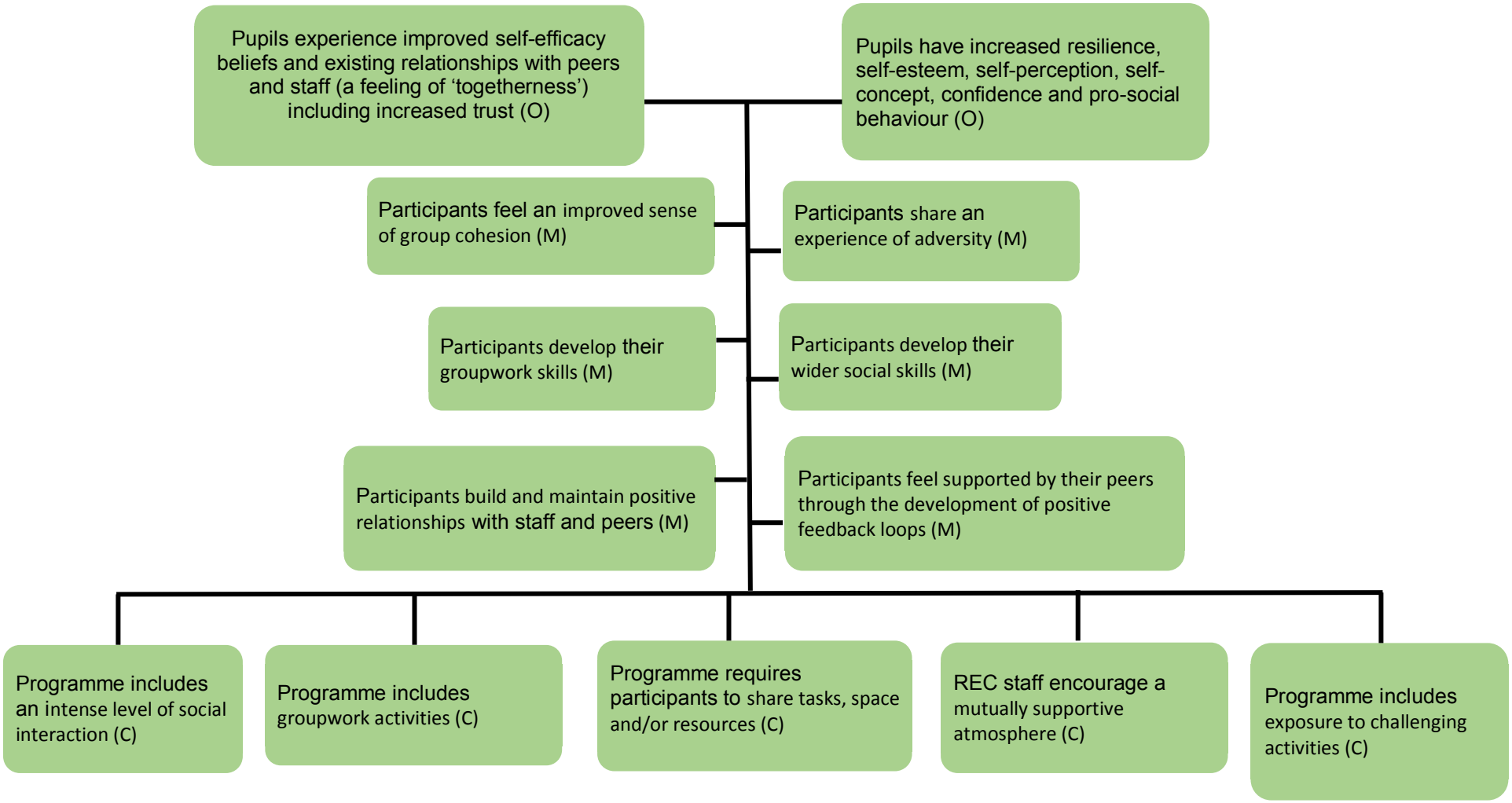


Figure 12. Subordinate programme theory Two: The Supportive Community.

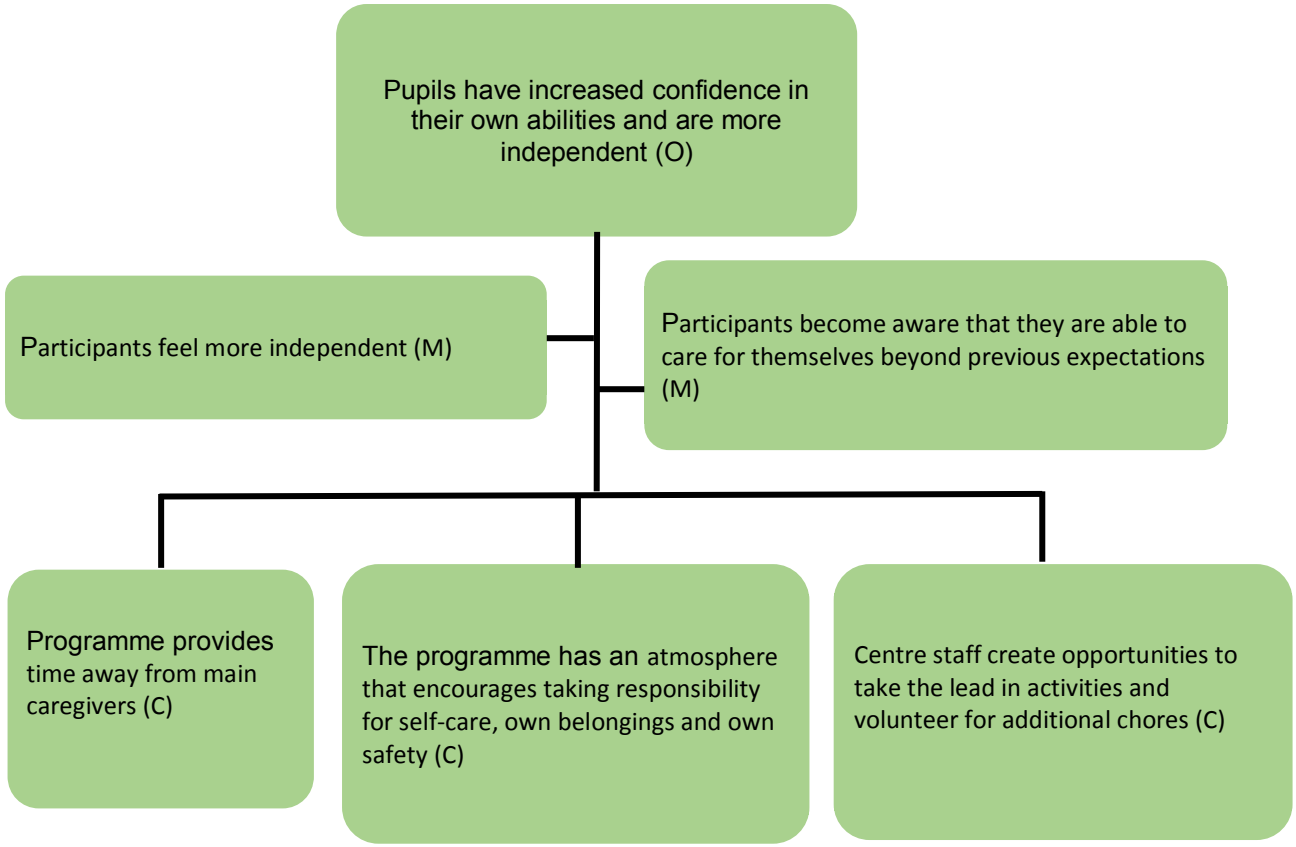


Figure 13. Subordinate programme theory Three: Independence.

Chapter Nine:
Discussion

9.1 Introduction

The main aims of this study were to explore the effect of taking part in an ORE programme on psychological wellbeing for pupils and what mechanisms might be contributing towards any change, through the identification and refinement of the underpinning programme theories. This Chapter discusses the findings of this study in relation to these aims and highlights the implications of these in relation to the work of the educational psychologist and the future planning and practices of the RES and Valleywell LA.

9.2 Changes to psychological wellbeing

Research Question One asked what the effect of taking part in an ORE programme is for pupil psychological wellbeing. As discussed in Chapter Six, no significant difference was found between scores on the SCWBS following the trip to the REC, indicating that the programme had no effect on psychological wellbeing for the pupils in this study. However, findings from the interviews with pupils, school staff and centre staff suggest that the pupils did experience some benefits to aspects of psychological wellbeing, which they attributed to the programme. Indeed, initial scoping of the quantitative data did suggest the possibility of a slight increase in wellbeing scores. One possible explanation for this discrepancy may be the small sample size precluding criteria for significance within a statistical test to be met (known as Type II error) (de Winter, 2013).

Another possibility is that the SCWBS lacks the necessary sensitivity to measure change in psychological wellbeing over the short period of time between administrations within this study (approximately two weeks). One final possibility is that the changes experienced by pupils occurred in a domain of wellbeing not measured by the SCWBS. Indeed, Leather (2013a) argues that research which relies on measurement of a broad construct risks being too simplistic and the results unhelpful. He suggests the use of more targeted methods such as attitude scales to measure change in specific areas of participants' views. Therefore, it may be more helpful to use a range of tools to measure change within a wide range of the

domains which contribute to psychological wellbeing, such as confidence and resilience (see Section 1.2.4).

9.3 Pupil Premium Funding and Psychological Wellbeing

Research Question Two asked whether taking part in an ORE programme has any additional benefit for psychological wellbeing in pupils eligible for PPF. Based on the data from the SCWBS it does not appear that this group experienced any additional boost to their psychological wellbeing and in fact, a visual comparison of mean scores revealed no notable difference following the residential. However, as noted in Chapter Six, the initial scores for overall wellbeing for pupils not eligible for PPF appeared to be lower than the scores of pupils who are eligible and lower than the mean wellbeing score identified by Liddle and Carter (2015) in their development of the measure. This is an interesting finding and raises the question of why overall psychological wellbeing appeared to be lower for these pupils. One possibility is that the interventions provided for the pupils eligible for PPF within school are having a positive effect on levels of psychological wellbeing, resulting in them recording higher baseline scores on the SCWBS than their peers. If this is the case then it could be suggested that there is a need to boost psychological wellbeing for those pupils who do not have access to the interventions funded by PPF and that participation in ORE programmes may be an effective way to do this.

9.4 The identified programme theories

Williams (2013) makes the case that the process underlying ORE programmes, which contributes to improvements in psychological wellbeing is highly complex due to the continuous interaction between individual elements. It is therefore not surprising that the final version of the Programme Theories identified following the RS and refined, based on observations during a residential trip and interviews with key stakeholders, within this study show a degree of complexity in the way that they are connected. Four such programme theories emerged from this process, as shown in Chapter Eight, which are now discussed in turn.

9.4.1 Overarching Programme Theory: Risk and Challenge

Within the literature, emphasis is placed on the benefits to psychological wellbeing that can arise from facing risk and overcoming challenge. Evidence from the

interviews in this study appeared to support this emphasis and led to the identification of links suggesting that aspects of risk and challenge played a role within all of the other identified programme theories (see Chapter Eight). Therefore, this programme theory was promoted to stand as an overarching programme theory.

The literature highlighted a number of Context factors, related to risk and challenge, which are supportive in promoting psychological wellbeing. These included the role of the centre staff in achieving a balance between optimal risk and the promotion of safety and the provision of opportunities for facilitated reflection. These context factors were supported by the testimony of the key stakeholders.

Additional Context factors identified in the literature were subject to revision based on the findings from the stakeholder interviews. The first of these concerned the nature of the activities undertaken during the programme. Both the centre staff and school staff identified a range of activities which may present a challenge to pupils, beyond the adventurous activities which form the basis of the programme. Interviewees identified that pupils respond in different ways to these challenges depending on their existing skills and previous experiences, with novelty increasing the level of challenge. In particular it was suggested that this was especially true for pupils who are less academically able, with the range of challenges providing new opportunities to achieve. It appears that this experience of achievement and the associated recognition and celebration of it then leads to improvements in psychological wellbeing for those pupils. Indeed, a number of studies have explored the benefits of OE and ORE opportunities for pupils whose attainment is lower (e.g. Quibell et al., 2017), but there is a dearth of research concerning the specific impact on psychological wellbeing for these learners. This finding presents an interesting prospect for boosting psychological wellbeing for this group and once again, suggests an interesting direction for future research.

Notes recorded in the research journal highlighted another Context factor related to risk and challenge was that programme participants were able to choose their level of participation, which resulted in a sense of empowerment and therefore contributed to improved psychological wellbeing. However, data from the interviews showed that there was a discrepancy, during the adventurous activities, between encouraging

pupils to push beyond their own boundaries and allowing pupils to choose. Indeed, some pupils suggested that their choices were not always respected, with them feeling forced to take part. It could therefore be argued that the pupils felt disempowered by this approach, raising the question of whether the right balance between choice and encouragement had been struck for this group of children.

The interviews unearthed an additional Context factor that had not previously been considered, regarding the importance of pupils being adequately prepared for the residential experience. This preparation was viewed by centre and school staff as having a mediating effect on the level of challenge experienced by pupils, with better preparation leading to a more positive attitude during the trip. However, there appeared to be disagreement between school and centre staff regarding what constituted 'adequate' preparation. School staff suggested that just giving pupils an idea of what they will be doing during the programme is sufficient, whereas the centre staff felt that a gradual build-up of nights spent away from home would be more helpful. Interestingly, the pupils made no comments relating to the preparation they had received prior to the trip and as the pupil interview took place before the staff interviews, it had not yet been identified as an issue to be discussed. Therefore, it would be interesting to further investigate what pupils see as important when preparing for an ORE programme. Incidentally, Amos and Reiss (2006) identified in their study that very few schools carried out any preparatory teaching prior to a residential experience. This indicates that the implementation of adequate preparation for pupils prior to attending an ORE centre may indeed be an area that is currently lacking.

9.4.2 Subordinate Programme Theory One: The Natural Environment

The setting of the REC within a natural environment was identified as playing a role in improving psychological wellbeing within the literature and throughout this study. The evidence suggests that this, along with the limited access to technology and opportunities to engage with nature supports improvements to psychological wellbeing.

Another key context factor identified within the literature was that the programme provides access to 'green space.' Based on my observations during the residential, it

was apparent that this did not go far enough in describing the freedom to roam provided by the expansive rural setting of the REC. However, the interviews identified that this freedom was not absolute, with boundaries, albeit relaxed, still in place to ensure safety and security.

The RS identified that a natural setting can have the effect of reducing cognitive load, resulting in cognitive restoration and leading to improved psychological wellbeing (e.g. Korpela et al., 2014). However, evidence from the interviews suggests that the rural setting of the REC may actually represent a cognitive challenge. The centre staff pointed out that this may particularly be the case for pupils from more urban areas, or those who are not used to spending time in green spaces. This apparent challenge inherent in the rural setting of the REC provides a clear link to the overarching programme theory as discussed in Section 9.4.1.

9.4.3 Subordinate Programme Theory Two: The Supportive Community

Beames et al. (2011) suggests that the benefits of outdoor learning come about at the conjunction of three key elements; people, place and activity. It is therefore perhaps unsurprising that the programme specifications identified through this study appear to emphasise the importance of the social aspects of the residential experience. The RS identified two TPTs which concerned the 'temporary community' and mutual support and shared the context factor regarding the intense level of social interaction, which comes about through shared space, resources and group work tasks. The interviews revealed that the two shared even more complex links and suggested a cyclical relationship where mutual support is a component of the formation of the 'temporary community' and being a part of this leads to increased mutual support. The two programme theories were therefore amalgamated to form a new programme theory (see Section 7.4.1).

A key context factor identified through the RS and interviews was the atmosphere of mutual support. However, the interviews suggested an additional way in which this atmosphere is created. It appears that through direct instruction and modelling, the centre staff work to promote mutually supportive behaviours, which has a beneficial effect on psychological wellbeing, by encouraging participation and recognising achievement. However, the centre staff also suggested that there are ways in which

the mutually supportive atmosphere can result in a pupil being pushed too far outside of their comfort zone or not being pushed at all, which could therefore be detrimental to psychological wellbeing.

As shown in Chapter Eight, this programme theory links to the overarching programme theory in a number of ways. As discussed in the previous paragraph the mutually supportive atmosphere promotes participation and this includes taking part in the challenging activities offered by the programme. In turn, the range of challenging aspects create a sense of adversity, which is shared by programme participants.

9.4.4 Subordinate Programme Theory Three: Independence

The final programme theory was initially identified based on my observations during the residential and did not appear to have been considered within the literature uncovered by the RS. The key context factors identified within this programme theory were that pupils are away from their main carers in an atmosphere that encourages them to take responsibility for self-care and their own belongings, as well as offering the opportunity to volunteer to carry out chores. The interviews with key stakeholders provided evidence to confirm the importance of these context factors for promoting psychological wellbeing by increasing independence.

Interestingly, interviews with the school and centre staff also highlighted additional details within these context factors that I had noted in the research journal. Firstly, as part of the general responsibilities which pupils are encouraged to take on, they are also given the opportunity to be responsible for their own safety equipment during adventurous activities. Furthermore, the interviews suggested that pupils are given the chance to take on a leadership role throughout the programme, which also contributes to developing independence. Finally, the staff interviews identified the central role played by the centre staff in creating and managing these opportunities.

As noted at the beginning of this section, the role of independence in ORE did not appear to be considered within the literature. This apparent gap in the research would therefore constitute an area benefitting from further exploration.

This programme theory once again has clear links to the overarching programme theory as challenging adventurous activities are a base from which pupils become more independent by taking responsibility for their own safety. Additionally, the variety of challenging aspects within the programme, including being away from home and taking responsibility for self-care are likely to have the effect of promoting independence.

9.4.5 The Role of the Centre Staff

The interviews revealed a number of areas in which the centre staff appear to play an important role in managing the atmosphere and opportunities presented at the REC. For example, the creation of opportunities to take the lead, encouraging recognition of achievement and modelling support. Perhaps surprisingly, the wide range of work undertaken by the centre staff 'behind the scenes' was not apparent in the literature I found regarding OE or ORE. Therefore, this is an area in need of further investigation, to explore the role of the centre staff in promoting psychological wellbeing more fully.

9.5 Limitations of the research and future directions

9.5.1 The Realistic Evaluation Approach

The methodological framework for this study was based on an RE approach, which enabled the exploration of the underlying context and mechanism factors within the programme offered by one REC. However, the RE approach is not a straightforward one, having no prescribed framework. Indeed, whilst planning the research I came across a number of studies based on RE and noted that there was significant variation in the way that RE had been applied. Therefore, although this means that RE could be considered a flexible approach, it is difficult to know whether the research has remained 'true' to Pawson and Tilley's (1997) intended vision of RE.

9.5.2 The Realist Synthesis

The finding of additional CMOCs based on the data from my research journal suggests the possibility that my literature search for the RS was not sufficiently thorough. Alternatively, it may be that there has yet to be any research that explores these areas, although this would seem unlikely. However, Timmins and Miller (2007) argue that a RS should not be considered to yield an all-encompassing picture of the

CMOCs surrounding the topic of study, instead they suggest that the RS provides sufficient framework upon which to build enquiry. Therefore, it would be interesting to carry out further reading, specific to these topics, in order to develop a more in depth understanding of how these programme theories might be at work within the REC.

Another limitation of the RS was that it did not include any procedure to check for inter-rater reliability of the findings. Since I single-handedly identified the Cs, Ms and O's within the literature, there is potential that my own biases may have influenced my interpretation of these.

9.5.3 The SCWBS

As discussed in Chapter One, the concept of psychological wellbeing is thought to encompass a wide range of elements, many of which were highlighted as being affected by ORE and OE, such as self-esteem and self-efficacy (see Chapter Three). However, pupil scores on the SCWBS only saw a small increase following the residential. Therefore, it may be that the SCWBS does not offer the necessary precision to measure these specific aspects of psychological wellbeing. With this in mind, future research in this area should begin with careful consideration of the way in which such measurement is carried out, perhaps including a range of well-established assessments to focus on the individual elements, in order to build a more robust picture of overall psychological wellbeing and any change that may occur.

Although the SCWBS is a validated measure of psychological wellbeing, its utility for measuring change following an intervention has yet to be established (Liddle and Carter, 2015). Consequently, it is possible that the SCWBS lacks the sensitivity required to detect such change, which may explain why only a small, non-significant improvement was found. I would therefore echo Mearns' (2016) suggestion that there is a need for studies to be carried out to explore this.

It is important to note that although this study appears to have found a link between a small increase in pupil psychological wellbeing and taking part in an ORE programme, this does not necessarily mean that there is a causal relationship. Indeed, it is impossible to exclude other potential explanations for the small change

in psychological wellbeing experienced by the pupils. Thomas (2009) argues that this is a common problem within social science research, which can be partially overcome with the use of a control group. Therefore, it may be useful for a control group to be included in any future research.

9.5.4 Critique of the interviews

As discussed in Chapter Seven, staff interviewees were asked to rate each of the CMOCs presented. However, this resulted in them all being rated at either a nine or a ten, making it difficult to unpick which factors were seen as most important. On reflection, it may have been more helpful to use a card sort activity as this would have presented a forced choice for participants and may have resulted in more meaningful ratings.

Presentation of the CMOCs was also a source of discomfort for me during the interviews as it was impossible to know how these could influence the data collected. More specifically, there is the potential that the information presented may have the effect of leading participants' responses and it is also important to consider whether participants would have had the confidence to disagree with the derived theories. Additionally, my decision to alter the language used when presenting the tentative CMOCs to participants may have resulted in the topics discussed being interpreted in a different way than originally defined. Therefore, the questions asked during the interviews may not necessarily have targeted the specific CMOCs derived from the literature. However, I am confident that the data gathered during the interviews was still highly relevant and enabled further refinement of the identified CMOCs.

Finally, a major limitation for the interviews was low participant engagement. As discussed in Chapter Four, only two of the four school staff (both LSPs) took part in the interviews and no parents participated. This potentially resulted in key information being missed from the study and highlights a need to explore ways to boost participation in future research.

9.5.5 The ethnographic element

Gee (2010) highlights the inherent difficulties within research that has an ethonographic element, stating "oral data may have been a narrative crafted

specifically for my benefit, whilst my very presence at [the centre] may have distorted proceedings there" (Gee 2010, p. 178). Therefore, it should be considered that my presence during the residential may have affected the way in which the programme worked.

Although this study included an element of ethnography, through the recording of observation in a field journal, it could be argued that I missed a trick with the possibility to collect data on pupil's wellbeing and experiences, throughout the course of the residential. Indeed, Cooley et al. (2013b) highlights the value of collecting data regarding OE in this way. Therefore, in future research it would be important to consider ways that this could be achieved. However, it is perhaps unfeasible to go to the same lengths as Cooley et al. (2013b) in their employment of a video diary room.

9.6 Implications for the LA and RES

This study found that pupils experienced a small, but not significant increase in psychological wellbeing following their week at an outdoor REC. Furthermore, data gathered from interviews with key stakeholders revealed a high level of enthusiasm for the programme. Although a tentative finding, this has implications for the LA and the RES in terms of the way in which they can promote the benefits for pupils participating in the programme. Additionally, the qualitative data uncovered directions for future research (see Sections 9.4.1-9.4.5), and provided indications for ways in which aspects of the programme could be honed to maximise the benefits for those taking part.

As discussed in previously (e.g. Section 4.6.1), the aim of research based on an RE approach is not to produce a general theory, but to develop a programme specification of 'what works, for whom and in what circumstances' for a particular programme. Consequently, the findings of this research provide a starting point for beginning to understand the underlying mechanisms through which pupils may benefit from taking part in an ORE programme. The Context factors identified within this study could be considered as providing a basis for identifying what makes the programme at this particular REC effective in supporting positive outcomes for pupils.

The findings of this study highlight the importance of pupils being adequately prepared for a REC experience. For example, the interview data indicated that there may be aspects of challenge that some pupils are unable to overcome.

9.7 Implications for educational psychology practice

A key implication of this study is that it contributes to the small evidence base demonstrating the utility of applying the RE approach to explore an education intervention programme (e.g. Birch, 2015, Davies, 2011 and Bozic and Crossland, 2012). Perhaps more importantly, this study demonstrates that this can be achieved using a mixed methods design, whereas previous research appears to have been based on purely qualitative methods. Therefore, this study may present a framework for an alternative approach to RE, which EPs could apply within their practice. Furthermore, the limitations highlighted in Section 9.5 provide suggests for way in which the framework for future research might be improved.

The findings of the current research suggest that despite the local and national focus on supporting pupils who are eligible for PPF, there may be a greater need to boost the psychological wellbeing of those pupils who are not eligible. This has implications for the way in which EPs work with schools, not only to identify those pupils most in need of support, but also to plan appropriate interventions to meet those needs. This study has shown that pupils not eligible for PPF experienced a boost to their psychological wellbeing, which appeared to bring them in line with their peers, following a week-long trip to a REC. This finding suggests that EPs can add ORE programmes to their list of interventions that support wellbeing and can suggest such programmes to school staff.

The finding that the programme can result in the creation of a supportive community, raises the possibility that this could be capitalised on when pupils return to school. Therefore, EPs could encourage school staff to plan ahead for ways in which they could incorporate this, and other aspects of learning that have taken place during the residential, when pupils return to the classroom. Furthermore, EPs may be well placed to support schools to introduce the identified Context factors into their existing systems and ethos.

9.8 Conclusion

Leather (2013a) cautions against a ‘one-size fits all’ approach to designing programmes when attempting to increase pupil self-esteem. This should be kept in mind when looking to apply the findings of this research to more general ORE programmes. However, this is a key consideration within RE research and it is recognised that the programme theories identified here are specific to the pupils, staff and REC featured within this study. The refined programme theories, which were developed in collaboration with the key stakeholders, certainly provide useful ideas about the ways in which pupil psychological wellbeing might be improved by taking part in an ORE programme. Furthermore, the findings identified within this study indicate a number of potential directions for future research.

References

Aldridge, J. M., Fraser, B. J., Fozdar, F., Ala'i, K., Earnest, J. and Afari, E. (2016) 'Students' perceptions of school climate as determinants of wellbeing, resilience and identity', *Improving Schools*, 19(1), pp. 5-26.

Allison, P., Davis-Berman, J. and Berman, D. (2012) 'Changes in latitude, changes in attitude: analysis of the effects of reverse culture shock–A study of students returning from youth expeditions', *Leisure Studies*, 31(4), pp. 487-503.

Amos, R. and Reiss, M. (2006) 'What contribution can residential field courses make to the education of 11-14 year-olds?', *School Science Review*, 88(322), pp. 37-44.

Arip, M.A., Yusooff, F.B., Jusoh, A.J., Salim, S. and Samad, A. (2011) 'The effectiveness of cognitive behavioral therapy (CBT) treatment group on self-concept among adolescents', *International Journal of Human Social Science*, 1(18), pp. 113-122.

Baena-Extremera, A., Granero-Gallegos, A. and del Mar Ortiz-Camacho, M. (2012) 'Quasi-experimental study of the effect of an adventure education programme on classroom satisfaction, physical self-concept and social goals in physical education', *Psychologica Belgica*, 52(4), pp. 369-386.

Beames, S. (2005) 'Expeditions and the social construction of the self', *Australian Journal of Outdoor Education*, 9(1), pp. 14–22.

Beames, S., Atencio, M. and Ross, H. (2009) 'Taking excellence outdoors', *Scottish Educational Review*, 41(2), pp. 32-45.

Beames, S., Higgins, P. and Nicol, R. (2011) *Learning outside the classroom: Theory and guidelines for practice*. London: Routledge.

Beck, A. T. (1976) *Cognitive therapy and the emotional disorders.* New York: International Universities Press.

Beck, A.T., Epstein, N. and Harrison, R. (1983) 'Cognitions, attitudes and personality dimensions in depression', *British Journal of Cognitive Psychotherapy,* 1(1), pp. 1-16.

Beightol, J., Jevertson, J., Carter, S., Gray, S. and Gass, M. (2012) 'Adventure education and resilience enhancement', *Journal of Experiential Education*, *35*(2), pp. 307-325.

Bergsteiner, H., Avery, G. C. and Neumann, R. (2010) 'Kolb's experiential learning model: critique from a modelling perspective', *Studies in Continuing Education*, 32(1), pp. 29-46.

Birch, J.A. (2015) *Using a realistic evaluation approach to explore how alternative education programs support children who are at risk of school exclusion to remain in mainstream education*. Doctoral thesis. University of Birmingham. Available at http://etheses.bham.ac.uk/6293/ (Accessed: 14 November 2015).

Boniface (2000) 'Towards an understanding of flow and other positive experience phenomena within outdoor and adventurous activities', *Journal of Adventure Education and Outdoor Learning*, 1(1), pp. 55-68.

Bowen, D.J., Neill, J.T., Williams, I.R., Mak, A.S., Allen, N.B. and Olsson, C.A. (2016) 'A Profile of Outdoor Adventure Interventions for Young People in Australia', *Journal of Outdoor Recreation*, 8(1), pp. 26-40.

Bozic, N. and Crossland, R. (2012) 'Using Realistic Evaluation to evaluate a pilot local authority common induction programme', *DECP Debate,* 145, pp. 7-12.

Braun, T. and Dierkes, P. (2016) 'Connecting students to nature–how intensity of nature experience and student age influence the success of outdoor education programs', *Environmental Education Research*, pp.1-13.

Braun, V. and Clarke, C. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3, pp. 77–101.

British Educational Research Association (2011) *Revised Ethical Guidelines for Educational Research*. Southwell: BERA.

British Psychological Society (2014) *Code of Human Research Ethics.* Leicester: BPS.

Brooks, J., McCluskey, S., Turley, E. and King, N. (2015) 'The Utility of Template Analysis in Qualitative Psychology Research', *Qualitative Research in Psychology*, 12(2), pp. 202-222.

Burnham, S. (2013) ‘Realists or Pragmatists? “Reliable evidence” and the Role of the Educational Psychologist’, *Educational Psychology in Practice*, 29(1), pp. 19-35.

Centre for the Use of Research and Evidence in Education (2010) *Learning away: a small scale literature review.* London: Paul Hamlyn Foundation.

Chadwick, J. (2016) 'Research in Brief: A Realistic Evaluation of the use of group consultation to deliver educational psychology services', *DECP Debate,* 158, pp. 11-19.

Chalman, C. (2013) 'Are outdoor education programs wrapped in cotton wool? Considering research associated with resilience in outdoor education', *Future faces: Outdoor education research innovations and visions*, pp. 20-23.

Chen, H.T. (2014) *Practical program evaluation: Theory-driven evaluation and the integrated evaluation perspective*. USA: SAGE Publications.

Christie, B. and Higgins, P. (2012) 'Residential outdoor learning experiences and Scotland’s school curriculum: an empirical and philosophical consideration of progress, connection and relevance', *Scottish Educational Review,* 44(2), pp. 45-59.

Cohen, L., Manion, L. and Morrison, K. (2011) *Research Methods in Education.* Oxon: Routledge.

Cooley, S.J., Cumming, J. and Burns, V.E. (2013a) 'Outdoor education increases students' groupwork skills, attitudes and self-efficacy during higher education', *Future faces: Outdoor education research innovations and visions*, pp. 31-35.

Cooley, S.J., Cumming, J., Holland, M.J., Novakovic, E.G. and Burns, V.E. (2013b) 'Evaluating learning experiences using a semi-structured video diary room', *Future faces: Outdoor education research innovations and visions*, pp. 36-40.

Coverdale, G. E. and Long, A. F. (2015) 'Emotional wellbeing and mental health: an exploration into health promotion in young people and families', *Perspectives in Public Health,* 135(1), pp. 27–36.

Craven, R. G. and Marsh, H. W. (2008) 'The centrality of the self-concept construct for psychological wellbeing and unlocking human potential: Implications for child and educational psychologists', *Educational and Child Psychology*, 25(2), pp. 104-118.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.

Davies, O.M. (2011) *Evidence-based practice in nurture groups: using a realistic evaluation framework to explore factors affecting practice and suggest future training directions.* Doctoral thesis, University of Birmingham. Available at http://etheses.bham.ac.uk/3219/ (accessed 30th June 2016).

Davis-Berman, J. and Berman, D. (2002) 'Risk and anxiety in adventure programming', *Journal of Experiential Education*, 25(2), pp. 305–310.

De Castella, K., Goldin, P., Jazaieri, H., Heimberg, R. G., Dweck, C. S. and Gross, J. J. (2015) 'Emotion Beliefs and Cognitive Behavioural Therapy for Social Anxiety Disorder', *Cognitive Behaviour Therapy*, 44(2), pp. 128-141.

De Vries, S., Claßen, T., Eigenheer-Hug, S.M., Korpela, K., Maas, J., Mitchell, R. and Schantz, P. (2011) ‘Contributions of natural environments to physical activity’, in Nilsson, K., Sangster, M., Gallis, C., Hartig, T., De Vries, S., Seeland, K. and Schipperijn, J. (eds) *Forests, trees and human health*. New York: Springer, pp. 205-243.

de Winter, J.C. (2013) 'Using the Student’s t-test with extremely small sample sizes,' *Practical Assessment, Research & Evaluation*, 18(10), pp. 1-12.

Demie, F. and Mclean, C. (2015) 'Tackling disadvantage: what works in narrowing the achievement gap in schools', *Review of Education*, 3(2), pp.138-174.

Dennis, B. (2010) 'Ethical dilemmas in the field: The complex nature of doing education ethnography', *Ethnography & Education*, 5(2), pp. 123–127.

Department for Education (2013) *The national curriculum in England Framework document: December 2014*. London: DfE.

Department for Education (2016) *Mental health and behaviour in schools: Departmental advice for school staff*. London: DfE.

Department for Education and Skills (2006) *Learning outside the classroom manifesto*. Nottingham: Department for Education and Skills Publications.

Dewey, J. (1944) *Democracy in education*. New York: Free Press.

DfE and EFA (2016) *Guidence: Pupil premium 2016 to 2017: conditions of grant.* Available at: https://www.gov.uk/government/publications/pupil-premium-conditions-of-grant-2016-to-2017/pupil-premium-2016-to-2017-conditions-of-grant (Accessed 14th March 2017).

Dillon, J., Morris, M., O'Donnell, L., Reid, A., Rickinson, M. and Scott, W. (2005) *Engaging and Learning with the Outdoors – The Final Report of the Outdoor Classroom in a Rural Context Action Research Projec*t. England: National Foundation for Educational Research.

Dodge, R., Daly, A.P., Huyton, J. and Sanders, L.D. (2012) 'The challenge of defining wellbeing', International journal of wellbeing, 2(3), pp. 222-235.

Donnelly, O. (2013) *Evaluating the impact of an outdoor adventure education intervention for primary school children perceived to be vulnerable*. Doctoral thesis, University of Nottingham. Available at: http://eprints.nottingham.ac.uk/13695/ (accessed 15th April 2016).

Durr, L.I. (2009) 'Optimal challenge: The impact of adventure experiences on subjective well-being', The Journal of Experiential Education, 31(3), p. 451-455.

Dweck, C. S. (1999) *Self-theories: Their role in motivation, personality, and development*. Philadelphia: Psychology Press.

Education and Skills Select Committee Enquiry (2005) *Education outside of the Classroom.* Available at: http://www.publications.parliament.uk/pa/cm200405/cmselect/cmeduski/120/12002.htm.

Falk, J. H., and Dierking, L. D. (2000) *Visitor experiences and the making of meaning*. Walnut Creek: AltaMira Press.

Fereday, J. and Muir-Cochrane, E. (2006) 'Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development', *International journal of qualitative methods*, 5(1), pp. 80-92.

Field, A. (2009) Discovering statistics using SPSS. London: Sage publications.

Fletcher, T. B., Hinkle, J.S. (2002) 'Adventure based counseling: An innovation in counseling', *Journal of Counseling and Development,* 80(3), pp. 277-285.

Fox, P., & Avramidis, E. (2003) 'An evaluation of an outdoor education programme for students with emotional and behavioural difficulties', *Emotional and Behavioural Difficulties*, 8(4), pp. 267–283.

Francis, J.J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M.P. and Grimshaw, J.M. (2010) 'What is an adequate sample size? Operationalising data saturation for theory-based interview studies', *Psychology and Health*, 25(10), pp. 1229-1245.

Frykman, M., Frykman, M., von Thiele Schwarz, U., von Thiele Schwarz, U., Muntlin Athlin, Å., Muntlin Athlin, Å., Hasson, H., Hasson, H., Mazzocato, P. and Mazzocato, P. (2017) 'The work is never ending: uncovering teamwork sustainability using realistic evaluation', *Journal of Health Organization and Management*, 31(1), pp. 64-81.

Fuller, C., Powell, D. and Fox, S. (2016) 'Making gains: the impact of outdoor residential experiences on students' examination grades and self-efficacy', *Educational Review,* 69(2), pp. 232-247 [early online].

Garst, B., Scheider, I. and Baker, D. (2001) 'Outdoor adventure program participation impacts on adolescent self-perception', *Journal of Experiential Education*, *24*(1), pp.41-49.

Gee, N.I. (2010) *An Ethnographic Case Study of a Residential Field Study Centre*. Doctoral thesis, University of East Anglia, Norwich. Available at https://core.ac.uk/download/pdf/2778977.pdf (accessed 29th October 2015).

Ghasemi, A. and Zahediasl, S. (2012) 'Normality tests for statistical analysis: a guide for non-statisticians', *International journal of endocrinology and metabolism*, 10(2), pp. 486-489.

Gillett-Swan, J.K. and Sargeant, J. (2015) ‘Wellbeing as a process of accrual: beyond subjectivity and beyond the moment’, Social Indicators Research, 121(1), pp. 135-148.

Goodman, R. (2001) 'Psychometric properties of the Strengths and Difficulties Questionnaire', *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(11), pp. 1337–1345.

Goodman, R. and Burton, D. (2012) 'What is the nature of the achievement gap, why does it persist and are government goals sufficient to create social justice in the education system?' *Education*, 40(5), pp. 500-514.

Gorard, S. (2016) 'A cautionary note on measuring the pupil premium attainment gap in England’, *British journal of education, society and behavioural science*, 14(2), pp.1-8.

Gorard, S. and See, B.H. (2013) *Overcoming disadvantage in education*. London: Routledge.

Hahn, K. (1957) *Outward bound*. New York: World Books.

Harter, S. (1988) *Manual for the self-perception profile for adolescents*. University of Denver: Colorado.

Hattie, J., Marsh, H.W., Neill, J.T. and Richards, G.E. (1997) 'Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference', *Review of educational research*, 67(1), pp. 43-87.

Howitt, D. and Cramer, D. (2008) Introduction to SPSS in psychology: For version 16 and earlier. Harlow: Pearson Education.

Huebner, E. S. (1994) 'Preliminary development and validation of a multidimensional life satisfaction scale for children', *Psychological assessment*, 6(2), pp. 149-158.

Hughes, B. (2016) *Rethinking psychology: Good science, bad science, pseudoscience*. London: Palgrave Macmillan.

Humberstone, B. and Stan, I. (2009) 'Well-being and outdoor pedagogies in primary schooling: The nexus of well-being and safety', *Australian Journal of Outdoor Education*, 13(2), pp. 24-32.

Humphrey, N and Wigelsworth, M. (2016) ‘Making the case for universal school-based mental health screening’, *Emotional and Behavioural Difficulties,* 21(1), pp. 22-42.

Huppert, F. A. (2009) 'Psychological Well-being: Evidence Regarding its Causes and Consequences', *Applied Psychology: Health and Well-Being,* 1(2), pp. 137-164.

Ivens, J. (2007) 'The Development of a Happiness Measure for Schoolchildren', *Educational Psychology in Practice*, 23(3), pp. 221-239.

Jackson, S. A. and Eklund, R. C. (2004) The flow scales manual. Morgantown, WV: Fitness Information Technology, Inc.

Kaplan, H. B. (1999) 'Toward an understanding of resilience: A critical review of applications and models'. In: Glantz, M. D. and Johnson, J. R. (eds.) *Resilience and development: positive life adaptations.* New York: Plenum. pp. 161-176.

Kaplan, S. (1995) 'The restorative benefits of nature: toward an integrative framework', *Journal of Environmental Psychology*, 15, pp. 169–82.

Kardjono, J. (2013) 'Emotional-control through the outdoor education program', *Future faces: Outdoor education research innovations and visions*, pp. 84-87.

Kelman, H. (1958) ‘Compliance, identification, and internalization: Three processes of attitude change’, *Journal of Conflict Resolution*, 1, pp. 51–60.

Kim, W., Lim, S.K., Chung, E.J. and Woo, J.M. (2009) 'The effect of cognitive behavior therapy-based psychotherapy applied in a forest environment on physiological changes \and remission of major depressive disorder, *Psychiatry investigation*, 6(4), pp. 245-254.

King, N. (2012) 'Doing template analysis'. In Symon, G. and Cassel, C. (eds) *Qualitative organizational research: Core methods and current challenges.* London: Sage, pp. 426-435.

Knight, S. (2009) *Forest Schools & outdoor learning in the early years*. London: Sage.

Kolb, D. (1984) *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.

Korpela, K., Borodulin, K., Neuvonen, M., Paronen, O. and Tyrväinen, L. (2014) 'Analyzing the mediators between nature-based outdoor recreation and emotional well-being', *Journal of Environmental Psychology*, 37, pp. 1-7.

Kuo, F. E. and Taylor, F. A. (2004) 'A potential natural treatment for attention deficit / hyperactivity disorder: evidence from a national study', *American Journal of Public Health*, 94(9), pp. 1580–1586.

Leather, M. (2010) *An exploratory case study of a 'successful' pupil referral unit (PRU)*. Doctoral thesis, University of Exeter. Available at http://hdl.handle.net/10036/97436 (accessed 29th June 2016).

Leather, M. (2013a). 'It's good for their self-esteem': the substance beneath the label', *Journal of Adventure Education & Outdoor Learning*, 13(2), pp.158-179.

Leather, M. (2013b) 'The importance of 'informal talk' in residential outdoor education: It's more than the activities', *Future faces: Outdoor education research innovations and visions*, pp. 88-92.

Lekies, K.S., Yost, G. and Rode, J. (2015) 'Urban youth's experiences of nature: Implications for outdoor adventure recreation', *Journal of Outdoor Recreation and Tourism*, 9, pp. 1-10.

Li, H., Chung, O. and Ho, E. (2012) 'Effectiveness of an adventure-based training programme in promoting the psychological well-being of primary school children', *Journal of health psychology*, 18 (11), pp. 1478-1492.

Liddle, I. and Carter, G. (2015) 'Emotional and psychological wellbeing in children: the development and validation of the Stirling Children's Well-being Scale', *Educational Psychology in Practice*, 31(2), pp. 174-185.

Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., Kelly, P., Smith, J., Raine, L. and Biddle, S. (2016) 'Physical activity for cognitive and mental health in youth: A systematic review of mechanisms', *Pediatrics*, 138(3), pp. 1-13.

MacKenzie, A. and White, R. (1982) 'Fieldwork in Geography and Long Term Memory Structures', *American Educational Research Journal*, 19(4), pp. 623-632.

Mackenzie, S.H., Son, J.S. and Hollenhorst, S. (2014) 'Unifying psychology and experiential education: Toward an integrated understanding of why it works', *Journal of Experiential Education*, 37(1), pp. 75-88.

Marks, N. and Shah, H. (2004) 'A well-being manifesto for a flourishing society', Journal of Public Mental Health, 3(4), pp. 9-15.

Martin, J., Sugarman, J. and Thompson, J. (2003) Psychology and the question of agency. New York: SUNY Press.

Maslow, A. (1970) *Motivation and personality* (2nd ed.). New York: Harper & Row.

Masten, A. S. (2001) 'Ordinary magic: Resilience processes in development', *American Psychologist*, 56(3), pp. 227-238.

McDowell, I. (2009) 'Measures of self-perceived well-being', *Journal of Psychosomatic Research*, 69, pp. 69-79.

Mearns, A.R. (2016) *An exploration of a school-based programme of mindfulness exercises in relation to the social and emotional wellbeing of children.* Doctoral Thesis. University of Exeter. Available at: https://ore.exeter.ac.uk/repository/handle/10871/23627 (accessed 1st October 2015).

Mero-Jaffe, I. (2011) ''Is that what I said?' Interview transcript approval by participants: An aspect of ethics in qualitative research', *International Journal of Qualitative Methods*, 10(3), pp. 231-247.

Mitchell, R., (2013) 'Is physical activity in natural environments better for mental health than physical activity in other environments?', *Social Science & Medicine*, 91, pp. 130-134.

Moore, J. (2005) 'Recognising and Questioning the Epistemological Basis of Educational Psychology Practice', *Educational Psychology in Practice*, 21(2), pp. 103-116.

Morgan, D. (2007) 'Paradigms lost and pragmatism regained. Methodological implications of combining qualitative and quantitative methods', in Plano Clark, V. and Creswell, J. (Eds.), *The mixed methods reader*. Thousand Oaks, CA: Sage, pp. 29–65.

Myers, J. E., Mobley, K. and Booth, C. S. (2003) 'Wellness of counseling students: Practicing what we preach', Counselor Education & Supervision, 42, pp. 264–274.

Neill, J.T. and Dias, K.L. (2001) 'Adventure education and resilience: The double-edged sword', *Journal of Adventure Education & Outdoor Learning*, 1(2), pp. 35-42.

O'Brien, E. A. and Murray, R. (2007) 'Forest School' in England: An evaluation of three case study settings', *Environmental Education*, 84, pp. 8–9.

O'Brien, L. (2009) ‘Learning outdoors: the Forest School approach’, Education 3–13, 37(1), pp. 45-60.

OfSTED (2004) *Outdoor Education: Aspects of Good Practice*. Manchester: HMI.

Ofsted (2012) 'Improving teaching and learning using the outdoor environment: Lavington Park Federation'. Manchester, HMI.

Ofsted (2016) School Report: Forest Hall* Primary School. London: Ofsted.

Onwuegbuzie, A.J. and Leech, N.L. (2005) 'On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies', *International journal of social research methodology*, 8(5), pp. 375-387.

Oppenheim, N.A. (2004) *Questionnaire Design, Interviewing and Attitude Measurement.* London and New York: Continuum.

Pawson, R. (2006) *Evidence-based Policy: A Realist Perspective*. London: SAGE publications.

Pawson, R. (2013) The science of evaluation: a realist manifesto. London: Sage.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: SAGE Publications.

Pawson, R., Greenhalgh, T., Harvey, G. and Walshe, K. (2004) *Realist synthesis: an introduction*. Manchester: ESRC Research Methods Programme, University of Manchester.

Public Health England (2014) *The link between pupil health and wellbeing and attainment: A briefing for head teachers, governors and staff in education settings.* London: PHE.

Public Health England. (2015) *Promoting children and young people's emotional health and wellbeing. A whole school and college approach*. London: PHE.

Quibell, T., Charlton, J. and Law, J. (2017) 'Wilderness Schooling: A controlled trial of the impact of an outdoor education programme on attainment outcomes in primary school pupils', *British Educational Research Journal,* [Early Online].

Rabiee, F. (2004) 'Focus-group interview and data analysis', *Proceedings of the nutrition society,* 63(4), pp. 655-660.

Rabiee, F. (2004) Focus-group interview and data analysis, Proceedings of the nutrition society, 63(4), pp. 655-660.

Ravens-Sieberer, U., Gosch, A., Rajmil, L., Erhart, M., Bruil, J., Duer, W., Auquier, P., Power, M., Abel, T., Czemy, L., Mazur, J., Czimbalmos, A., Tountas, Y., Hagquist, C., Kilroe, J. and European KIDSCREEN Group (2005) 'KIDSCREEN-52 quality-of-life measure for children and adolescents', *Expert Review of Pharmacoeconomics & Outcomes Research*, 5(3), pp. 353-364.

Rea, T. (2006) '"It's not as if we've been teaching them…" reflective thinking in the outdoor classroom', *Journal of Adventure Education and Outdoor Learning*, 6(2), pp. 121-134.

Rickinson, M., Dillon, J., Teamey, K., Morris, M., Young Choi, M., Sanders, D. and Benefield, P. (2004) *A review of research on outdoor learning.* London: Field studies council.

Robson, C. (2011) *Real World Research: A Resource for Users of Social Research Methods in Applied Settings.* Chichester: Wiley.

Ross, H., Nicol, R. and Higgins, P. (2007) 'Outdoor study of nature: teachers' motivations and contexts', *Scottish Educational Review*, 39(2), pp. 160-172.

Ryan, R. M. and Deci, E. L. (2000) 'Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being', *American Psychologist*, 55(1), pp. 68-78.

Ryff, C. D. and Keyes, C. L. (1995) 'The structure of psychological well-being revisited', *Journal of Personality and Social Psychology*, 69, pp. 719–727.

Schenck, J. and Cruickshank, J. (2015) 'Evolving Kolb: Experiential education in the age of neuroscience', *Journal of Experiential Education*, 38(1), pp. 73-95.

Seligman, M. (2011) *Learned Optimism*. New York: Simon & Schuster.

Sheard, M. and Golby, J. (2006) 'The efficacy of an outdoor adventure education curriculum on selected aspects of positive psychological development', *Journal of Experiential Education*, 29(2), pp.187-209.

Shooter, W., Paisley, K. and Sibthorp, J. (2010) 'Trust development in outdoor leadership', *The Journal of Experiential Education*, 33(3), pp. 189-207.

Simpson, P. A. (2007) *Residential outdoor education in Scotland*. Doctoral Thesis. University of Stirling. Available at http://dspace.stir.ac.uk/handle/1893/309#.VurlrvmLTIU (accessed 16 February 2016).

Smith, C.A., Sherman, N.W. and Hall, E.E. (2011) 'Mental Concentration as Influenced 'by Adventure Activity', *Journal of Outdoor Recreation*, *3*(3), pp.151-157.

Smith, E.F., Gidlow, B. and Steel, G., (2012) 'Engaging adolescent participants in academic research: the use of photo-elicitation interviews to evaluate school-based outdoor education programmes', *Qualitative research*, *12*(4), pp.367-387.

Somervell, J. and Lambie, I. (2009) 'Wilderness therapy within an adolescent sexual offender treatment programme: A qualitative study', *Journal of sexual aggression*, 15 (2), pp.161-177.

Straker, J. (2008) ‘Unearthing 'The Outdoors' in Outdoor Education’, *New Zealand Journal of Outdoor Education: Ko Tane Mahuta Pupuke*, 2(4), pp. 103-124.

Taylor, T.L. and Montgomery, P. (2007) 'Can cognitive-behavioral therapy increase self-esteem among depressed adolescents? A systematic review', *Children and Youth Services Review*, 29(7), pp.823-839.

Telford, J. (2010) *Meanings, values, and life course: a study of participants' experiences at a Scottish outdoor education centre*. PhD thesis, University of Edinburgh. Available at https://www.era.lib.ed.ac.uk/handle/1842/5683 (accessed 25th February 2016).

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J. and Stewart-Brown, S. (2007) 'The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation', *Health and Quality of life Outcomes*, 5(63), pp. 1-13.

Thomas, G. (2009) *How To Do Your Research Project: A Guide for Students in Education and Applied Social Sciences.* London: Sage.

Thorburn, M. (2015) 'Theoretical constructs of well-being and their implications for education', *British Educational Research Journal*, 41(4), pp. 650-665.

Timmins, P. and Miller, C. (2007) ‘Making evaluations realistic: the challenge of complexity’, *Support for Learning*, 22(1), pp. 9-16.

UNICEF (2007) ‘Child poverty in perspective: An overview of child well-being in rich countries’, *Innocenti Report Card 7*. Florence: UNICEF Innocenti Research Centre.

UNICEF (2013) ‘Child Well-being in Rich Countries: A comparative overview’, *Innocenti Report Card 11*, Florence: UNICEF Office of Research.

Ussher, M. H., Owen, C. G., Cook, D. G. and Whincup, P. H. (2007) 'The relationship between physical activity, sedentary behaviour and psychological wellbeing among adolescents', *Social psychiatry and psychiatric epidemiology*, 42(10), pp. 851-856.

Waite, S. (2010) 'Losing our way? The downward path for outdoor learning for children aged 2–11 years', *Journal of Adventure Education and Outdoor Learning*, 10(2), pp. 111-126.

Walford, G. (2001) Doing qualitative educational research. London: Continuum.

Weare, K. (2010) 'Mental Health and Social and Emotional Learning: Evidence, Principles, Tensions, Balances', *Advances in School Mental Health Promotion*, 3(1), pp. 5-17.

Webb, H. (2011) *A Realistic Evaluation exploring the implementation of the Social and Emotional Aspects of Learning (SEAL) programme across a whole school context.* Doctoral thesis, University of Birmingham. Available at: http://etheses.bham.ac.uk/3336/ (accessed 7th November 2015).

Wells, N.M. and Evans, G.W. (2003) 'Nearby nature a buffer of life stress among rural children', *Environment and behavior*, 35(3), pp. 311-330.

White, R. (2012) 'A sociocultural investigation of the efficacy of outdoor education to improve learner engagement', *Emotional and Behavioural Difficulties*, 17(1), pp. 13-23.

Whittington, A., Aspelmeier, J.E. and Budbill, N.W. (2016) 'Promoting resiliency in adolescent girls through adventure programming', Journal of Adventure Education and *Outdoor Learning*, 16(1), pp. 2-15.

Williams, R. (2012) *The impact of residential adventure education on primary school pupils.* Ed D thesis. University of Exeter. Available at http://hdl.handle.net/10036/3518 (accessed 25th February 2016).

Williams, R. (2013) 'Woven into the fabric of experience: residential adventure education and complexity', *Journal of Adventure Education and Outdoor Learning*, 13(2), pp. 107-124.

Willner, P. and Lindsay, W.R., (2016) 'Cognitive Behavioral Therapy', in Singh, N. N. (ed) *Handbook of Evidence-Based Practices in Intellectual and Developmental Disabilities.* Springer International Publishing, pp. 283-310.

World Health Organisation (2012) *Developmental Difficulties in early childhood: Prevention, early identification, assessment and intervention in low- and middle-income countries: A review.* Geneva: WHO.

World Health Organisation (2014) *Mental health: A state of well-being*. Geneva: WHO.

Young Minds (2013) *Local Authorities and CAMHS Budgets 2012/2013*. London: Young Minds.

Zhang, J.W., Howell, R.T. and Iyer, R. (2014) 'Engagement with natural beauty moderates the positive relation between connectedness with nature and psychological well-being', *Journal of Environmental Psychology*, *38*, pp. 55-63.

Appendix A

Timetable of Activities

		Monday	Tuesday	Wednesday	Thursday	Friday
8:00am			Breakfast	Breakfast	Breakfast	Breakfast
9:15am			Morning meeting	Morning meeting	Morning meeting	Morning meeting
9:30am	Group 1 Group 2 Group 3 Group 4	Travelling to the centre Arrival Grand Tour	High Ropes 2 High Ropes 1 Canoeing Mine and Nightline	All groups – day hike to the local village	Canoeing Archery High Ropes 2 High Ropes 1	Climbing High Ropes 2 Mine and Nightline Archery
12:15pm		Lunch	Lunch	Lunch	Lunch	Lunch
12:45pm		Free time	Free time	Free time	Free time	Packing
1:30pm	Group 1 Group 2 Group 3 Group 4	High Ropes 1 Mine and Nightline Archery Climbing	Archery Canoeing High Ropes 1 Canoeing	All groups – day hike to the local village	Mine and Nightline Canoeing Climbing High Ropes 2	Return to school
4:00pm		Unpacking	Free time	Free time	Free time	
4:30pm		Making beds	Teacher's time	Teacher's time	Teacher's time	
5:15pm		Dinner	Dinner	Dinner	Dinner	
6:00pm		Free time	Free time	Free time	Free time	
7:00pm		Evening activity	Evening activity	Evening activity	Evening activity	

Appendix B

Participant Information Sheets and Consent Forms

School Logo

UoB Logo

Local Authority Logo

Parent Information Sheet

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

About the researcher:
My name is Angela Keeling and I'm a trainee Educational Psychologist, currently in Year 2 of a three year training course at the University of Birmingham. I am on placement within X *local authority* and have enhanced DBS clearance, enabling me to work with children and young people.

X Primary School has been invited to take part in a research study and I am seeking your permission for your child to take part. This information sheet will help you to understand why the research is being done and what it will involve, to help you decide whether or not you will grant permission for your child to take part. It is important that you take the time to read the following information carefully and discuss it others if you wish. My contact details and the contact details of my university tutor and placement supervisor are provided at the end, so please contact us if there is anything you are unsure about or if you would like more information.

The purpose of the study:
The purpose of this study is to investigate the effect of attending an outdoor residential education centre on children's psychological wellbeing. I am interested in finding out what aspects of outdoor residential education are particularly beneficial for children's psychological wellbeing.

Why has my child been selected?
I am asking the parents of every pupil attending the planned trip to X residential centre for permission for their child to be invited to participate in the research.

Does my child have to take part?
No – involvement in this study is voluntary.
If you do decide to give your permission for your child to take part, they will still be free to withdraw up to four weeks after the final part of the study, without giving a reason. Your child can withdraw from the study by contacting me using the details provided below, or by asking you or a member of school staff to contact me for them. Choosing to withdraw or not take part will not affect you or your child in any way. Your child will

still be able to attend the residential trip even if you do not give permission for them to take part in the study.

What will happen to my child if they take part?
If you give permission for your child to participate, they will also be asked if they would like to take part. On a particular day, around two weeks before the residential trip, your child and several others will be invited to participate in the first part of the study. Their usual class teacher and support staff, along with myself, will be present. The children will be given information about the research and will be asked to fill in a consent form. If they do so, they will be asked to complete a questionnaire.

The questionnaire will ask them about their thoughts and feelings. The answers to the questions will tell us about the pupils' level of psychological wellbeing. After completing the questionnaire, your child will continue with their usual school day. On a particular day during the two weeks after the residential trip, the children will be asked to complete the questionnaire again.

Also following the residential trip, your child will be invited to take part in a small group interview, known as a focus group. If your child would like to take part, they will be given information about what the focus group is about and asked to fill in another consent form. During the focus group they will be asked to look at photos from their trip and to talk about how their experiences during the trip made them feel. The focus group will be recorded using an audio recording device and I will be making written notes.

I will be attending the residential trip as a volunteer and will be keeping a research diary during this time. However, these notes will not include any details about your child or any direct quotes of what they say.

What are the possible benefits of your child taking part?
This study will help develop understanding of ways for schools to support psychological wellbeing in children. By taking part, your child would be contributing towards this understanding. Additionally, your child would have the opportunity to share their views on how the experience of outdoor residential education has effected them.

What are the possible risks of taking part?
There are no physical risks to your child if they take part. There is a very small risk that your child may find the subject of psychological wellbeing

causes distress. However, your child will not have to talk about anything they do not feel comfortable with and will be reminded that they can stop at any time.

What will happen when the research study ends?
The results will be written up into a research report and will be presented during a feedback session to the pupils, staff and parents at school. A summary of the research will also be sent to you via your child's school.

Will your child's participation in this study be kept confidential?
Procedures for handling, processing, storing and destroying data collected will be compliant with the University of Birmingham's research code of practice (accessed here: http://www.birmingham.ac.uk/Documents/university/legal/research.pdf).

All information that is collected about your child during the research will be kept strictly confidential, subject to *local authority* safeguarding procedures. These can be accessed via the *local authority* safeguarding children's board website (accessed here: http://www.Valleywelllscb.org.uk). Your child will not be personally identifiable in the write up of the study. The data will be kept for 10 years after the research is completed.

What will happen to the results of the research study?
The results of the study will be written up as part of my thesis for my Doctorate in Applied Educational and Child Psychology. It is also possible that the results will be published in journal articles. Your child's anonymity will be preserved throughout.

If you or your child decide that they can no longer be involved in the research, their data can be withdrawn up to one month from the date of data collection. You can do this by contacting me, using the contact details below.

What if there is a problem?
If there is a problem with any part of the research, I can be contacted 9am-5pm Mon-Fri, however, I do not expect that any part of the study will cause harm to anyone taking part.

Who has reviewed the study?
This study has been reviewed by the University of Birmingham's Research Ethics Team.

What do I do next?
If you agree to allow your child to take part in the research, please complete the attached 'opt-in' consent form and return to Angela Keeling (via your child's school), in the envelope provided.

How to contact us:

- **Angela Keeling** (Trainee Educational Psychologist, University of Birmingham and *Local Authority* Inclusion Support)
  - [redacted]
  - [redacted]
- **Sue Morris** (Research Supervisor, University of Birmingham)
  - [redacted]
- (Supervising Educational Psychologist, *Local Authority* Inclusion Support)
  - o *@localauthority*.gov.uk

Thank you for reading this.

Research opt-in consent form – A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

***** Please complete and return this slip if you are happy for your child to participate in the research. If you are not happy for them to participate, do nothing. If you would like further information, please use the contact details provided above.

Pupil's name:

_____

Parent's / Carer's name:

_____

Please tick all that apply:

□ **I give consent for my child to complete the wellbeing questionnaire before and after their residential trip.**

□ **I give consent for my child to take part in a focus group after their residential trip.**

Signed:

_____

School Logo

UoB Logo

Local Authority Logo

Participant Information Sheet

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

About the researcher:
My name is Angela Keeling and I'm a trainee Educational Psychologist, currently in Year 2 of a three year training course at the University of Birmingham. I am also currently on placement within X *local authority.*

About the research:
As you know, X Primary School has been invited to take part in a research study and I am seeking parents who would like to be involved. This information sheet will help you to understand why the research is being done and what it will involve, to help you decide whether or not you would like to take part. It is important that you take the time to read the following information carefully and discuss it others if you wish. My contact details and the contact details of my university tutor and placement supervisor are provided at the end, so please contact us if there is anything you are unsure about or if you would like more information.

The purpose of the study:
The purpose of this study is to investigate the effect of attending an outdoor residential education centre on children's psychological wellbeing. I am interested in finding out what aspects of outdoor residential education are particularly beneficial for children's psychological wellbeing.

Focus Group:
I am looking for a group of parents to take part in an activity called a focus group. This is a type of group interview, where you will be asked to talk about your child's wellbeing and their experiences during the residential trip.

If you chose to take part, you will be invited to come into school to have a discussion with a group of other parents. This discussion will be recorded using an electronic audio recorder and I will be taking notes.

You will be able to leave the focus group at any time, without giving a reason. Following the focus group, if you decide you no longer wish to be involved in the research, your data can be withdrawn up to one

month from the date of data collection. You can do this by contacting me, using the contact details below.

What will happen when the research study ends?
The results will be written up into a research report and will be presented during a feedback session to the pupils, staff and parents at school. A summary of the research will also be sent to you via your child's school.

Will your participation in this study be kept confidential?
Procedures for handling, processing, storing and destroying data collected will be compliant with the University of Birmingham's research code of practice (accessed here: http://www.birmingham.ac.uk/Documents/university/legal/research.pdf).

All information that is collected the research will be kept strictly confidential, subject to X *local authority* safeguarding procedures. These can be accessed via the X *local authority* safeguarding children's board website (accessed here: http://www.*local authority*lscb.org.uk). You will not be personally identifiable in the write up of the study. The data will be kept for 10 years after the research is completed.

What will happen to the results of the research study?
The results of the study will be written up as part of my thesis for my Doctorate in Applied Educational and Child Psychology. It is also possible that the results will be published in journal articles. Your anonymity will be preserved throughout.

What if there is a problem?
If there is a problem with any part of the research, I can be contacted 9am-5pm Mon-Fri, however, I do not expect that any part of the study will cause harm to anyone taking part.

Who has reviewed the study?
This study has been reviewed by the University of Birmingham's Research Ethics Team.

What do I do next?
If you would like to take part in the research, please complete the attached 'expression of interest' form and return it to Angela Keeling (via your child's school), in the envelope provided.

How to contact us:

- **Angela Keeling** (Trainee Educational Psychologist, University of Birmingham and *Local Authority* Inclusion Support)
  - [redacted]
  - [redacted]
- **Sue Morris** (Research Supervisor, University of Birmingham)
  - [redacted]
- Supervising Educational Psychologist, *Local Authority* Inclusion Support)
  - o *@localauthority*.gov.uk

Thank you for reading this.

Expression of Interest Form

Research – A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

***** Please complete and return this slip if you are interested in participating in the research. If you would like further information, please use the contact details provided above.

Name:

_____

Telephone number:

_____

Best time to contact:

_____

School Logo

UoB Logo

Local Authority Logo

Participant Information Sheet

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

About the researcher:
My name is Angela Keeling and I'm a trainee Educational Psychologist, currently in Year 2 of a three year training course at the University of Birmingham. I am also currently on placement within X *local authority.*

About the research:
As you know, X Primary School has been invited to take part in a research study and I am seeking school staff who would like to be involved. This information sheet will help you to understand why the research is being done and what it will involve, to help you decide whether or not you would like to take part. It is important that you take the time to read the following information carefully and discuss it others if you wish. My contact details and the contact details of my university tutor and placement supervisor are provided at the end, so please contact us if there is anything you are unsure about or if you would like more information.

The purpose of the study:
The purpose of this study is to investigate the effect of attending an outdoor residential education centre on children's psychological wellbeing. I am interested in finding out what aspects of outdoor residential education are particularly beneficial for children's psychological wellbeing.

Interviews:
I am looking for school staff who attended the residential trip to take part in interviews, where you will be asked to talk about pupil wellbeing your experiences during the residential trip.

If you chose to take part, I will arrange to meet with you at a time and place most convenient to you. The interview will be recorded using an electronic audio recorder and I will be taking notes.

You will be able to leave the interview at any time, without giving a reason. Following the interview, if you decide you no longer wish to be involved in the research, your data can be withdrawn up to one month from the date of data collection. You can do this by contacting me, using the contact details below.

What will happen when the research study ends?
The results will be written up into a research report and will be presented during a feedback session to the pupils, staff and parents at school. A summary of the research will also be sent to you via the school.

Will your participation in this study be kept confidential?
Procedures for handling, processing, storing and destroying data collected will be compliant with the University of Birmingham's research code of practice (accessed here: http://www.birmingham.ac.uk/Documents/university/legal/research.pdf).

All information that is collected the research will be kept strictly confidential, subject to X *local authority* safeguarding procedures. These can be accessed via the X *local authority* safeguarding children's board website (accessed here: http://www.*local authority*lscb.org.uk). You will not be personally identifiable in the write up of the study. The data will be kept for 10 years after the research is completed.

What will happen to the results of the research study?
The results of the study will be written up as part of my thesis for my Doctorate in Applied Educational and Child Psychology. It is also possible that the results will be published in journal articles. Your anonymity will be preserved throughout.

What if there is a problem?
If there is a problem with any part of the research, I can be contacted 9am-5pm Mon-Fri, however, I do not expect that any part of the study will cause harm to anyone taking part.

Who has reviewed the study?
This study has been reviewed by the University of Birmingham's Research Ethics Team.

What do I do next?
If you would like to take part in the research, please complete the attached 'expression of interest' form and return it to Angela Keeling (via the school), in the envelope provided.

How to contact us:

- **Angela Keeling** (Trainee Educational Psychologist, University of Birmingham and *Local Authority* Inclusion Support)

- [redacted]
- [redacted]

- **Sue Morris** (Research Supervisor, University of Birmingham)
  - [redacted]
- (Supervising Educational Psychologist, *Local Authority* Inclusion Support)
  - o *@localauthority*.gov.uk

Thank you for reading this.

Expression of Interest Form

Research – A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

***** Please complete and return this slip if you are interested in participating in the research. If you would like further information, please use the contact details provided above.

Name:

_____

Telephone number:

_____

Best time to contact:

_____

School Logo

UoB Logo

Local Authority Logo

Pupil Information Sheet

Research Project: The impact of Outdoor Residential trips on primary school pupil wellbeing.

About the researcher:
My name is Angela Keeling and I'm training to be an Educational Psychologist at the University of Birmingham. Educational Psychologists are interested in how children and young people think, feel and behave.

I am doing a research project and want to find out about how going on an outdoor residential trip effects wellbeing.

About the research:

The research will help me, your school and the residential centre understand how residential trips effects pupil wellbeing. This is important because it will help us to learn about ways to improve wellbeing for pupils in primary schools.

What will you do?

Questionnaire
I would like you to complete a questionnaire about what you think and how you feel. This will take between 10 and 20 minutes.

This will be done in your classroom and your class teacher and learning support will be there to help.

Your answers will not be shared with any other pupils and you can stop filling in the questionnaire at any time.

You will be asked to fill in this questionnaire twice; once before your residential trip and once after you have returned.

Focus Group
I would also like you to take part in an activity called a focus group. This is like a group interview, where you will be asked to talk about your experiences on the trip.

Your teacher will choose a small group of around 10 pupils, from those who volunteer to take part. If you are chosen, you will come to a quiet room in school with some of your classmates.

I will show you photos from the residential trip and ask you to talk about how you think the trip might have affected your wellbeing. I will be using an audio recorder and taking notes to record what you say.

You will be able to leave the focus group at any time, without giving a reason.

What happens to your information?

Your information will be stored safely and securely. Names or any other personal information will not be included when I write up my research.

If you tell me about something that could harm you or someone else, I will need to tell someone to get help.

If you decide that you do not want your information to be included in my research anymore, you will have one month from the day you took part to tell me. You can do this by sending me an email, making a telephone call to me, or by telling your class teacher (who will tell me for you). My contact details are at the end of this information sheet.

What next?

If you would like to take part in the research, please complete the consent form.

If you have any questions or would like to know more, you can ask me about the project at any time. My contact details are at the end of this information sheet.

You can also ask your teachers about the project.

How to contact me:

I can be contacted on [redacted] or at [redacted]

I am a research student and have two supervisors. You can talk to my supervisors at any time.

One of my supervisors is called ... She is an Educational Psychologist and can be contacted on [redacted] or [redacted]

My other supervisor is called Sue Morris. She is also an Educational Psychologist and can be contacted at [redacted]

Other useful information:

If you are worried about your wellbeing, thoughts or feelings, please speak to your teacher or your parents / carers. Here are some other things you could do:

- Ring Childline on 0800 1111 or visit their website http://www.childline.org.uk
- Visit http://www.youngminds.org.uk

Thank you for reading this.

Consent Form

My name is:

_____

Please circle your answer to each question:

1. I would like to be in the research project	Yes	No
2. I understand I can say I do **not** want to be part of the research at any time	Yes	No
3. I am happy to complete the questionnaire twice	Yes	No
4. I would like to take part in the focus group	Yes	No
5. I understand my information may be used in a report but my name **will not** used	Yes	No
6. If I have a question, I know who to ask	Yes	No
7. I understand that if I report something that could harm myself or others, you will need to tell someone to get help	Yes	No

School Logo

UoB Logo

Local Authority Logo

Consent form

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

This information is being collected as part of a research project concerned with the impact of Outdoor Residential Education on the wellbeing of Primary School Pupils by Angela Keeling, a Trainee Educational Psychologist at the University of Birmingham.

- I confirm that I have read and understand the participant information leaflet for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

- I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

- If I withdraw my data will be removed from the study and will be destroyed.

- I understand that my personal data will be processed for the purposes detailed above, in accordance with the Data Protection Act 1998.

- Based upon the above, I agree to take part in this study.

Name of participant……

Date…… Signature……..

Name of researcher/ individual obtaining consent…….....

Date…… Signature……..

School Logo

UoB Logo

Local Authority Logo

Consent form

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

This information is being collected as part of a research project concerned with the impact of Outdoor Residential Education on the wellbeing of Primary School Pupils by Angela Keeling, a Trainee Educational Psychologist at the University of Birmingham.

- I confirm that I have read and understand the participant information leaflet for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

- I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.

- If I withdraw my data will be removed from the study and will be destroyed.

- I understand that my personal data will be processed for the purposes detailed above, in accordance with the Data Protection Act 1998.

- Based upon the above, I agree to take part in this study.

Name of participant……
……

Date…… Signature……..

Name of researcher/ individual obtaining consent…….....

Date…… Signature……..

School Logo

UoB Logo

Local Authority Logo

Participant Information Sheet

Study Title: A Realistic Evaluation of the impact of Outdoor Residential Education on psychological wellbeing in primary aged pupils.

About the researcher:
My name is Angela Keeling and I'm a trainee Educational Psychologist, currently in my final year of a three year training course at the University of Birmingham. I am also currently on placement within Valleywell Inclusion Support.

About the research:
As you know, [redacted] has been invited to take part in my research study and I am seeking centre staff who would like to be involved. This information sheet will help you to understand why the research is being done and what it will involve, to help you decide whether or not you would like to take part. It is important that you take the time to read the following information carefully and discuss it others if you wish. My contact details and the contact details of my university tutor and placement supervisor are provided at the end, so please contact us if there is anything you are unsure about or if you would like more information.

The purpose of the study:
The purpose of this study is to investigate the effect of attending a trip to an outdoor residential education centre on children's psychological wellbeing. I am interested in finding out what aspects of outdoor residential education are particularly beneficial for children's psychological wellbeing.

Group interview:
I am looking for centre staff to take part in a group interview, where you will be asked to talk about your ideas about pupil wellbeing during a trip to the centre.

If you chose to take part, the group interview will take place on the afternoon of Friday 23rd September 2016. The interview will be recorded using an electronic audio recorder and I will be taking notes.

You will be able to leave the interview at any time, without giving a reason. Following the interview, if you decide you no longer wish to be involved in the research, your data can be withdrawn up to Friday 21st

October (one month from the date of data collection). You can do this by contacting me, using the contact details below.

What will happen when the research study ends?
The results will be written up into a research report and will be presented during a feedback session to the pupils, staff and parents at Forest Hall Primary school. A summary of the research will also be sent to you, via

Will your participation in this study be kept confidential?
Procedures for handling, processing, storing and destroying data collected will be compliant with the University of Birmingham's research code of practice (accessed here: http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf).

All information that is collected during the research will be kept strictly confidential, subject to Valleywell Council safeguarding procedures. These can be accessed via the Valleywell safeguarding children's board website (accessed here: http://www.Valleywelllscb.org.uk). You will not be personally identifiable in the write up of the study. The data will be kept for 10 years after the research is completed.

What will happen to the results of the research study?
The results of the study will be written up as part of my thesis for my Doctorate in Applied Educational and Child Psychology. It is also possible that the results will be published in journal articles. Your anonymity will be preserved throughout.

What if there is a problem?
If there is a problem with any part of the research, I can be contacted 9am-5pm Mon-Fri, however, I do not expect that any part of the study will cause harm to anyone taking part.

Who has reviewed the study?
This study has been reviewed by the University of Birmingham's Humanities and Social Sciences Ethical Review Committee to ensure that the research falls within the standards of the University of Birmingham's code of practice for research.

What do I do next?
If you would like to take part in the research or have any questions, please contact me using the contact details below.

How to contact us:

- **Angela Keeling** (Trainee Educational Psychologist, University of Birmingham and Valleywell Inclusion Support)
  - [redacted]
  - [redacted]
- **Sue Morris** (Research Supervisor, University of Birmingham)
  - [redacted]
- (Supervising Educational Psychologist, Valleywell Inclusion Support)
  - o @Valleywell.gov.uk

Thank you for reading this.

Appendix C

SCWBS: The Stirling Children's Wellbeing Scale
Below are some statements about your feelings and thoughts. Please tick the box that best describes your experience.

Participant number: _____

Statements	Never	Not Much of the time	Some of the time	Quite a lot of the time	All of the time
I think good things will happen in my life					
I have always told the truth					
I've been able to make choices easily					
I can find lots of fun things to do					
I feel that I am good at some things					
I think lots of people care about me					
I like everyone I have met					
I think there are many things I can be proud of					
I've been feeling calm					
I've been in a good mood					
I enjoy what each new day brings					
I've been getting on well with people					
I always share my sweets					
I've been cheerful about things					
I've been feeling relaxed					

Appendix D

A Sample of the Slides Presented During the Pupil Group Interview

Research progress so far

- Found out what people already know about wellbeing and residentials
  - (a review of the literature)
- Wrote a journal about what I saw on the trip

Next steps

- Gathering the views of key stakeholders:
  - Pupils
  - Staff
  - Parents
- Consent form

Ground rules

- Respect each other
- Confidentiality
- Any others?

What I'm trying to find out…

- Your ideas about your wellbeing
- Anything about you that changed on the trip to the Residential Centre
- What you think caused this change to happen

What we're going to do

- Have a look at photos from the Centre
- Talk about any changes linked to the photo
- Talk about why you think these changes happened
- Use a scale to say how important the change was:

1 — 10

Photo two

Photo six

Photo eleven

Photo thirteen

Photo seventeen

Photo twenty three

Photo twenty seven

Appendix E

Pupil Group Interview Schedule

We all went on a trip to [residential] centre last week. And as you know, the reason I was there, was because I wanted to find out how going away on a residential trip effects your wellbeing.

[Display first slide]

So far I've looked into what people have already written about it, so that's what's called a review of the literature. I also wrote some things down about what we did while we were away.

[Display second slide]

Next step is to speak to you guys and I'd like to speak with some parents and teachers on another day. The next thing to do is to have a look at the consent forms.

[Provide previously completed consent forms, give pupils time to read and check them]

Please ask me any questions. If you're happy to take part in the group interview today, please give your form back to me. If not, you can leave at any time.

[Display third slide]

Now, I've got some ground rules for this group. The first one is to respect each other. That means if somebody says something and you don't agree with we let them talk and remember that other people might have different opinions. Another ground rule is about confidentiality. It means we're not sharing anything outside of this room, but if any of you say anything that makes me think that you might be in danger or that somebody else is in danger then I will have to share that with another adult. If that happens, we would have a chat about it after the interview. Can anybody else think

of any other ground rules that we should have while we're in here and I'll write them on a flip chart?

[Display fourth slide]

Now, what am I trying to find out? I'm trying to find out your ideas about wellbeing. I'm trying to find out anything about you that you feel changed from being at [residential] centre and what you think caused that change to happen. Can you tell me what you think wellbeing is? [Use prompts and probes from Table38].

[Record responses on flip chart]

[Display fifth slide]

I'm going to show photos from the centre and I'd like you to tell me about any changes that you think are linked to those photos. We're gonna use a scale, from one to ten so that you can show me how important you think that change was. Now you might not all pick the same place on the scale and that's ok. Does anybody have any questions before we start? If any of you do have a question while we're going through, put your hand up. And remember our ground rules.

[Display each photo in term, using questions, prompts and probes from Table 38]

Table 38. Questions, prompts and probes for the pupil group interview.

Topic area	Question	Prompt	Probe
Wellbeing	What do you think wellbeing is?	What does it feel like? What does it look like? Mind Body Positive Negative	What does that mean? Can you tell me more about that? How do you know?
The Photos	Did [subject of photo] change your wellbeing?	Have you noticed any differences? Did [subject of photo] change how you felt?	In what way? What made that happen? Can you tell me more about that?

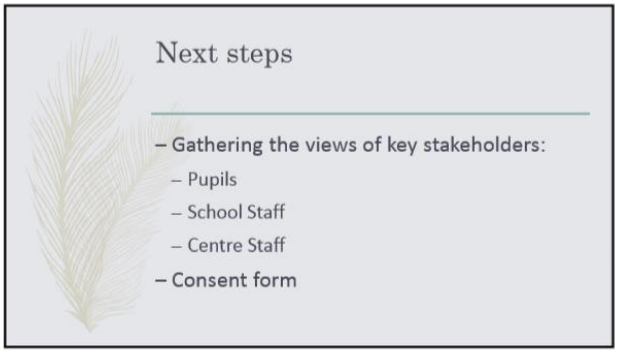
	How important was the change for your wellbeing [using scale]?	Did [subject of photo] change what you thought? Good things Bad things	What does that mean? What does everyone else think about that?

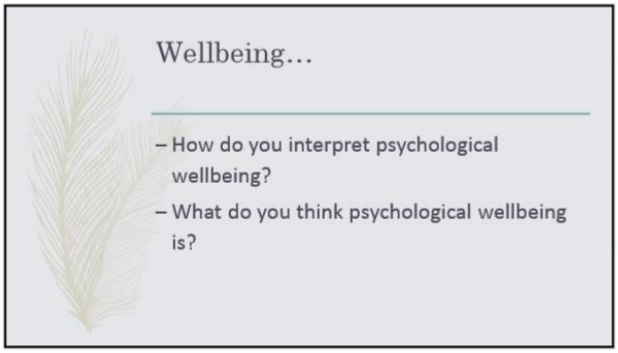
Before we finish, is there anything else that you would like to share about your trip to [residential] centre and your wellbeing?

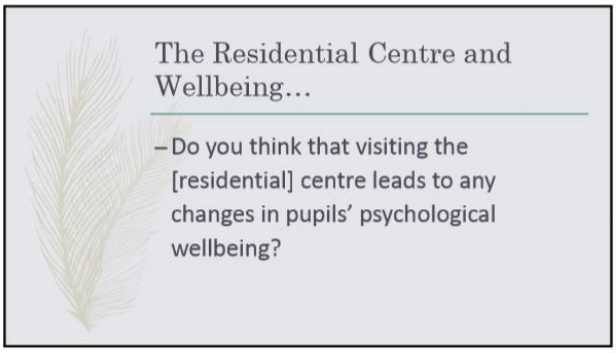
Thank you for taking part!

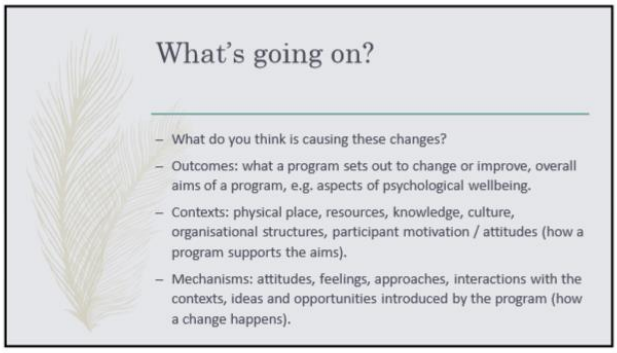
Appendix F

School and Centre Staff Interview Slides









Rural setting

Context	Mechanism	Outcome
Rural environment Away from technology and urban environment Access to large outdoor space to play	Children able to restore cognitive capacity Children notice the beauty in nature Children feel able to play imaginative and energetic games (increased exercise)	Children experience increased self-esteem and life satisfaction

Temporary community

Context	Mechanism	Outcome
Spending 24/7 with peers - Daytime activities - Mealtimes - Shared spaces - Free time Shared adversity	Children develop better / new relationships with peers Children learn to manage conflict and share resources	Children feel part of a 'temporary community' Children gain improved communication and social skills

Independence

Context	Mechanism	Outcome
Time away from carer means taking responsibility for self-care tasks Can choose to take responsibility for general chores	Children feel more independent and realise they are able to care for themselves	Children experience increased confidence and self-esteem

Challenge

Context	Mechanism	Outcome
New activities with an element of risk and challenge Safety is emphasised by staff Children in control of level of participation	Children experience a feeling of achievement (by surpassing their expectations) Children feel empowered to make decisions about their level of participation	Increased resilience (ability to overcome future challenge) Children experience boosted self-esteem

Mutual support

Context	Mechanism	Outcome
Staff encourage an atmosphere of mutual support	Children feel supported by their peers and provide support in return	Children develop positive peer relationships

Anything else?

Are there any other ways you think a trip to the [residential] centre supports psychological wellbeing?

Appendix G

School Staff Interview Schedule

Introduction

Thank you for agreeing to take part in this research. Firstly I just wanted to reassure you that anything you say during our meeting today will remain anonymous. I will not record, store or use your name in any report I write but I will use an ID code instead.

I will be making notes about what you say but I would also like to record the interview so that I do not miss anything that is said. Once I have typed it up, a copy of the transcription will be kept on a secure university server for ten years as per University guidelines. Are you happy for me to record this interview?

I'll be using the views of everyone to help me get a better understanding of how the residential and how outdoor residential education is helpful. I'll also be using the information for my thesis, which is part of my university work. Do you have any questions?

I may want to quote some of the things you say in my research but I will try my best to ensure that you cannot be identified by the quotes I use. If there is anything you say during this interview that you don't want me to record please just let me know.

I am interesting in gaining your views so there is no correct answer. If you have any questions at any point please feel free to ask me. Are you happy to continue?

[Display slide: 'Research progress so far.']

This is where I'm up to so far. I've carried out a review of the literature around outdoor residential education and pupil wellbeing. I kept a field diary when I was on residential here with Forest Hall school and wrote down my reflections and anything I noticed while I was here. I've carried out a group interview with pupils.

[Display slide: 'Next steps.']

The next step is to gather more information from key stakeholders and that's why I'm here to interview you.

[Provide information sheet and consent form and allow time to ask questions]

Please read the information sheet and, if you're happy to take part in the interview today, complete the consent form and pass it back to me. Please ask me any questions.

Background questions

I'd now like to ask a few questions about you.
What's your role within the school?
And what does that involve?
How many times have you been to the [residential] centre?

Wellbeing

[Display slide: 'Wellbeing']
I am doing some research to try and find out about how the [residential] centre effects pupil psychological wellbeing. So I'd like to start by getting your views on what psychological wellbeing is.
What do you interpret psychological wellbeing to mean?
What does it mean to you?
[Write responses on flipchart paper]

[Display slide: 'The residential centre and wellbeing']
Do you think that the visit to [residential] centre has led to any changes in pupils' psychological wellbeing?

Sharing the TPTs

[Display slide: 'What's going on?']

I am going to share with you some ideas about how general ORE opportunities may work to support pupil psychological wellbeing. These are just ideas that may or may not explain how the Centres like [the one we visited] might work.
[Talk through slide content]
Don't worry about the terminology here, this is so that you have an understanding of the types of things I'm looking for.
I would like you to help me understand what a visit to the does to support pupil psychological wellbeing in your opinion and whether you experienced any of the following factors.

[Display each of the TPTs in turn and talk through. Use questions, prompts and probes from Table 39]

Table 39. Questions, prompts and probes for the school staff interviews.

TPT	Question	Prompt	Probe
Rural setting	Do you think that the rural setting at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think the rural setting is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..? What makes it a ..?
	How do you think the rural setting supports pupil wellbeing?	What you've noticed Incidents Experiences Observations	What factors cause the rural setting to be effective? What is it about that rural setting? Can you tell me more about that?

			What do you think is going on?
	Is there anything that would stop the rural setting from being effective from helping wellbeing?		Why do you think that? Can you tell me more about that?
Temporary community	Do you think that the [residential] centre supports the development of a temporary community?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that the temporary community at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think the temporary community is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..? What makes it a ..?
	How do you think the temporary community supports pupil wellbeing?	What you've noticed Incidents Experiences Observations	What factors cause the rural setting to be effective? What is it about that rural setting? Can you tell me more about that? What do you think is going on?

	What contributes to the creation of the temporary community at [residential] centre?	How does it happen? How does it form? Anything else?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from forming?
	Is there anything that would stop the temporary community from being effective from helping wellbeing?		Why do you think that? Can you tell me more about that?
Independence	Do you think that the [residential] centre supports independence?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that independence at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think independence is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	What contributes to independence at [residential] centre?	How does it happen? Anything else?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?

	What factors cause independence to be effective in supporting pupil psychological wellbeing?	What is it about independence that then leads to better wellbeing?	Why? In what way? Can you tell me more about that? Is there anything that you think might cause independence to be ineffective in helping wellbeing?
Challenge	Do you think that the [residential] centre provides opportunities for challenge?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that challenge at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that? In what way?
	How important do you think the temporary community is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	What contributes to the creation of opportunities for challenge at [residential] centre?	What is it that means that challenging activities and challenging situations can happen?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?
	What factors cause challenge to be	What is it about	Why? In what way?

	effective in supporting pupil psychological wellbeing?	challenge that supports wellbeing?	Can you tell me more about that? Is there anything that you think might cause challenge to be ineffective in helping wellbeing?
Mutual support	Do you think that the residential provides opportunities for mutual support?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that mutual support at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that? In what way?
	How important do you think mutual support is, in supporting pupil psychological wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	How does mutual support happen at [residential] centre?	What is it that means that mutual support develops?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?
	What factors allow mutual support to be	What is it about mutual support that	Why? In what way?

	effective in supporting pupil wellbeing?	helps wellbeing?	Can you tell me more about that? Is there anything that you think might cause mutual support to be ineffective in helping wellbeing?

Now it's over to you, because those were the things that I've found out from reading and what you've told me will help me develop those ideas even more. Is there anything that I've missed or anything else that you think might be going on?

Thank you for taking part.

Appendix H

Centre Staff Group Interview Schedule

Introduction:

Thank you for agreeing to take part in this research. Firstly I just wanted to reassure you that anything you say during our meeting today will remain anonymous. I will not record, store or use your name in any report I write but I will use an ID code instead.

I will be making notes about what you say but I would also like to record the interview so that I do not miss anything that is said. Once I have typed it up, a copy of the transcription will be kept on a secure university server for ten years as per University guidelines. Are you happy for me to record this interview?

I'll be using the views of everyone to help me get a better understanding of how the residential and how outdoor residential education is helpful. I'll also be using the information for my thesis, which is part of my university work. Do you have any questions?

I may want to quote some of the things you say in my research but I will try my best to ensure that you cannot be identified by the quotes I use. If there is anything you say during this interview that you don't want me to record please just let me know.

I am interesting in gaining your views so there is no correct answer. If you have any questions at any point please feel free to ask me. Are you happy to continue?

[Display slide: 'Research progress so far.']

This is where I'm up to so far. I've carried out a review of the literature around outdoor residential education and pupil wellbeing. I kept a field diary when I was on residential here with Forest Hall school and wrote down my reflections and anything I noticed while I was here. I've carried out a group interview with pupils and individual interviews with school staff.

[Display slide: 'Next steps.']

The next step is to gather more information from key stakeholders and that's why I'm here to interview you all today.

[Provide information sheet and consent forms and allow time to ask questions]

Please read the information sheet and, if you're happy to take part in the interview today, complete the consent form and pass it back to me. Please ask me any questions.

Background questions

What are your roles within the [redacted]?

How long have you all worked for the centre?

Wellbeing

[Display slide: 'Wellbeing']

I am doing some research to try and find out about how the [residential] centre effects pupil psychological wellbeing. So I'd like to start by getting your views on what psychological wellbeing is.

What do you interpret psychological wellbeing to mean?

What does it mean to you?

[Write responses on flipchart paper]

[Display slide: 'The residential centre and wellbeing']

Do you think that visiting [residential] centre leads to any changes in pupils' psychological wellbeing?

Sharing the TPTs

[Display slide: 'What's going on?']

I am going to share with you some ideas about how general ORE opportunities may work to support pupil psychological wellbeing. These are just ideas that may or may not explain how the Centres like [the one we visited] might work.

[Talk through slide content]

Don’t worry about the terminology here, this is so that you have an understanding of the types of things I’m looking for.

I would like you to help me understand what a visit to the [redacted] does to support pupil psychological wellbeing in your opinion and whether you have noticed any of the following factors.

[Display each of the TPTs in turn and talk through. Use questions, prompts and probes from Table 40]

Table 40. Questions, prompts and probes for the school staff interviews.

TPT	Question	Prompt	Probe
Rural setting	Do you think that the rural setting at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think the rural setting is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it’s a ..? What makes it a ..?
	How do you think the rural setting supports pupil wellbeing?	What you’ve noticed Incidents Experiences Observations	What factors cause the rural setting to be effective? What is it about that rural setting? Can you tell me more about that? What do you think is going on?
	Is there anything that would stop the rural		Why do you think that?

	setting from being effective from helping wellbeing?		Can you tell me more about that?
Temporary community	Do you think that the [residential] centre supports the development of a temporary community?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that the temporary community at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think the temporary community is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..? What makes it a ..?
	How do you think the temporary community supports pupil wellbeing?	What you've noticed Incidents Experiences Observations	What factors cause the rural setting to be effective? What is it about that rural setting? Can you tell me more about that? What do you think is going on?
	What contributes to the creation of the temporary community at [residential] centre?	How does it happen? How does it form? Anything else?	Can you tell me more about that? What do you think is going on?

			Is there anything that might stop it from forming?
	Is there anything that would stop the temporary community from being effective from helping wellbeing?		Why do you think that? Can you tell me more about that?
Independence	Do you think that the [residential] centre supports independence?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that independence at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that?
	How important do you think independence is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	What contributes to independence at [residential] centre?	How does it happen? Anything else?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?
	What factors cause independence to be effective in supporting	What is it about independence that then	Why? In what way? Can you tell me more about that?

	pupil psychological wellbeing?	leads to better wellbeing?	Is there anything that you think might cause independence to be ineffective in helping wellbeing?
Challenge	Do you think that the [residential] centre provides opportunities for challenge?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that challenge at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that? In what way?
	How important do you think the temporary community is in supporting pupil wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	What contributes to the creation of opportunities for challenge at [residential] centre?	What is it that means that challenging activities and challenging situations can happen?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?
	What factors cause challenge to be effective in supporting pupil psychological wellbeing?	What is it about challenge that supports wellbeing?	Why? In what way? Can you tell me more about that? Is there anything that you think might cause

			challenge to be ineffective in helping wellbeing?
Mutual support	Do you think that the residential provides opportunities for mutual support?	What you've noticed Incidents Experiences Observations	In what way?
	Do you think that mutual support at [residential] centre, supports psychological wellbeing?		Why do you think that? What makes you say that? In what way?
	How important do you think mutual support is, in supporting pupil psychological wellbeing?	On a scale of one to ten	Why do you think it's a ..?
	How does mutual support happen at [residential] centre?	What is it that means that mutual support develops?	Can you tell me more about that? What do you think is going on? Is there anything that might stop it from happening?
	What factors allow mutual support to be effective in supporting pupil wellbeing?	What is it about mutual support that helps wellbeing?	Why? In what way? Can you tell me more about that? Is there anything that you think might cause mutual

			support to be ineffective in helping wellbeing?

Now it’s over to you, because those were the things that I’ve found out from reading and what you’ve told me will help me develop those ideas even more. Is there anything that I’ve missed or anything else that you think might be going on?

Thank you for taking part.

Appendix I

Process of Qualitative Data Analysis

Since the purpose of collecting the testimony of key stakeholders within the ORE programme was to use these views to further refine the identified TPTs, I sought a method of data analysis that would enable me to do this. Thematic analysis was identified as appropriate due to its flexible nature and applicability within a range of epistemological bases (Braun and Clarke, 2006). Furthermore, thematic analysis has been utilised within a number of studies which are based on an RE framework (e.g. Birch, 2015, Southall, 2014 and Webb, 2011). Another advantage of thematic analysis is that it enables a hybrid approach to be applied to analysis of the data (e.g. Fereday and Muir-Cochrane, 2006). In this way, data is analysed through the lens of existing theory (a deductive approach), as well as being examined for newly emerging themes (an inductive approach) (Fereday and Muir-Cochrane, 2006). In the current study, this means that the previously identified TPTs were transformed into codes, which were then used as a framework to examine the interview data (see Figure 7.). This use of 'a priori' codes is based on a technique called template analysis and involves the development of a coding template, which is applied to a dataset to enable to refinement and revision of previously identified data (Brooks et al., 2015).

As emphasised by Pawson and Tilley (1997) it is possible that initial theory generation within RE may not be successful in identifying all key CMOCs. Therefore, it was important to examine the interview data for aspects of the programme that may not have been unearthed by the RS. This was achieved by applying an inductive approach to thematic analysis of the interview data, after the initial deductive analysis had been completed. An overview of the hybrid thematic analysis procedure for this study is shown in Table 34.

Programme theory (i) concerning the natural environment

Increase in self-esteem and life satisfaction and improvements in confidence, emotional control and emotional wellbeing (O)

- Programme takes place within a natural environment (C)
- Participants have freedom to roam in a large outdoor 'green space' (C)
    - participants are enabled to take part in energetic and imaginative play (M)
- Reduced cognitive load, limited access to technology (C)
    - pupils experience cognitive restoration (M)
- participants enabled to engage with nature (C)
    - participants develop a sense of 'nature connectedness' (M)

Programme theory (ii) concerning the 'temporary community'

Improvement of self-efficacy beliefs and existing relationships with peers and staff (a feeling of 'togetherness'), as well as an increase in confidence (O)

- Intense level of social interaction (including groupwork activities) (C)
- shared tasks, space and/or resources (C)
    - improved sense of group cohesion (M)
    - shared experience of adversity (M)
    - participants develop groupwork skills (M)
    - participants develop wider social skills (M)

Programme theory (iii) concerning risk and challenge

Improved self-esteem, self-perception, self-efficacy (O)

Increase in confidence, motivation and trust in others (O)

- activities of a challenging nature (C)
- pupils control their level of participation (C)
- overseen by staff skilled in achieving a balance between optimal risk and the promotion of safety (C)
    - participants feel empowered (M)
    - participants gain a sense of 'mastery' (M)
    - participants experience achievement beyond expectations (M)
    - participants feel they have overcome the challenges presented (M)
- facilitated opportunities for reflection (C)
    - participants experience an increase in positive cognitions (M)

Programme theory (iv) concerning mutual support

Increase in resilience, self-esteem, self-perception, self-concept, confidence and pro-social behaviour and improvements in existing relationships with staff and peers, including increased trust (O)

- mutually supportive atmosphere (C)
- exposure to challenging activities (C)
- intense level of social interaction (including groupwork activities and shared tasks, space and/or resources) (C)
    - participants build and maintain positive relationships (M)
    - participants feel supported by their peers through the development of positive feedback loops (M)

Programme theory (v) concerning independence

Increase in participants' confidence in their own abilities and independence (O)

- time away from main caregivers (C)
- atmosphere that encourages taking responsibility for self-care and own belongings (C)
- opportunity to volunteer for additional chores (C)
    - participants feel more independent (M)
    - participants become aware that they are able to care for themselves beyond previous expectations (M)

Figure 7. Template used for deductive thematic analysis.

Table 34. Stages of the hybrid thematic analysis and how they were applied in this study, adapted from Fereday and Muir-Cochrane (2006) and incorporating Braun and Clarke's (2006) 'six stages of thematic analysis' (p. 87).

Step	Application
Developing the template	The template was developed from the TPTs derived from the RS and research journal. See Figure 7.
Familiarisation with the data (Thematic Analysis stage one)	I transcribed each of the interview recordings and read each of the transcripts at least three times, with the template in mind.
Applying the template codes to the data set	Coding of the data was carried out using NVivo 11 software. Each programme element (Cs, Ms or Os) of the template was assigned a code and a corresponding node was created. Transcripts were coded by assigning extracts which confirmed or contested the programme elements to the relevant node.
Generating initial codes (Thematic Analysis stage two)	Previously unidentified aspects, which had the potential to be new programme elements were coded and a corresponding node was created (see Figure 8). Relevant data were collated to each node.
Searching for themes (Thematic Analysis stage three)	The newly identified initial codes were collated to develop potential themes, which could be abstracted to produce new Cs, Ms or Os.
Reviewing themes (Thematic Analysis stage four)	Identified themes were then carefully reviewed both in relation to the coded data and in relation to the transcripts in order ensure they remained a true reflection of the dataset.
Defining and naming themes (Thematic Analysis stage five)	Further refinement was applied to the specifics of each new programme element identified. Clear definitions and names for each programme element were devised.

Use the coded data to find 'how far the research data supported, challenged or modified the identified TPTs.	The coded extracts were organised into a matrix format, next to the corresponding previously identified programme element or newly identified theme (see Table 35 for an exemplar extract of this). Programme elements were considered to be supported if they had been identified and corroborated in at least one transcript. The new themes were examined in relation to the existing template, to explore whether they corroborated or challenged the previously identified TPTs. Adaptations were made to the template based on data which challenged or supplemented the previously identified TPTs.
Present adapted template / producing the report (Thematic Analysis stage six)	Chapter Seven shows the adapted template along with a report of the findings of the analysis.

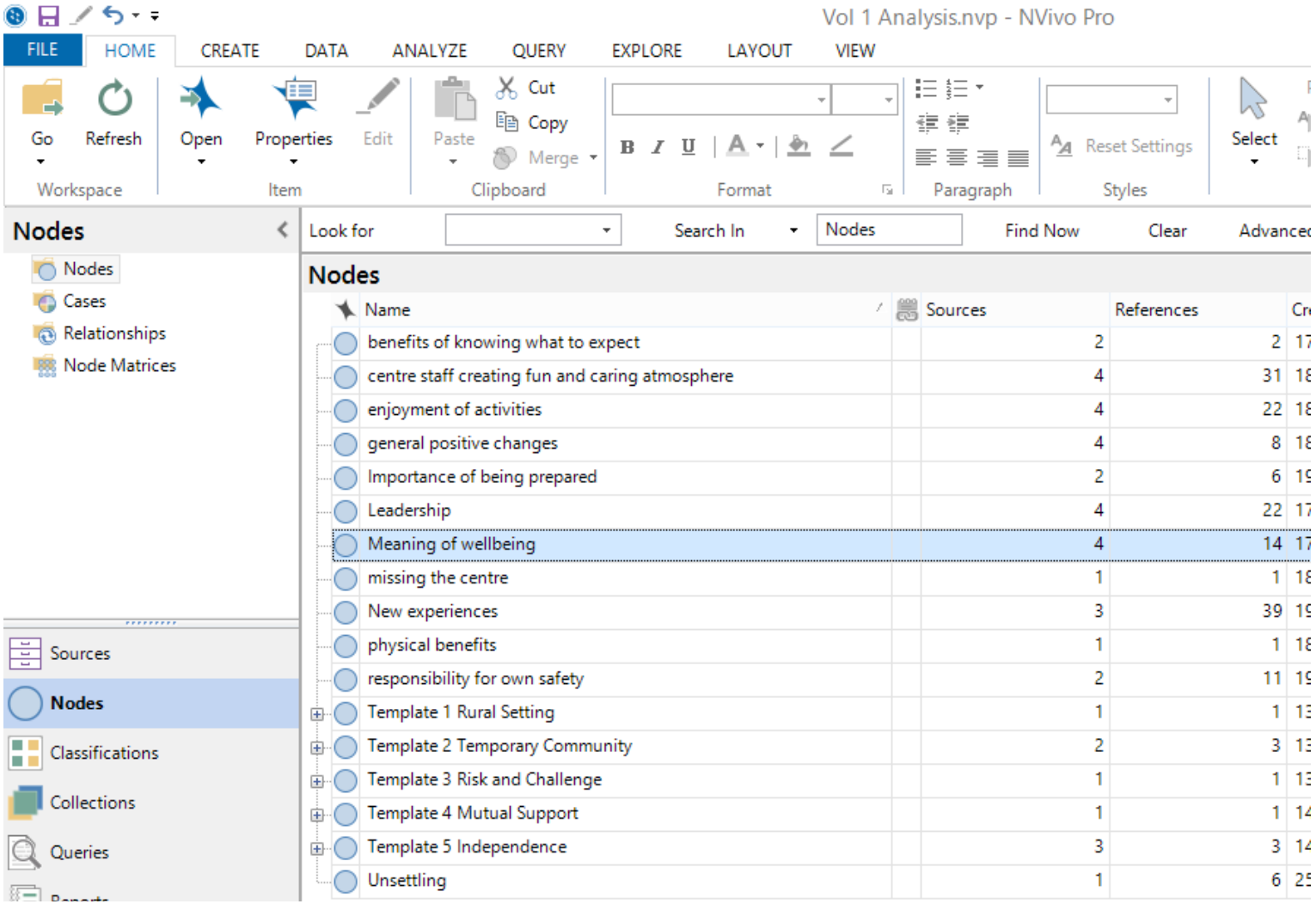


Figure 8. Screenshot from Nvivo showing initial identified codes (nodes) identified during stage two of the Inductive thematic analysis.

Table 35. Extract from coding matrix.

Code	Extract	Source
C1: challenging activities	P2: And they've got to learn to deal with that… P1: Yeah… P2: Gotta learn to deal with not being good at something. P3: Dunno… P1: Yeah, that's a huge one for them. Not being good at stuff. 'Cos, yeah… P2: Some people can't cope with that….	Centre staff
	was just, all this week trying to get the staff to back off, leave the kids to get on with it and actually, we've given them a task, set them on their way, given them a few pointers and then just sit back. And let the children just, struggle, without having to jump in.	
	Because they, it's just too much. You know, there's a lot of green, a lot of cows, a lot of spiders. There's a, you know, there's a lot in there for them to process. And that, it unsettles them. [sharp intake of breath] They run around "oh my god, there's a chicken." You know?	
	Potentially theres a period of them being quite, that being stressful and erm, being negative for their wellbeing…	
	sometimes that's also true that there isn't a person necessarily out there watching them, being with them. Well there isn't, like, the teacher with them, you know, on a, on a play, free play session…	
	I think we probably express an attitude that some of them haven't even come across before. You know, I'd imagine that some of them feel like they come from families where they just think the outside is dirty and they don't go outside that much and the ideas expressed by their parents and their teachers are probably along the lines of "oh don't go out there, you'll get muddy" and we suddenly say "well it's fine to get muddy." For them to suddenly accept something that they've not heard for most of their lives, that's quite tricky for them.	
	I think actually, there should be a planned programme from the schools and having those children away from home for one night or an overnight in school and then maybe an overnight at a centre, and then maybe a two day residential, then a five day residential.	

	it's the first experience of a away from home, is a five day residential. For a year three, four, god, that's huge. It's massive for them.	
	P3: They can relate it back to, to, you know, the teachers; "do you remember when I was scared on that climb? But I went to the top. Sure you're now doing…" P1: Absolutely… P3: Relate it back to "this maths you're now struggling with, but I kept going and…"	
	One of the hardest things is stopping teacher from teaching [laughs]. And say actually "this is not about teaching, this is about facilitating and if that involves them failing and struggling then, you know, we actually have to let them." Hard as it might be and you can see it and you know it's a couple of little steps that you just need to intervene and help and you could have it done in a second, but actually the bigger picture is, how is that really help?	
	I'd rather see them fail and reflect and then try again. And that's really hard for kids as well	
	Yeah, "can't do it", "well you're not trying hard enough then."	
	the first thing they do is they get a task to do something for themselves that they don't do at home, you know?	
	P1: Yeah! We capitalise on that don't we? [laughs] P2: Yeah. Anything can be. "Ah yeah, let's make our beds!" P1: "Yeah, let's do the washing up!" P2: Yeah… P1: "Let's do the setting up of dinner." And they think, you know, they, most of us would likely sit there and go "Oh, do I have to?" But actually, they get really quite [indistinct] about it. Capitalise on that, that's really good.	
	will, want to put the jeopardy in there, I actually want to increase that level of jeopardy and, so that they feel that there's actual real consequences and then the decisions they make will be led by that.	
	you want that level of stretch	

	You don't want them to feel like this is a walk in the park…	
	I'm really clear, is that, I don't get paid by the number of people that get to the top of the high ropes, so frankly I don't care. You know? Well, all I care about is that they've given it a go…	
	P1: I don't care whether they get to the top. In fact, it's quicker and easier if they don't. You know, so they've made the choice… P2: Yeah, the child's made the choice. They choose what they want their challenge to be and they try and beat it…	
	I'll be thinking to that staff member "just shut up, because that child might be at that limit already", I'm sort of feeling that they are and I'd prefer them, if they made their decision at that point to go, "I'm coming down now." And they came down, because actually the, they've made that decision. In fact, I've had children who've really never left the ground on a high ropes session and I've had to say to staff, "really happy with that, they've shown me that they can make a decision." If they change, they change, we'll put them up there.	
	Well, it's just pushing them into that, like, that level of uncomfort. Because, I mean, we can, we all learn. Learning, is, it is, is, will happen anyway. It's just that we have such a short amount of time that we use risk to accelerate that learning. So, we push them into that, the stretch zone, yeah, the uncomfort zone and erm. Out of their comfort zone, into the stretch zone so they're open to more learning, more quickly.	
	you can do it in a five day residential by having risk as the acceleratant, you know, the accelerant factor.	
	I think it proves to them that they can. Yeah, even if, like you said, that "I don't wanna go on that, full stop, I'll go two rungs up a ladder." Their initial outset was, "no I can't." And at the end of it, their outlook of it "well actually I can."	
	If they're doing the same activity basically, for each child, so you've got to manage it, so that they get the most from it, without being pushed too far, or not enough, if that makes sense.	
	It's almost an art form, to know when that person is actually done, or when it's, whether we can maybe push a touch more…	
	I think, the way you run activities, like, with, if you take climbing stuff for instance. We, although we, we are managing it from the out, from, you know. From, from their side of things it looks like, well they are doing the belaying and managing the ropes and stuff when we're not around, so.	
	I think it comes under the independence things as well, it's that, well, I refused to touch any of the harnesses that I had on the climbing wall session the other day. I said "I'm not going to help you take any	

	of them off, you've got to hand them back and neither will any of the staff here. You've gotta do it. So if you've, you need some help, you've got to ask for it." And they're really terrible at asking for help. Erm, well this group was anyway, but I forced the situation, to make them ask each other for help and that sets up the precedent that they can so that it becomes easier to offer help and offer and ask for help. And that's part of that mutual support. And I forced the situation, as they had to, they couldn't struggle and do it on their own. They had to ask for help to get it done, cause not, no adult was gonna help them in that room.	
	Having the resources to do the challenges.	LSP 1
	Being able to take that challenge and having the opportunity to make new experiences and yeah. I mean, even the canoeing that they did. That was a good challenge for some because I know a lot of those children can't swim. So for them to get in the canoe is a big challenge. Yeah. And of course, having the equipment to make that challenge. That.	
	More risk than what they get in school, what they get at home probably	LSP 2
	some of them were like; "I don't wanna climb that", the tall one. They were scared of the high ropes. "I can't get there." And they were holding on, so they were so much far from the ground, but they were holding on "I can't do it, I can't do it" but because the other children were saying "we can do it, we've done it, so you can do it." And then something must have clicked inside her, saying "ah, the risk is there, I can go." And she went to the top	
	Instead of stopping at the bottom and then they go "yes I've done it!" And they'll wanna go again	
	they're challenging themselves more, instead of holding back and thinking "well, I don't like this activity, I'm not gonna do it."	
	instead of like, some children will go "ah, I haven't done very well here" and they've seen other children to succeed. But then, when they've done it again, they've succeeded to climb, like the big ropes, or erm, going under the tunnel.	
	I think it was the other children as well. Because at the start, one child said "oh, I can't do that, it's too dark" but they have their torches. But because they were going "oh, this is fun" and one child came out the other end, but then she went back in, but came out the end he was at, he says "come on, follow me, I'll help you through." So she, she helped him through. So, yeah, I think it does, that challenge.	
	I think, like, every day they're still challenging themselves aren't they? Like at X centre, the whole week, every activity and even, like, making the beds, working, you know, in groups, they're still challenging themselves in different ways	

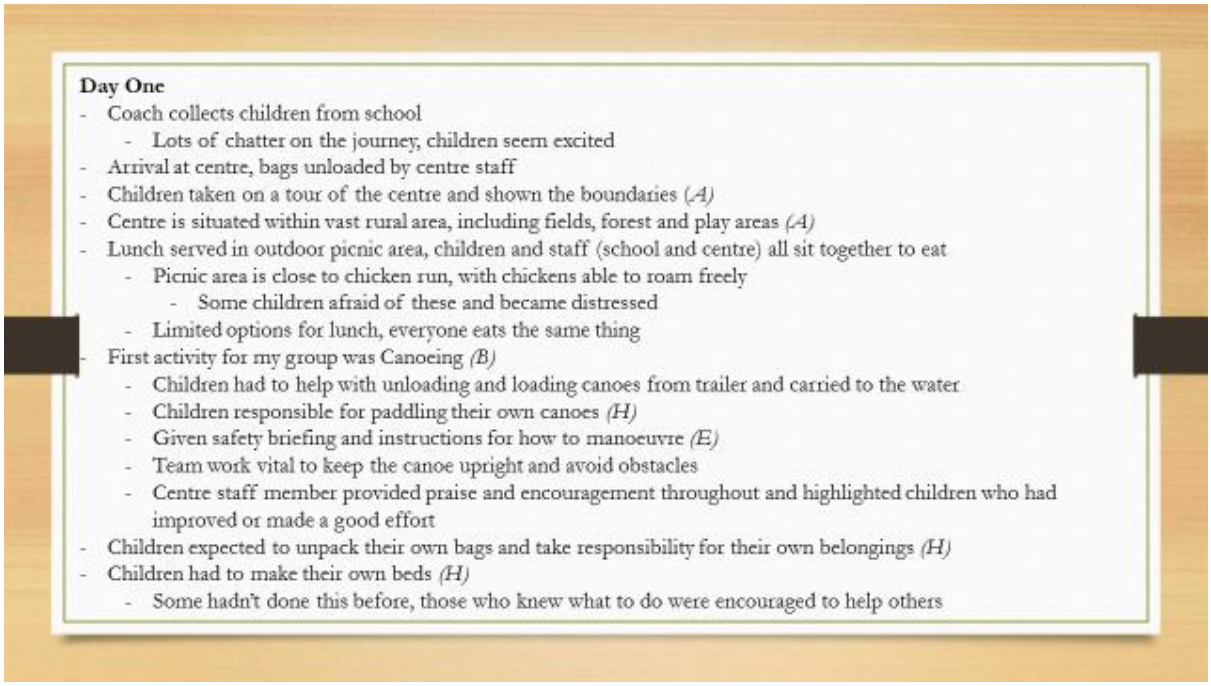
	one of the staff who was on really chatted to him; “why won’t you go up?” You know, gave him so much confidence, that he, erm, and he said “just go up halfway.” And he did it. So, the staff there are brilliant.	
	E: It’s like oh my…	pupils
	C: It was kind of stressful because you couldn’t just stamp any one of anything. Because there was a code on there. A code…	
	A: And it wasn’t fair because I thought someone was standing on it and it was [centre staff member]! How am I supposed to lift that up?	
C2: pupils in control	I’m really clear, is that, I don’t get paid by the number of people that get to the top of the high ropes, so frankly I don’t care. You know? Well, all I care about is that they’ve given it a go…	centre
	P1: I don’t care whether they get to the top. In fact, it’s quicker and easier if they don’t. You know, so they’ve made the choice… P2: Yeah, the child’s made the choice. They choose what they want their challenge to be and they try and beat it…	
	This is difficult with staff sometimes, with teaching staff, because they’re like “get to the top, get to the top!” I’m like “oh no, please don’t.” Cause they’ll get to the top, yeah and then they’ll be stuck because they’ve gone past they’re safety cut off zone. Then they’ll just be gripped and holding the top of the wall, or they’ll be holding the top of the high ropes and I’ll be having to talk them down for the next twenty minutes.	
	I’ll be thinking to that staff member “just shut up, because that child might be at that limit already”, I’m sort of feeling that they are and I’d prefer them, if they made their decision at that point to go, “I’m coming down now.” And they came down, because actually the, they’ve made that decision. In fact, I’ve had children who’ve really never left the ground on a high ropes session and I’ve had to say to staff, “really happy with that, they’ve shown me that they can make a decision.” If they change, they change, we’ll put them up there.	
	P2: she, put a harness on, there’s like, there’s, she’s done something, she’s put a harness on. Get tied in… P1: Yeah… P2: Go up one rung of the ladder and come back down again. Ok, at least she’s got tied in and gone up a rung of the ladder. That for her is an achievement, rather than just cutting it off. Yeah, exactly…	

	P1: That's probably pushed the boundaries far enough haven't they?	
	I think it proves to them that they can. Yeah, even if, like you said, that "I don't wanna go on that, full stop, I'll go two rungs up a ladder." Their initial outset was, "no I can't." And at the end of it, their outlook of it "well actually I can."	
	It's almost an art form, to know when that person is actually done, or when it's, whether we can maybe push a touch more…	
	And also, if they didn't wanna do it. Saying, well that's fine, that's ok. You know, "it's your choice", "you've, you know, you've come this far, if you don't want to carry on then." Yeah. Allowing them to do not at all.	LSP 1
	they don't do it so that they're like putting pressure on them, you know? They know how far to take it, before somebody gets upset and yeah	
	And then you see them take one more step or if they don't want to take one more step	
	giving the opportunity to be a leader	
	some of them were like; "I don't wanna climb that", the tall one. They were scared of the high ropes. "I can't get there." And they were holding on, so they were so much far from the ground, but they were holding on "I can't do it, I can't do it" but because the other children were saying "we can do it, we've done it, so you can do it." And then something must have clicked inside her, saying "ah, the risk is there, I can go." And she went to the top	LSP 2
	Well, like in schools, in forest, I don't let them climb trees because I've been told I can't let them climb trees, due to risk. But, like, if they were at X centre, I know, some were climbing trees and like, in the hide and seek. So, they climbed trees, thinking "I can go so far, I'm just gonna go for it." But in, like, the parks and that lot, they're probably not allowed to because their parents so no.	
	they're challenging themselves more, instead of holding back and thinking "well, I don't like this activity, I'm not gonna do it."	
	I think it was the other children as well. Because at the start, one child said "oh, I can't do that, it's too dark" but they have their torches. But because they were going "oh, this is fun" and one child came out the other end, but then she went back in, but came out the end he was at, he says "come on, follow me, I'll help you through." So she, she helped him through. So, yeah, I think it does, that challenge.	
	one of the staff who was on really chatted to him; "why won't you go up?" You know, gave him so much confidence, that he, erm, and he said "just go up halfway." And he did it. So, the staff there are brilliant.	
	B: I couldn't do that, high ropes. Too scary…	pupils

	A: Seeing as I got stuck in all those wooden things, I…I just, I just wanted to get down but I couldn't because I needed to get untangled and it was just really scary.	
	B: I got half way and then I though no, I'm not doing it.	
	A: I was thinking about stopping there but I though, no…	
	D: First, I was like, I won't go on it. Then they strapped me up, then Miss [member of school staff] made me go up. Then, and then I said, I went up to her and said I wanted to get down and they wouldn't let me down till I got to the top. And then I had to go to the top…	
	B: It was scary 'cause they make you go in…	
C3: staff skilled at balancing risk and safety	I will, want to put the jeopardy in there, I actually want to increase that level of jeopardy and, so that they feel that there's actual real consequences and then the decisions they make will be led by that.	Centre staff
	Because I don't actually, actively encourage the ability to say, you know, you can get hurt, this is not safe. But most of it is apparent risk, rather than objective risk…	
	So, I don't emphasise the safety.	
	I'm there going to a child "ah, well you know if you fall off here you could really hurt yourself." But the staff member want to hear that, actually, the limit is, the chance is you'll fall off your bunkbed, more than you'll fall off the climbing wall.	
	I would say, I don't think that safety is emphasised.	
	I don't go to maximum lengths. I explain the safety systems that are in place and why they're there, but erm, you've got, you know? It's "why have we got these ropes? Because we could fall. And they're, they're here to try to stop us from falling." But I don't, I think it's wrong to stand in front of them and say "you're perfectly safe…"	
	we create a level of risk deliberately, for the purposes of what we do. I think that we control the levels of risk so that they're there, but and they're very well and very safely controlled.	
	They are safe, you know? That climbing wall is ridiculously safe. However, we don't want them necessarily to know the actual reality of the safeness of it because actually that takes away from the challenge element and the risk. There has to be the element of failure. There has to be the element of jeopardy, of, of you know, real hurt, to actually create that feeling that they're achieving something	

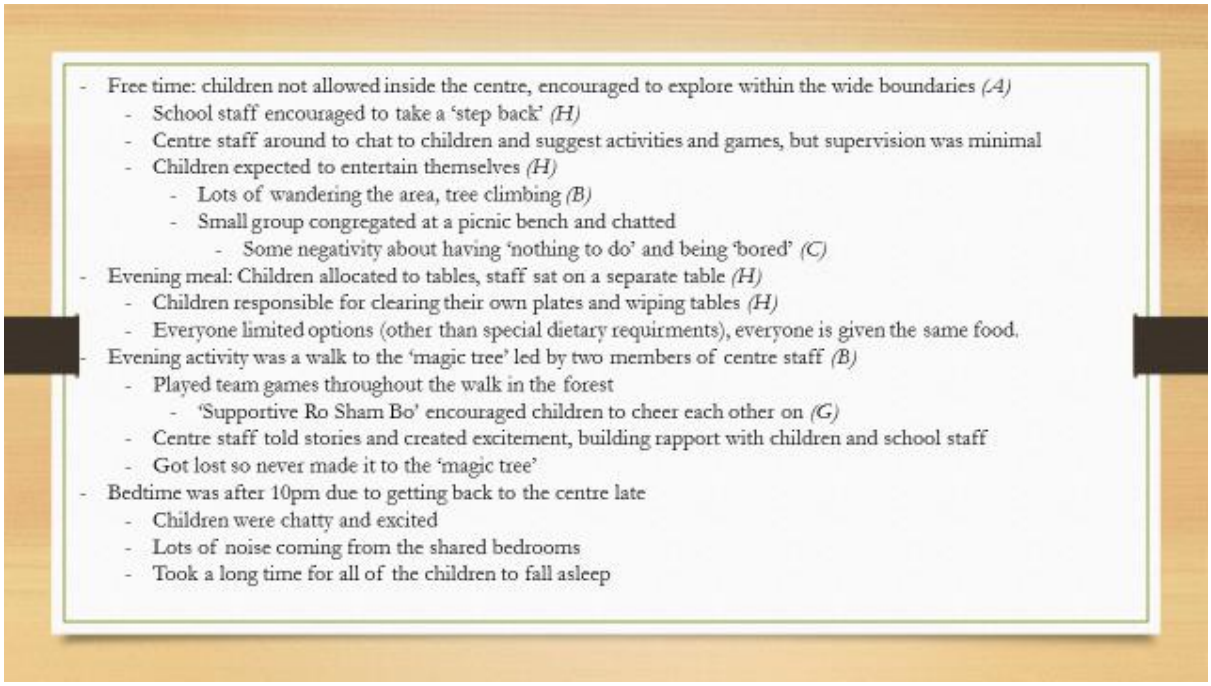
Appendix J

Research Journal



Day One

- Coach collects children from school
  - Lots of chatter on the journey, children seem excited
- Arrival at centre, bags unloaded by centre staff
- Children taken on a tour of the centre and shown the boundaries *(A)*
- Centre is situated within vast rural area, including fields, forest and play areas *(A)*
- Lunch served in outdoor picnic area, children and staff (school and centre) all sit together to eat
  - Picnic area is close to chicken run, with chickens able to roam freely
    - Some children afraid of these and became distressed
  - Limited options for lunch, everyone eats the same thing
- First activity for my group was Canoeing *(B)*
  - Children had to help with unloading and loading canoes from trailer and carried to the water
  - Children responsible for paddling their own canoes *(H)*
  - Given safety briefing and instructions for how to manoeuvre *(E)*
  - Team work vital to keep the canoe upright and avoid obstacles
  - Centre staff member provided praise and encouragement throughout and highlighted children who had improved or made a good effort
- Children expected to unpack their own bags and take responsibility for their own belongings *(H)*
- Children had to make their own beds *(H)*
  - Some hadn't done this before, those who knew what to do were encouraged to help others



- Free time: children not allowed inside the centre, encouraged to explore within the wide boundaries *(A)*
  - School staff encouraged to take a 'step back' *(H)*
  - Centre staff around to chat to children and suggest activities and games, but supervision was minimal
  - Children expected to entertain themselves *(H)*
    - Lots of wandering the area, tree climbing *(B)*
    - Small group congregated at a picnic bench and chatted
      - Some negativity about having 'nothing to do' and being 'bored' *(C)*
- Evening meal: Children allocated to tables, staff sat on a separate table *(H)*
  - Children responsible for clearing their own plates and wiping tables *(H)*
  - Everyone limited options (other than special dietary requirments), everyone is given the same food.
- Evening activity was a walk to the 'magic tree' led by two members of centre staff *(B)*
  - Played team games throughout the walk in the forest
    - 'Supportive Ro Sham Bo' encouraged children to cheer each other on *(G)*
  - Centre staff told stories and created excitement, building rapport with children and school staff
  - Got lost so never made it to the 'magic tree'
- Bedtime was after 10pm due to getting back to the centre late
  - Children were chatty and excited
  - Lots of noise coming from the shared bedrooms
  - Took a long time for all of the children to fall asleep

Day Two

- Children woken by school staff, but had to get themselves up, washed, dressed and ready for breakfast *(H)*
  - Atmosphere appeared subdued and many of the children complained of not sleeping well because of others chatting and making noise *(C)*
  - Some children talking negatively about being at the centre and wanting to go home *(C)*.
  - Had to set own tables and clean up after themselves *(H)*
- Daily meeting for school staff and centre staff
  - Check in about about how children have been getting on
    - School staff highlighted any that were struggling and noted to keep an eye on them
- Daily meeting with children
  - Centre staff shared planned activities for the day
- Morning activity: Archery
  - Centre staff member begins session with an emphasis on aspects of safety (safe areas, how to handle the equipment) *(E)*
  - Children take turns to have a go, so lots of waiting around
    - Lots of moaning about being bored *(C)*
    - Children appeared tired
  - Staff member provides coaching and support to differentiated levels
  - Element of competition encouraged by centre staff member
  - Success criteria differentiated depending on ability

- All groups came back together for lunch
  - School staff sat with children but had minimal involvement *(H)*
  - Children independent in collecting food and clearing up *(H)*
- Afternoon activity: High ropes 1 (crate stack) *(B)*
  - Children collected and adjusted safety helmets and harnesses (with supervision) *(H)*
  - Safety of ropes and equipment emphasised by centre staff *(E)*
  - Two pupils on activity at a time, others helped to stack crates or belayed
  - Centre staff member modelled encouragement and support *(G)*
    - Some children picked up on this and began to copy *(G)*
    - Other children chose to sit away from the group
      - Complaints about being bored and having to wait for their turn *(C)*
  - All children able to have a go
    - Some worried about being up high and needed extra encouragement from staff and peers
    - Children chose when they wanted to come down *(D)*
- Evening meal: Some children volunteered to set the table in preparation *(H)*
  - Very quiet atmosphere, children appeared tired and subdued
- Evening activity: remained close to the centre
  - Centre staff led a group game of hide and seek, school staff joined in *(B)*
- Early bedtime; children all asleep much more quickly
  - One child upset due to homesickness, but not allowed to call home

Day Three

- Breakfast: Some children chose to set the tables before breakfast, without being asked *(H)*.
  - Children appear happier and more positive (possibly due to the early night)
    - There were no disturbances during the night
  - Children had to get themselves into pairs or small groups to arrange carrying their lunches *(H)*.
    - Negotiation about who would carry the bag and who to work with
- Free time: Children no longer sitting around by the picnic bench, all seem to be engaged in group games or imaginative play *(B)*.
- Whole group activity: Hike to the nearby village (approx 3 miles) *(B)*
  - Walking through a range of landscapes, e.g. dense forest, hillsides, fields, riverside
    - I overheard children talking about having not experienced settings like it before
  - Centre staff allocated children to be the 'leader' and show the rest of the group which way to go *(H)*
    - Moved children who were 'dawdling' at the back to the front
  - Some children were unhappy about having to walk through 'stingers' (brambles)
    - Centre staff encouraged positive reflection and celebration of achievement for getting through it
  - Centre staff told stories and shared knowledge of the local area at times during the walk
    - Children seemed to particular enjoy the ghost story
  - Children began to complain of being tired as we approached the village
    - Some commented that they had never walked so far before.
    - Mass sense of relief when we reached the village and stopped for lunch *(C)*

- Lunch: Stopped by the river and ate lunch as a whole group
  - Children formed own small groups and chatted
- Exploring the village: visited a small sweetshop where children could spend the small amount of money they had brought with them
  - Children had previously been told that this was a planned activity
    - Some had been chatting excitedly about this throughout the day
  - Children who had bought sweets spontaneously shared with those who hadn't brought money *(G)*
    - School and centre staff praised this
  - Village park: Children encouraged to climb large tree as a group
    - Small group of children unsure and choose to watch instead
- Return hike to the centre (approx. 3 miles) *(B)*:
  - Children appeared quieter on the return hike
  - Some complained of being tired and hungry *(C)*
  - Others talked about having enjoyed the day
    - One child showed overt joy, skipping up the hill and shouting about feeling 'amazing!'
- Evening meal: Children worked together to clear the tables, rather than just taking their own plates *(H)*
  - This appeared to be spontaneous
  - School staff commented that they had noted a change in the children's behaviour today
    - E.g. appearing more confident and settled and being more sensible
- Evening activity: Children given the option of going for a 'mud walk' or watching the football match at the centre.

- Approximately one third chose to go for a walk *(A, D)*
- Children encouraged by school and centre staff to walk in muddy puddles and jump in mud pool
  - A few got 'stuck' and asked for help to free themselves *(C)*
    - School and centre staff encouraged them to be independent and try to free themselves *(H)*
  - Children spontaneously volunteered to help each other *(G)*
    - Either by giving advice or physically pulling them out of the mud
  - Almost all children and some staff covered in mud on arrival back at the centre
    - But all seemed to find it funny and some were keen to tell children in the other group what had happened
  - All had to be hosed down outside the centre!

Day Four

- Breakfast: Lots of chatter about the events of the night before, children sharing stories of being stuck in the mud, or watching the football
  - Groups worked together to clear tables as a team
- Morning activity: High ropes 2 *(B)*
  - One child at a time allowed on the ropes course
  - Had to put on their own harnesses, told that adults wouldn't help them unless they'd tried first *(H)*
    - Children belaying for each other *(H)*
  - Success criteria differentiated by centre staff, depending on child's response
    - E.g. encouraged to finish the course if confident or encouraged to get onto first level if very nervous *(D)*
  - Children spontaneously cheered each other on and gave encouragement while waiting for their turn *(G)*
  - Much more positive atmosphere compared to High Ropes 1 on Day 2
  - Children responsible for putting away their own safety equipment *(H)*
- Lunch: Groups came back together for lunch at the picnic area
  - Sharing stories about the morning activities and still talking about being stuck in the mud last night
  - Children that had been afraid of the chickens no longer outwardly distressed or distracted by them
- Afternoon activity one: Nightline
  - Children paired by centre staff member
    - Some not happy about working with a child they wouldn't usually spent time with
    - Communication essential for guiding blindfolded partner around obstacles

- Quieter children purposefully chosen as guides to give an opportunity to have a voice
- Children set off on activity and pairs independently navigate the course *(H)*
- School and centre staff encourage a fun atmosphere by setting extra obstacles and tangling ropes
  - Lots of laughter from children and adults
- Afternoon activity two: 'Mine'
  - Centre staff member led games and told ghost stories to encourage children to enter the 'mine'
  - Some children unsure about being in small spaces *(D)*
    - Encouragement provided by children and staff
    - Children offered to support each other *(G)*
    - Children talked about enjoying the 'scary stories'
- Evening meal: Children chatted about the activities during the day
  - Some talked about liking the centre and not wanting to go home tomorrow
- Evening activity: Orienteering around the grounds of the centre *(A, B)*
  - Children able to choose who to be in a group with
  - Encouraged to stay together as part of the task
    - Activity required team work, good communication
  - Some school staff also took part and emphasised the element of competition
  - Some children chose to stay close to the camp area *(D)*
    - Making 'tiny dens for tiny people'
    - Chatting to centre staff

- Collecting firewood
- Centre staff explained safety rules for being around the fire *(E)*
  - Children expected to manage their own behaviour to keep themselves safe *(H)*

Day Five

- Breakfast: most children talking about not wanting to go home
  - Saying they will miss the centre or the centre staff
- Packing:
  - Children expected to pack their own bags *(H)*
  - They appeared happy to do this
    - None asked for help
- Morning meeting: all children asked to reflect on the week *(F)*
  - What they have enjoyed most
  - Any achievements
  - Times they have felt supported or given support
  - One word to describe their experience
  - School and centre staff shared their observations of how the children had changed or succeeded *(G)*
- Children given praise and recognition for this
- Morning activity: Climbing *(B)*
  - Centre staff member pointed out safety aspects of the activity and minimal risk *(E)*.
  - Children put on own helmets and harnesses *(H)*
  - Encouraged to have a go at tying the rope on themselves *(H)*
  - Children who can tie the rope asked to help others *(H)*
  - Children encouraged to climb as far as they wanted *(D)*

- All got a turn on the climbing wall
  - Some initially didn't want to, but changed their minds with encouragement from staff and peers and emphasis on being able to choose when to come down *(D)*
- Children encouraged each other to climb higher and gave instructions for where to reach or put their feet *(G)*
- Those not on the wall given responsibility of belaying or holding the 'slack', so all involved at all times
- Activity ended with supported reflection on the activity *(F)*
  - Children given chance to say how they thought they did and their achievements during the activity
- Lunch: All groups together for lunch in the picnic area
  - Sharing stories of the morning's activities
  - Children that were scared of the chickens tried to feed and stroke them
- Journey back to school:
  - Children carried their own bags and helped put them on the coach *(H)*
  - Children keen to say goodbye to centre staff
  - Children initially very chatty on the coach
    - Talking about events from the week and interactions with the centre staff
    - Saying they want to stay at the centre
      - Emphasising the trees and fields as reasons for this
  - Many children feel asleep as the journey continued
  - Children carried own bags from the coach *(H)*
    - All refused offers of help from school staff and their parents

Appendix K

Correlation Tables for Scores on the SCWBS

Tables 36 and 37 show the correlations between scores on individual questions on the SCWBS. Questions 1, 3, 4, 5, 6 and 8 correspond to the subcomponent of positive outlook. Questions 9, 10, 11, 12, 14 and 15 correspond to the subcomponent of positive emotional state. High correlations would suggest the presence of a relationship between individual questions and therefore support reliability within the subcomponents.

Table 36. Correlations of Wellbeing Scores at T1.

		Q1 pre	Q3 pre	Q4 pre	Q5 pre	Q6 pre	Q8 pre	Q9 pre	Q10 pre	Q11 pre	Q12 pre	Q14 pre	Q15 pre
Q1 pre	Pearson Correlation	1	.582**	.620**	.586**	.635**	.356	.614**	.614**	.570**	.391	.376	.538*
	Sig. (2-tailed)		.007	.004	.007	.003	.123	.004	.004	.009	.088	.103	.014
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q3 pre	Pearson Correlation	.582**	1	.523*	.272	.441	.158	.258	.156	.072	.294	.430	.474*
	Sig. (2-tailed)	.007		.018	.246	.051	.506	.273	.511	.763	.208	.058	.035
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q4 pre	Pearson Correlation	.620**	.523*	1	.432	.801**	.490*	.668**	.606**	.597**	.393	.667**	.779**
	Sig. (2-tailed)	.004	.018		.057	.000	.028	.001	.005	.005	.086	.001	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q5 pre	Pearson Correlation	.586**	.272	.432	1	.512*	.464*	.292	.504*	.396	.061	.084	.216
	Sig. (2-tailed)	.007	.246	.057		.021	.040	.212	.023	.084	.800	.724	.360
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q6 pre	Pearson Correlation	.635**	.441	.801**	.512*	1	.608**	.583**	.702**	.699**	.391	.549*	.596**
	Sig. (2-tailed)	.003	.051	.000	.021		.004	.007	.001	.001	.088	.012	.006

	N	20	20	20	20	20	20	20	20	20	20	20	20
Q8 pre	Pearson Correlation	.356	.158	.490*	.464*	.608**	1	.501*	.712**	.333	.072	.389	.622**
	Sig. (2-tailed)	.123	.506	.028	.040	.004		.024	.000	.152	.763	.090	.003
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q9 pre	Pearson Correlation	.614**	.258	.668**	.292	.583**	.501*	1	.768**	.539*	.348	.595**	.783**
	Sig. (2-tailed)	.004	.273	.001	.212	.007	.024		.000	.014	.133	.006	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q10 pre	Pearson Correlation	.614**	.156	.606**	.504*	.702**	.712**	.768**	1	.698**	.423	.630**	.625**
	Sig. (2-tailed)	.004	.511	.005	.023	.001	.000	.000		.001	.063	.003	.003
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q11 pre	Pearson Correlation	.570**	.072	.597**	.396	.699**	.333	.539*	.698**	1	.342	.354	.386
	Sig. (2-tailed)	.009	.763	.005	.084	.001	.152	.014	.001		.140	.125	.093
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q12 pre	Pearson Correlation	.391	.294	.393	.061	.391	.072	.348	.423	.342	1	.599**	.405
	Sig. (2-tailed)	.088	.208	.086	.800	.088	.763	.133	.063	.140		.005	.076
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q14 pre	Pearson Correlation	.376	.430	.667**	.084	.549*	.389	.595**	.630**	.354	.599**	1	.687**
	Sig. (2-tailed)	.103	.058	.001	.724	.012	.090	.006	.003	.125	.005		.001
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q15 pre	Pearson Correlation	.538*	.474*	.779**	.216	.596**	.622**	.783**	.625**	.386	.405	.687**	1
	Sig. (2-tailed)	.014	.035	.000	.360	.006	.003	.000	.003	.093	.076	.001	
	N	20	20	20	20	20	20	20	20	20	20	20	20

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 37. Correlations of Wellbeing Scores at T2.

		Q1 post	Q3 post	Q4 post	Q5 post	Q6 post	Q8 post	Q9 post	Q10 post	Q11 post	Q12 post	Q14 post	Q15 post
Q1 post	Pearson Correlation	1	.482*	.734**	.303	.684**	.684**	.564**	.539*	.336	.621**	.516*	.484*
	Sig. (2-tailed)		.031	.000	.194	.001	.001	.010	.014	.148	.003	.020	.031
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q3 post	Pearson Correlation	.482*	1	.429	.180	.460*	.316	.179	.397	-.200	.361	.412	.209
	Sig. (2-tailed)	.031		.059	.448	.041	.174	.450	.083	.397	.118	.071	.377
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q4 post	Pearson Correlation	.734**	.429	1	.222	.526*	.649**	.421	.441	.344	.427	.271	.430
	Sig. (2-tailed)	.000	.059		.348	.017	.002	.065	.052	.138	.060	.248	.058
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q5 post	Pearson Correlation	.303	.180	.222	1	.705**	.505*	.382	.526*	.374	.110	.452*	.373
	Sig. (2-tailed)	.194	.448	.348		.001	.023	.097	.017	.105	.643	.046	.105
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q6 post	Pearson Correlation	.684**	.460*	.526*	.705**	1	.489*	.546*	.522*	.501*	.431	.465*	.573**
	Sig. (2-tailed)	.001	.041	.017	.001		.029	.013	.018	.024	.058	.039	.008
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q8 post	Pearson Correlation	.684**	.316	.649**	.505*	.489*	1	.594**	.751**	.367	.530*	.666**	.658**
	Sig. (2-tailed)	.001	.174	.002	.023	.029		.006	.000	.111	.016	.001	.002
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q9 post	Pearson Correlation	.564**	.179	.421	.382	.546*	.594**	1	.730**	.570**	.469*	.640**	.543*
	Sig. (2-tailed)	.010	.450	.065	.097	.013	.006		.000	.009	.037	.002	.013
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q10 post	Pearson Correlation	.539*	.397	.441	.526*	.522*	.751**	.730**	1	.343	.308	.737**	.599**
	Sig. (2-tailed)	.014	.083	.052	.017	.018	.000	.000		.139	.187	.000	.005
	N	20	20	20	20	20	20	20	20	20	20	20	20

Q11 post	Pearson Correlation	.336	-.200	.344	.374	.501*	.367	.570**	.343	1	.158	.081	.444*
	Sig. (2-tailed)	.148	.397	.138	.105	.024	.111	.009	.139		.505	.735	.050
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q12 post	Pearson Correlation	.621**	.361	.427	.110	.431	.530*	.469*	.308	.158	1	.603**	.303
	Sig. (2-tailed)	.003	.118	.060	.643	.058	.016	.037	.187	.505		.005	.194
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q14 post	Pearson Correlation	.516*	.412	.271	.452*	.465*	.666**	.640**	.737**	.081	.603**	1	.486*
	Sig. (2-tailed)	.020	.071	.248	.046	.039	.001	.002	.000	.735	.005		.030
	N	20	20	20	20	20	20	20	20	20	20	20	20
Q15 post	Pearson Correlation	.484*	.209	.430	.373	.573**	.658**	.543*	.599**	.444*	.303	.486*	1
	Sig. (2-tailed)	.031	.377	.058	.105	.008	.002	.013	.005	.050	.194	.030	
	N	20	20	20	20	20	20	20	20	20	20	20	20

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix L

Timeline of Data Collection Activities

Date	Activity
28/6/16	T1 SCWBS completed
4/7/16-8/7/16	Residential week at the ORE Centre. Observations recorded in the research journal.
11/7/16	T2 SCWBS completed
18/7/16	Group interview with pupils
20/7/16	Planned group interview with parents (cancelled due to lack of attendance)
2/8/16	Individual interviews with school staff
23/9/16	Group interview with centre staff