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From virtual worlds to the Outward Bound Trust:
A study of contemporary residential outdoor
adventurous education in postdigital space

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Abstract

This multiple-case study draws on ethnographic methods and presents findings from three Outward Bound Trust residential outdoor adventurous education centres in England, Scotland, and Wales. Through recognising that the place and use of mobile technologies and social media by instructors and young people in the residential setting is a contested topic, this study explored how networked spaces influence the facilitation and experience of Outward Bound programmes in the United Kingdom.

The first phase of the research investigated instructor perceptions of mobile technologies and social media in their practice with a total of 20 instructors through online semi-structured interviews in early 2022. Following the development of a reflexive thematic analysis framework, findings are presented which centre on a culture of phone-free practice, the recognition that young people's mobile technologies are portable comfort zones, and that Outward Bound provide young people with an antidote to their engagements with screens and social media.

Following the analysis of these interviews, in the second phase of the study I spent five days at each Outward Bound centre. During these visits, I fully participated in an Outward Bound programme alongside young people aged 12 - 17 who were staying at their respective centre from schools in England and Scotland. This aspect of the study explored whether an Outward Bound programme may be affected by the presence or non-presence of young people's mobile technologies, and whether platforms such as Netflix or Minecraft shape how young people engage with the outdoors as part of their residential trip. Adopting a participant-as-observer approach, a total of 50 young people took part in this aspect of the study, including 23 who participated in one of six separate focus groups.

Findings presented from the data analysis demonstrate how a lack of connectivity generated stress, anxiety, and anger for young people, especially in relation to not being able to speak with their parents. Alongside this, mobile technologies were considered critical for young people to develop and preserve memories of landscapes that were unlike home. Online media such as Netflix, TikTok, and Minecraft also informed young people's experiential baselines from which they made sense of both Outward Bound and nature. The study is situated within a postdigital characterisation of society which recognises that technology and broader networked architectures are so entangled in daily life that the physical and the digital are increasingly entangled.

Ultimately, the data generated with instructors and young people demonstrates a collision in perspectives. Firstly, instructors positioned Outward Bound as an essential form of postdigital counter-narrative which aims to return young people to "real life". And, secondly, young people's Outward Bound experiences were often characterised by desperate attempts to connect with home and to remember their Outward Bound experience by curating memories through photographs. Alongside this, online media framed how young people engaged with nature and the landscape. The study provides a set of key recommendations for Outward Bound in the United Kingdom and reflects on the ways in which networked spaces and contemporary youth cultures inform young people's residential experiences.

Lay Summary

This PhD was the result of a collaborative Economic and Social Research Council award between the University of Edinburgh and the Outward Bound Trust (Outward Bound). From the outset, the focus of the research has been on the role and impact of mobile devices and social media on residential outdoor adventurous education experiences at Outward Bound centres in the United Kingdom. The research is particularly timely given the increasing ubiquity of mobile technologies and online environments in society, and the potential ways in which they influence young people's educational experiences in the outdoors.

This study had three research questions which focussed on the perceptions and practices of instructors in relation to technology and social media, and the situated on-the-ground experiences of young people who participate in residential Outward Bound programmes:

1. How do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound?
2. In what ways do the presence or non-presence of mobile technologies at Outward Bound affect how young people experience their residential outdoor adventure education trip?
3. What role might online media, video on demand services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound?

A multiple-case study was designed, and I interviewed instructors from Outward Bound's Loch Eil, Ullswater, and Aberdovey centres. I also visited these centres for five days each and

observed young people participating in Outward Bound programmes alongside conducting a series of focus groups.

My analysis of the data indicated a distinct tension between the perspectives of instructors and the situated experiences of young people. Most instructors described limiting the use of young people's mobile technologies and social media in their practice. In particular, social media was considered "fake," with Outward Bound programmes being recognised as offering young people a form of detox from their networked lives. This stance included descriptions of young people's mobile devices being a form of comfort zone, which most instructors thought may need to be removed for Outward Bound's learning outcomes to be achieved.

However, my engagement with young people at the Outward Bound centres challenged instructors' perspectives. When unable to access their mobile devices and, in particular, not make contact with home, young people exhibited stress, anxiety, and anger. Alongside this, young people actively sought to remember their Outward Bound experiences through taking photographs on their devices. The preservation of memories through photography in these residential environments was an important motivator for young people, but was often restricted through not having access to their mobile technologies during activities.

I also developed an unexpected outcome which centred on how young people's previous engagements with online media and gaming informed interactions with nature and with peers when at Outward Bound. In the thesis, this is described as a form of *experiential baseline*, which foregrounded how young people interpreted and understood their Outward Bound experiences. Platforms which featured in this finding included Minecraft and Netflix,

and indicate some of the ways in which contemporary online youth cultures shaped young people's experiences across three residential Outward Bound environments.

The findings from both the instructors and young people were interpreted through a postdigital lens which, at a foundational level, recognises that digital technologies and our day-to-day lives are so intertwined that we can no longer separate them. Through this lens, my sense is that the findings and associated discussion in this thesis could be important for policy makers and outdoor professionals, as well as those who are interested in the relationships between online cultures and young people. The study, therefore, makes a number of recommendations for policy, practice, and research which could contribute to the development of residential outdoor adventurous education outcomes in an increasingly technological world.

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Many people have helped me along the way both personally and professionally as I have built up to and undertaken PhD candidature. Firstly, thank you to the Outward Bound Trust for their care, diligence, and interest in this field of study. Without Outward Bound as a collaborative partner, and through their in-kind funding, this research would not have been possible. In particular, Emma Ferris, Martin Davidson, and Emily Wormald have been instrumental throughout. Thanks and appreciation also goes to the Economic and Social Research Council and the Scottish Graduate School of Social Sciences for funding this PhD and for providing support throughout the project.

To the instructors, schools, young people, and visiting staff members who participated in this study, I am indebted to you for the time and patience you gave me. Your honesty and welcoming nature have been both inspiring and motivating, and will continue to be so. I was so impressed by the young people I worked with across the Outward Bound centres and the memories generated and stored as we all navigated our experiences will remain with me forever.

Closer to home, without the help, support, and kindness of Catherine, I am unsure how this PhD project would have played out. Whether it be debating the merits of the postdigital and reading early drafts, through to encouraging me to see a therapist in my second year, Catherine's reassuring and loving presence has been a constant. Indeed, to all the family and friends who have listened to me waffle on about my PhD, my journey has been underpinned by a network of close acquaintances who have been the best and most caring support team a PhD candidate could wish for.

I would also like to thank my supervisors, Professor Gale Macleod and Professor Simon Beames. I first saw the advert for this PhD during a holiday in Perthshire and, as I looked through the documents, was so excited to see that both Gale and Simon were the named supervisory team. Having worked with them during my MSc, I knew that we could make a good partnership. Throughout my candidature, their support, (friendly) criticality, and openness has nudged me in unexpected directions and this thesis would not have been possible without them.

Lastly, but by no means least, in late 2022 Catherine and I started caring for a rescue cat, Pickle. Following lifesaving surgery and a whole load of heartache, Pickle was saved, and has provided me with unending cuddles, meows, purrs, play, and joy.

For Catherine and Pickle, the team.

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Appendix AD - Instructor information sheet for observations.

Appendix AE - Voluntary informed consent form for instructor observations.

Publications linked to the PhD

The referenced works below are presented in chronological order with the most recent first.

- Reed, J. (2023). Instructor perspectives on mobile technologies and social media in practice: Findings from the United Kingdom's Outward Bound Trust. *Journal of Experiential Education*, 1-19. <https://doi.org/10.1177/10538259231186774>
- Reed, J. (2023). Mobile technologies, social media and gaming in outdoor education: Where to from here?. *Horizons*, 102, 16-18.
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- Reed, J. (2021). What is the Postdigital? Why Might it Matter for Outdoor Experiential Education? *Pathways: The Ontario Journal of Outdoor Education*, 33(2), 28-31.

A full list of my current publications is available through my ORCID:

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This PhD was undertaken and completed flight free

Chapter One

Introduction

This thesis has at its core an explicit focus on seeking to understand how mobile technologies and online, networked, spaces influence the practices and experiences of instructors and young people at three residential Outward Bound Trust centres in the United Kingdom (UK). This chapter sets out the context for the study and initially maps out some of the fundamental concepts and issues that feature throughout my thesis. I also outline how the research was developed, which includes the construction of aims, the methodological approach, and my positionality within the research. An extended introduction is also provided which describes the history of The Outward Bound Trust, as well as its current position within the field of residential outdoor adventure education (OAE). This introduction concludes with a synthesis of the chapters included in this thesis, before proceeding to a review of literature in chapter two.

1.1. Initial Foundations for the Thesis

The relationships between humans and technologies are increasingly becoming blurred. Throughout contemporary society, the ways in which we work, play, socialise, and consume are very often characterised and shaped by the presence of some form of technology. As Ellul (1964) put forward over half a century ago, the rise of a technological society brings with it a wide range of questions and issues, chief amongst which was the standardisation of culture and the rise of absolute efficiency within every corner of human lives. An important distinction was, however, made by Tully (2003) who identified an emerging shift in the way technology interacts with humans at the individual level. In what Tully (2003) described as

Technology II, the turn of the century brought with it devices and networks that were individually available and which offered a user endless forms of participation and consumption. In the time since, we know that technology has continued advancing, with evidence suggesting that 5.44 billion people have a mobile phone (or approximately 68% of the world population), with 5.16 billion using the internet (Kemp, 2023). As scholars such as Irwin (2016), Lindgren (2017), and Boulianne (2019) demonstrate, digital media and broader technological architectures often characterise contemporary societies, and are entangled in the social, cultural, and political fabrics of everyday life.

As technology has continued to develop and become more “portable,” it is plausible that Tully’s (2003) outlining of *Technology II* is already at the end of its shelf life. For instance, the emergence of *web 2.0*, which acknowledged how the internet developed into a hub for participatory cultures and user-generated content (O’Reilly, 2009), advances our understandings of how online and connected environments have developed. And, of course, the whispers heard in relation to the coming *Web3*, where artificial intelligence, blockchain cryptocurrencies, and the metaverse are likely to be prominent, demonstrate just some of the potential technological developments to come (Belk et al., 2022). What has become evident is that technology and our uses of it continue to advance. These advances continuously shape and reshape the present state of our technologically centred realities and, as is to be expected, also offers this thesis a shelf life. This thesis must be read with this in mind; it is a light in a sea of rapid change, and will, within a timeframe yet to be determined, become an archival depiction of reality in post-Covid-19 residential OAE at The Outward Bound Trust in the UK (from here on, referred to as “Outward Bound”).

Throughout my PhD candidature, the development of the emerging postdigital paradigm has been particularly important. The postdigital acknowledges that “we are increasingly no longer in a world where digital technology and media is separate, virtual, ‘other’ to a ‘natural’ human and social life” (Jandrić et al., 2018, p. 893). Indeed, as authors such as Hood and Tesar (2019) discuss, the boundaries which have encapsulated what is “digital” and what is “real” are becoming indistinct, and that researchers and society at large need to fundamentally re-examine how childhood is framed and experienced in postdigital space. As I will discuss in chapter two, and as a dominant theme throughout this thesis, the idea of a collapsed binary between the digital and non-digital -- that our lives are so intertwined with technology that the two are largely indistinguishable -- generates necessary terrain for this thesis to navigate in relation to residential OAE.

This leads to Brubaker’s (2020) description that “[d]igital hyperconnectivity is a defining fact of our time” (p. 771), and that the nature of socialisation has transcended the immediate “here and now”. Such a perspective facilitates what Hodkinson (2017) has referred to as the “always-on” nature of communication and consumption. For young people growing up in these never-off online cultures, participation and presence are very often compulsory (Marwick & boyd¹, 2014) and, drawing on findings from Gangneux (2019), is grounded in social expectations which stigmatise those who opt out. It is thought that regardless of whether an individual is online, one’s technological presence on social media is never off and that this can generate a sense of social pressure. That said, in recent studies from Ofcom (2022, 2023), the eighth and ninth in a longitudinal study which commenced in 2014, young people in the UK are recognised as increasingly passive in their usage of online

¹ The spelling of danah boyd in lower case is intentional throughout the thesis and reflects boyd’s personal and political stance on pronoun capitalisation. For boyd’s own description, see boyd (n.d.).

platforms. According to their data, young people place less importance on connecting and socialisation, and place more emphasis on consuming content, especially professional content from influencers, with platforms such as TikTok, YouTube, and Netflix being most popular. As Rainie and Wellman (2012) describe, this sense of hyperconnectivity, whether that be for socialising or for passively engaging with content, “means that people never walk – or sit – alone” (p. 113).

Whilst there is little doubt that mobile technologies and online platforms are ubiquitous in the lives of young people (Baruch & Erstad, 2018; Montgomery, 2015), there is an increasing body of literature which problematises the impact of such technologies on young people’s play ecologies and engagement with nature (Edwards & Larson, 2020; Kumpulainen, 2022; Larson et al., 2019; Speldewinde & Campbell, 2022). This is not a new hypothesis given Balmford et al. (2002) discovered two decades ago that young people could identify more Pokémon “species” than they could British Wildlife. More recently, Livingstone and Pothong (2022) shared insights which painted young people’s digital and non-digital play as similar, but recognised that play through a screen restricts the imaginative, stimulating, and risk-centred domains of play. However, what remains less clear is how gaming and media consumed in online and connected environments shape young people’s imaginations and playful interactions with nature in residential OAE settings. As Singer and Singer (2011) ask, “[t]o what extent do play and imaginative processes reflect the useful influence of our electronic milieu?” (p. 293). It is necessary to say at this stage that I draw on Greider and Garkovich (1994) throughout this thesis to consider “nature” and landscape as socially constructed. With this understanding, the meanings participants attach to nature throughout the research may be viewed as filtered through individual sociocultural contexts and generates an eclectic mix of interpretations and engagements.

The above provides a foundational account of the role technologies have within postdigital space, and their fundamental centrality in the lives of young people. It also demonstrates the sheer volume of approaches to and understandings of “technology”. In this thesis, I define and approach technology as the portable electronic devices and wireless communication systems which facilitate instant connectivity and the sharing of information globally. I do not, as suggested by Payne (2002) and others (e.g., Wattoo, 2001), describe technology in relation to hardware such as a canoe or bicycle, nor am I referring to walking boots, maps, or Gore-Tex in my definition of technology. Instead, my explicit focus when referring to technology in the thesis focusses on hardware such as a mobile phone and the associated networked connectivity that is facilitated by such a device. With this in mind, the thesis is situated within young people’s sociotechnical infrastructures and is positioned within residential OAE at Outward Bound in the UK. At its core, this research seeks to explore how and in what ways postdigital sociocultural realities influence and shape the nature of delivery and participation at contemporary Outward Bound.

Whilst the literature concerning mobile technologies in outdoor education more broadly is limited, what often presents itself is a binary, or a for-and-against argument, which scarcely delivers a consensus on the role and influence mobile technologies might have when learning out-of-doors (Bolliger et al., 2021; DeHudy et al., 2021; Hills & Thomas, 2020; Reed, 2022a; van Kraalingen, 2021). For instance, Smith et al. (2018) considered technology to threaten relationship development and nature connection in outdoor learning endeavours, whilst Garden (2022) found that incorporating iPads in Forest School education enhanced “the learning experience and improve[d] children’s physical, intellectual and social development” (p. 12). This dichotomy was captured in van Kraalingen’s (2021) systematised review on technology in outdoor education which concluded that it is doubtful

whether a unanimous verdict will be reached on the effects mobile technologies have on outdoor education.

This generates a keen tension which, as I outline in section 1.2, fundamentally underpins the purpose of this thesis, which is to empirically explore the relationships between always-on, hyperconnected, online spaces, and how these shape instructor practices and young people's experiences in rural and remote Outward Bound centres and activities.

1.2. The Development of the Research, the Construction of Research Aims, and the Approach to the Investigation

This PhD is the result of a collaborative Economic and Social Research Council award between The University of Edinburgh and Outward Bound in the UK. The focus of the study was set from the very beginning of the project, with Outward Bound seeking a PhD candidate who would focus on the influence of mobile devices and social media on the transfer of learning in residential OAE. This topic was immediately of interest, and I have taken this topic and developed a study which holds significant insight into contemporary Outward Bound and the online and networked lives of young people.

Given the dichotomy present in literature considering the role of technologies in outdoor education (e.g., Cuthbertson et al., 2004; Reed, 2022a; van Kraalingen, 2021), and the ways in which mobile technologies and online media underpin contemporary youth culture (e.g., Anderson & Jiang, 2018; Osgerby, 2020; Vanden Abeele, 2016a, 2016b), the study was tasked with capturing a broad range of voices and experiences as they interact with Outward Bound. The two core aims which foregrounded my thought processes were:

1) To examine how instructors at Outward Bound perceive the use or non-use of technologies in their practice. 2) To assess how the presence or non-presence of mobile technologies affects how young people construct and experience their Outward Bound residential. These foundational aims reflect the very limited empirical research base on the roles and influences of mobile technologies in residential OAE and provided the basis for research question development.

Throughout the early stages of developing the research design, the level of complexity present within Outward Bound spaces and processes was evident. No doubt, Outward Bound is an intricate space which brings with it a wide range of people, places, devices, technological infrastructures, and cultures. As noted by Christie et al. (2016), when quoting Davis and Sumara's (2006) work on the nuanced and multi-layered natures of education, outdoor learning endeavours are so complex and heterogenous they surely defy "simplistic analyses and cause-effect explanations" (Davis & Sumara, 2006, p. xi). At its core, this thesis seeks to navigate this uncertainty, to explore cultures and experiences at Outward Bound as they relate to hyperconnected, postdigital, societies and childhoods. It was clear, drawing on Fetterman (2009) and Delamont (2014), that in order to recognise and understand on-the-ground experiences at Outward Bound, I needed to be immersed in the Outward Bound culture and therefore employed an *ethnographically informed* approach to the research (see section 3.3).

In order to achieve this situated and comprehensive overview of the relationships and complexities between mobile technologies and Outward Bound, three of Outward Bound's centres (Aberdovey, Ullswater, Loch Eil) were selected for the study. As I will expand on in chapter three, each centre represented a single case study and, broadly

following the work of Stake (2006), generated a multiple-case study design. The ethnographically informed approach to data collection which was employed took heed of Hammersley (2006) and Walford's (2018) acknowledgements on ethnography's journey and application beyond its classical anthropological model. I was also informed by Parker-Jenkins (2018), who described the conflation of traditional ethnography with case studies which claim to be ethnographic. Their argument centres on how the use of ethnographic methods (e.g., observation and interviews) do not demonstrate the long-term embeddedness of the researcher in a given culture as would be expected in classical ethnography. This thesis therefore draws on ethnographically situated methods (interviews, focus groups, and observations) within a multiple-case study design, but does not claim to be ethnographic.

Whilst developing the approach to the research, I visited all three centres in the early summer of 2021, just as Covid-19 restrictions were easing. Whilst there were no young people at any of the centres, I was able to engage with heads of centre and a limited number of instructors; this offered a flavour of what was happening on the ground in relation to mobile technologies and the delivery of Outward Bound courses. As a result of these visits and my engagement with heads of centre and instructors, it became clear that three populations should be included in this study for me to understand the influences of mobile technologies across the three centres, they are:

1. Outward Bound instructors, senior instructors, and learning and adventure managers. Instructional approaches and perspectives were constructed through semi-structured interviews on Zoom and through in-person observation.
2. Young people aged between 12 and 17 participating in Outward Bound programmes as part of a school visit. The situated nature of young people's

experiences, as they navigated their Outward Bound visits, were generated through in-person observation and focus groups.

3. Visiting staff members (e.g., teachers and teaching assistants) who accompany the young people to the centre. Their perspectives and insight into the school's background provided important context for the study. Visiting staff took part in a short context-setting interview and participated in the observations.

A total of 20 members of Outward Bound's instructional staff took part in an interview. I also observed 50 young people aged 12-17 who were participating in a five-day Outward Bound residential programme, with 23 participating in six separate focus groups. Young people travelled to their respective Outward Bound centre from schools in England and Scotland. Eleven visiting staff members were also observed, and I undertook a short context-setting interview with them whilst at the Outward Bound centre. More information on the composition of cases can be found in chapter three. A diverse group of people participated in the study, and I was mindful from the outset of whether and/or how factors such as gender, ethnicity, and social class could influence perceptions and experiences at Outward Bound. However, I did not find any discernible trend or theme that related to these elements, and so they do not feature as an explicit focus in the findings chapters.

Finally, the development of research questions initially reflected the work of Maxwell (2013), who cautioned against the development of theoretical and practical "tunnel vision" by refining research questions too fast and too soon (p. 75). Within this, Agee's (2009) influential text on reflective research question development was also engaged with, leading to the development of three research questions for the study. They are:

1. How do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound?
2. In what ways do the presence or non-presence of mobile technologies at Outward Bound affect how young people experience their residential outdoor adventure education trip?
3. What role might online media, video on demand services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound?

These questions seek to look beyond the dichotomy of technology in outdoor education, and explore the situated, (dis)connected, on-the-ground experiences and perspectives of instructors, young people, and visiting staff as they come together at Outward Bound. At this stage, it is also necessary to outline what I mean when I refer to “outdoor education”. From here on, outdoor education is referred to, broadly, as an approach to formal education which purposefully removes young people from the classroom, and which utilises outdoor environments for the purpose of learning, connection, and adventure.

1.3. Personal Reflections on my Position within the Research

Drawing on the work of Parker-Jenkins (2018), who outlines the influence of the researcher’s position within ethnographically grounded studies, it is necessary to describe how I have positioned myself within this research. As Mauthner and Doucet (2003) outline, the operationalisation of reflexivity in social science research is sometimes limited by uncertainties which inadequately address the ontological, epistemological, and theoretical assumptions which frame how the researcher perceives and interacts with subjectivity. It is,

therefore, essential when introducing this thesis that I describe how my subjective personal, interpersonal, and cultural self relates to the research topic. Drawing on Berger (2015) and others (e.g., Cumming-Potvin, 2013; Le Gallais, 2008), I have considered it essential that I identify and monitor how my beliefs and viewpoints may have affected any claim to knowledge. This section outlines the relevant elements of my life that relate to the research and provides initial insight into my position within the topic.

Returning to Mauthner and Doucet (2003), the very act of undertaking a qualitative study, such as the one here, naturally imbues my own lifeworld with the research. A lifeworld which will have undoubtedly affected the study's ontological, epistemological, and theoretical foundations. Alongside this, Lietz et al. (2006) and Berger (2015) put forward that the reflexive researcher must contemplate how personal background and beliefs intertwine with the co-construction of participant realities. I recognise that my position as the researcher filters and structures the phenomena under investigation, and that this study's findings are socially co-constructed between the study's participants and myself.

Born in 1995, I consider myself to be an early member of Generation Z, a generation characterised by immediate connectivity and online participation (I describe Generation Z in more detail in section 2.4.1). It is important to acknowledge that I identify as a white, cisgendered, male. I come from a middle-class background and was brought up in the Forest of Dean, Gloucestershire, England. My childhood was not what I might describe as "typical," as I was taught at home by my parents from the age of 10, and I took just two examinations in English and Maths at the age of 14 and 15 respectively. To this day, I do not have any formal GCSE qualifications. It was an isolated educational journey, mostly segregated from others my age as I navigated growing up. Crucially, the Forest of Dean became a significant

feature in my childhood, and I would often walk, run, and sit within woodland that I could access from a gate in the back garden. Whilst my peers might have been sitting in a classroom, I was in my outside classroom, connecting with the place I called home and learning from what I saw, thought, and felt.

Whilst my journey through secondary education was largely isolated, that changed at the age of 15, when I asked my parents if I could have access to social media. Eventually, they agreed, and I joined Facebook, Twitter, and MSN between August 2010 and January 2011. In a short space of time my life was transformed. I had access to a network of “friends” and “followers,” I had a space where I could express myself, and the solitude of home education was replaced by a virtual network of others to whom I could relate. I was (and am) a keen gamer too and, throughout this PhD, playing on games such as *WRC10* or *Flight Simulator* has provided a virtual space to escape and process. I also use virtual environments such as *Zwift*, a massive multiplayer environment for running and cycling, for my own leisure, something which culminated in a paper written with colleagues which considered *Zwift* as a virtual leisure space (Reed et al., 2023).

Of course, alongside those initial social media platforms I engaged with, I naturally proceeded toward other forms of social media, including Snapchat and Instagram. Snapchat became a problematic space during my years at college, where I undertook a BTEC in Sports Coaching, as I unfortunately became the target for bullying through the platform. Hurtful and inappropriate messages would disappear in the space of a second or two, too fast for me to screenshot for evidence, and I struggled as I navigated my first engagement as the victim of cyberbullying. I soon after deleted Snapchat and I have not returned to the platform since. As a young person navigating what was an awful situation, through bitter

experience I have seen the darker side of using social media and how this can affect your life and outlook.

Fast forward to the final year of my undergraduate degree, I took a class which offered me an introduction to social media in the context of sport and adventure. Through the first edition of Fuchs' (2014) text on social media, I was able to examine the relationships between social media and the political. This was fascinating for me, and I also considered the work of Thorpe (2016) on the influences of new media on research agendas in action sports. These foundational readings instilled a great sense of interest, especially in relation to how mobile technologies and social media permeate and influence 21st century life.

However, it was during my postgraduate degree in Outdoor Education at the University of Edinburgh that I had my "lightbulb" moment, when I began considering how technologically mediated spaces influence how young people experience outdoor learning. At the time, this culminated in developing a film with peers about our collective experience of an old Oak tree after completing a course called *Outdoor Environmental Education: Concept-based Practice*, delivered by (now Professor) Robbie Nicol (for the film, see Dunn (2020) and for a subsequent podcast for the British Educational Research Association, see Smith (2020)). This further stimulated my interest in the relations between mobile technologies and social media and outdoor learning endeavours which, as I will come onto in chapter two, have often been characterised as a space where no technology is or should be present.

It is from this position that I began my PhD candidature, with a blend of personal experience, deep-rooted curiosity, and a desire to understand and share how social media

influences how young people experience residential OAE at Outward Bound in the UK. All the while I have consistently returned to texts such as those from Holmes (2010) and Parker-Jenkins (2018) to acknowledge my position and to emphasise and re-emphasise the constructed nature of the research findings as I have navigated the experiences and realities of the study's participants.

1.4. Extended Introduction: The Foundations of Outward Bound

With this study collaboratively supported by Outward Bound, and with data generation situated entirely with populations engaged in the Trust's delivery or outcomes, this section describes its historic foundations alongside its current outcomes and approaches.

1.4.1. *The Historic Foundations of Outward Bound*

Outward Bound (called the "Aberdovey Sea School" at the time) was first established in Aberdovey, Wales, in 1941 (Outward Bound, 2022a). As Freeman (2011) outlined, the school was set up by Kurt Hahn (1886-1974) and Lawrence Holt (1882-1961) with the explicit intent of developing tenacity, perseverance, confidence, and experience in young seamen.

Described in the Norwood Report two years later (Committee of the Secondary School Examinations Council, 1943), Hahn's underlying philosophy for the sea school was "to bring boys and girls in touch with sea and mountain, and in open-air tasks and ventures to build up the moral strength and create the physical endurance which come from such contact" (p. 83-84). Also identified by Cook (1999), this excerpt is unique in that it refers to both boys and girls being on equal terms at Outward Bound despite the first all-female programme at the sea school not taking place until 1951 (Outward Bound, 2022a). For the present-day

Outward Bound, five pillars of Hahn's approach remain and focus on developing enterprising curiosity, indefatigable spirit, tenacity in pursuit, readiness for sensible self-denial, and (above all else) compassion (Outward Bound, 2022b).

However, whilst the Norwood Report outlined what might be interpreted as Hahn's philosophy of education which now underpins Outward Bound, Flavin (1996) noted Hahn's impatience with the notion of any philosophy of education. Instead, Hahn's beliefs for the future of education were rooted in his criticism of the state of Western European society (van Oord, 2010). Drawing on a foundation which acknowledged humanity's moral decline and loss, Hahn (1947) linked this to the advancement of science and technology at the time (of course, the rise of networked architectures could have stretched this further), professing that "[t]he scientific and technical progress which we have witnessed in our life-time has been immense. But it has been accompanied by deterioration in human worth. Something indefinable has been lost" (p. 2). This led to Hahn (1959), in a later address at the Annual Dinner of Old Centralians, to suggest, how "[l]ike many educators I feel great anxiety about the state of the young throughout the free world" (p. 3). This great anxiety centred on five key "decays" of youth: The decay of fitness, self-discipline, enterprise (which Hahn attributed to *spectatoritis*), skill and care, and compassion (Hahn, 1959).

For James (1980a), the Hahnian approach that was developed at Outward Bound centred on five key areas which became characteristic of programme participation. These five approaches consolidate how Hahn sought to address his perception on the decay of young people's formative experiences:

1. Students were encouraged to pledge themselves to a "training plan," one that outlined each students' code of responsibility and personal goals.

2. Students were on a tight time schedule and all activities were tightly controlled which included time to relax and recuperate.
3. Adventure and risk played a key role in programmes. It was through direct experiences in the outdoors that students would develop a sense of togetherness and character.
4. Small groups of students were greatly preferred, which linked to Hahn's incorporation of military structure and organisation.
5. Linked to military foundations, the Sea School instilled and embodied the importance of community service which, of course, linked to the school's inception during the Second World War.

Alongside these characteristics, Christianity "instruction" was also an important factor at the Sea School which centred on developing a degree of *muscular Christianity* with explicit links to the growth of character (Freeman, 2020). Hahn (1947) touched on this, making a plea to the nation that the 23rd psalm be followed when educating young people on the sea or in the mountains, that is, "He restoreth our soul," demonstrating the mediating positive effect Hahn associated with taking young people into the outdoors.

As Fischer and Attah (2001) described, this period also gave rise to Outward Bound programmes targeting specific populations such as children with behaviour issues and indiscipline (Rawson, 1973) and rehabilitation programmes for young offenders (Castellano & Soderstrom, 1992; Pommier & Witt, 1995). Commonly, it was thought that Outward Bound programmes would offer these young people, who often had limited access to the outdoors, the greatest benefit. This development coincided with an approach to practice in the 1960s put forward by an American Outward Bound instructor, Rusty Baille, whose approach centred on *letting the mountains speak for themselves* (Bacon, 1987; Hooykaas, 2022; James, 1980b;

Woodcock, 2006). Drawing on Joplin (1981), this approach was developed as a counter-narrative to educational approaches which were encouraging learners to debrief and reflect on their experiences (Martin et al., 2017; Quay, 2021). In many ways, the letting the mountains speak for themselves approach speaks to the work of Walsh and Golins (1976). They reinstated the importance of mystery in descriptions of Outward Bound programmes, putting forward that “any codification of the process tends, by its simplification, to deny access to mystery” (p. 22).

Whilst reflection is now a central part of Outward Bound’s approach to learning transfer, the premise of adventures in “wild” and “remote” areas has remained a defining feature of the Trust’s approach (e.g., Goldenberg et al., 2005; Hickman Dunne, 2019). It is also necessary to at least acknowledge Outward Bound’s position in relation to similar organisations such as the Scouts or Girlguides. Indeed, the development of taking young people into the outdoors for the purposes of moral citizenship and self-discipline in the 20th century was not just taking place at Outward Bound. As outlined by Mills (2013, 2022), organisations such as the Scouts were also developing forms of moral education and resilience development in the outdoors. Outlining these relationships demonstrates the foundations of 20th century forms of outdoor education and acknowledges the ways in which the Outward Bound approach has historically interlinked with other associations. With this in mind, the next section outlines the present-day Outward Bound and considers its purpose and desired outcomes for young people.

1.4.2. Present-Day Outward Bound

Outward Bound in the UK now operates six residential centres across Scotland, England, and Wales (Outward Bound, 2022c; Figure 1). The Trust has grown significantly and is still underpinned by Hahnian beliefs which centre on “[w]e are all better than we know. If only we can be made to realise this, we may never again be prepared to settle for anything less” (Outward Bound, 2021a, p. 3). This growth may be seen in data that describes how, in the UK between 2017 and 2018, 23,379 young people took part in a residential OAE programme at Outward Bound (Outward Bound, 2019), and the Trust has now provided over 1.2 million young people with a residential OAE visit since its inception in 1941 (Outward Bound, 2022a).

Alongside this growth, the Trust has developed four social impact reports which highlight the outcomes associated with young people’s participation in Outward Bound programmes (Outward Bound, 2009, 2011, 2014, 2017). Through in-house evaluation, the most recent report demonstrates the Trust’s positive impact on young people, which includes increased self-confidence, enhanced emotional control and resilience, and improvements in communication and teamwork (Outward Bound, 2017). However, given these reports are not subject to peer review, it is noted that they present limited methodological information. They also draw primarily on post-course survey evaluations which may overlook situated, on-the-ground, experiences. Presently, no social impact report discusses Outward Bound’s influence on young people’s online lives or what role mobile technologies and social media might play in the Trust’s outcomes.

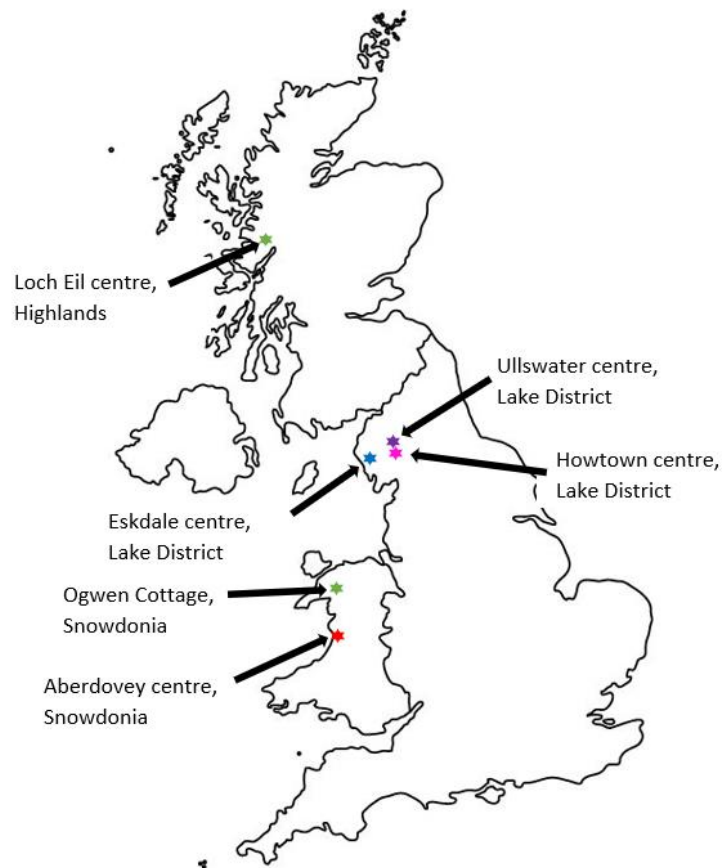


Figure 1. Map of the United Kingdom demonstrating the location of the Outward Bound Trust's centres.

The present outcomes for secondary age young people focus on the following six areas

(Outward Bound, 2022d):

- Confidence.
- Emotional wellbeing.
- Improved relationships.
- Resilience.
- Confidence in learning.
- Understanding of the natural environment.

It may be gleaned from these outcomes that Hahn's (1947, 1959) original purpose, that is to develop young people through adventurous activities outdoors, still feature at the core of Outward Bound's purpose. Looking beyond these outcomes and the impact reports generated in-house, a growing base of empirical literature outlines the Trust's present position and impact. That said, a significant portion of literature presents outcomes from other international Outward Bound schools, of which there are now 37 in 34 countries (Outward Bound International, 2022). This means studies such as those from Bobilya et al. (2011) and Daniel et al. (2022) (Outward Bound USA), Gassner and Russell (2008) and Ang et al. (2014) (Outward Bound Singapore), and Martin and Leberman (2005) and Martin et al. (2016) (Outward Bound New Zealand) do not hold as much contextual relevance for the present study. Each individual school is a separate entity and factors such as risk management approaches and the focus of a programme can vary from country-to-country (Outward Bound International, 2022). What these international studies do provide is some evidential foundations for this thesis surrounding the efficacy and experience of the Outward Bound process.

For instance, at the Philadelphia Outward Bound school, Orson et al. (2020) demonstrated how, through young people enduring anxiety and distress, they developed new mindsets which enhanced levels of perseverance². Meanwhile, at Outward Bound Canada, Kirwin et al. (2019) highlighted how an Outward Bound mindfulness programme generated lasting mental health impacts three-months post-programme when courses placed emphasis on immersion in natural environments without the distractions of everyday

² Beyond the Outward Bound context, previously published research has questioned the efficacy of causing stress and anxiety in learners to achieve outcomes such as perseverance, courage, and resilience (e.g., Estrellas, 1996; Preston, 2014; Reed & Smith, 2023). This is an ongoing conversation for the field.

life. Remaining at Outward Bound Canada, Radtke and Harper (2018), writing in *Outward Bound Canada's Journal of Education*, suggest that Outward Bound programmes are well-placed to address narratives of mobile phone addiction in young people. They draw on the concept of *NoMoPhobia* (no mobile phone phobia) which acknowledges how “[t]he effects of device use have been seen to parallel substance abuse symptoms” and how “the need to maintain student focus on activities and social relations is disrupted by device use” (Radtke & Harper, 2018, p. 16). This paper captures an emerging narrative that Outward Bound programmes may positively counteract young people’s excessive uses of and attachments to their mobile technologies. This is something this thesis sought to explore further.

Looking to texts which considers Outward Bound specifically, there is a more limited literature base, and it is authors such as O’Brien and Allin (2022) and Hickman Dunne (2019, 2022) who describe some of the present-day realities of participation at Outward Bound. As described by Hickman Dunne (2022), the present focus of Outward Bound is on the encouragement of “a slower-paced type of outdoor education” and courses typically orient around a common format (p. 35). The start of a week-long course infamously begins with *jog and dip* where participants walk / jog to a nearby body of water and immerse themselves with their teammates (Hickman Dunne, 2019). As Outward Bound (2022e) state, “when you jog and dip you're part of history” (para 6). Courses then typically follow a general structure which will often include an overnight expedition alongside activities such as gorge walking and rock climbing.

Meanwhile, O’Brien and Allin’s (2022) study of the first Women’s Outdoor Leadership Course at the Trust discovered transformative learning outcomes around increased confidence and an inner authentic sense of self. Looking to other identified

outcomes from Outward Bound programmes, Prince's (2021) systematic review of lasting outcomes from residential OAE highlights two key areas the Trust positively impacts. These are 1) Increased confidence which helps young people make and meet new friends, and 2) Enhanced intra-personal characteristics such as determination and emotional control which helps young people remain calm in the face of adversity. However, it is noted that Prince's (2021) systematic review did not include grey literature and did not hand-search journals. Instead, common databases such as Google Scholar and ResearchGate were searched using simple "catch all" terms and no follow-up emails were sent to authors, which naturally restricted the development of search strings and the overall rigour of the systematic review.

That said, the above outcomes are important for contextualising the present study and, although the research aims and questions do not look to outcomes specifically, the desired effects associated with participation at Outward Bound offer an important contextual foundation. What is perhaps of more relevance is how these experiences and associated positive outcomes are delivered. Whilst it is Outward Bound's international schools which dominate narratives surrounding the effective instruction of Outward Bound courses (e.g., Larson et al., 2022; McGovern, 2022; Warner et al., 2020), UK-based studies also feature, which hold insight into how the Trust's outcomes are achieved. For instance, Mees and Collins (2022) interviewed nine Outward Bound instructors to assess their professional judgment and decision making development. A primary outcome centred on instructors' engagement with the Hahnian approach to education outlined earlier, with instructors specifically seeking out challenging personal experiences which could develop their decision making skills when working with young people. Instructors were thought to not only deliver the Trust's ethos but to also live through it in their personal lives and adventures.

Alongside this, Mees and Collins (2022) also highlighted the importance of instructors having practical wisdom with emphasis placed on doing “*the right thing, for the right group, in the right situation*” (p. 10, italicised in original). This sense of contextual complexity and dynamic approach to instruction at Outward Bound was also outlined in a separate paper by Mees et al. (2022). Their data indicated how instructors needed to manage dynamic and complex situations in wild and remote places whilst ensuring their group remains safe. Whilst empirical research considering instructional approaches which build towards achieving Outward Bound’s outcomes are limited, what is present demonstrates approaches to practice that are situational and complex, and which are embedded within the Trust’s Hahnian approach to development.

It is also necessary to briefly outline the comfort zone model (Figure 2) and its role in Outward Bound and broader OAE. Described by Luckner and Nadler (1997) and others (e.g., Exeter, 2001; Panicucci, 2007), the comfort zone model posits that, in order to best learn in OAE, participants must leave their comfort zone and access their stretch zone. It is the stretch zone where it is thought that learners are best placed to develop the resilience and confidence that feature as core outcomes in Outward Bound programmes (Outward Bound, 2009, 2011, 2014, 2017). The role of perceived risk is important here and learners are often presented with challenging (but safe) activities where elements of perceived risk or danger push them beyond their comfortable environment. Indeed, in an Outward Bound publication, Exeter (2001) suggested that “a well managed adventure training session gives individuals the opportunity to leave their comfort zone” (p. 38). But, as Exeter (2001) asked, as an instructor, “how do you know when a participant is experiencing emotional danger?” (p. 42).

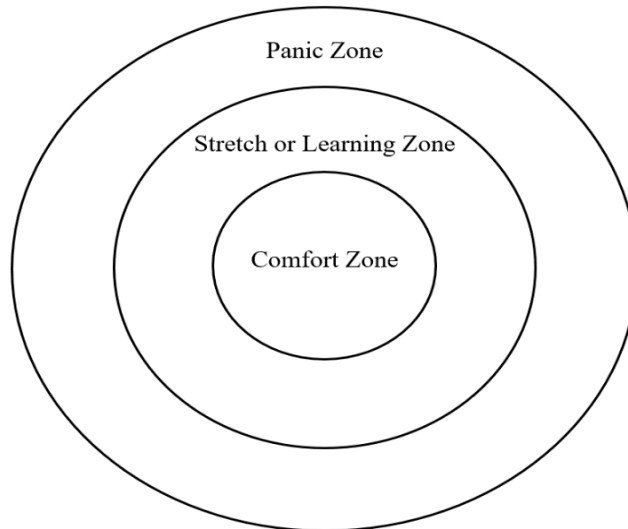


Figure 2. The comfort zone model. Adapted from Panicucci (2007).

Alongside Exeter's (2001) question, the comfort zone model has come under increasing scrutiny. In particular, Brown (2008) positioned the comfort zone model as a descriptive concept that overlooks complexity and the situated, person-specific, nature of taking learners into environments where they may experience risk, anxiety, and fear. I have also questioned the efficacy of the comfort zone model when asking whether the "risk + fear = growth hypothesis remains relevant within the complexities of the twenty-first-century sociocultural landscape" in OAE (Reed & Smith, 2023, p. 117). The above information offers important context for chapter four where young people's mobile technologies are described as "portable comfort zones" by instructors.

1.4.3. Summary

From the origins of the Aberdovey Sea School to the present-day Outward Bound, emphasis has been placed on providing young people with residential OAE experiences which make positive and long-lasting impacts. What are conspicuous in their absence are studies which

consider the Trust's role within the hyperconnected, online, lives of young people. Whilst internal documents such as "kit lists" (Outward Bound, 2021b) and "frequently asked questions" pages (Outward Bound, 2022f) suggest young people *do not* bring their phone or that signal at centres is limited, there is little evidence linking Outward Bound to the sociotechnical realities of young people and society. In essence, conceptualisations of what "technology" is and how it is interacted with at the trust remain absent. In many ways, the collaborative nature of this study with Outward Bound has sought to offer a foundational investigation into how the "always-on" online lives of young people shape the facilitation and experience of Outward Bound in the 21st century. With the collaborative nature of the research in mind, it is necessary to say at this stage that senior members of staff at Outward Bound have worked alongside me throughout this research to ensure that my approach can have the greatest impact for the trust. This is outlined further in chapter three where particular attention is placed on how the cases were selected in conjunction with staff members at Outward Bound. Finally, this thesis adopts a critical stance at times on the relationships between Outward Bound, young people, and approaches to mobile technologies and social media in practice. I would like to say at this point that I personally found the adventurous learning components at Outward Bound inspiring and the critiques throughout the thesis are geared towards developing and enhancing instructor practices and young people's experiences.

1.5. Thesis Structure

Following this introduction, this thesis comprises a further seven chapters. Building on the extended introduction above on the historical and contemporary foundations of Outward

Bound, **chapter two** explores other relevant literature which theoretically, conceptually, and empirically relate to the focus and design of the research. Here, I first examine the dichotomous binary that is present in literature concerning the place and use of technology in outdoor education. From there, attention shifts to postdigital characterisations beyond this binary, and considers the ways in which the thesis has sought to explore beyond outdoor education's analogue vs digital discussions and the importance of online, connected, spaces in the lives of young people.

Following my examination of literature relevant for the thesis, **chapter three** details my methodological position, the design of the research, and the methods employed to recruit participants and to generate and analyse data. Drawing on a realist ontological position and a social constructionist epistemology, I describe how the study employed ethnographically situated methods (but is not an ethnography) and the steps taken to construct the study's findings. This chapter also includes the ethical implications I have navigated through my engagement with Outward Bound instructors and school groups, as well as a critical examination of the integrity, character, and quality of my research.

With the study's methodological approach described, **chapters four, five, and six** present the study's findings and discusses them in relation to germane literature. Throughout these chapters, a tension is described between instructor perspectives on Outward Bound being a phone-free experience for young people, and the ways in which young people's Outward Bound experiences were negatively affected through their mobile technologies being removed and their online connectivity being disrupted. This sense of negativity from young people centres on connectivity with parents and young people's desire to remember their Outward Bound experiences (**chapter five**). Consideration is also

placed on the identification of a *networked baseline* for young people at Outward Bound and how this baseline informed how they engaged with nature and with peers (**chapter six**).

In **chapter seven**, attention returns to the postdigital, and I explore how the findings construct forms of postdigital resistance in the instructor data, as well as how the postdigital condition may be used to assess how young people generate understandings and engagements with nature. Here, I consider the entanglements between young people, mobile connectivity, networked architectures, and residential OAE, as well as the usefulness of a postdigital stance in attempts to understand young people's residential experiences.

Finally, **chapter eight** concludes the thesis and provides a synthesis of the study's findings as well as returning to the research questions. It is here that recommendations from the study are also presented, and the study's limitations are outlined and discussed. My final thoughts on my research at Outward Bound and the study's outcomes are also included in this section.

Chapter Two

Review of Literature

2.1. Introduction

The relationships between online, connected spaces such as social media and young people's social, cultural, and educational experiences have given rise to a significant literature base (e.g., Goggin, 2013; Maclsaac et al., 2018; Selwyn & Stirling, 2016; Tanrikulu & Mouratidis, 2022; Zillich & Riesmeyer, 2021). That said, a motivating factor during the development of the present study came from there being very little empirical literature exploring how these online ecosystems affect how young people experience residential OAE. Despite young people's voices often being absent, there is a small literature base concerning the role and (non)use of mobile technologies in the facilitation of outdoor education (see Bolliger & Shepherd, 2017; DeHudy et al., 2021; Isgren Karlsson et al., 2022). There is also an abundance of broader literature surrounding mobile technologies, social media, and young people, and this has influenced the generation and focus of the research aims and questions. The literature presented here has been reflectively and critically engaged with and has revealed significant gaps concerning the role and use of technology in outdoor education.

Before critically evaluating the literature concerning young people and networked spaces, this chapter begins with the binary perspectives on the use of mobile technologies in outdoor education (section 2.2). This section centres on van Kraalingen's (2021) suggestion that "it is unlikely that a consensus will be reached on whether mobile technology positively or negatively affects outdoor learning" (p. 12). The implications of this lack of consensus are examined in relation to the thesis and the affordances of mobile

technologies in outdoor education are assessed. Next, literature which suggests that the “technology – no technology” binary has collapsed is explored, and, drawing on Burnett and Merchant’s (2020) notion of “undoing the digital,” a postdigital conceptualisation of education and society is considered (section 2.3). In sections 2.4 and 2.5, I look toward young people and networked spaces more specifically. Firstly, relevant literature concerning online spaces and youth cultures is examined (section 2.4), before turning to literature which discusses how online connected spaces, such as gaming and streaming services, influence young people’s creative and playful leisure time (section 2.5). As I have already discussed, the connections between broader studies of contemporary, online, youth cultures and residential OAE are yet to be made. This section argues that this is a much-needed area for consideration in what may be recognised as increasingly postdigital societies.

2.2. Technology and Outdoor Education: A Double-Edged Sword?

This section begins by mapping out the binary in perspectives which exists surrounding the use and presence of technology in outdoor education. From there, romanticised narratives of adventure and nature are considered before literature which evaluates the affordances of technology in outdoor education are discussed.

2.2.1. *Examining the Binary: The Double-Edged Sword and Beyond*

The link to the *double-edged sword* in the subtitle above links to the paper from Cuthbertson et al. (2004). Although earlier works (e.g., Conover & Conover, 1995; Strong, 1995) described how technology “diminishes the experience of learning in the outdoors by

making it more comfortable and readily consumable” (Reed et al. 2022, p. 1), it was Cuthbertson et al. (2004) who consolidated the for-and-against argument on the role of technology in outdoor education. Their paper is conceptual and centres on whether uncritical incorporations of technology in outdoor education may compromise how young people directly and meaningfully connect to the natural world. Indeed, they state that if outdoor education relies on technology too heavily, “we miss some of the profound understandings gained from a physical dependence on, and engagement with, the land” (Cuthbertson et al., 2004, p. 142). It is this concern that often features in scholarly and practice-based contexts and frames my examination of literature in outdoor education moving forward.

Interestingly, the double-edged sword from Cuthbertson et al. (2004) has become somewhat of a cornerstone in conversations around technology in outdoor education. This is despite the paper generating purely hypothetical scenarios which lack the voices of participants who deliver and experience outdoor education on-the-ground. Alongside this, Payne and Wattchow (2008) also cautioned against the role technology may have in the instrumentalising of outdoor education which could develop “a vicious cycle ... (where) outdoor education is a reflection of the faster cultural and technological phenomena” (p. 26). More recently, Beames (2017) also noted how innovation in outdoor education must not be employed “for its own sake” (p. 4), but must be critically engaged with in order for educators to make intentional decisions which are grounded in whether a given innovation (e.g., an iPad) may enhance learners’ meaningful engagement with place and people. Whilst embers of a technology binary may still be found here, greater emphasis is placed on intentional pedagogic decisions which consider how technological innovations may (or may not) enrich learning, engagement, and interactions with nature.

However, in a literature review conducted by Philip and Razali (2020), an analysis of 78 peer reviewed papers, chapters, conference presentations, and magazine articles revealed that whilst technology in outdoor education can provide space for learning development, technology can also reduce authentic experiences in the outdoors. van Kraalingen (2021) also conducted a systematised review on the application of mobile technologies in outdoor education, where findings further reinforced that considerations of technology in outdoor education research and practice take place within a binary. Indeed, van Kraalingen's (2021) analysis of 33 articles revealed that the accessibility and portability of mobile technologies offer new opportunities for learning. However, losses in the quality of direct experience, reductions in safety, and acknowledgements of complexity demonstrate the ambiguity that is present when considering how and/or whether to use technologies in practice. It is important to note that van Kraalingen's (2021) review does not claim to be "systematic," and is referred to as "systematised" as initial searches derived "either no results or irrelevant results" (p. 3). As a consequence, there remains a question concerning the validity of van Kraalingen's (2021) findings in relation to the residential OAE context in which this thesis is situated.

In an attempt to understand the role of technology in outdoor education, Hills and Thomas (2020) created "the digital technology and outdoor experiential learning framework" which was updated in a later chapter on the topic (Hills & Thomas, 2021; Figure 3). The framework broadly follows the experiential learning cycle of Kolb and Kolb (2017) (e.g., plan, do, review), but once again engages in the development of a binary, given section B and C dichotomise the inclusion and exclusion of technology in outdoor experiences. Further, in the first iteration of the framework (Hills & Thomas, 2020), the affordances of mobile technologies in outdoor education are drawn from an exploratory

essay presented at a conference by Wiley (2005). Deriving a framework for practice without an empirical basis has resulted in a limited data-driven foundation to decision making on the use of mobile technologies in outdoor education. This further reflects the original paper from Cuthbertson et al. (2004) and hints at a field that is attempting to make sense of technology without sufficient empirical evidence.

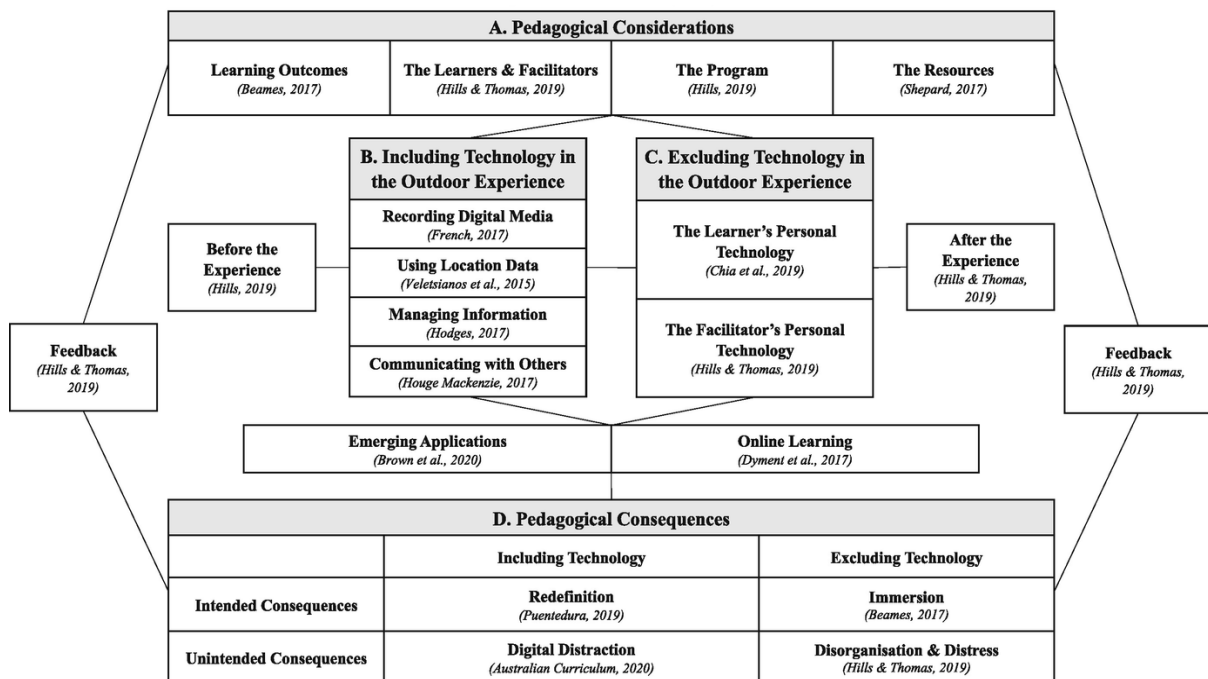


Figure 3. The Second version of the Digital Technology in Outdoor Experiential Learning Framework (Hills & Thomas, 2021).

Whilst there is little consensus on the place and use of technology in outdoor education, and there is a limited empirical foundation, recent work has called into question the efficacy and helpfulness of this binary in practice. Indeed, positioning technology in outdoor education as “good” or “bad,” or “helpful” and “unhelpful,” somewhat overlooks the complexities surrounding young people’s online and connected lives (Reed, 2021, 2022a). If nothing else, young people’s outdoor education experiences are now bookended by the realities of “a fluid and hyper-networked society” (Reed, 2021, p. 29). Interrogations of this binary have also been undertaken elsewhere. For instance, in a webinar I presented

at with colleagues (Norges idrettshøgskole, 2021), the outdoor education community who attended the webinar explored beyond the “yes technology – no technology” binary. With discussion shared in a later paper on the matter (van Kraalingen et al., 2022), it was acknowledged that online networked spaces collapse previously held notions that outdoor education is a bounded experience and that “learners inevitably start and end their outdoor education experiences within the sociotechnical structures that permeate society” (van Kraalingen et al., 2022, p. 9). Further, reflecting on the critical stance adopted by Morse and Emery (2023), they recognise technology in outdoor education as a field lacking empirical scrutiny, and that current considerations have been muted by a lack of ontological considerations on the gap between the “digital” and the “real”.

As I have described, I, alongside colleagues, have been seeking to problematise and nuance conversations had in relation to technology and outdoor education (see Reed, 2021, 2022a; van Kraalingen et al., 2022). That said, applied studies that evaluate this perspective in practice are scarce. My thinking here has also stemmed from engagement with the work of Greenhalgh-Spencer (2013), who challenges the oversimplification of binary narratives surrounding technology in education more broadly. They suggest that sceptics of online education put forward that these endeavours are “not real, not fully present, not embodied” (Greenhalgh-Spencer, 2013, p. 316). Interestingly, narratives of “fakeness” can also be found in the outdoor education literature. For example, in a conceptual paper on the role of outdoor education in the Australian national curriculum, Martin (2010) positioned young people’s engagement with technology as being “virtual” and noted how the fundamental premise of outdoor education is that it is in the “real world”. He argues that outdoor education is well-positioned to encourage participants to critically examine their disconnection from nature and to emphasise learners’ “real needs in terms of food and

water” (Martin, 2010, p. 7). In many ways, the discussion from Greenhalgh-Spencer (2013) offers a degree of pretext to section 2.3 where “undoing the digital” and postdigital theorising are outlined. But, in summary here, as Jenkins and Deuze (2008) discuss, contemporary technologies are both fluid and convergent and spread in and through our everyday lives. Presently, what impact this might have in outdoor education literature and practice surrounding the (non)use of technologies is centred on binary thinking that reveals little consensus.

2.2.2. Romanticised Accounts of Adventure and “No Technology Here” Narratives in Engagements with Nature

With a binary present, and a limited empirical foundation, it is necessary to outline the foundational factors that contribute to this discussion in outdoor education. Looking to some of the literature which captures the traditional foundations of outdoor education and, perhaps, outdoor leisure more broadly, going into the outdoors may be recognised as a place to escape the fast-paced nature of our everyday lives. Returning to the early work of Strong (1995), it has been thought that technology stands in the way of the “good life,” that it erodes our abilities to listen, consider, and experience. Meanwhile Conover and Conover (1995) suggested that technology in the outdoors develops a sense of efficiency which can disconnect users from the landscape.

Payne (2002) also picks up on technology generating a disconnection from nature in a phenomenologically grounded interpretation of technology in kayaking. Drawing on Payne (2000) and Wattchow (2001), Payne (2002) places fault on technology for its role in the destruction and manipulation of nature. Indeed, Wattchow (2001) recognised that outdoor education is positioned as an endeavour which promotes outcomes such as self-sufficiency,

silence, solitude, and remoteness. Alongside these outcomes, Wattchow (2001) also draws on Brookes (1993) to emphasise how a variety of outdoor education experiences may challenge dominant belief systems, such as the fundamentals of consumption, progress, and capitalism. In many ways, outdoor education has been positioned as a form of cultural resistance. With this in mind, the purposes of outdoor education programmes have been recognised as undermined by technology, especially if technology is employed without instructors critically scrutinising its impact on learning (Wattchow, 2001). This centres on technology contributing to the erosion of craft and heritage and outdoor education being recognised as offering learners space to reengage through direct, meaningful, experiences in nature. However, what remains unclear in contemporary practice, is how and in what ways instructors navigate these tensions and how these tensions influence learner experiences.

Looking beyond outdoor education literature, we see other, perhaps more classical, texts which describe the impact of technologically mediated interactions with nature. As the American philosopher and naturalist, Aldo Leopold asks in *A Sand County Almanac* “[b]igger and better gadgets are good for industry, so why not for outdoor recreation?” (Leopold, 1949, p. 181). Going on to answer his own question, Leopold (1949) states that “excessive mechanization destroys contrasts by moving the factory to the woods or to the marsh” (p. 181). Fry (1992) was similarly wary of the role technologies would have on human connections with the natural world, suggesting that if we see the world through the prism of technology, we will soon see “the mind drained of life” (p. 268).

Meanwhile, in 2005, Louv (2005, 2011) coined the term *nature deficit disorder*, and, in 2011, outlined a need to reconnect with ourselves and nature in our increasingly virtual

societies. The fundamental argument put forward by Louv is that the realities of present-day society, including the prevalence of technology, are producing a generation of young people who have a disordered relationship with nature, which is affecting their behaviour and health. Whilst Fletcher (2017) counters the foundations of nature deficit disorder by demonstrating how online gaming may generate nature connectedness in young people, Grimwood et al. (2018) assessed how instructors in an urban outdoor education programme in Ontario, Canada, embodied Louv's (2005, 2011) outlook on young people's nature disconnection. They discovered how Louv's position on nature disconnection being caused by television and technology was addressed by the mantra "[o]utside regardless of weather" (Grimwood et al., 2018, p. 215).

The consensus in this literature centres on the outdoors as a space where young people may reconnect to nature without the presence of screens and that this provides an "antidote" to young people's increasingly technological lives. Such a theme was also described by Smith and Dunkley (2018) who, reflecting on the work of Louv (2005), acknowledge the presence of a moral foundation where young people's disconnection to nature has been blamed on the increasing presence of technology. Interestingly, Smith and Dunkley's (2018) study found that the binaries constructed within Louv's (2005) Nature Deficit Disorder did not match their findings. Through a qualitative study at Craig Y Nos Country Park in the Brecon Beacons national park (Bannau Brycheiniog), young people navigated the relationalities between their technologies and nature in ways which enhanced roaming in the environment (Smith & Dunkley, 2018).

Finally, the work of Pyle (1993) on the *extinction of experience* holds resonance. Much like Louv (2005, 2011), technological advancements and online, virtual, nature

experiences are noted to be generating the extinction of in-person and in-place connections (Ballouard et al., 2011; Soga & Gaston, 2016). For Pyle (1993), whose text drew on his own childhood outdoor experiences, direct and emotional engagement with nature cannot be replaced by such vicarious and indirect interactions. Returning to van Kraalingen's (2021) systematised review, the work of Pyle (1993) is also acknowledged, and emphasis is placed on the applicability of the extinction of experience when making sense of "no technology here" narratives in outdoor education. Drawing on evidence from a breadth of authors (e.g., Smith et al., 2018; Uhls et al., 2014; Wattchow & Brown, 2011), van Kraalingen (2021) suggests that mobile technologies threaten direct and meaningful experiences in nature. The identification of this threat resulted in a critical stance being adopted which encourages the field to assess "how mobile technology reconfigures the traditional cornerstones of outdoor education" (van Kraalingen, 2021, p. 8). Returning to the work of Wattchow (2001), the following quote aligns with the perspective that technology fundamentally restructures our relationships with nature:

The rate of change of 'modern' or 'high' technology and the global reach of 'technosystems' has so shifted us from being able to acknowledge our organic links with the world, and so many of our 'traditional' technologies and techniques have disappeared, that we find ourselves stranded upon our own distant island. (Wattchow, 2001, p. 25)

These critical stances are undoubtedly necessary when taking learning outside, but what remains missing is an evaluation of the situated experiences of young people taking part in outdoor education with or without mobile technologies. It is this absence of young people's voices and experiences in these critical discussions which contributed to the

formulation of research question two (see section 1.2 for the research questions). What also remains unclear both in literature and practice is reflected in the conclusion of the paper from Bolliger et al. (2021) where they asked “do (instructors) believe that students have to disconnect from civilization (and technology) completely in order to experience the outdoors fully?” (p. 64). Of course, such a question is grounded in the belief that technology stands in the way of outdoor education achieving its traditional goals. So, whilst one of Outward Bound’s core outcomes centres on young people generating “[u]nderstanding of the natural environment” (Outward Bound, 2022d, para 10), it remains unclear how instructors perceive the role of mobile technologies as they interact with the outcomes at the core of Outward Bound programmes in the UK. It is this uncertainty concerning instructor perspectives which informed the initial foundations of research question one.

2.2.3. *The Other End of the Scale: Affordances of Technology in Outdoor Education*

Whilst I have outlined literature which discusses the double-edged sword and the traditional, technology-free, narratives present in discussions surrounding outdoor education, it is important to outline some of the affordances that have been identified in the literature. For instance, in the Nordic context, Kumpulainen (2022) drew on a relational ontology (that people and objects are brought into being through their relations with other people and objects) to question the unnecessary binaries that have characterised interpretations of nature, technology, and young people. Following their empirical work in a Finnish primary school (Kumpulainen et al., 2022), they call for more child-sensitive approaches to research that considers technology, young people, and nature. They also call for a greater appreciation of complexity, and acknowledge that the meaning and use of

technologies in the outdoors cannot be predetermined by an educator, but should instead recognise that technologies are entangled with the daily realities of learners. Through an augmented reality engagement with nature, Kumpulainen (2022) and Kumpulainen et al. (2022) found that young people's immersive and imaginative engagements with technology enhanced both place connection and the awareness of their relational proximity with nature.

Meanwhile in the UK's Forest School context, Garden (2022) acknowledged that the use of iPads could enhance learning outcomes. Through semi-structured interviews with 32 key-stage two students, Garden (2022) suggests that framing outdoor education as a form of "escape" from everyday schooling may overlook the social, physical, and intellectual benefits of using a mobile device for learning. Interestingly, one common theme amongst the studies of Kumpulainen (2022) and Garden (2022) was the acknowledgement of the pervasiveness of technology and networked spaces in the lives of young people. Perhaps taking a different stance to Wattchow (2001) and the data presented by Grimwood et al. (2018), where outdoor education was considered to offer young people a stripped back, traditional form of engagement outside, the findings from Kumpulainen (2022) and Garden (2022) demonstrate the entangled nature of technology and young people and the positive role technologies can have for learning in the outdoors. Such a perspective places emphasis on the entanglement of technology in the lives of young people, which questions whether genuinely "technology-free" experiences are possible or desirable in the outdoors.

The affordances of mobile technologies in enhancing learning in outdoor education was also discussed by Lai et al. (2013) in a study on the effectiveness of QR codes in Taiwan. With a similar set of outcomes to Garden (2022), the employment of mobile technologies

for learning was seen to assist in achieving learning outcomes as well as facilitating teaching and learning in diverse settings. Meanwhile, in the Cyprus context, Uzunboylu et al. (2009) demonstrated how student photographs of environmental degradation shared immediately with classmates via a mobile phone enhanced environmental concern and connectedness. Crucially, learners in the study were noted to have enjoyed using mobile technologies “anywhere, any place, and any-time” with the authors concluding that “[m]obile technologies should be used to increase environmental awareness of students” (Uzunboylu et al., 2009, p. 387). With such a stark calling for mobile technologies to be included in outdoor education, this relates back to section 2.2.1 as further evidence of the presence of a double-edged sword, with the above literature falling in the “for technology” side of the binary.

Beyond outdoor education specifically, and looking a little broader at learning endeavours which encompass outdoor fieldwork and fieldtrips, a more substantive literature base is available which documents the affordances of mobile technologies beyond the classroom. For instance, Thomas and Munge (2017) and Munge et al. (2018) describe how the assessment of skill performance through technology (e.g., the now defunct “coach’s eye” app), safety (e.g., Global Positioning Systems for navigation), and field guide apps (rather than big textbooks) all offer educators and learners valuable and engaging forms of taking learning outside. This was echoed by Pfeiffer et al. (2009) in a study which examined the role dynamic information provided by mobile technologies could have during a snorkelling activity as part of a Mediterranean fieldtrip. Through being able to immediately search for information concerning fish species, mobile technologies provided a form of dynamic visualisation for learners which was seen to enhance their knowledge of biodiversity. In many ways, it is onsite access to information and resources that is often

cited as a key affordance of mobile technologies being a part of beyond the classroom education (e.g., Welsh et al., 2013; Xie et al., 2021). Such a perspective hints at the practical uses of technology in the outdoors as a tool to enhance safety, pedagogy, and learning. For instance, authors such as Smith et al. (2020) document “how the technology of the map app and audio guide might assist moorland navigation” (p. 238), demonstrating one of the ways in which the presence of a device may work in collaboration with the user in outdoor environments.

The above provides insight into the other side of the for-and-against argument surrounding the use of mobile technologies in outdoor education. Sometimes drawing on the perspective that mobile technologies and online spaces are an inseparable part of young people’s lives, the studies such as those from Kumpulainen (2022) and Garden (2022) document the positive effect technology can have on learning experiences in outdoor education. Personally, I also recognise that simply disconnecting a young person during an outdoor education programme could overlook some of the ways in which young people are entangled with their networked environments. I extend on narratives of entanglement in section 2.3 where I examine literature relating to whether it is possible to simply disconnect learners in outdoor education settings.

2.2.4. Summary: A Dichotomy on Uncertain Ground

The work from Cuthbertson et al. (2004) on the double-edged sword remains a significant factor in discussions on the place and use of technology in outdoor education. I have also noted a lack of data-driven arguments (e.g., Cuthbertson et al., 2004; Hills & Thomas, 2020) that do not account for the voices of those who deliver and participate in outdoor

education. Alongside this, I (Reed, 2021, 2022a) and others (van Kraalingen et al., 2022) have begun to question whether the double-edged sword adequately captures the complexity and entanglement of technology in contemporary society. I personally believe that the analogy no longer captures the complex relations between young people, the outdoors, and technology. That said, others (e.g., Martin, 2010; Payne & Wattchow, 2008; Uhls et al., 2014) position technology as a primary threat to the traditional purposes of outdoor education. As Wattchow (2001) described, outdoor education has been considered uniquely placed to address the negative impact technology has had on humanity's mutual and dependent relationship with nature. It is this that contributed to the overarching aims of the study: 1) To examine how instructors at Outward Bound perceive the use or non-use of technologies in their practice. 2) To assess how the presence or non-presence of mobile technologies affects how young people construct and experience their Outward Bound residential. Reflecting Janesick's (2000) recommendation, these generative aims offered a central pillar throughout the design of the research and the construction of research questions.

That said, some of the positive impacts of technology have been outlined, where evidence of a perspective shift is demonstrated to align outdoor education with the technological realities of young people. Questions have also been placed on whether it is prudent, possible, and valuable to disconnect a young person during their outdoor education experiences (Garden, 2022; Kumpulainen, 2022). There is little, if any, agreement on the role and place of technology and social media within outdoor education which provides important context for this thesis. Alongside the above, the studies from Grimwood et al. (2018) and Bolliger et al. (2021) on the important role instructors play in the framing and use of technology in practice informed the construction of research question one: How

do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound?

2.3. Undoing the Digital: Postdigital Conceptualisations of Technology and Society

With the above text demonstrating the double-edged sword concerning the place and use of technology in outdoor education, it is necessary to explore literature which extends beyond this characterisation and assess contemporary formulations of a *postdigital* society. This subchapter's title is borrowed from Burnett and Merchant's (2020) book, *Undoing the Digital*, which critically examines contemporary discourse surrounding digital infrastructures, culture, and society. Equally, this subchapter could have been titled "Being digital" to reflect Negroponte's (1995) prophetic text on a future society that he considered would be entirely digital. However, the distinction between "undoing" or "being" digital is not important here, but what is of great significance can be found in Burnett and Merchant's (2020) introduction. They describe how society's reliance on technology means we find "ourselves in a situation in which it is impossible to avoid discussing the digital" and how, in one way or another, "the digital always seeks to define our situation" (Burnett & Merchant, 2020, p. 1). This section explores the collapsing digital vs analogue binary in society through the lens of the postdigital and investigates what role postdigital realities might have on current educational discourse.

2.3.1. *Outlining the Postdigital: Collapsing the Analogue vs Digital Binary*

Sticking with Burnett and Merchant (2020), they provide a short excerpt which synthesises an experience that many of us will be familiar with:

Message alert. I click on the icon, it's almost as if I don't have a choice. Look what came up in my memories! Pictures of my granddaughter stroking the cat – they have been lovingly curated by Facebook. How can you forget when your phone remembers better than you do? I roll my eyes, resenting the intrusion, and then my screen flashes with a reminder 'Meeting Cathy 4:15pm. Traffic moderate. Travel time 50mins.' I may be a slave to my smartphone but at least I won't be late. (p. 9)

Despite its satirical nature, what the above quote demonstrates is the inseparability of mobile technologies in our day-to-day lives. As Elwell (2014) described, the lines of difference between our so-called “analogue” and “digital” lives have blurred to the extent that distinguishing between the two is increasingly challenging. This was not a new synthesis, and it was as early as the turn of the millennium when scholars began to note the importance of the so-called “postdigital” (e.g., Maeda, 2002; Pepperell & Punt, 2000). Despite these early pieces, it was the definition provided by Jandrić et al. (2018) (cited in chapter one) which has gathered a sense of momentum surrounding postdigital theorising. That is, “we are increasingly no longer in a world where digital technology and media is separate, virtual, ‘other’ to a ‘natural’ human and social life” (Jandrić et al., 2018, p. 893). Despite this definition, Jandrić and Ford (2022a) put forward that the postdigital must be “a concept that constantly resists any final

definition” as society is only at the beginning of what could be a postdigital age (p. 707).

With this hesitancy in mind, in 2019, the inaugural issue of the new journal *Postdigital Science and Education* outlined a new community space for postdigital scholars (Jandrić, 2019). In Jandrić’s (2019) introduction to the journal, he describes how the postdigital concept was inspired by another of Negroponte’s (1998) texts, this one being titled “Beyond digital,” in the magazine *Wired*. In it, Negroponte (1998) proffered that “[l]ike air and drinking water, being digital will be noticed only by its absence, not its presence” (para. 4). Of course, such a statement could be seen to reinforce “no technology here” narratives such as that from Strong (1995) where technology is viewed as a preventative factor to accessing the “good life” in outdoor education. However, in their outlining of the postdigital, Jandrić et al. (2018) expanded on Negroponte (1998) to emphasise the postdigital as challenging to define, but that it extends beyond binary thinking and recognises humanity’s relationship with technology as both fluid and messy. Holding onto this notion of unpredictability and complexity, Knox (2019) recognises that researchers and educators drawing on postdigital foundations must acknowledge the entangled and situated role sociotechnical relationships hold in our constructions of reality.

As put forward by Fawns et al. (2023), a postdigital position may offer the researcher “ideas, ways of thinking ... conversations, conclusions, and connections” as they navigate the design of the research and go about generating and analysing data (p. 8). Whilst Jandrić (2022a) has recently plotted his own personal history of the postdigital, the stance on the postdigital taken in this thesis is presented as part of a

dialogue by Knox on “postdigital thinking” in a more expansive discussion paper from Jandrić et al. (2019). Knox picks up on the paradox of the postdigital by demonstrating how we are not in a “post” digital society, but rather in an era where our lives are characterised by more and more digital technologies and infrastructures. As Adams and Jansson (2023) suggest, this is not just about individual forms of technology such as iPads or supercomputers, but it is also the sociocultural structures which have come to normalise immediate connectedness, information sharing, and consumption.

In many ways, this increasing reliance on and inseparability of technology in society stands as one reason why authors such as Payne and Wattchow (2008), Martin (2010), and van Kraalingen (2021) position outdoor education as being in a unique position to encourage learners to question such developments. However, what the postdigital does is extend beyond discussion on certain *types* of technological advancement and instead offers a foundational platform for thinking and engaging with the increasing pervasiveness of technology in society (Jandrić et al., 2019). Indeed, drawing on Ryberg et al. (2021), postdigital thinking seeks to nuance and problematise analogue vs digital binaries and calls into question whether such binaries are an accurate depiction of present-day cultures and societies.

With a chasm in place surrounding outdoor education’s approach towards technology and the more nuanced, pragmatic, stance taken when looking through a postdigital lens, I felt that more critical engagement was required surrounding the construction of technology binaries in the context of this thesis. I therefore developed a commentary in *Postdigital Science and Education* in an attempt to outline and problematise this issue (see Reed, 2022a). Drawing on Fawns (2019), Jandrić et al.

(2019), Knox (2019), and Ryberg et al. (2021), I explored the efficacy of Tsing's (2015) writing on the notion of *tangled landscapes*. Although not written from a postdigital position, Tsing's (2015) focus on entanglement is drawn from the standpoint that single elements of society and culture are "intertwined with countless other factors that, when combined, shape reality at that very moment" (Reed, 2022a, p. 4). In essence, the embeddedness of technology in present society places any notion of a simplistic for-and-against binary on technology in outdoor education on uncertain and implausible ground.

Such a perspective links to Traxler et al. (2022) and their suggestion that postdigital theorising stands on a foundation which recognises "entanglements between the online and offline, analogue and digital, and biological and informational" (p. 508). This viewpoint has been fundamental in my design and approach to the thesis and offers a critical and problematising lens through which to view the binary that has been constructed surrounding the use or non-use of technology in the outdoor education literature. This also links back to Bolliger et al. (2021) and their asking of whether outdoor instructors consider technological disconnection to be an essential mediator of meaningful student experience. Clearly, the postdigital stance problematises this sense of *complete* disconnection and questions whether this might still be possible in technologically reliant societies. Indeed, as Nguyen (2023) suggested, there are personal, practical, and societal challenges associated with disconnecting from technology, which may include factors such as an individual's social needs, wellbeing, and lifestyle. That said, emerging scholarly texts have begun to consider the role of resistance to technology within what Gregg (2011) described as *society's connectivity imperative*.

Looking to texts considering postdigital resistance to technology, and looking beyond the field of outdoor learning, the text from Adams and Jansson (2023) on postdigital territoriality examines the feasibility of a technology free “return to place”. Their piece begins by suggesting that “any such romantic return to a predigital, bounded place seems futile given the entangling force of today’s ever-expanding networks of digital communications” (Adams & Jansson, 2023, p. 658). Placing such a statement within the context of this thesis, the possibility of an authentic and genuinely disconnected outdoor education experience seems unlikely. I felt Adams and Jansson’s (2023) argument was important for the thesis in the sense that it offers a critical and perhaps more realistic perspective on the entangled nature of technology in our day-to-day lives. Indeed, following the work of Kuntsman and Miyake (2019) on positioning *digital disengagement* as a theoretical lens to explore technological counternarratives, Adams and Jansson (2023) suggest how, for some, a yearning for a postdigital disentanglement has emerged. The importance here rests on technological “disentanglement” rather than “disconnection” which acknowledges that the pervasiveness of technology in our lives cannot simply be switched on and off. This sense of disentanglement therefore aligns with Traxler et al. (2022) and their emphasis on technological entanglements rather than overly simplified dualistic constructions of disconnection and connection. What the above indicates is that it may be impossible to disentangle oneself from the realities of the postdigital, but that a more nuanced and critical view is required which acknowledges the fundamental centrality technology plays in our lives. This is returned to in section 7.2.

It is here that some context surrounding the applicability of the postdigital is required and it is necessary to examine some of the broader literature which

demonstrates the inseparability of society, culture, and technology. For instance, one line of thought which encompasses postdigital thinking is that of technology as societal and cultural *infrastructure*. Leaning on Latham and Layton (2019), this is important as it is these “background technological networks and systems that support urban life” and which is integral to the functioning of economy, politics, and media (p. 2). Both Barns (2019) and Plantin and Punathambekar (2019) recognised this, describing how the rise of international online platforms has led to an infrastructural turn, which recognises how contemporary societies rely on these critical infrastructural architectures to function. This was demonstrated in a study from Mexico City from Cruz and Harindranath (2020) which evaluated the instant messaging platform WhatsApp as a “technology of life” (Para. 2). Throughout day-to-day interactions with others, WhatsApp was seen to offer a sustaining infrastructure which mediated the majority of work and social engagement.

The findings from Cruz and Harindranath (2020), that online platforms and environments such as WhatsApp now hold an infrastructural authority within society, are emulated elsewhere (e.g., Pereira et al., 2022). But what the above text has offered this thesis is a contemporary view beyond binary thinking surrounding technology and outdoor education. I have been particularly taken by this characterisation of technology in society, and work which adds nuance to this seeming oversimplification (e.g., Fawns, 2019; Jandrić et al., 2019; Knox, 2019; Ryberg et al., 2021) have been instrumental throughout the design of the research and refining of research questions. However, it is necessary to say here that I do not think that one side of the binary (e.g., technology) has “won”. I prefer to think of the physical and the digital as entangled in ways which sustain day-to-day life, and which are dependent on

one another in the construction of our social lives. It may also be, given I am an early member of Gen Z, that a postdigital stance represents my own life experience of not knowing a time without immediate connectivity and mobile technology. The next section now looks specifically at literature which considers the postdigital in educational contexts to further explore how postdigital thinking is influencing contemporary teaching and learning.

2.3.2. *Contemporary Formulations of Reality in Postdigital Education*

If we are to acknowledge that the digital has become “the master narrative of our world,” it is essential that such narratives are applied to educational contexts (Fuller & Jandrić, 2019, p. 215) and, as is the purpose of this thesis, to the realities of residential OAE. Indeed, whilst an array of literature applies postdigital thinking far beyond the realms of education (see, for instance, Ralston (2022) on slacktivism or Jandrić (2022b) on postdigital warfare), emerging literature on the relationships between the postdigital and education demonstrate the ways in which pedagogy and learning are increasingly entangled with postdigital realities. This raises an important question over how a postdigital characterisation of teaching and learning intersects with existing philosophies of education. Whilst a more thorough evaluation concerning romantic, critical, or posthuman philosophies is beyond the scope of this research, it is necessary to at least position the thesis within these considerations.

Interestingly, Jandrić and Knox (2022) warn against defining a postdigital educational philosophy, suggesting that the “great convergence” between analogue and digital is too complex to presently disentangle. Jandrić and Ford (2022b) pick up on this complexity,

suggesting that postdigital conceptualisations of education engage with anticolonial, feminist, critical, and posthumanist philosophies to name just four. It is with this in mind that I proceed with this section and begin with Fawns (2022) who describes how notions of entanglement may be helpful when considering the embeddedness of technology in pedagogical practice. In a section seeking to move beyond the pedagogy - technology dichotomy, Fawns (2022) emphasises that realistic views are required on the unequivocal embeddedness of technology in education. Alongside his acknowledgement, it is suggested that anything less than this fails to recognise the entangled nature of current pedagogical practice with technology, and provides a starting point through which to move beyond techno-binaries in educational contexts. For Fawns (2022), not doing so “leaves educators susceptible to an inadequate appreciation of complexity relating to how it [technology] is entangled in educational activity” (p. 2). Naturally, such a statement appears directly contradictory to previously cited works such as Uhls et al. (2014) which intentionally call for technology-free outdoor learning environments.

The tension described above has generated somewhat of a friction in my own considerations of the postdigital as this thesis has been developed. Much like Traxler et al. (2022), I recognise the entangled, messy, nature of technology in education and the need to challenge oversimplified techno-binaries and that a postdigital stance is well-positioned to do this. However, the historical and romanticised accounts of nature and outdoor learning outlined in section 2.2.2 undoubtedly inform the direction of literature in outdoor education and contest the notion from Fawns (2022) that educators have “an inadequate appreciation of complexity” when discounting technology (p. 2). Reflecting the work of Christie et al. (2016) and their citing of Davis and Sumara’s (2006) work encompassing education and complexity, outdoor education practices and experiences are incredibly heterogeneous and

complex. A part of this complexity is situated in calls to return learners in outdoor education to the “good life” (Strong, 1995) and the general sense that disconnecting learners from technology provides a purposeful critique to technology’s entanglement in society.

This links to my contribution in a dialogue paper which responded to *The manifesto for teaching online* from Bayne et al. (2020) (contribution present in MacKenzie et al., 2022). In the manifesto, Bayne et al. (2020) describe how technology in education is reshaping and dissolving notions of “place-essential” teaching and learning, and characterise this as a “shifting configuration of place” (p. 164). Drawing on Shooter and Furman’s (2014) suggestion that a placeless education (e.g., with no in-person, in-place, connection with nature) cannot develop climate and planetary conscious learners, I highlighted in the response how our postdigital realities are also embedded within the climate and ecological crisis (MacKenzie et al., 2022). In many ways, literature concerning both outdoor education and postdigital thinking has led to somewhat of a standoff and it is yet to be determined how a postdigital outdoor education may navigate this tension.

With narratives of place being reconfigured, I have also noted a limited base of empirical evidence which applies postdigital thinking to the realities of teachers, learners, and policy makers in practice. Despite there being numerous theoretical publications on the role of the postdigital in the development, framing, and experience of education (e.g., Jandrić & Knox, 2022; Mañero, 2020), extensive empirical data documenting the role and impact of the postdigital within education have yet to be presented. With the notable exception of studies assessing the role of the postdigital during the online, virtual, education associated with the Covid-19 pandemic (e.g., Jandrić et al., 2021; Peters et al., 2020), the field may be characterised as being in a state of data deficiency. Perhaps a symptom of the

field's infancy, a natural limitation has been a lack of operationalisation on the role postdigital thinking *might* have in the construction and analysis of data and participant experiences in education studies. Of course, the context of this thesis offers a unique platform from which to assess the efficacy of postdigital thinking in residential OAE environments, where young people's uses of technology are often limited or removed altogether in order for young people to reconnect with nature and to others (e.g., Payne & Wattchow, 2008; Wattchow, 2001).

2.3.3. *Postdigital Realities and Entanglements: Summary*

Returning to the title of this section, Burnett and Merchant's (2020) *Undoing the digital*, it is clear that postdigital thinking has been gathering a sense of momentum. Grounded in notions of entanglement (Knox, 2019; Traxler et al., 2022) and that a truly analogue alternative to digital life is no longer possible (Elwell, 2014; Ryberg et al., 2021), I have traced the beginnings of postdigital thinking back to Negroponte's (1998) work which considered how technology in contemporary society is primarily noticed only when it is absent. In essence, it has become increasingly challenging, if not impossible, to fully disentangle oneself from the realities of mobile technologies and networked spaces. In the construction of this thesis, such a perspective has been starkly at odds with authors such as Payne (2002) in the outdoor education literature who have often position technology as a vanguard against what Strong (1995) described as the pursuit of the "good life".

Of course, postdigital thinking also pulls into question the concerns put forward by Pyle (1993) and Louv (2005, 2011) on humanity's increasing disconnection with nature. As described by Adams and Jansson (2023), attempts to truly disconnect from technology in a

postdigital world are significantly hampered by technology's entanglement with the human condition. How outdoor instructors navigate these entanglements, and the impact they have on young people's experiences at residential centres, are yet to be navigated in the literature. This has contributed to the development of research questions one and two concerning instructor and young people perspectives and experiences in this time of the postdigital within Outward Bound's residential OAE settings in the UK. Alongside this, the postdigital has also provided a lens through which to make sense of participant realities at Outward Bound and has provided a foundational theoretical position for the study.

2.4. Young People and Networked Spaces: A Mapping of Literature

From the outset of my PhD candidature, studies such as the Scottish school-based ethnography from Maclsaac et al. (2018) on the role social media plays in young people's informal social relationships, have centred my attention on the importance of these spaces for young people. Alongside this, the foundational works of boyd (2010, 2014) and Marwick and boyd (2014) have directed me towards the role online, networked spaces have in the construction and maintenance of contemporary youth cultures. This section begins by examining the importance of mobile technologies and social media in the lives of young people, before looking to literature which extends beyond traditional formulations of social media to include literature concerning young people's relationships with gaming and other forms of media and online engagement. Finally, a cautionary note is included which presents literature on narratives of young people's excessive screen time, mental health, and technology addiction.

2.4.1. *The Importance of Networked Spaces in the Lives of Young People*

Although drawing on data that is now over a decade old, my initial reading of boyd's (2014) book on the social lives of America's networked teenagers drew my attention to the emerging social, cultural, and political importance networked spaces hold for young people. From the outset, my focus has been informed by boyd's (2014) acknowledgement that "[t]eens' engagement with social media and other technologies is a way of engaging with their broader social world" (p. 202). Something else that also captured my attention was boyd's (2014) conversation with 18-year-old Skyler. In a dialogue between Skyler and her Mum about the online, connected, spaces where her friends would "hang out," Skyler suggested that a young person's absence from such spaces would have such a profound effect on sociality it would mean that "you don't exist" (boyd, 2014, p. 119). Hodkinson (2017) also touches on social media participation as increasingly compulsory for young people and describes such platforms as "always-on". Hodkinson (2017) also describes social media engagement by young people as being defined by a platform's capacity to offer multi-spatial environments for sociability. This means that there is no one single online space where young people interact online, but that engagement is dissolved across a multitude of platforms.

Although there is no single environment for online engagement, current popular spaces for young people, as described in data presented by Mittmann et al. (2022), includes platforms such as Snapchat and TikTok. This multi-platform, online, environment for socialising and engagement led to Lane's (2020) description of social media participation being "unbounded," meaning social interaction and the consumption of content no longer has to be in-person or in-place. This characterisation of social media as offering a dispersed (in terms of both time and space) meeting point relates to the works of Watkins (2009) and

Taylor and Bazarova (2021) and their discussions on how online, networked, spaces has led to young people being “available, anytime, anywhere”. Interestingly, a recent blog post from Outward Bound (2023a) appeared to challenge this notion and suggested “that scrolling can be exhausting. Dare we say, dull? Especially when you could trade it all in for actual experiences like hiking, camping, climbing, dancing, swimming, sailing, stargazing, paddling, and literally living your best life. Right?” (Paras 2 - 3). In essence, the message conveyed here may overlook the situated and necessary components of young people’s connectivity and could serve to pit Outward Bound activities against the realities of contemporary youth cultures.

Of course, the importance of technology is not confined to young people alone, as Lupinacci (2021) described in a study of 19 - 47 year olds in London, social media platforms encourage constant connectivity to both the world and to others, and that this sense of connection can generate feelings of co-presence with global communities. Whilst the use and impact of social media naturally extends far beyond contemporary youth culture, what has been identified in the literature as different for young people is that they have been born into this postdigital era where information, entertainment, and others are immediately available. To contextualise this, texts from The Pew research centre (e.g., Dimock, 2019; Parker & Igielnik, 2020) characterise the generation born between 1997 and 2012 as *Generation Z*. Although identifying the beginning of Generation Z is challenging (Seemiller and Grace (2019) suggest 1995 is the best start point), Turner (2015) outlines the unique features of this generation. As a key touchstone, Turner (2015) positions Generation Z as a population of young people who “have become accustomed to interacting and communicating in a world that is connected at all times” (p. 104).

Whilst factors such as changes in the consumer behaviour of Generation Z have also been plotted (e.g., Goldring & Azab, 2021; Jacobsen & Barnes, 2020), Hodkinson (2017) indicates how these always-on spaces effect the ways in which young people develop and exhibit their identities. This was identified by Vițelar (2019) who, in a Romanian study with 100 young people, demonstrated how social media was employed as a method of both identity and brand development. Whilst the presentation of self and the development of identity performance on social media is not new (e.g., Hogan, 2010), Stahl and Literat's (2022) thematic analysis of TikTok videos with the hashtag #GenZ demonstrates the ways in which networked spaces provide environments for young people to self-represent and to collectively express themselves. They found a diversity in self-expression which was facilitated by personalised hashtags, green screen effects, and sound-based creativity that facilitates a performative environment where young people can curate and maintain their personal and collective identities.

As Schellewald (2021) described, networked spaces such as TikTok facilitate "meaningful social interaction through enacting a site of momentary copresence that brokers awareness for the life circumstances of distant others" (p. 1439). This sense of copresence with distant others collapses the previously bounded nature of social interaction and generates contemporary spaces for young people to engage and consume. In many ways, this description of connectivity and the always-on nature of young people's social participation, consumption, and identity links back to notions of postdigital entanglement from Knox (2019) and Traxler et al. (2022). It becomes increasingly challenging (and more likely impossible) to distinguish the ways in which contemporary youth culture is generated and sustained in a simplified binary characterisation of purely analogue and digital interactions. Further, whilst limited literature makes links between outdoor education and

Generation Z, Beames et al. (2017) draw attention to “Gen Z” in an introduction to a special issue seeking to critically examine the concept of adventure in outdoor education. Drawing on the previously cited work of boyd (2014), Beames et al. (2017) acknowledge that mobile technologies are “a vital and integral part of Gen Z life” and that contemporary forms of adventure education are required to “respond to the challenges of our time” (p. 276).

Whilst it remains unclear whether Beames et al. (2017) position Generation Z’s reliance on mobile technologies as a core issue in contemporary society, the authors identify an important characterisation of social media and broader connected spaces from boyd (2014). This characterisation centres on the concept *networked publics* (boyd, 2008, 2010, 2014), which draws attention to the ways in which a sense of “publicness” is reconstructed by networked technologies and the prescribed modes of interaction that come with engagement in these designed spaces. Whilst the architectural design and social affordances and limitations that come with social media are beyond the scope of this thesis, the concept of networked publics provides one final indication on the importance of these spaces for young people. As boyd (2014) acknowledges, young people are “searching for a public of their own” and generate their own spaces for participation away from traditional, adult-oriented, environments (p. 199). Young people’s seeking of a space of their own was also described by Campos-Holland et al. (2015) who demonstrated how young people intricately navigated adult authority which often stems from their school and family lives.

Finally, the desirability of a public of their own was also hinted at by 17-year-old Carmen in Marwick and boyd’s (2014) study on youth privacy on networked publics when she suggested how “it’s just uncool having your mom all over your wall, that’s just lame” (p. 1058). Alongside this, what has become clear throughout my engagement with the

literature on the value young people place on their access to and uses of social media has centred on three key aspects:

1. The curation and maintenance of both youth cultures and youth identities are entangled in both in-person and online environments and that a postdigital interpretation implies we can no longer separate youth culture from these networked spaces (e.g., Adams & Jansson, 2023; Traxler et al., 2022).
2. In the global north, Generation Z have known nothing else other than always-on online environments where they can curate a public of their own away from more traditional adult-oriented spaces (e.g., boyd, 2014; Hodkinson, 2017; Turner, 2015).
3. Outdoor education literature has scarcely engaged with the importance young people place on their uses of social media and instead often focuses on the outdoors as an antidote to young people's online engagement (e.g., Martin, 2010; Wattchow, 2001).

Of course, these factors generate necessary terrain for outdoor education to navigate and has informed the direction and aims of this thesis. Centrally, I have taken forward a sense of complexity and the recognition that the double-edged sword argument which is so often at the core of outdoor education literature may no longer be fit for purpose.

2.4.2. Media, Gaming, and Online Engagement Beyond Traditional Social Media

With the importance of social media engagement outlined in relation to the development and maintenance of contemporary youth culture, the eight-year longitudinal study mentioned in section 1.1 from Ofcom (2022, 2023) gives insight into young people's shifting

contemporary engagements with media. Whilst the 2022 report aligned with Mittmann et al. (2022), in that TikTok is currently the most popular social media platform for young people, other forms of media such as YouTube and Netflix are found to significantly feature in young people's engagements with online environments and content. As the 2022 report illustrated, young people "were being less 'social' on a lot of social media" and the consumption of professionally produced content from influencers dominantly represented young people's engagement (Ofcom, 2022, p. 5). This reflects the writing of Chau (2010) who described how spaces such as YouTube have become a form of participatory culture for young people where they can create and distribute content, and connect and collaborate with others both near and far. Popular media spaces are therefore extending present understandings of young people's engagements and interactions in online spaces.

Alongside these shifts in engagement, broader shifts in contemporary media landscapes from the days of DVD rental to the instantly available video on demand (VOD) services such as Netflix or Disney+ are altering both viewing practices and broader understandings of how media is produced and consumed (Jenner, 2016, 2017). As Laor and Galily (2022) described, the always-on nature of online content has meant that "Generation Z consumes more mobile digital content and focuses on VOD and YouTube" (p. 7) which ultimately contributes to the curation and maintenance of generational identity described earlier by Stahl and Literat (2022). Matrix (2014) also discussed this, describing how young "Netflixers" are watching and engaging with VOD programmes to glean the cultural knowledge necessary to enhance their participation in the cliques and conversations of their friends.

Whilst boyd (2008) described music as a *cultural glue* for young people in the mid-2000s, VOD series such as the recently popular *Stranger Things* or *Squid Game* are increasingly spaces which provide young people with the (sub)cultural references necessary to fit in and participate. For instance, Siregar et al. (2021) evaluated the cultural effect of the game which features in episode one of *Squid Game*, “Red light, Green light”. Whilst at the time of writing for Siregar et al. (2021) the hashtag #SquidGame had been used over 11 billion times on TikTok, they also hint at how the construction of memes and videos concerning “Red light, Green light” have become a significant new trend within digital culture. Whilst the ephemeral, quickly changing, nature of trends in youth culture hints at Kaun’s (2021) description of *digital immediacy*, media ecosystems and their relation to the curation and maintenance of culture necessitates young people to remain plugged-in (Valkenburg & Piotrowski, 2017). This provided additional nuance to my attempt to make sense of how young people’s postdigital realities intersect with their experiences of residential OAE at Outward Bound in the UK and contributed to the construction of research question three. It is important to note here that research question three was developed during and after I generated data with young people. The observational component of the study elicited additional insight into how networked spaces provided young people with a sense-making baseline from which they interpreted and understood their residential OAE experiences.

Meanwhile, another aspect of Ofcom’s (2022) report that stands out in relation to the present-day experiences of young people at Outward Bound centres on gaming. Whilst fewer girls were found to participate, all 12 of the boys in the study spent time playing online games. According to Ferguson and Olson (2013), online gaming, alongside other forms of online participation such as social media, must be positioned as an essential aspect

of young people's socialising and entertainment. Alongside this acknowledgement, Wills (2019) described gaming as "a new realm of play" with Egenfeldt-Nielsen et al. (2013) demonstrating how, "[i]n the historical blink of an eye, video games have colonized our minds and invaded our screens" (p. 2).

Building on this recognition from Egenfeldt-Nielsen et al. (2013), Bassiouni and Hackley (2014) conducted a literature review which demonstrated how online gaming spaces offered young people an environment to experiment, connect with friends, and engage in imaginative play. This led to Thompson (2016), in the *New York Times Magazine*, describing the current group of youth gamers "The Minecraft Generation". The prevalence of online gaming in the lives of young people was also outlined by Keilhauer (2012) in a German study of 349 young people between the ages of 10 and 22. Across the sample, 84% of participants were found to play video games daily or nearly every day, with boys playing for three hours and girls playing for two and a half hours on average on schooldays. Much like the above paragraphs on the role of VOD services such as Netflix, and their integration into contemporary youth culture, gaming is yet one more space and activity which is seen to contribute toward the formulation of trends and narratives of normality in the lives of young people. Young people's entanglements with Netflix and Minecraft are returned to in sections 6.2.1 and 6.2.2 in relation to data generated across the Outward Bound centres.

When considered alongside more traditional characterisations of social media, VOD services and gaming contribute to what Castells et al. (2009) describe as "a mobile youth culture" (p. 5). Despite writing over a decade ago, their synthesis centres on recognising the centrality of mobile technologies and networked spaces in youth culture, and how these spaces offer young people satisfactory methods of both self-expression and reinforcement

(Castells et al., 2009). In the years since Castells et al. (2009), the writing of Vanden Abeele (2016a, 2016b) provides a helpful foundation from which to conclude this section. Centrally, Vanden Abeele (2016a, 2016b) describes how mobile technologies have been domesticated (e.g., they are a part of young people's lifestyles) into the lives of young people and how this domestication foregrounds a collection of common practices and interactions which structure the always-on nature of mobile youth cultures. For Vanden Abeele (2016a), this generates important directions for future research such as the need to "address whether ... school cultures affect the mobile lifestyles of youths" (p 922). Replacing the word "school" with "Outward Bound" in the above quote links to research questions two and three (see section 1.2 for the research questions), and how "no technology here" narratives may influence young people's experiences of residential OAE through restricting access to an important cultural referent in the lives of young people.

2.4.3. A Cautionary Note: Addiction and Screen Time

Sections 2.4.1 and 2.4.2 have outlined the literature that has contributed to my understanding of the technologically entangled constructions and maintenance of contemporary youth cultures. In essence, these cultures may be developed within a wide range of traditional social media and other online environments such as VOD services and gaming. However, there exists a body of literature which calls into question what issues may arise given the pervasiveness of mobile technologies in the lives of young people. This shorter subsection outlines some of these concerns and centres on narratives of addiction as they relate to young people's embeddedness in online spaces.

Narratives of online addiction are not new and throughout the early 2000s an *internet addiction scale* was being tested and validated (e.g., Chen et al., 2003; Nichols & Nicki, 2004). These early scales were later amended by Kwon et al. (2013a, 2013b) who created the *smartphone addiction scale*, which seeks to account for addictive behaviours concerning smartphone use in adolescents. This scale was used as a foundation for Olson et al. (2022) who assessed 81 studies employing the smartphone addiction scale and found that between 2014 and 2020 addictive smartphone engagement increased globally. With this increase in mind, the UK based study with young people aged 11-18 from Lopez-Fernandez et al. (2014) found that 10% of participants exhibited problematic phone use. For van Velthoven et al. (2018), figures such as these are indicative of an “emerging public health concern” which has been facilitated by ease of use, a desire to escape, anonymous online spaces, and the regularity and persistent nature of notifications (p. 4).

Of course, my previous citing of Radtke and Harper (2018) and their description of Outward Bound Canada being well positioned to address young people’s NoMoPhobia, that is the fear of being phoneless, is helpful here. Both Ali et al. (2017) and Rodríguez-García et al. (2020) conceptualise NoMoPhobia along four key areas. Being without a phone:

1. Restricts a person’s ability to communicate with other people.
2. Links to fear surrounding being disconnected.
3. Produces anxiety surrounding not being able to access information immediately.
4. Means the comfort associated with phone use is removed.

Ultimately, Radtke and Harper (2018) ask whether Outward Bound Canada should “[b]e stalwart in our historical practices and remove student distractions such as their technology at course start?” (p. 18). The answer for works taking a critical view of technology in

outdoor education is that it is essential that outdoor education maintains its traditional, technology free, approach (e.g., Uhls et al., 2014; Wattchow, 2001). However, if contemporary outdoor education would like to address problematic phone uses and narratives of NoMoPhobia amongst young people, the work of van Velthoven et al. (2018) holds significant insight. Indeed, it is suggested that despite environments and institutions seeking to intentionally control young people's smartphone engagement (such as limiting use, digital interventions, or inciting digital detoxes), "none of these has proven to work yet" (Velthoven et al., 2018, p. 1). This raises important questions for outdoor education endeavours which seek to remove a young person's technology as a form of detox and whether these endeavours are likely to be effective.

Lastly, my reading of Livingstone and Blum-Ross's (2020) text, which outlines how adult fears about technology influences the lives of young people, contributed to my understandings of narratives of addiction as they relate to the delivery of Outward Bound programmes. They provide the link between the remembered pasts of adults and "romantic accounts of 'free range' childhoods" and the perceived ways rapid technological change is negatively influencing young people's formative years (Livingstone & Blum-Ross, 2020, p. 7). For Madsen (2022), popular media discourse on smartphone addiction contributes to this, which, according to Lanette and Mazmanian (2018), often centres on extreme and dramatizing narratives which have compared smartphone use to Class A drugs. That said, narratives of addiction provide additional layers of nuance surrounding young people's uses of mobile technologies, and is returned to in section 4.2.3 where some instructors consider smartphone addiction to be one reason why technology removal from young people at Outward Bound centres is important.

This section documents some of the literature which describes the sometimes excessive uses associated with young people and their smartphone engagement. It is also important to note that the literature discussed here was engaged with more thoroughly during the interviews conducted with Outward Bound instructors where some of these narratives emerged. What has become clear is that whilst the literature evaluated in section 2.4.1 and 2.4.2 provides comprehensive evidence of the importance of mobile technologies in the lives of young people, the very same technologies can produce severe and detrimental social and psychological outcomes.

2.5. Online Media and Contemporary Sense-Making: Influences of Online Media on Young People's Leisure and Play Experiences

This short section reviews literature relating to the influence mobile technologies and media have on young people's creative leisure and play experiences. There exists an emerging foundation of literature which is beginning to identify the role online environments have in young people's contemporary formulations of play. As Stevens et al. (2008) suggested, considerations of how "playing these games affects kids' lives when the machine is off" are yet to be fully considered (p. 41). Given much has changed within gaming and media ecosystems (and young people's uses of them) since the writing of Stevens et al. (2008), exploring recent work on the ways in which online media influence how young people make sense of their realities is important.

This line of thought came about during the generation of data with young people at the three Outward Bound centres when it became clear that spaces such as Netflix, Minecraft, and TikTok were providing *sense-making baselines* which informed how young

people engaged with others and with the environment. For me, sense-making baselines refers to the foundational, networked knowledge and understandings young people brought to Outward Bound. These baselines of understanding were foregrounded and developed in online spaces long before young people visited their respective residential centre (see chapter 6). In many ways, this builds on and operationalises the work of Siregar et al. (2021) on the significant cultural effect online and on-demand spaces can have across society. Expanding these effects into considerations of young people's sense-making foundations generates a limited yet important foundation of literature which has informed my interpretation and construction of young people's postdigital realities at Outward Bound in the UK.

2.5.1. Present Conceptualisations of Shifting Imaginations: An Emerging Topic

Firstly, it is necessary to note that the literature presented below draws primarily on gaming literature as I could find little (if any) evidence concerning the role VOD services have on young people's constructions of day-to-day life. Initially centring on the relationship between young people's online play and constructions of nature, McNally and de Andrade (2022) offered insight into the mediating role gaming spaces such as Minecraft can have on young people's engagement with natural environments when saying that such spaces provide contemporary "ways of seeing and being in nature" (p. 180). This is important for this thesis given Bigl (2013) asked whether the construction of reality in video games transfers from the game into the everyday life of the player.

This directly links to the development of research question three which centres on whether online media and gaming impact the sense-making baselines of young people when

participating in Outward Bound programmes. Indeed, returning to Bigl (2013), their online survey of 1146 gamers found that 86.8% of the sample transferred their gaming experiences into their day-to-day lives. Knowledge gleaned in-game were seen to influence “real-life” dreams and emotions, something Bigl (2013) described as offering players “a very positive aha experience” that could be reflected upon (p. 148). Whilst a focus on the transfer of knowledge from virtual environments into everyday life is not new (e.g., Barnett, 2014) and has been described as *Game Transfer Phenomena* (whereby game elements trigger thoughts and actions in everyday life) (e.g., Ortiz de Gortari et al., 2011), Poels et al. (2015) described how game elements in World of Warcraft influence user associations, daydreams, and perceptions in day-to-day living. They identified increased playing time and narrative involvement from the player as primary factors which facilitate the transfer of knowledge from the virtual to the physical. For Poels et al. (2015), the development of vocabulary and slang were seen to be affected by gaming, and gamers also interpreted “real-life” objects through the lens of in-game elements. The knowledge gleaned through intense and prolonged game play may therefore affect how a player perceives and interacts with their physical environment (Poels et al., 2015).

The ways online environments affect how individuals and groups make sense of physical reality was also discussed by both Giddings (2017) and Hjorth and Richardson (2017) in relation to *Pokémon GO*. Describing the augmented reality game as framing young people’s postdigital play, they suggest that media devices and online spaces fuse with our everyday physical environments which ultimately scaffold and sustain playful imagination (Giddings, 2017; Hjorth & Richardson, 2017). This speaks to Ruckenstein (2015) who, in an analysis on the role of the Nintendo DS in children’s lives, suggested such mobile technologies allow young people to “play at life” in virtual environments. These

technologies are considered to be “continually altering and remaking ways in which children experience and interact with the human and non-human world” (Ruckenstein, 2015, p. 354). On encountering this literature, it was clear that it held significant applicability for the thesis as it related to the experiences I had observed and spoken to young people about during my fieldwork at the Outward Bound centres. The seemingly unique ways in which spaces such as Netflix, Minecraft, and TikTok provided young people with a sense-making foundation during their Outward Bound experiences are discussed in sections 6.2 and 6.3.

The literature examined above contributed to the construction of research question three: What impact might online media, VOD services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound? This question was constructed during the data generation and analysis phases and acknowledges Agee’s (2009) reflective and interrogative approach to the generation of research questions. In particular, works such as those from Ruckenstein (2015) and McNally and de Andrade (2022) have provided significant insight into this gap in the literature and aided my navigation and construction of young people’s playful imaginations as they relate to virtual environments and gaming.

2.6. Chapter Summary and Situating the Thesis

Beginning by outlining the presence of a double-edged sword concerning the place and use of technology in outdoor education (Cuthbertson et al., 2004; van Kraalingen, 2021), this chapter has outlined that little consensus has been reached concerning what role and impact technology might have when educating young people beyond the classroom (van Kraalingen et al., 2022). This lack of consensus has informed the overarching aims for the

thesis: 1) To examine how instructors at Outward Bound perceive the use or non-use of technologies in their practice and, 2) To assess how the presence or non-presence of mobile technologies affects how young people construct and experience their Outward Bound residential. These aims reflect the lack of consensus on technology in outdoor education and the fundamental roles mobile technologies and online spaces have in the generation and maintenance of contemporary youth cultures.

Whilst these foundational aims have guided the study, I have explained how the lack of consensus surrounding analogue vs technology in outdoor education has been problematised given the role of the postdigital in contemporary understandings on the pervasiveness of networked architectures in our everyday lives. As Burnett and Merchant (2020) suggested, the digital has been undone, and “we are increasingly no longer in a world where digital technology and media is separate, virtual, ‘other’ to a ‘natural’ human and social life” (Jandrić et al., 2018, p. 893). This collapsing of the analogue vs digital in contemporary society has left the technology debate in outdoor education on uncertain ground (van Kraalingen et al., 2022). Indeed, applying such thinking to broader educational endeavours (Fawns, 2022; Fuller & Jandrić, 2019) reveals a developing theme which centres on technology’s *entanglement* with education, and that overlooking this may lead educators to insufficient understandings on the role technologies play both in their pedagogy and in the lives of learners. My engagement with the postdigital literature therefore generated yet more uncertainty on what role technology might have in residential OAE at Outward Bound and contributed to the overall aims of the research, alongside contributing to the construction of research questions one and two.

Research question two was also informed by literature concerning the important roles mobile technologies, networked spaces, and broader media (e.g., VOD) play in the construction and maintenance of youth culture and participation. Drawing on authors such as boyd (2008, 2010, 2014) and Mittmann et al. (2022), traditional forms of social media such as TikTok and Snapchat were described in relation to their importance in the lives of young people. This rested on the foundation of Turner's (2015) acknowledgement that the current generation of young people (Generation Z) "have become accustomed to interacting and communicating in a world that is connected at all times" (p. 104). Indeed, Hodkinson (2017) described social media for young people as "always-on" social and cultural spaces. Given Outward Bound programmes often necessitate that young people leave their technology behind for extended periods of time (e.g., during water activities or expeditions), it became clear that this sense of constant connection could be disrupted which generated important terrain for this thesis to navigate.

The report from Ofcom (2022) also held significant insight beyond traditional social media. Through outlining the role of gaming and VOD services in young people's engagement with online spaces, this has led to descriptions of "The Minecraft Generation" (Thompson, 2016), as well as evidence hinting at the influence Netflix shows such as Squid Game hold in the construction and maintenance of contemporary youth culture (Siregar et al., 2021). During my engagements with young people at Outward Bound centres, it became clear that these online environments were having a profound impact on their interpretation of and engagement with the world around them. The data generated with young people led to me interrogating literature concerning the role gaming and VOD services might have on young people's transfer of knowledge from online spaces to everyday life. The data and my subsequent reading of this literature provided the foundations of research question three:

What impact might online media, VOD services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound? Figure four presents the overall aims of the research, the research questions, and the literature that contributed to their development.



Figure 4. Presentation of research aims, research questions, and key articles that contributed to their construction.

Although I could find very little concerning the role VOD services might have on young people’s understandings of the “real world,” studies such as those from Bigl (2013) and Poels et al. (2015) demonstrated the ways in which game elements can influence how everyday life is perceived and engaged with. Drawing on Ruckenstein (2015), it was summarised that gaming spaces persistently modify and reconstruct young people’s experiences and perceptions of the world around them. This contributed to the

development of research question three and provided this thesis with the necessary foundation to explore how young people perceive and construct their experiences at Outward Bound in the UK as they relate to online VOD services and gaming environments.

This chapter has presented the relevant literature that has featured in the development and implementation of this thesis. What I have learned from my engagement with this literature is that a key tension is present between the narratives and uncertainties which spring from the double-edged sword characterisation and the emerging reality of postdigital entanglements. This, coupled with the importance of social and broader online media and gaming in the lives of young people, exposes a gap in the literature relating to the situated experiences of networked participants in contemporary residential OAE. The next chapter describes the methodological approach and methods employed in the study before proceeding to the first findings and discussion section in chapter four.

Chapter Three

Methodology

3.1. Introduction

With the relevant conceptual and empirical foundations of the study examined, this chapter presents the decisions made and steps taken throughout the design and implementation of the study. These decisions and steps were undertaken to address the aims of the research which reflected the tensions present between the double-edged sword and postdigital characterisations of technology in outdoor education:

1. To examine how instructors at Outward Bound perceive the use or non-use of technologies in their practice.
2. To assess how the presence or non-presence of mobile technologies affects how young people construct and experience their Outward Bound residential.

To examine these aims and the associated research questions, an ethnographically informed approach to the generation of data was undertaken. This reflected Parker-Jenkins' (2018) work which cautions against conflating traditional ethnography with the use of ethnographically situated methods as doing so overlooks the situated, long term, embeddedness of the researcher within ethnographic research designs.

Acknowledging the work of Bhatti (2021), the research approach was both flexible and meticulous and incorporated four different forms of data generation to construct sufficiently in-depth, context specific, data. Between January and April 2022, I interviewed members of Outward Bound's instructional team, and then, in May and July 2022, I spent a week each at three different Outward Bound centres with three different schools. During these weeks I undertook participant observation, focus groups with young people, and

interviewed visiting staff members. This chapter begins by outlining the ontological and epistemological assumptions that underpin the thesis. I then present the design of the research, the participants and research settings, and the approaches taken to generate and analyse data. The end of the chapter outlines my reflections on methods undertaken to ensure the trustworthiness of the research as well as the ethical considerations I have addressed during the study.

3.2. Philosophical Assumptions Underpinning the Thesis

The development of the research design and the construction of findings have been underpinned by my own perspectives regarding the nature of reality (ontology) and knowledge (epistemology). As Guba and Lincoln (1994) state, these may be regarded as “the basic belief system or worldview that guides the investigator” (p. 105). Within some qualitative traditions, such as the positivist and interpretivist paradigms described by Spencer et al. (2014) and Guba et al. (2018), a series of well-founded philosophical assumptions are made available to the researcher. However, on reading around the nature of reality and knowledge within approaches such as relativism, subjectivism, or pragmatism, I felt that none fully aligned with my own assumptions concerning the construction and maintenance of reality. Following the works of Maxwell (2008, 2012a, 2012b, 2017), Robson (2017), and others (e.g., Pawson, 2002, 2006; Pawson & Tilley 1997), this research is situated within the realist paradigm and draws on a realist ontological position (Burr, 1998, 2015) and a social constructionist epistemological standpoint (Crotty, 1998). This section outlines these philosophical assumptions and demonstrates how they have shaped my approach to the research.

Ontological realism holds that there is a real world that exists separately from our constructions, interpretations, and beliefs (Maxwell, 2012a). In essence, following Maxwell's (2012a) and Robson's (2017) stance on realist ontology, I believe that there is an external world (e.g., social media exists as an entity) but that we will all generate our understandings and representations of social media based on different factors. These factors, which may include language, thoughts, culture, or perceptions, underpin our representations of reality. This generates an eclectic and messy mix of endless understandings and interpretations which inform our engagements with the world. Drawing on Pawson (2006), who describes such social systems as "the product of literally endless components and forces" (p. 18), I have been somewhat comforted in the knowledge that I cannot adequately construct every component of participant realities at Outward Bound.

I have, therefore, underpinned this thesis with the acknowledgement that it is unlikely, if not impossible, to isolate and know every single contributing factor which interacts with my research questions and the data generated. Instead, I have sought to identify thematic commonalities in the data which provide insight into perceptions and experiences of mobile technologies and social media at Outward Bound in the UK. Naturally, my own understandings and representations of participant realities in this research are entangled within this realist characterisation. Drawing on Holmes (2020) and others (e.g., Milner, 2007; Savin-Baden & Howell-Major, 2013), I recognise that the constructed nature of this research interacts with an external world that exists independently from my interpretations of reality for instructors and young people.

Meanwhile, Crotty (1998) provides the underpinning characterisation of the social constructionist epistemological standpoint I have operated within in this study. Consistent

with my ontological perspective, Crotty (1998) describes that all knowledge is “contingent upon human practices” that are “constructed in and out of interaction between human beings and their world” (p. 42). In essence, knowledge is constructed, consolidated, and transmitted through social engagement. Throughout the research, I have taken the view of Burr (2015) that there is no objective truth and that the knowledge brought to Outward Bound and shared with me by participants “is derived from looking at the world from some perspective or other” (p. 9). Naturally, the rise of online communication and engagement has added yet more complexity to the ways in which knowledge is socially constructed. As noted by Jong and Drummond (2016), a social constructionist epistemology provides a platform which may begin to shed light on how knowledge is constructed socially both in-person and through a screen.

As is common with research situated within these assumptions (e.g., Grenier, 2006; Healy & Perry, 2000), a qualitative approach is employed because I am personally interested in how people experience the world, but also because the research questions are geared towards the analysis of postdigital experiences at Outward Bound. Following Fawns et al. (2023), the present study acknowledges the position that “[p]ostdigital relations are not simply there, waiting to be illuminated” (p. 8), but that the study is situated in an external reality that is separate from my constructions of participant perceptions and experiences. The next section describes the first part of this construction by outlining the design of the research, before I describe the participants and research settings.

3.3. A Multiple-Case Study with Ethnographic Methods

The overarching design of the research reflected both the works of Stake (2006) and Parker-Jenkins (2018) and employed a multiple-case study approach using ethnographically situated methods (which is not traditional ethnography). This section deals with each in turn and outlines the design of the multiple-case study as well as the approaches I have taken to generate data (for a full breakdown of data generation methods, see section 3.5).

Stake's (2006) work informed the multiple-case study approach, which comprised three Outward Bound centres in the UK (Aberdovey (Wales), Loch Eil (Scotland), and Ullswater (England)). Following Stake (2005), the multiple-case study employed here seeks to investigate pre-defined phenomena (e.g., young people's experiences on the presence or non-presence of mobile technologies at Outward Bound) and treats each Outward Bound centre as a bounded case. The "boundedness" of each case was defined using the criteria set out by both Hitchcock and Hughes (1995) and Cohen et al. (2018) who identify the following factors relevant for the present study:

1. Temporal characteristics. The cases were bounded by the time I spent engaging with each site and by the limited time each school group spent at their respective Outward Bound centres.
2. Geographical location. Each location brought with it a unique set of circumstances. For instance, the prevalence of phone signal at each centre.
3. Shaped by organisational arrangement. Each centre has been defined based on Outward Bound's organisational composition in the UK. Each centre has its own management, safety, and staffing structures.

Outward Bound as an organisation also played a role in the selection of the cases. Whilst I maintained autonomy over the research design and approach, senior members of staff at Outward Bound helped guide my decision making. In particular, the three cases were selected in conjunction with these staff members and helped ensure the research could have the greatest impact possible within the trust. The selected centres are all used by secondary schools throughout the academic year and, given the focus on young people aged 12-17 in the research, it was felt that these centres would offer the most useful insight for the trust. With this in mind, Outward Bound in the UK is, in and of itself, the umbrella for the three cases examined in this study. This, in Stake's (2006) terminology, is described as the study's *quintain*, and Outward Bound as an entity (including centralised office staff and management) has played a vital organisational role in my engagement with each case (Figure 5).

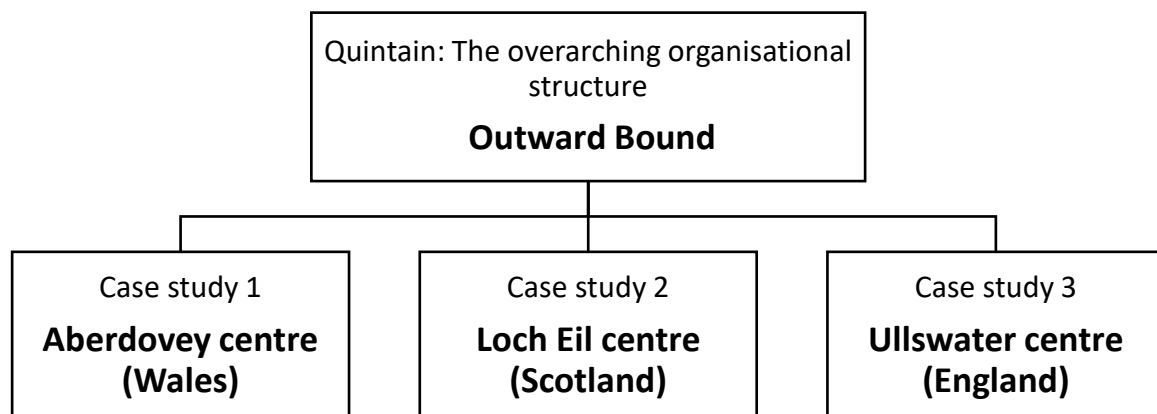


Figure 5. The overarching quintain and the three bounded case studies.

The selection process for cases originated in June 2021 when I visited the three centres in-person (Figure 6). Outward Bound's three other centres (Eskdale, Lake District; Howtown, Lake District; Ogwen Cottage, Eryri National Park) were discounted at this point as the Eskdale centre is used primarily by older groups of apprentices and the Howtown and

Ogwen Cottage centres are smaller and would have restricted the selection of participants for the study. Visiting the Aberdovey, Loch Eil, and Ullswater centres were valuable moments for the research. This importance is reflected by Chughtai and Myers (2017) who emphasise *entering the field* for the first time as “a rite of passage into a complex practice world and marks a critical field moment” (p. 795). I spent two days each at the Aberdovey and Ullswater centres and one at Loch Eil, and had the opportunity to engage with both managers and instructors on what they had seen on-the-ground in relation to mobile technologies and social media at Outward Bound. No data was generated during these visits and their explicit purpose was to only “scope out” each centre and orient myself with these Outward Bound settings.



Figure 6. Images taken during June 2021. Left to right: Bedroom at Loch Eil, wooden cabin used by Outward Bound in the Dyfi Forest (Wales), canoeing hut on the shore of Ullswater. Images by author.

Following these initial visits, the scale and complexity of perspectives and experiences from the Outward Bound staff members I met led to the conclusion that I needed to spend significant time at each centre when generating data. This was decided in conjunction with staff members at Outward Bound, in particular because they were seeking insight into the use and impact of mobile technologies across the trust, rather than at one isolated site. Turning to Jeffrey and Troman (2004) on the nature of time and immersion in

educationally situated ethnography, I sought to “live the life of the inhabitants” (young people) at these three Outward Bound centres (p. 538), but could not spend the months or years necessary to characterise the study a classical ethnography. This lack of embeddedness meant I could not evaluate the long-term cultural and practice-based elements that could have intersected with the research questions. I therefore turned to Hammersley (2006), Walford (2018), and Parker-Jenkins (2018) who each describe the important role ethnographically situated methods can have in case study research. For Hammersley (2006), shortened time spent “in the field” departs from the spatial and temporal embeddedness of the researcher that is typically associated with ethnographic research designs. For me, although I was set to spend five days at each centre, I felt this length of time did not warrant an ethnographic characterisation. This choice is reflected in the work of Lutz (1981) who reinforced this decision throughout the design and implementation of the research:

[Ethnography] is not a case study, which narrowly focuses on a single issue ... or a brief encounter (for a few hours each day for a year, or 12 hours a day for a few months) with some group. Those types of research are ethnographic but *not ethnography!* They may be good research but, when they are passed off as ethnography, they are poor ethnography and poor research. (p. 52, italics in original)

Alongside Lutz (1981), the present study aligns with the argument put forward by Parker-Jenkins (2018) who suggests that some researchers misunderstand the historical contexts of ethnography, and are instead engaging in case study research with ethnographically situated methods.

In light of my engagement with the above literature, the present study employed a range of ethnographically situated methods and employed interviews, observations, and focus groups. Through spending a total of 15 days in the field across the three case study sites, the research design has afforded temporal and contextually bounded insight into the situated experiences of instructors, young people, and visiting staff members at three of Outward Bound's residential centres in the UK. The next section describes these research settings in greater detail and also provides the necessary information on who took part in the study.

3.4. The Research Settings and Participant Selection

With the design of the research outlined, the first element necessary for me to achieve *thick description* in the findings sections is to describe the cases that feature in the research (Geertz, 1973; Lincoln & Guba, 1990). The requirement for this is situated in the text of Geertz (1973) who outlines how the researcher jots down the happenings “from a passing event, which exists only in its own moment of occurrence, into an account, which exists in its inscriptions and can be reconsulted” (p. 19). This section provides descriptions of the cases and then proceeds to describe the selection processes undertaken to recruit participants and schools where further information is provided on school type and location, as well as the young people who participated in the study.

3.4.1. Description of the Cases

3.4.1.1. Case One: Aberdovey. The Aberdovey centre is situated on the West Coast of Wales inside the Eryri National Park³. It is the original Outward Bound centre and has been open since 1941. The main centre is an expansive site, with a series of dorm blocks spread over the hill for young people, and a main building for visiting staff (including me) which also houses the operations room for instructors and the cafeteria where breakfast, lunch, dinner, and hot chocolate are consumed. The centre itself is situated a short walk from the town of Aberdyfi where Outward Bound has a building on the wharf. This building is where instructors and young people prepare for activities such as powerboating and jog and dip. The other activities undertaken by the centre happen across the Eryri National Park and includes the use of wooden cabins for expeditions, the Dovey Estuary for water-based activities, and nearby crags for rock climbing.

3.4.1.2. Case Two: Loch Eil. The Loch Eil centre is situated approximately six miles from Fort William in North-western Scotland on the Northern shore of Loch Eil⁴. The main building at the heart of the centre is a 19th century hunting facility named “Achdaliu Lodge” which includes dorm rooms as well as social rooms and dining facilities. Across the driveway, there is another dorm building; I was housed in this dorm building during my week there. Following a walk down the driveway, and having crossed the A830, the Loch Eil centre has a boathouse and a jetty from which activities such as canoeing and jog and dip take place. Behind the centre is a woodland which includes on-site adventurous challenges

³ For further information about the Aberdovey centre, see Outward Bound (2022e), or, see The Outward Bound Trust (2023) for a point of view walkthrough of the centre.

⁴ Further information about the Loch Eil centre can be found at Outward Bound (2023b). For a 360-degree view of the Loch Eil centre and surrounding area, see The Outward Bound Trust (2018).

as well as a large parachute suspended in the trees which offers shelter for campfire activities. The area surrounding the Loch Eil centre is a mecca for adventurous activities and the centre regularly undertakes activities within the Nevis range and further west towards the coast at Arisaig.

3.4.1.3. Case Three: Ullswater. The Ullswater centre is situated within the English Lake District, approximately three miles from the small village of Pooley Bridge⁵. The centre is situated within 18 acres of woodland and is on the shores of Ullswater, the second largest lake in England. Unlike cases one and two, dorm rooms and social areas are all situated within the main house, a Georgian Grade II listed building. A walk through the on-site woodland reveals numerous activity locations and a series of learning huts, these huts are where I undertook the focus groups at Ullswater. The far end of the woodland rests on the shores of Ullswater and a small beach gives access for water-based activities. The areas around the centre comprise primarily of Lakeland Fells and activities are regularly undertaken across the Lake District National Park.

3.4.2. *Recruitment of Instructors for Interview*

Reflecting the work of Campbell et al. (2020), the selection strategy for instructors mirrored the realist and social constructionist standpoints underpinning the study. Through selecting a limited number of instructors for interview, I acknowledge that the data generated can offer only partial access to the complex and fluid realities of Outward Bound instructors. As

⁵ Further information about the Ullswater centre can be found at Outward Bound (2023c) and a video tour of the centre can be found at The Outward Bound Trust (2019).

described by Patton (2007, 2015), Kelly (2010), and Schreier (2018), the approach to instructor recruitment for interview initially focussed on a *convenience sampling approach*. The instructors were all full-time members of instructional staff at one of the three centres (the case studies) and were physically situated within the cases I was examining. In alignment with Kelly (2010), this convenience approach was employed to yield both appropriate and research-specific information with a population of instructors who already worked within the case study setting. All instructors and senior instructors were emailed in advance of the study by the Head of Impact Evaluation at Outward Bound and were invited to participate in an interview with me on Zoom (see section 3.8.1 for ethical considerations on using Zoom). This email included information about the study and how to get in touch with me as the researcher. To ensure instructors did not feel pressure to participate following the use of a gatekeeper for access, the email outlined that instructors were not obliged to participate and to get in direct contact with me to express interest or to decline the invitation. For instructors expressing an interest, it was at this point that they were informed that participation would be confidential and I outlined what the interview process would be like.

However, only four instructors got in touch following this email, which was a number lower than I had anticipated given I had hoped this initial contact may generate as many as 10 instructors. I therefore decided to interview these instructors and ask them directly whether they knew of anyone else who might be interested in participating and whether they could spread word about the study to colleagues and friends. The approach to participant recruitment therefore changed to a *snowball sampling* approach (Handcock & Gile, 2011; Parker et al., 2019), with interviewed instructors often asking housemates and friends whether they would like to participate and then referring them to me. Reflecting the

work of Noy (2008), this approach generated an interactional and emergent method to instructor recruitment and interviews were sometimes conducted at short notice.

Often, the instructors who agreed to be interviewed were on their break between 5pm and 7pm, which is time given between ending the day’s main activity and the beginning of evening activities to allow for rest and preparation. Occasionally, some instructors were “working from home,” with three instructors being at home due to having tested positive for Covid-19. In total, twenty members of instructional staff took part in interviews from across the three cases (Figure 7). These comprised seven instructors, ten senior instructors, and three learning and adventure managers. Reflecting Braun and Clarke’s (2021) cautioning against the operationalisation of participant recruitment by deciding “how many” instructors to include before data generation, the narratives and content of each interview was kept under close review. My approach to saturation was drawn from Hennink et al. (2017) who recommended focussing on “meaning saturation” to develop a “richly textured understanding of issues” (p. 591).

<p style="text-align: center;">Aberdovey Case study 1</p>	<p style="text-align: center;">Loch Eil Case study 2</p>	<p style="text-align: center;">Ullswater Case study 3</p>
<ul style="list-style-type: none"> • 2 instructors • 3 senior instructors • 1 learning and adventure manager 	<ul style="list-style-type: none"> • 3 instructors • 3 senior instructors • 1 learning and adventure manager 	<ul style="list-style-type: none"> • 2 instructors • 4 senior instructors • 1 learning and adventure manager

Figure 7. Number of instructional staff recruited across the three cases.

Reading and re-reading the data I had already generated whilst still recruiting and interviewing instructors enabled me to keep track of the key meanings being assembled in relation to research question one (this process is described in greater detail in section 3.6). Through searching for meaning saturation alongside the ongoing recruitment of instructors,

I was able to judge whether the meanings and viewpoints instructors were sharing with me corroborated with that of other instructors and whether I was achieving meaning saturation. It was clear after the 20 interviews that similar perspectives were being expressed by instructors, senior instructors, and learning and adventure managers within each case.

3.4.3. *Recruiting Schools, Young People, and Visiting School Staff*

The recruitment of schools also reflected a convenience sampling approach (Patton, 2007, 2015; Schreier, 2018) and the three schools who took part in the research had already booked their visit to their respective Outward Bound centre before I approached them. Following Ritchie et al. (2014), I generated a set of prescribed selection criteria to refine what could have been a large number of potential schools, but also to ensure any possible school aligned with the research aims and questions. These foundational criteria were:

1. Secondary schools based in the UK.
2. Mixed sex schools.
3. Travelling to their respective Outward Bound centre between May and August 2022.

These were selected as I felt that mixed-sex secondary schools would be best situated to answer research questions two and three as they include the age range the research questions were geared towards. Alongside this, mixed-sex secondary schools are the dominant school “type” that travel to Outward Bound, and utilising these helped me provide Outward Bound with empirical insight into the dominant form of school that visits throughout the academic year. Finally, criterion three was selected to fit within the scope and necessary timescale of the research.

In collaboration with office staff at Outward Bound (account managers for different regions in the UK), a list of 12 schools who initially matched these criteria was provided for me. Of these, three were initially discounted as they fell outside my desired time period. I then sent emails detailing the study to the remaining nine schools and received replies from six (Appendix A), two of which responded to say that they did not want to take part in the study. At this stage, I had two prospective schools at case one, and one each at cases two and three. A date clash between one of the schools in case one with the school in case three directed my choice of school in case one.

I spoke directly with each booking member of staff at the school either by phone or email and they agreed to take part in the study provided parents, young people, and other visiting staff gave voluntary informed consent. These schools are outlined below and are fictionalised in alignment with Clough (2002) for the purposes of anonymisation, and draw on *symbolic equivalents* (Yalom, 1989) to draw context-setting parallels between the schools and these fictionalised characterisations. As outlined in section 3.8, in order to protect the identity of participants, when referring to instructors, young people, and case locations, I have employed random avian-based pseudonyms and the cases are called Skylark, Starling, and Smew. It is important to say here that these narratives are informed by the data generated through interviews with visiting staff members:

- Starling centre, Long View Academy: Long View Academy is a Sikh Faith School from the outskirts of a metropolitan area of a large city in England. The school has a Combined Cadet Force unit of which the young people visiting the Starling centre were members. Students attending the centre were 13 - 17-years-old and had taken part in residential OAE previously. The

school allowed young people to have their phones at the centre, but insisted that they should not be present on activity.

- Smew centre, Faraday Community High School: Faraday Community High School is a school situated within a large city in Scotland. The school has either been recognised as “weak” or “satisfactory” by His Majesty's Chief Inspector of Education in Scotland. The school’s catchment area is situated within the top 10% of the most deprived areas in Scotland (Scottish Government, 2020) and students attending Loch Eil were aged 12 - 16. The school emailed parents in advance of visiting Outward Bound to recommend that phones were left at home, but most young people brought them and used them throughout activities and downtime. Local authority approval for the school’s inclusion in the study may be found in Appendix B.
- Skylark centre, Eastwood Secondary: Eastwood Secondary is situated between two large metropolitan areas in North-eastern England. The young people who attend the school come from a mix of socioeconomic backgrounds, with many having not left their local area for an overnight trip before. Those who attended the Skylark centre were aged 12 - 13 and, for many, this was their first time undertaking adventurous activities. Young people were allowed their phones during downtime but were told not to take them on activities. On a few occasions, young people were found to have brought their phones with them when they were prohibited.

Within each case, all young people attending the centres were invited to take part. This process consisted of obtaining school, parental, and young person informed consent both before and during each residential visit (for the ethical processes undertaken and

complied with, see section 3.8). Across the three centres, 50 young people were observed, with 23 of these 50 taking part in six separate focus groups (two within each case, see Figure

Starling centre	Smew centre	Skylark centre
<ul style="list-style-type: none"> • 10 young people (6 participated in focus groups) • 3 visiting staff members 	<ul style="list-style-type: none"> • 15 young people (6 participated in focus groups) • 4 visiting staff members 	<ul style="list-style-type: none"> • 25 young people (11 participated in focus groups) • 4 visiting staff members

Figure 8. Number of young people and visiting staff recruited across the three cases.

8). Alongside the young people participating in the study, a total of 11 visiting staff members accompanied the young people to Outward Bound across the three case studies and all agreed to participate in a short, context-setting, semi-structured interview during each week.

With three cases, 20 instructors, 50 young people, and 11 visiting staff members, the research was well-placed to achieve a broad and holistic view of the research aims and questions. All the while, throughout the selection of participants, I acknowledged that a “real world” exists independently from the constructions and interpretations of these 81 participants at Outward Bound, and that I could not construct an all-encompassing account of their realities (Maxwell, 2012a). That said, the cases and participants included in this study offer situated and bounded insight into their constructed experiences as I have engaged and assembled them, and I believe their perspectives hold important insight for Outward Bound in the UK. It is important to note at this stage that chapters four, five, and six present findings from each case together. Whilst I am aware that this may lose some of the contextual boundedness of the study, I believe that presenting data from across the

cases together in these chapters reinforces the strength of the commonalities in perspective and experience I identified across Outward Bound.

3.5. Data Generation

Four primary methods were employed throughout the research to generate data with instructors, young people, and visiting staff members. These were:

1. Twenty semi-structured interviews with Outward Bound instructors.
2. Three lots of five-day observations with young people during their visit to each Outward Bound centre.
3. Six focus groups with young people during their visit to each Outward Bound centre.
4. Eleven context-setting semi-structured interviews with visiting staff members during their Outward Bound visit.

The generation of data began in January 2022 with the instructor interviews. These interviews were concluded in April 2022 and my visits to each centre occurred between May 2022 and July 2022. Interviews with instructors alongside the observations and focus groups with young people are the three dominant datasets for the study, with the visiting staff interviews providing important contextual information that is not included in the findings chapters. This approach was taken to provide an overarching understanding of the ways in which mobile technologies and networked spaces affect practices and experiences across the trust. I acknowledge that a traditional ethnography within just one centre could have provided alternative insight, but my geographically dispersed approach provides Outward Bound with the overarching view necessary to develop policy and instructor approaches

across the trust. This section, therefore, describes the processes undertaken to generate data and are presented in chronological order.

3.5.1. *Semi-Structured Interviews with Instructors*

The approach taken to the construction of the semi-structured interviews aligned with the writings of Flick (2018, 2023), which suggests that a flexible and free-flowing conversation between participant and researcher makes it more likely that open and honest dialogue can surface. The interview questions were designed to leave room for instructors to share their own perspectives in a manner that was not too restrictive and afforded room for their perspectives on mobile technologies and social media to be shared (Flick, 2018). I also drew on Rubin and Rubin (2012) as I developed the interview schedule and acknowledged that this approach could generate both detailed and information rich data (see Appendix C for the interview schedule). Alongside this, the two question “types” outlined by Rubin and Rubin (2012) informed the development of the interview structure; these were “main questions” that would help guide the interview and a series of pre-prepared “follow-up questions” to delve deeper. It was expected that questions would also emerge during each interview depending on the content and direction of answers from the interviewee.

Before formally generating data with Outward Bound instructors, the texts from Sampson (2004) and Malmqvist et al. (2019) on the importance of conducting a pilot interview were considered. In particular, Sampson’s (2004) discussion on a pilot interview potentially highlighting gaps in the interview schedule as well as facilitating a “warm up” for my entrance to the field appeared logical. In December 2021, I conducted a pilot interview with a critical friend from Scotland, who is a residential OAE instructor who does not work

for Outward Bound. Following this interview, I asked how the conversation felt for them, and I also transcribed the audio recording verbatim so that I had a comprehensive account of how questions were delivered and answered (Appendix D). I learned from the process that an additional question was required to ensure instructor focus was placed on their work with young people, rather than mobile technologies and social media solely in the personal lives of instructors. The question added was: “What role (if any) do you think social media plays in the lives of young people?”.

Given the geographical dispersion of the instructors across the UK, and due to limiting the exposure of Covid-19 to both instructors and myself, all interviews were carried out on Zoom. As Covid-19 restrictions had been in place for a significant period prior to the interviews, a substantial base of literature helped guide my approach (e.g., Lobe et al., 2020; Oliffe et al., 2021). In particular, Zoom enabled instructors to take part at a time and place that suited them, although our geographical dispersion meant that I had to acknowledge I was “being there differently” (Oliffe et al., 2021, p. 4). Having spent plenty of time on Zoom over the 18-months prior to the interviews, I was content that researcher-interviewee dialogue sufficiently flowed.

Finally, following Thomas (2011, 2021), the process for conducting interviews across the cases occurred in parallel, meaning that interviews frequently transitioned from case-to-case. It was not uncommon for me to interview instructors across all three cases in a given week. This facilitated a fluid approach to data collection and allowed me to reflect on the interrelatedness between cases at an early stage. For instance, in my third interview (Euan⁶, Skylark centre), the interviewee made mention of the *portable comfort zone* which was a

⁶ The name “Euan” was the pseudonym chosen by the instructor in the third interview.

concept I felt required further exploration. I therefore amended the interview schedule so that narratives of phone use, young people, and comfort at Outward Bound could be asked to other instructors across the three cases. The portable comfort zone finding is presented and examined in sections 4.4.1 and 4.6.1 and I also interviewed the learning and adventure managers (who oversee instructor training and development) within each case *last*, which enabled the findings I had been assembling with instructors to be discussed and evaluated. I did not divert from the ethical standards underpinning this thesis during these interviews, and individual instructor names or job titles were not shared in any way with the learning and adventure managers.

3.5.2. *Observations with Young People*

Following the generation and analysis of instructor interview data, I then spent five-days at each of the Outward Bound centres. I visited Ullswater in the first week of May 2022 and then drove straight to Loch Eil and spent a week there. This was an intense couple of weeks and a period of rest and reflection preceded my visit to Aberdovey in the third week of July. This subsection outlines the approaches taken during these weeks and details my time spent on-the-ground as I experienced Outward Bound programmes alongside young people.

Drawing on Silverman (2005) and Punch and Oancea (2014), my approach centred on a *participant-as-observer* method which, according to Seim (2021), has an enduring legacy in ethnographically situated research that centres on the active participation of the researcher “in the field”. Each week, I actively participated alongside young people, whether that be rock climbing, camping during an expedition, or participating in Outward Bound’s infamous “Jog and Dip” activity, and actively sought to embed myself as a participant on

each course. As seen from course feedback (Appendix E), I developed a close bond with these young people and was in a reasonably unique position in that I was not only participating in Outward Bound activities, but was also living alongside the study's participants. Of course, I had my own dorm room, but from waking up and having a cup of tea at 7am all the way through to bedtime after hot chocolate at 10pm, I was fully engaged with young people and the programme (Figure 8). For instance, at the Starling centre, I spent time on expedition and so also camped with young people which included communal cooking and sharing common items such as water purification tablets.



Figure 8. Images from the Starling and Skylark centres. Left image, on expedition. Right image, canoeing on a lake.

These observations were recorded through fieldnotes, and I always kept a waterproof research fieldnotes book and pen with waterproof ink with me during each week. As Emerson et al. (2011) explain, “there is no one ‘natural’ or ‘correct’ way to write about what one observes” (p. 6) and my approach to recording the observations reflects the writing of Geertz (1973). Crucially, Geertz (1973) describes fieldnotes as inscriptions of social discourse which take passing events that may exist for just a fleeting moment and records them so that they may be returned to and examined. Further, drawing on Walford’s (2009) analysis of fieldnotes processes from four world-leading ethnographers, it is concluded that

there is no common “fieldnotes language” and their style is often based on personal preference.

I therefore loosely followed the methods outlined by Emerson et al. (2011) and my process consisted of initially jotting down the events I was seeing, hearing, and experiencing. Sometimes this could occur immediately (e.g., whilst hiking) and at other times it was necessary to jot down what had happened later (e.g., during canoeing where my notebook was in a waterproof bag). These jottings consisted of informal conversations with individual or groups of young people and also consisted of interactions I had seen and heard at any given time (see Appendix F for images of these jottings). These were typically “extended jottings,” and I provided as much detail as was reasonably practicable based on the location and the amount of time I could withdraw from the group. This geographical and temporal proximity to the “field” meant that I could recall my observations with as much detail as possible, and I focussed on developing narratives that would provide sufficient detail to be returned to and expanded upon when back home.

Once I had completed data generation across each case, I was then able to immediately undertake what Emerson et al. (2011) described as “moving from field to desk” (p. 48). I spent significant time firstly reflecting on my fieldnotes, reading them from cover-to-cover, and then proceeded to write up and reconstruct my fieldnotes in as much detail as possible. Throughout each week I had also taken photographs of objects and places which helped my recall. These extended reconstructions of my fieldnotes included describing scenes and dialogue as well as my own positionality and reflections (see Appendix G for an excerpt of my fieldnotes reconstruction from the Starling centre).

3.5.3. Focus Groups with Young People

The focus groups conducted with young people were undertaken at all three centres in the 5pm - 7pm break in activities, with the first taking place on Tuesday evening and the second on Thursday evening. Reflecting Frey and Fontana (1991), the purpose of the focus groups was to explore young people's perspectives on having or not having their mobile technologies at Outward Bound, and to provide a method of triangulating and confirming the data generated from my observations. The focus groups were incorporated to provide the young people in the study a space where they could socially co-construct collective meanings with their peers (Eder & Fingerson, 2001), and to facilitate an environment where group memories and joint experiences from the Outward Bound visit could be used to stimulate discussion (Guthrie, 2020; Wilkinson, 2008). As such, my role as the researcher changed here and, although I had a list of prompts to help keep the focus group on track (see Appendix H), I often participated as a facilitator and allowed conversation to flow so long as it remained on topic. All focus groups were conducted at the Outward Bound centre itself and all were recorded using a portable audio recording device.

Aligning with Kitzinger and Barbour (1999), each focus group began with a prescribed task that aimed to encourage group dialogue and to help the young people centre on our discussion. These tasks focussed on two sentence completion scenarios:

1. Not having my phone this week at Outward Bound made me feel...
2. I have used my phone at [insert place / location] whilst at Outward Bound this week.

These answers were initially used as prompts and facilitated the start of the focus group discussion. However, I often found that a lot of the young people wanted to share their thoughts at the start of the focus group and would often talk over each other. Having

thought about this possibility in advance, Percy (a keyring sized Puffin from the Royal Society for the Protection of Birds) was passed around the group to help facilitate a single person speaking each time for the audio recording.

The focus groups themselves were reasonably short, typically lasting approximately 20 minutes. This reflected the tight timescales afforded in the 5pm - 7pm break as this time is also used for kit cleaning, dinner, and activity preparation for the evening. Young people's free time during each week became a natural constraint for the research and the organising of focus groups in collaboration with visiting staff members sometimes took much longer than anticipated (this is described as a limitation of the study in section 8.3.2). Despite the time-limited nature of the focus groups at each centre, young people would often come up to me afterwards (e.g., at the dinner table) and chat more, either alone or with their friends. In particular, one young person at the Skylark centre actively sought me out to tell me that he had broken his phone during the evening activity a few hours after his participation in one of the focus groups. This blurring of data generation boundaries in the moments after the focus groups produced an interesting crossover between data generated in the focus groups and during the observations. These crossover moments were not audio recorded, and so were noted in a more expansive manner as informal conversations in my fieldnotes journal.

3.5.4. *Semi-Structured Interviews with Visiting Staff Members*

The interviews conducted with visiting staff members were also subject to the time-limited reality of a five-day long Outward Bound programme. Interviews were often conducted on activity (e.g., hiking and camping) or in the staff room long after lights out. These interviews

did not relate to any of the research questions, instead, their purpose was to provide me with important contextual information regarding the location and demographic of the school, the motivations to come to Outward Bound, and whether any phone policy was already in place. A semi-structured interview schedule was developed (Rubin & Rubin, 2012; see Appendix I) and each interview helped me understand broader narratives surrounding the instructor and young person data, as well as the background decision-making processes that were influencing young people's Outward Bound experiences.

As I have mentioned, the data generated through these interviews may be considered "complementary data" in that they helped contextualise and orient the thick descriptions presented across chapters five and six. Much like the focus groups with young people, these interviews were reasonably short and typically lasted 10 minutes. On two occasions, interviews were stopped and restarted due to interruptions, one of which was a necessary pause during a hike due to a behavioural issue, the other due to the visiting staff member being requested to belay a participant during rock climbing. Despite these interviews being reasonably short and with them not explicitly linking to a research question, I found them to be an invaluable context-setting resource as I have sought to construct the nature of participant experiences in this thesis.

3.6. Data Analysis

The analysis of all data broadly followed the work of Braun and Clarke (2006) and adopted a thematic approach to the analysis of transcripts and fieldnotes. However, I have remained critically attentive to the later works of Braun and Clarke (2019) and Braun et al. (2022) who caution against the instrumentalisation of qualitative data analysis through their original

2006 work. They note that their initial six-point analysis framework has provided a formulaic approach in qualitative research which may serve to sterilise constructions of reality. Instead, the reflexive approach to thematic analysis described by Braun and Clarke (2022) provided the underpinning framework that I referred to throughout the analysis. My procedures acknowledged that analysis is “open, fluid, organic, and recursive” and that codes “are never finally fixed” (Braun & Clarke, 2021, p. 207).

Such an approach requires an acknowledgement on how I have balanced the reporting of the analytic themes with how my own voice comes through in the following three chapters. The approaches presented in this section always sought to remain as close to participant narratives and experiences as possible, but, given the fluid and organic nature of the analysis, my interpretive voice filters throughout the findings chapters. Ultimately, the findings have been understood through my postdigital framework, which is presented at times with my own voice to reflect the nature of data generation and my presence in the field during the moments that feature in the thesis. The research, therefore, reflected Pole and Hillyard’s (2016) assertion that analysis is a recurring and “never off” endeavour; analysis has not been treated as a distinct phase of the study.

Analysis for the instructor interviews, focus groups with young people, and interviews with visiting staff members broadly followed the same trajectory, and I developed an analysis table to help guide me through the generated data (Table 1). However, the analysis of the data generated from the observations somewhat departed from the stages in my initial analysis table; this process is described in section 3.6.4. Finally, the data generated from the instructor interviews and my engagement with young people (focus groups and observations) feature as the dominant datasets in the study as they are

most closely tied to the research questions. The analysis of the visiting staff interviews provided context on each school and whether they had a pre-defined approach to young people's phones for their visit to their respective Outward Bound centre.

Steps of the analysis	Analysis undertaken
Step one	Walk with the data (data familiarisation).
Step two	Verbatim transcription of audio recordings.
Step three	In-vivo lumper approach for initial coding (in-case).
Step four	Code consolidation through developing a series of statements that align with codes from within the case (in-case).
Step five	Patterning the statements developed in phase four with patterned codes presented alongside the relevant data (in-case).
Step six	Patterned codes synthesised and themes constructed using flash cards (in-case).
Step seven	Constructed cross-case thematic maps where theme importance was placed on each research question (cross-case).

Table 1. The steps undertaken that underpinned the analysis of interview and focus group data.

3.6.1. Analysis of Instructor Interview Data

This section outlines the processes I have undertaken to synthesise what was a large amount of data and how I have constructed the themes present in the instructor interviews. As Bullock (2016) suggested, any approach “to analysing qualitative interview data start(s) with a process of data familiarisation” (p. 331). The day after each interview, I therefore took the *data for a walk* (Step one). This consisted of putting an audio recording device in my pocket with headphones on and taking the same route for each interview that would last approximately an hour. Following my walk, I then manually transcribed each interview verbatim (McLellan et al., 2003; Appendix J) and, in alignment with Poland (1995), who

discussed maintaining rigor throughout the transcription process, sent completed transcripts to each instructor for review and to ensure they were happy with their contribution (Step two). All instructors were happy with their transcript and no edits were required.

Next, I drew on one of Saldaña's (2016) first cycle coding methods, and adopted a manual *in-vivo lumper* approach. This consisted of "lumping" sections of each interview transcript into a table to initially identify commonalities. Each lumper code was represented by the *actual* words (hence *in-vivo*) used by the instructor which initially helped me ensure the voice of each participant was driving my analysis (see Appendix K for example coding table). This resulted in 20 lumper codebooks (one for each member of instructional staff). From these codebooks, I proceeded to step four where, within each case, I consolidated the codes generated in step three. This was a primary interpretive moment and I actively searched for shared meanings *across* the lumper codebooks from step three within each case. I then wrote out by hand a series of statements that I felt encapsulated the codes in step three. I also reflected on Braun and Clarke's (2019) suggestion that the "coding process requires a continual bending back on oneself" (p. 594). I therefore revisited coding cycles three and four throughout the analysis, always reflecting on whether the themes I was constructing could be traced to the instructor's voices in these code development and consolidation phases.

Drawing on descriptions from Saldaña (2016) and Miles et al. (2020), the series of statements developed in phase four were then patterned within each case to identify a series of candidate themes. These themes centred on an extended phrase or sentence and were positioned in a table alongside the relevant text from each interview transcript (see

Appendix L). This process generated 44 candidate themes for case one, 55 for case two, and 65 for case three. These candidate themes were synthesised in step six with themes being merged where crossover was present, and others being removed if they did not contribute to answering research question one. This process was undertaken using flashcards so I could tangibly “look” at and move the themes around which resulted in the construction of the final themes within each case (Appendix M) which were then presented in a set of thematic maps (Appendix N). These thematic maps were reviewed to assess crossover and the relative importance of each theme was based on its suitability in relation to research question one. This resulted in three findings that are presented and discussed in chapter four.

3.6.2. *Analysis of Focus Group Data*

The analysis of the focus group data followed a condensed version of table one, with step four not being required due to having less data to consolidate. I started with taking a walk with headphones on to familiarise myself with the data (Bullock, 2016). I then transcribed each focus group verbatim using the labelling system adopted by McLellan et al. (2003) which helped differentiate between the speakers (Appendix O). Then, once again returning to Saldaña’s (2016) first cycle coding method, I manually lumped content from each focus group into in-vivo codes which reflected both the actual words of participants, and served to synthesise data where common topics and patterns were present (Step three). This generated a codebook for each focus group (six codebooks in total).

I then took each of the in-vivo lumper codebooks from within each case and examined them for patterns (Step four). Once again reflecting the code generating

descriptions from Saldaña (2016) and Miles et al. (2020), this in-case patterning process generated an overarching codebook of patterns for the two focus groups within each case. With these three overarching codebooks consolidated, I once again “bent back” and read and re-read the original transcripts to ensure I was remaining close to the data (Braun & Clarke, 2019). Following this reflexive moment, I then examined the three codebooks in tandem, searching for common patterns across the cases and constructed a series of overarching candidate themes using flashcards which, once again, helped me tangibly present and link the data (Step five; Appendix P). These candidate themes informed the generation of six thematic maps (Step 6; Appendix Q) which were assessed in relation to research questions two and three. This process, where I focussed once again on the relative importance of each thematic map in relation to the research question, constructed two findings which are discussed in chapter five.

3.6.3. *Analysis of Visiting Staff Interviews*

The purpose of the visiting staff interviews was to provide a contextual foundation to the data generated with young people. As such, the analysis process was condensed and took the form of a content analysis. I engaged with the data to the point where I felt I had sufficient insight into each school and whether the school had a pre-defined approach to young people’s phone use at Outward Bound. I started by taking the data for a walk along the same route taken for the focus group data (Step one). Each interview was then transcribed verbatim (Step two) and was read and re-read to ensure I was fully familiar with the data (Bullock, 2016; McLellan et al., 2003). Each interview transcript was then initially coded using Saldaña’s (2016) in-vivo lumpers approach which generated 11 codebooks

across the three cases (Step three). I then examined the codebooks for patterns and constructed an overarching codebook for each case which comprised codes that were patterned from the visiting staff codebooks from step three (Step four). These four steps provided enough of the insight I felt was required to contextualise the data generated with young people, and I have used the patterns from my codebooks to inform the fictionalised descriptions of each school in section 3.4.3. Given the three research questions did not seek to explore the role and influence of visiting staff members, data generated in these interviews does not feature in the following chapters.

3.6.4. *Analysis of Fieldnotes from Observations*

The analysis of the reconstructed fieldnotes (see section 3.5.2) comprised five interlinked but slightly different stages (Table 2) that, once again, aligned with the open and fluid approaches to my engagement with the data described by Braun and Clarke (2021, 2022). I also drew on the approaches described by Emerson et al. (2011) who provided a helpful guide to the analysis of my ethnographically situated fieldnotes. Firstly, reflecting Hammersley and Atkinson's (2019) description of how temporary engagement with fieldnotes can develop inadequate data familiarity, I spent time reading and re-reading the reconstructed fieldnotes (step one).

Steps of the analysis	Analysis undertaken
Step one	Read and re-read the reconstructed fieldnotes.
Step two	Fieldnotes initially categorised using descriptive phrases in the margin of the fieldnotes documents and relevance for research question two or three (or both) identified (in-case).
Step three	Constructed narrative memos that integrate overlapping and complimentary categories developed in step two (in-case).
Step four	Thematic patterns constructed from the narrative memos (step three) across the cases. Memos falling outside a pattern are discarded and overarching themes constructed (cross-case).
Step five	Thematic maps developed (cross-case).

Table 2. Steps taken during the analysis of observational fieldnote data.

Once satisfied that I had sufficient familiarity, I once again read the fieldnotes, this time categorising specific words and sentences in the document margin (Emerson et al., 2011; Appendix R). This was my first interpretive contact with the fieldnotes, and I consistently referred to both the extended jottings in my fieldbook and my original fieldnotes reconstruction to ensure these initial categorisations adequately aligned with participant experiences. At this point, I also noted within these categorisations whether the category aligned with research question two, three, or both. Following this, I constructed a series of narrative memos that integrated the categories I assigned in step two. Throughout each case, I recognised that categorisations in the margin often overlapped, and it was these intersecting categories that were typed up in the form of narrative memos (Appendix S). Such an approach was developed following Emerson et al. (2011) who suggested that integrative memos may “identify and explore a general pattern or theme that cuts across a number of disparate incidents or events” (p. 187). This unifying approach helped bring together events that happened in different places and different times, but that were linked

through commonalities such as content (e.g., video games as a lens through which to interpret surroundings). Throughout this process, I once again engaged in “bending back” and returned to my original fieldbook to ensure the memos I was constructing reflected my recorded experiences of young people (Braun & Clarke, 2019).

In step four, I constructed thematic patterns from these narrative memos across the cases and actively identified overlapping content to construct a series of overarching thematic patterns. These thematic patterns from across the cases were also reviewed following the analysis of the focus group interviews with young people to ensure my constructions of young people’s experiences in the development and analysis of my fieldnotes had been both fair and precise. This provided a form of meta-analysis between the two datasets as I was able to assess and review commonalities and differences across the data generated with young people.

At this stage, themes that had little or no overlap between cases were discarded, but were returned to throughout the construction of the thematic maps to ensure their exclusion was necessary. The final step, generating the thematic maps, took the patterns developed in step four and presented them through a spider diagram (Appendix T). These were assessed in relation to the two findings from the focus group analysis outlined in section 3.6.2 and it was clear that they were once again present in the themes from the observations. Chapter five, therefore, comprises data generated from both the focus groups and observations. Alongside these two findings, an additional finding is present in relation to research question three, this is discussed in chapter six with data from the observations.

In summary, chapters four, five, and six present and consider a total of six findings across the three research questions. These findings were driven by a postdigital

interpretation of the data, and I therefore prioritise and support the voices of young people over the voices of instructors across these chapters. A postdigital stance challenges the perspectives of most instructors in chapter four and supports the on-the-ground experiences of young people as they navigated their Outward Bound experiences in chapters five and six. Alongside this theory-led decision, my prioritisation of young people's perspectives was also taken given the lack of youth voice in current literature on the topic in outdoor education. In essence, I sought to give youth voices a certain amount of agency in this thesis, a decision which will have undoubtedly generated certain implications for how the findings are interpreted. These implications are particularly important when engaging with the instructor data and my reflexive thematic approach ensured the construction of findings across the datasets were diligent and meticulous. Ultimately, I follow the work of Smith et al. (2022) who suggested it is necessary for us to consider whether young people in contemporary society are taking what they need from educational experiences in the outdoors. Figure nine presents each of the findings alongside their respective research question.

<p style="text-align: center;">Research question one</p> <p>How do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound?</p>	<p style="text-align: center;">Research question two</p> <p>In what ways do the presence or non-presence of mobile technologies at Outward Bound affect how young people experience their residential outdoor adventure education trip?</p>
<p style="text-align: center;">Findings</p> <p>There is a lack of phone policy at Outward Bound, instructors often position social media as being “fake,” and Outward Bound is recognised as providing an antidote to technology addiction.</p> <p>Instructors prefer their practice to be phone-free. This includes the identification of a cultural norm at Outward Bound and mobile technologies as a primary distraction in the outdoors.</p> <p>Mobile technologies are positioned by instructors as a portable comfort zone at Outward Bound, with instructors preferring that young people do not speak with parents during a residential.</p>	<p style="text-align: center;">Findings</p> <p>A lack of connectivity generates stress, anxiety, and anger for young people at Outward Bound. This is especially in relation to contact with parents.</p> <p>Taking photographs is an important motivator for phone-use and young people seek to take photographs to preserve memories of their Outward Bound visit and to share their experiences with others.</p>
<p style="text-align: center;">Research question three</p> <p>What role might online media, video on demand services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound?</p>	
<p style="text-align: center;">Finding</p> <p>Online media and gaming provide experiential baselines from which young people make sense of their Outward Bound experiences in nature and with others.</p>	

Figure 9. The six findings presented alongside their respective research question.

3.7. Trustworthiness of the Research

As Cohen et al. (2018) describe, research is evaluated by its validity, by which they refer to the appropriateness of the methods, analysis, and data in relation to the research questions. In other words, validity may be defined as the means through which the evidence is constructed and linked to a study’s propositions (Andrews, 2003). However, it is necessary here to depart from the statistical and external validity measures proposed by Ary et al. (2019), as their underlying metric does not align with my social constructionist epistemology. Instead, the present study observed Lincoln and Guba’s (1985)

trustworthiness criteria and this section provides my stance on the credibility, transferability, dependability, and confirmability of the study.

3.7.1. Credibility and Confirmability

Following Lincoln and Guba (1985) and Tobin and Begley (2004), credibility is defined as the fit between participant views and experiences and my representations of them, and confirmability as the transparent and rigorous demonstrations of how I have constructed findings that are tightly linked to the data. Throughout the study I have considered these two trustworthiness measures to be inherently linked and are therefore discussed here together.

Firstly, acknowledging the approaches taken to credibility and confirmability from Nowell et al. (2017), emphasis has been placed on the development of an audit trail that demonstrates how I have approached, analysed, and interpreted the data. This audit trail, primarily evidenced in the appendices, provides step-by-step accounts on how I have approached the data and how I have constructed the messy and fluid realities of participants. Alongside this, my approach to the construction of findings has been to purposefully generate *thick descriptions* of participant realities (Geertz, 1973). This has been achieved through providing in-depth contextual descriptions of each case, as well as through the generation of extended narratives following my observations at each Outward Bound centre. These thick descriptions were essential as I navigated young people's experiences and interpreted the meanings attached to them.

For the instructor interviews, credibility was achieved through member checking (Birt et al., 2016). This consisted of sending transcripts to each instructor and having

informal conversations with instructors during the observations about the findings that I was constructing. Alongside this, Outward Bound in the UK set up an internal working group for the research and I was able to share my evolving findings with the group during the analysis phases. Nowell et al. (2017) also recommend having more than one researcher engaged in the analysis of data. Clearly, with this being an independent research project, this was not possible and is a natural limitation, but I did discuss my approach and the findings I was constructing throughout the analysis with my supervisors. These “critical friend” discussions added one further mechanism to ensure a rigorous approach to the management and analysis of data, as well as to the construction of findings. Finally, reflecting Braun and Clarke’s (2019) recommendation on constantly “bending back” during coding provided a reflexive moment of pause and scrutiny throughout my engagement with the data. It was this process of returning to the raw data that ensured I was rigorously and accurately constructing the meanings and explanations participants attached to their experiences of mobile technologies and social media at Outward Bound.

3.7.2. Transferability

For Lincoln and Guba (1985), transferability refers to the case-to-case transfer of knowledge from the present study to other applicable populations and contexts. That said, Stake (1995) recognised that case study research is well placed to make what he describes as *petite generalisations*. These are forms of “generalisations that regularly occur all along the way in the case study” and serve as an anchor from which my assessment of transferability may be assessed (Stake, 1995, p. 7). Alongside Stake’s (1995) characterisation of *petite generalisations*, my position reflects that of Maxwell (1992) and Maxwell and Chmiel (2014)

who describe *internal transferability* as the capacity to generalise from the study setting to communities, events, and environments that did not directly feature in the research. Whilst thick description and rich, context-specific, portrayals of the research findings are once again recognised as critically important, so that the reader may apply these to their own contexts (Stahl & King, 2020), Maxwell and Chmiel (2014) identify descriptions of participant selection to carry equal weight.

For instance, describing the cases and participants is important if findings from within and across the cases are to be applied to other settings. This was achieved in the descriptions provided of the cases and of the school within each case (see sections 3.4.1 and 3.4.3). Matters of school and case location and the ages and backgrounds of the young people were considered important in the development of a transparent research process. Maxwell and Chmiel (2014) also outline how descriptions of the temporally bounded and/or limited nature of research interactions influence the likelihood of transferability. Although I spent approximately an hour interviewing each instructor and spent five-days at each centre with young people, there is still a time-limited “briefness” in my level of engagement with the participants in this study. Drawing inferences from these brief encounters limits the degree with which my construction of participant realities and meanings may be transferred to other contexts.

As such, I believe that the study’s findings are not generalisable to other contexts where young people live away from home or where outdoor instructors deliver adventurous activities. Despite this, through thick description and an acknowledgment of the diversity present in each case, my intention has been to develop a set of findings that have the potential to be internally transferred to other Outward Bound centres in the UK and to

other groups of young people visiting them. It may be that such findings also hold resonance across international Outward Bound schools, but this will require further research in such settings. It may also be that other residential OAE providers in the UK can apply the findings from this research to their own settings, but this must be done on a case-by-case basis that accounts for factors such as young people's access to mobile technologies or the amount of time spent away from home.

3.7.3. Dependability

Whilst the audit trail discussed in section 3.7.1 served to offer a level of transparency regarding my approach to the data and the construction of findings, it also offers the reader reassurance that my processes are traceable and logical through comprehensive documentation (Tobin & Begley, 2004). That said, given Robson and McCartan's (2016) view that social research takes place within open and unpredictable systems and is subject to change based on context, setting, participants, and researcher, it will not be possible for this study to be fully replicated. This perspective also aligns with my constructionist epistemological position which holds that the development and consolidation of knowledge is socially situated. In essence, the social environments (and therefore knowledge developed within them) I have engaged with in this study cannot be perfectly reproduced.

It is also important to acknowledge how my identity, subjectivities, and past experiences are likely to have framed my understandings of participant realities (see section 1.3 for my reflections on my position within the research). Taking the position of *researcher-as-instrument* (Yoon & Uliassi, 2022), the centrality of my voice and my role in the analysis of data cannot be replicated. Whilst I have taken a breadth of measures to ensure I have

constructed participant experiences and meanings as accurately as possible (see section 3.7.1), my position (who I am, what I look like, my demeanour) will have undoubtedly influenced how participants interacted with me, as well as how I understood these interactions. Whilst Poggenpoel and Myburgh (2003) describe the researcher-as-instrument to be “the Achilles heel in an educational research project” (p. 418), I contest this, and acknowledge that my careful and reflexive approach throughout the research has provided situated insight that is unique to this study and that may not be duplicated by a different researcher in a different place and time.

The comprehensive audit trail provided in the appendices documents this careful and reflexive approach, but does not do so with the explicit intention for the study to be replicated. Instead, returning to Maxwell (2008, 2012a, 2012b, 2017) and my realist ontological position, the representations of reality in this study are grounded within an assortment of language, perceptions, and thoughts that have come together, if only briefly, to inform the construction of findings. As Stake (1995) argued, researcher “subjectivity is not seen as a failing needing to be eliminated but as an essential element of understanding” (p. 45). It is this that I have carried with me throughout the research to recognise the constructed nature of the findings, and that, as a critical reader and researcher, these constructions hold value and provide important insight into the nature of reality in relation to mobile technologies and social media at Outward Bound in the UK.

3.8. Ethical Considerations

The ethical guidelines provided by the British Educational Research Association (2018) underpinned the study’s careful and purposeful approach to ethics. Approval for the study

from the Moray House School of Education and Sport's Research Ethics Committee was split into two separate applications: the first being for the instructor interviews and the second for my visits to each centre. Ethical approval was granted in December 2021 and March 2022 respectively (Appendix U). This section is split into two to reflect these separate applications and details the steps taken to ensure participant safety and anonymity, as well as the ways in which ethical dilemmas were navigated.

3.8.1. *Approach to Ethics for Instructor Interviews*

Instructors were sent a research information sheet (Appendix V) and voluntary informed consent form (Appendix W) in advance of their interview. Reflecting the position of Crow et al. (2006), instructors were given the opportunity to decline participation and could withdraw from the study at any time without prompting any adverse consequences. No instructor withdrew from the study following their interview. Further, the identity of the instructors who participated in the study were not shared with Outward Bound. Instructors selected their own pseudonym at the end of their interview which reflected the importance Allen and Wiles (2016) placed on the act of naming and offered each instructor a degree of autonomy concerning how they would be referred to in the study. Two instructors (both learning and adventure managers) were concerned that, because Outward Bound has so few learning and adventure managers, they could be reidentified. It was agreed with one instructor that a gender-neutral name be used for their pseudonym, and with another that when referring to their interview that I do not disclose their role within Outward Bound. The findings presented in chapter four do not, therefore, include the job titles of each participant and all members of staff who participated in an interview are referred to as an

“instructor”. To further address this, all three findings’ chapters do not refer to each case by location (e.g., Aberdovey, Loch Eil, Ullswater). Instead, each case has been assigned an avian-based pseudonym and, in no particular order, are called Skylark, Starling, and Smew.

Whilst the use of Zoom for interviews was approved by the research ethics committee, and Zoom was the preferred platform for Outward Bound, authors such as Dassel and Klein (2023) have subsequently brought into question the security of data when using these platforms. Interviews were not recorded on Zoom (I used a Dictaphone) and data generated from the instructor interviews were stored in two secure locations. Data was stored on a password protected and encrypted external hard drive in my home, and also within a password protected folder within the University of Edinburgh’s OneDrive client. Whilst these storage mechanisms underpinned data security, if I was to interview instructors again, I would choose a different platform to underpin my data management plan. Following interview, all instructors were sent a copy of their transcript to member check (Birt et al., 2016), with no instructor requesting any changes. All instructors received a summarised report of the findings constructed from their participation in the study via email.

3.8.2. Approach to Ethics for Visits to the Outward Bound Centres

Following Heath et al. (2007) and Schelbe et al. (2015), parents or carers who agreed for their child to take part in the study reviewed a participant information sheet (Appendix X) and completed a voluntary informed consent form online (Appendix Y). These forms were sent via email to parents and guardians by the school using their internal mailing systems.

On arrival at each centre, those students who had parental consent (50 in total) were given a participant information sheet (Appendix Z) and, following an appropriate amount of time to review it, were invited to complete a voluntary informed consent form (Appendix AA). The young people were therefore informed of the research process, including what their involvement would look like and what I would be doing. Alongside the information sheet, these factors were also described verbally to ensure that all young people understood what I was asking of them. All young people with parental consent agreed to participate. During this verbal description of the study, I also outlined that I was not there as an instructor and that I was at the centre to engage with them for the purposes of research. This was an important distinction throughout each week, and I reminded young people about my role when I directly engaged with them. Alongside this, I intentionally sought to position myself as a non-instructor through asking our instructor questions during activity briefings or at the end of activities.

Meanwhile, visiting staff members and instructors who were delivering the Outward Bound programme reviewed their participant information sheets and filled out their voluntary informed consent forms during the first day of my visit (Appendix AB, AC, AD, AE). All participants and parents had the right to withdraw from the study at any time without penalty (Crow et al., 2006) and young people allocated their own pseudonyms for the study (Allen & Wiles, 2016). Alongside the use of pseudonyms, every effort has been made to anonymise young people, visiting staff members, and their associated school so that they cannot be reidentified. However, with Saunders et al. (2015) recognising anonymity as existing along a continuum which must balance amplifying the protection of participant identity with data integrity, it was not possible to guarantee that a participant could not be identified. This was outlined in the participant information sheets for participants and

parents and every effort has been taken to anonymise participants whilst maintaining the quality of the data generated during my visits. As mentioned in section 3.8.1, the cases throughout the findings chapters are called Skylark, Starling, and Smew to further protect the identity of participants and, alongside this, the school names have been fictionalised.

Throughout my fieldwork, I paid close attention to Denscombe's (2017) recommendations, which highlighted that participant observation may raise additional ethical factors, given the researcher may generate good, trusting, relationships with participants. Living alongside young people for five days at a time meant that I got to know the young people participating in the study well, and they also got to know me. This raised important considerations around what a young person might feel able to tell me during both the observations and focus groups. During observations and informal conversations, I therefore took additional steps to clarify with participants whether information shared with me was appropriate for the research, or whether it was "off the record". For the focus groups, before I began recording, I reminded young people that they did not have to participate and what my role was at Outward Bound.

I felt restating my role as a researcher was important when young people explained their worries surrounding not being able to contact parents, and I explicitly asked each participant who shared this information if they were happy for me to record it. In advance of my visits to the centres, I also noted three of my own criteria that needed to be met for me to make a record in my fieldbook. These were:

1. In addition to their initial consent, ensure the participant has agreed that the information shared with me can be recorded.

2. That I must make sure information disclosed could not inadvertently or advertently cause harm to participants or to others.
3. That no experience of Outward Bound would be negatively impacted by my presence as a researcher.

This purposeful and careful approach ensured that the positive relationships I generated with participants (Appendix E) did not result in information that would not have been shared with me outside these intense residential social environments.

My waterproof fieldnotes books were stored in a locked desk drawer in my home and the reconstructed fieldnotes and data from the focus groups were stored on a password protected and encrypted external hard drive in my home, and within a password protected folder within the University of Edinburgh's OneDrive client. Finally, summarised reports were sent to the visiting staff members and instructors who had requested this information. Alongside this, the city council who approved my access to one of the schools in the study requested that the full thesis be sent to them after it has been examined. The study's findings will also be shared internally with the Outward Bound senior management team through the development of a summarised report.

3.9. Chapter Summary

Beginning with my philosophical assumptions, and proceeding to outline the study design, participant recruitment, data generation methods, data analysis, and ethical implications, this chapter has presented and explained the approaches taken to answer the research questions. Through the development and implementation of a series of ethnographically situated methods reflecting the works of Hammersley (2006), Walford (2018), and Parker-

Jenkins (2018), the research presented here explores whether and/or how experiences at Outward Bound in the UK are being influenced by postdigital characterisations of reality. Along the way, I have acknowledged that reality is fluid and, drawing on Maxwell's characterisation of realism (2008, 2012a, 2012b, 2017), have interpreted and constructed a set of findings that do not describe reality "as it is," but which acknowledges the constructed nature of the study's findings. Following the works of authors such as Braun and Clarke (2019, 2021, 2022), a reflexive approach has been taken that fully recognises my role within the research and how the findings presented here offer only a glimpse into the multi-layered fabric of participant experiences and interactions.

Data generation began with interviewing 20 members of Outward Bound instructional staff, and I then spent a total of 15-days participating in programmes across the three cases (Aberdovey, Loch Eil, Ullswater) which have been randomly assigned avian-based pseudonyms and are, from here on, called Skylark, Starling, and Smew. During these visits I undertook the role of participant-as-observer and spent each week actively participating in Outward Bound activities alongside 50 young people. During these visits, I also conducted six focus groups with 23 young people and interviewed 11 visiting staff members. Data analysis aligned with the processes described by Braun and Clarke (2006, 2019, 2022), and the analysis was continual throughout the study. Finally, I discussed the trustworthiness of the research and the associated ethical implications and procedures that underpinned it. These factors have contributed to a study that has been an enjoyable and challenging experience and one that I believe holds important insights into contemporary youth cultures as they intersect with residential OAE at Outward Bound in the UK.

Chapter Four

Instructor Perspectives on Mobile Technologies and Social Media at Outward Bound

4.1. Introduction

The analysis of instructor interview data led to the construction of three findings. This chapter begins by presenting these findings across three subsections:

1. There is a lack of phone policy at Outward Bound, instructors often position social media as being “fake,” and Outward Bound is recognised as providing an antidote to technology addiction (section 4.2).
2. Instructors prefer their practice to be phone-free. This includes the identification of a cultural norm at Outward Bound and mobile technologies as a primary distraction in the outdoors (section 4.3).
3. Mobile technologies are positioned by instructors as a portable comfort zone at Outward Bound, with instructors preferring that young people do not speak with parents during a residential (section 4.4).

From section 4.5, these three sections are then examined in relation to existing literature. Particular attention is placed on the traditionally situated views of instructors on the role of disconnecting young people from their technologies at Outward Bound. Alongside this, the discussion centres on narratives of comfort and the importance instructors placed on young people experiencing disconnection from parents. I return to these factors in chapter seven where I apply postdigital theory to these purposeful attempts to disconnect young people during their Outward Bound experiences. I have previously published some of the data in this chapter in Reed (2023a, 2023b, 2023d).

4.2. Phone Policy, Fakeness, and Addiction

4.2.1. *No Phone Policy and Simplifying Practice*

Instructors often described a degree of ambiguity in decision making around whether mobile technologies should or should not be present in practice, with 19 of the 20 instructors citing a lack of phone policy at Outward Bound to be a primary issue. For instance, Alan⁷ described how “the decision about whether to let them take phones rests with the school, it rests with the visiting members of staff” (Starling centre). This was echoed across the cases with Anne suggesting “there's no firm policy at Outward Bound to take phones off or not take phones off” (Smew centre), and Oliver explaining how “it depends on the school. So, both that the school will allow the students to have their phones, and other schools that are absolutely no phones” (Skylark centre). For Euan, he explained that “there's a bit of relief when schools blanket say ‘no phones!’ because it's out of my hands. I don't have to worry about the decision making” (Skylark centre). Instructors often placed onus on individual schools to make the decision on what to do with phones during an Outward Bound residential.

With a lack of Outward Bound led policy on what to do with phones, and this often placed within the remit of schools, instructors expressed relief at both having this decision taken away from them, especially when schools decided there would be no phones. For instance, Holly suggested that when schools “have decided they're not going to have their phones during the day, during activity time they get locked away and that, for me, it makes it a lot easier” (Smew centre). Helen also discussed school-based phone management as “very much a teacher's job, like, ‘I'm not getting your phone out,’ that's not my job, I'm not

⁷ As discussed in section 3.8.1, all instructor names are pseudonyms.

here to give you your phone” (Starling centre). In essence, not needing to manage phone use by young people is positioned as important and allows an instructor to focus on delivering a programme. Despite this, instructors also acknowledged that Outward Bound as an organisation must keep an eye on the future. Alex explained that “it's not going away, so I don't feel like it's worth fighting” (Starling centre), and at the Skylark centre, Lisa also suggested “in the short term, at least, it's definitely not going anywhere. So, I don't see why we should fight against it”. What came through the interviews was that instructors were often happy to allow schools to set the phone use agenda, and hoped that their decision would be that no phones are allowed. When this happened, instructors recognised the delivery of Outward Bound activities to be easier, but they also acknowledged that it may be time to stop battling against young people’s uses of phones in their practice.

4.2.2. Social Media as a Form of Fake Engagement. Outward Bound Reconnects Young People to “Real Life”

Young people’s engagement with social media was often considered fake by instructors who positioned Outward Bound programmes in the UK as reconnecting learners to the “real world”. Oliver suggested that person-to-person communication on social media “takes away that connection, that proper connection between a human being and a human being, you know, you're doing it through a piece of technology” (Skylark centre). This view on social media communication being illegitimate was replicated across the cases. By way of example, Charles acknowledged that “maybe it is their real world, but it's not, you know, it's only a real world when it's between you and the screen” (Smew centre) and Lauren suggested “it [social media] is not true, and it is not real, it is digital ... it is a false connection” (Starling centre). These constructions of falseness from instructors were often

described in tandem with nostalgic memories of previous personal experiences where connectivity was limited. For instance, Neil told a passionate story about a trip to France in 2011 with a “French brick” phone and how he “would go up to the internet room once every fortnight” (Smew centre). Alongside this, Helen described how her “Mum would just kick us outside and say, ‘see you at five, bye’. Kids definitely don’t do that now” (Starling centre). It was this linking back to their own childhoods or past experiences that often foregrounded instructor hopes that Outward Bound programmes would reconnect young people to a world beyond their screens.

With young people’s engagement with social media described as “false” or “unreal,” instructors expanded and frequently communicated Outward Bound programmes as reconnecting young people to the “real world,” and to the people in direct proximity with them. For Lauren, phone-free Outward Bound “means they can build a connection with the actual people on the course” (Starling centre). Alan also discussed this, linking a lack of signal to in-person, real world, engagement:

Sometimes, and this is great, is when there's no signal. And you hear all that, 'there's no signal, there's no 4G,' and you think 'well, this is going to be interesting, because you actually have to talk to each other, face-to-face, perhaps with the person you are sharing a tent with.' (Alan, Starling centre)

Meanwhile, Liam described Outward Bound courses as something “you can’t explain” and that, whilst “you can see one or two sentences from the phone ... actually being there, you get so much more” (Skylark centre). In essence, screen-based engagement was considered to restrict the strength of connection to the Outward Bound environment. Anne summarised this by describing in-person, phone-free, Outward Bound in the UK as “more

impactful, because you're showing them that they can exist without their phones" (Smew centre). When I had this discussion with Naomi, she broadly reflected on whether Outward Bound's purpose is to reconnect learners to each other and to themselves in an environment where they do not have access to their online networks:

I think the question is, do we try and embrace it [technology] and make that part of our work and courses? Or do we hold on to Outward Bound being that different experience? That we want to take people back to that, maybe it's gotten lost over the years in terms of being outside, but just being by yourself. (Naomi, Smew centre)

These questions centre on challenging the always-on nature of social media, the pursuit of solitude, and offering young people opportunity to reconnect not only with the world around them, but also to themselves. Instructors frequently constructed narratives of social media facilitating a degree of fake engagement and that Outward Bound courses could provide a source of in-person and in-place reconnection.

4.2.3. *Young People Considered Addicted to Phones. Outward Bound Thought to be a Form of Detox*

Alongside positioning Outward Bound as uniquely placed to return young people to a "real" world, instructors often described courses as offering a detox for young people away from their phones. This was often foregrounded by discussions surrounding young people's addiction to mobile phones and excessive screen time. For instance, Helen described Outward Bound courses in the UK as "almost like a bit of rehab away from your phone" and that "I just think, it's [Outward Bound courses] just a detox, get rid of it" (Starling centre).

This was reflected by Charles who described removing phones from young people as part of a programme as being “almost like a heroin addict with that withdrawal from it” (Smew centre). At the Skylark centre, Liam also described that “there's almost withdrawal. You'll get a lot of people going ‘when can I have my phone? I need to go and do this, can I have my phone now?’”. Staying in the Skylark centre, Louise considered that young people enjoy withdrawing from always-on online environments and that “most of them really quite appreciate, you know, that sort of detox, I suppose”. Despite this, Alex offered an alternative position, stating that they had “literally seen (young) people cry actual tears” when phones are removed and that, when asking young people to put down phones, “it's like a massive, massive [repeated] reaction” (Starling centre). However, once the initial reaction has subsided, Alex recognised that “they never miss it because they're so immersed in what's going on” (Starling centre). In many ways, it seemed that instructors were acknowledging how some young people resist their position on removing or limiting access to mobile technologies at Outward Bound.

Within narratives of addiction, withdrawal, and detox, instructors often continued to tell animated stories of young people hiding phones from staff members in a hidden manner. As Callum told me, “they'll try various tactics, some of them will come with two phones so that they can hand one in and try and keep a hidden phone” (Starling centre). Max described this too, suggesting that “they're really sneaky, so I remember there would be dummy phones given in. So, like an iPod Touch, and they kind of look like an iPhone” (Starling centre). As Immy explained, instructors recognise that young people sometimes hand in “a burner phone” (Smew centre) and resist the notion of being technology-free. Indeed, instructors often framed Outward Bound as a counter-narrative to young people's “addiction” to technology. This was summarised by Lisa who described Outward Bound

courses as “giving them tools and reasons why they might want to put down their phones and put aside social media” (Skylark centre). Ultimately, instructors positioned young people as reliant on and attached to their phones in ways that may be addictive and considered Outward Bound courses to be a detox from always-on, always-connected, childhoods. Alongside this, for those young people who chose to hide their phone, instructors identified a level of resistance from participants to the purpose of phone removal at the trust.

4.3. Phone-Free Preferences in Practice

4.3.1. *The Desire for Outward Bound Programmes to be Phone-Free*

With a lack of phone policy alongside narratives of “fakeness” and “addiction,” the interviewed instructors expressed a clear desire for their practice at Outward Bound to be phone-free. Through this, instructors outlined a cultural norm which centred on “a little bit of a culture at Outward Bound of ‘no, it's the good old outdoors, you go out with nothing’” (Liam, Skylark centre). As Callum put it, “the angle that we've tended to approach it from is to try to get young people to engage in putting their phones away” (Starling centre). This was reinforced by Max (Starling centre) when saying that “as a centre, we take a bit of a preference to them not taking their mobile phones on activities,” and at the Smew centre with Neil who said that “when I started, the centre in general, and I think still, most people don't take phones on activities”. As Oliver concluded, the general stance is that “we don't have any devices out with Outward Bound” (Skylark centre). Such statements go beyond instructor hopes that schools would make the “no phones” decision, and indicated the presence of a practice-based commitment within the centres that rests on the assumption that young people’s mobile technologies should not be present during activities.

Throughout these conversations, instructors often discussed mobile signal and Wi-Fi as key factors. For instance, at the Smew centre, Holly said that turning off the centre Wi-Fi is a “way you can kind of prevent them being on their phones”. That said, Charles acknowledged that you “now get signal (at the centre), so it's [turning the Wi-Fi off] not so much of a barrier” (Starling centre). To address this at the Starling centre, instructors intentionally sought locations for activities where no signal would be present. For instance, Callum said “we are quite lucky in that (activity location) don't have any mobile signal [laughs]; which is good! Hopefully it stays that way” (Starling centre). This featured as another method to ensure young people could experience Outward Bound programmes without access to online environments.

Finally, instructors identified compromises in safety as a primary reason for their practice to be phone-free. Oliver summarised this when stating “the major thing for us is safety ... They need to understand what they're doing and what the risks are. If they've got their phone, then most of the time they're homing in on that” (Skylark centre). Ian discussed safety too, sharing that “in the past (I have) had young people making phone calls in the middle of a session, which is, potentially, quite dangerous” (Skylark centre). These perspectives were replicated across the cases with Anne suggesting that “we need their safety attention, and if they're on their phone [pauses] ... humans aren't very good multitaskers!” (Smew centre). Holly also expressed her concerns with this, describing how “if we're on a scramble, on a walk and they're looking at their phone, it could be quite detrimental to their safety if they're not watching what's going on” (Smew centre). As Lauren described, “it compromises safety ... because that is a distraction” (Starling centre). Whilst instructors presented many reasons for practice to be phone-free, safety featured as

an uncompromisable factor in their decision making on the place and use of mobile technologies.

4.3.2. *The Presence of Mobile Technologies Distract from the Fundamental Purposes of Outward Bound Programmes*

Thus far, the analysis of the data has demonstrated that a cultural norm is present around not using phones on Outward Bound courses across the cases, and that instructors seek activity locations with limited signal and often cite safety concerns if phones are present. The final element of instructors' phone-free preferences centres on mobile technologies detracting from the fundamental outcomes and purposes of an Outward Bound course in the UK. Drawing on the interview with Charles, he considered the following:

For us to truly deliver on our mission, then the phone does become a genuine, like, disconnect to our outcomes, because we are trying our hardest to make you all realise how wonderful outside places are. The only way you can do that, I think, is by being fully immersed. (Charles, Smew centre)

Alex explained that a typical week will always have "some purposeful time without phones to say 'no we're going to be present and just enjoy where we are'" (Starling centre) which placed emphasis on embracing and noticing nature on Outward Bound courses without screens. The notion that solitude and mindfulness are disrupted by mobile technologies at Outward Bound also came up in my interview with Max. He described how phone-free programmes "can really help facilitate other powerful experiences that they might be missing, so things like solitude, time for self-reflection, moments of mindfulness". In essence, instructors positioned the presence of mobile technologies as fundamentally

distracting young people from Outward Bound environments, and from the development of learning outcomes.

Benjamin further explained this in relation to developing communication as part of an Outward Bound course: “my preference would be to do it in person, and I think that's a great thing, to literally leave the technology behind because it's a chance to do that” (Skylark centre). Holly also picked up on communication, suggesting that “if you've got one or two of the students using phones, they're just not able to interact with their peers as they would without having it and to be able to kind of communicate fully” (Smew centre). The presence of phones on a course was also positioned as undermining the traditional purpose of an Outward Bound programme. For instance, Greg described networked contact with people who are not directly present at Outward Bound as distracting from the very purpose of a residential course:

If they still have that contact with the rest of their peers from their normal social group, it definitely inhibits it ... they're not as vulnerable, so they need to engage with the people that are there with them, rather than people who are somewhere else. (Greg, Skylark centre)

This sense of contact to those who are not temporally or proximally in the same space was discussed by instructors through the metaphor of the portable comfort zone and this is presented next.

4.4. Portable Comfort Zones and Speaking with Home

4.4.1. *Mobile Technologies as a Portable Comfort Zone at Outward Bound*

As mentioned in section 3.5.1, in my third interview, Euan made mention of mobile technologies offering young people a level of unhelpful comfort at Outward Bound: “we want them to do something different that gets them out of their comfort zone. And a phone is a portable comfort zone in a lot of ways” (Skylark centre). I followed up with Euan on this during the interview who then linked his identification of phones and comfort to an episode of South Park:

There's a fantastic image in my mind, which is one of the seasons of South Park, they talked about social anxiety ... one of the images that they had was, 'I need my safe space,' and it is basically a cardboard box that people would put over their heads so that no one could talk to them, they'd have headphones on, and then they'd be on their phones in a safe space. (Euan, Skylark centre)⁸

Following this, I read back through the transcripts of interviews one and two (Lauren from the Starling centre and Immy from the Smew centre). Despite not mentioning the exact portable comfort zone phrase, both linked phone use at Outward Bound by young people to narratives of comfort which restrict young people's engagement and learning.

For instance, Lauren suggested that “they are so used to being able to phone home and someone will fix their problem, they're the one's that need to not have their phones” (Starling centre). In essence, removing a phone for Lauren encouraged young people to

⁸ For the South Park episode Euan refers to, see Comedy Central (2019).

exercise resilience and autonomy, rather than to use a phone to seek help or reassurance.

For Immy, she noted how young people's mobile technologies restrict learning as:

They still get that sort of comfort from just even having it in their hand and holding it. Some of them have had it in their hand and they have not used it to do anything, but they're just using it for comfort, like having a blanket with you.

(Immy, Smew centre)

Following these three interviews, I adjusted the interview schedule for the remaining 17 instructors to explicitly ask about narratives of phones, comfort, and instructor practices.

The portable comfort zone model was frequently described by instructors as a limiting factor in Outward Bound programmes. As Callum described in relation to encouraging young people to exercise resilience, "my immediate thought is that your phone would give you a way out of that" (Starling centre). In essence, the presence of mobile technologies on a programme is thought to restrict the ability of a young person to be resilient, which is one of Outward Bound's (2022d) key learning outcomes in the UK. However, Louise also considered how a phone at Outward Bound may increase a young person's comfort and ability to participate when suggesting that "they are a definite comfort zone and, yeah, a lot of people would struggle to even come away if they couldn't bring their phone with them" (Skylark centre). The idea that living away from home at Outward Bound can be an uncomfortable experience was also discussed by Naomi. She considered that young people:

Suddenly feel quite self-conscious. You've got a stupid Outward Bound waterproof jacket on. You've probably got some way too short Outward Bound waterproof trousers on. You probably look pretty silly in your eyes. And then you

haven't got anywhere to hide behind your phone or in the world that you know really well, and we're making you really uncomfortable. So, I think the phone is a bit of a safety zone, isn't it? (Naomi, Smew centre)

As Greg described, "it's just that umbilical cord of support. Without it being cut, you just feel that 'I can just call them [parents], I can just be taken back to my nice safe place, I don't have to fully engage'" (Smew centre). Instructor narratives often overlooked the possibility that mobile technologies could help young people feel less anxious through having contact with home and the ways in which networked connectivity may support programme engagement. Instead, the presence of a phone on an Outward Bound programme was thought to potentially restrict a young person's ability to immerse themselves in the residential experience by offering access to a comfortable space.

That said, whilst some instructors positioned comfort through phones as a negative, other instructors did identify portable comfort zones to potentially enhance the likelihood of a young person's continuing engagement in a programme. For instance, Ian made mention of comfort being a positive factor when stating how mobile technologies allow young people to:

Just take two minutes just to check whatever the social media platform it is that they want to be on. They might feel like they're a little bit home, a little bit with some friends, and have that company again that they've been missing, and that might help just give them that relief for a couple of minutes. (Ian, Skylark centre)

This perspective was echoed across the cases. Focus was often placed on how not being able to take a phone on activity "might just tip them over the edge" (Alex, Starling centre). The

notion that the presence of a phone may prevent young people from extending into their panic zones was further described by Charles who suggested:

Some people are so full up on their comfort cup just by being here, that just putting on a new pair of boots might be enough to tip them over the edge. So, when you say 'you can't have your phone anymore,' that might just be the bit that makes them go, 'well, I'm out of here'. (Charles, Smew centre)

Whilst some instructors felt that portable comfort zones were a limitation in some instances, the presence of a phone was also identified as a possible factor that helps a young person to participate in a way where they feel safe and comfortable. This narrative of safety and comfort is returned to in sections 5.2.2 and 5.4.1 where young people's connectivity disruptions at Outward Bound elicited anxious and angry responses which disrupted their residential experience.

4.4.2. Instructor Perspectives on Young People Connecting with Home During a Residential

Throughout the interviews, 17 instructors described to me the negative role parents played in shaping young people's Outward Bound experiences. These conversations centred on instructors preferring that young people do not speak with home, despite some having previously acknowledged the important reassuring role a portable comfort zone might have. At the Skylark centre, Lisa told me "I'm not going to lie. It's [parental connection] an absolute nightmare. Yeah, probably the worst, worst [repeated] thing to come of it is that parents connect to the young person on a two-day or a five-day course". Lauren also placed significant emphasis on young people speaking with parents when suggesting that "it's a

nightmare! Absolute nightmare! They are completely distracted, if they have a problem, they want to phone home, opposed to trying to work it through” (Starling centre). Euan was equally concerned, telling me that “they [parents] can be incredibly disruptive when it comes to delivering genuine adventure” (Skylark centre). In essence, parental contact was thought to compromise the integrity of a young person’s residential OAE experience.

Charles was similarly dismayed at the prospect of a young person speaking with a parent during a residential and considered that “parents are a nightmare! [laughs] Any issue usually stems from parents. It is a noticeable difference when parents are present” (Smew centre).

These instructors conceptualised Outward Bound adventures across the cases as necessitating disconnection from the home environment, and that controlled fear and disconnection are necessary precursors to student learning and the Outward Bound experience.

Instructors also identified that young people actively seek parental contact. Holly told me how:

A lot of times they say, ‘but my Mum,’ or whoever’s at home, ‘will be worried about me,’ or, ‘they’re ringing me,’ or, ‘I need to get in touch,’ that sort of thing. You know, I feel like it’s just an excuse to keep a hold of it.

(Holly, Smew centre)

Within this notion of young people seeking contact with home, instructors often felt that the students on their programmes are placed under pressure by home to maintain contact.

As Lisa explained, instructors are “certainly seeing loads of pressure on young people from parents and from families for constant updates” during a residential (Skylark centre). In some instances, instructors shared with me that parents have been known to escalate a

situation when they have not heard from their young person. Drawing on Euan as an example, he told me of a moment where a young person contacted home without the instructor knowing:

The most serious thing was when Mountain Rescue has been called on a group (by a parent) and the instructor was not aware. It was only when the Mountain Rescue Team (phoned) up ... we were like 'what do you mean? We don't. We haven't got a call out, we don't need help'. (Euan, Skylark centre)

Of course, these instances are rare, but served as an example of the ways in which an unmanaged lack of connectivity between parent and child can generate significant and disproportionate responses. As Anne told me, "it almost feels like parents are more anxious about not being able to communicate with their student than the student is" (Smew centre). Helen also picked up on this, stating how "you definitely get the parents who call Outward Bound and are like 'I haven't seen a picture of Jimmy on social media, is he still alive?'" (Starling centre). These descriptions indicated that parents are also concerned when connectivity with their child is limited or removed.

Finally, some instructors expressed a dilemma around whether young people should or should not speak with home. This also linked to the portable comfort zone concept and whether connecting with home enhances a young person's perceived sense of safety. Alex discussed this, asking a series of questions that she felt interacted with her practice:

If they find some phone signal when we're out, and they make a phone call home, what impact is that going to have on their home life? Their

experience here, is it going to detract from it? What about everyone else who hasn't been able to do that in the group? What impact does that have on them? (Alex, Starling centre)

Here, Alex constructed a degree of uncertainty that was echoed across the centres around what the best and right approach is concerning young people's contact with home. Naomi also acknowledged that there is no clear approach when stating that "we're kind of finding our way around it, but yeah, there's certainly no clear evidence or decision, or even discussion, of whether it's affecting what we do, or whether we could do it better" (Smew centre). In many ways, these quotes from Alex and Naomi provide an overarching characterisation that focusses on uncertainty in instructor practice around whether and/or how mobile technologies influence young people's Outward Bound residential experiences.

4.5. Reinstating Outward Bound's Mission: Phone-Free Experiences Positioned as a Learning Enhancer in Outdoor Adventure Education

With the findings from the instructor interviews presented above, the remainder of this chapter now interprets the findings in relation to germane literature. This initial section examines the role and usefulness of the double-edged sword metaphor (Cuthberston et al., 2004) as it intersects with instructor perspectives on mobile technology and social media in their practice. This places emphasis on culture, traditionalism, and safety (section 4.5.1), before examining narratives of fakeness, addiction, and adult understandings of young people's phone use (section 4.5.2). From there, the construction of the portable comfort zone model is considered in section 4.6, and includes an examination of instructor considerations on the role of young person – parent connectivity.

4.5.1. *One Side of the Double-Edged Sword: Intentional and Romantically Situated Phone-Free Practice to Enhance Learning and Safety*

The dominant instructor perspective centred on delivering residential OAE that is phone-free. Whilst Cuthbertson et al. (2004) acknowledged the for-and-against arguments around technology in outdoor education, the data indicated that instructors were steadfast in their belief that mobile technologies did *not* have a place in Outward Bound learning environments in the UK. This centred on the very purposes of Outward Bound programming being undermined by mobile technologies, which aligned with Cuthbertson et al. (2004) when they suggested that engagement with technology in the outdoors may overlook direct and meaningful engagement with the land.

Looking to the historical foundations of the Trust (e.g., Freeman, 2011; Hahn, 1947; James, 1980a), the no-phone culture described by instructors may be traced to Kurt Hahn's initial purpose for Outward Bound. As Hahn (1947) described, the advancement of technology in the post-war era was thought to have deteriorated human worth, and was a factor which fundamentally shaped the purpose of Outward Bound at the time. Indeed, in a blog post for Outward Bound, Rhys (2023), a senior instructor who is not a participant in this study, related three of Hahn's five pillars (Outward Bound, 2022b) to young people's contemporary uses of technology. For Rhys (2023), "physical fitness" is impacted by "screen time and less green time" (para 5), "initiative" is negatively impacted in a world where increased screentime means we are "informed yet detached from everything going on around us" (para 7), and "self-discipline" is reduced through "technology ... (offering) immediate self-gratification" (para 12). The data indicated that instructors engage with contemporary applications of Hahn's foundations seriously, and actively seek to restrict young people's access to their networked worlds. This may also be linked to the broader

historical foundations of outdoor education in the early 20th century as discussed in section 1.4.1, where moral citizenship and discipline were prominent features of early approaches (see Mills, 2013, 2022).

Instructors' phone-free preferences may, therefore, be positioned within a historically situated tradition at Outward Bound of "no technology in the outdoors". It is also necessary to place this in the context of the research from Mees and Collins (2022) that was introduced in section 1.4.2, where they recognised that the practices and lives of Outward Bound instructors are embedded within the Outward Bound ethos. Based on the data presented, such an ethos may be characterised as undoubtedly "technology free" and which returns learners to a pre-digital environment for the purposes of learning enhancement and immersion. Indeed, with Liam drawing on the notion of Outward Bound activities taking place "in the good old outdoors" where you are expected to "go out with nothing," spaces for adventure were constructed as "pure" and not a space where technology is welcome. Such a return to the past hints at a historically situated stance within the interviewed instructors that aligns with work such as Leopold (1949), Pyle (1993), and Louv (2005, 2011), who position technology as negatively affecting the human experience in nature. This returns me to Wattchow's (2001) work where technology-free outdoor experiences are considered to stimulate opportunities in nature for learners to engage in silence and solitude. These factors were explained by Max who described phone-free Outward Bound experiences as being an opportunity for learners to engage in "things like solitude, time for self-reflection, (and) moments of mindfulness".

The sensory components of engaging in nature at Outward Bound are, therefore, considered threatened by the presence of young people's technology by instructors. Here,

echoes of Pyle's (1993) extinction of experience are present, and offers a lens through which to understand instructors' conceptions that technology detrimentally affects purposeful engagements with nature. Indeed, Pyle (1993) suggests that in-person and in-place experiences in nature are becoming extinct as a result of hypermobile and technological societies. Such a perspective was also described in van Kraalingen's (2021) systematised review where direct and meaningful outdoor learning experiences were seen as being threatened by the presence of technology. Instructors aligned with this perspective, which not only reinforced evidence of a culture at Outward Bound of "leave phones behind," but also the intentionality that is present in instructor practices when seeking to reconnect learners in a world where technology is believed to endanger direct and meaningful nature experiences.

Whilst instructors described a historically situated phone-free culture, and held onto romantic notions of nature engagement, they also cited distraction and the safety of an activity to be a primary factor in their reasoning for not allowing young people to use their mobile technologies. In the literature, the safety of activities in relation to the presence of mobile technologies does not feature as a prominent theme. I also think the limited discussion on the impact of mobile technologies on participant safety is compounded further given the mixed stance offered in van Kraalingen's (2021) systematised review. In the review, safety is firstly described as negatively impacted by mobile technologies in outdoor learning, but then later described as "providing opportunities that increase safety," which generates a degree of ambiguity in the review on what the safety impacts of mobile technologies are in the outdoors (van Kraalingen, 2021, p. 3).

Indeed, van Kraalingen's (2021) position on safety being enhanced by the presence of mobile technologies appears to be drawn from the work of Leyshon et al. (2013), which is a paper included in the systematised review that does not have an outdoor education focus. In the case of the data presented here, the instructors clearly perceive the presence of a young person's technology to fundamentally detract from the safety of Outward Bound activities in the UK. The instructor's focus also extended beyond the safety factors described by Hills and Thomas (2020; figure 3), who identified global positioning services as making outdoor activities safer. Instructors made no mention of global positioning services as part of their practice, and instead reinforced the "no technology" culture at Outward Bound with the narrative that a learner's concentration and awareness are threatened when mobile technologies are present. It may be necessary for further research to be conducted to assess how safety may or may not be affected by young people having their mobile devices on their person during Outward Bound activities.

4.5.2. *Constructions of Social Media Fakeness and Technology Addiction: Instructor Perceptions of Young People's Technology Use*

Alongside concerns of safety, the interviewed instructors readily described their practice as reconnecting learners to "real life". This directly intersected with the question asked by Bolliger et al. (2021), that is, "do (instructors) believe that students have to disconnect from civilization (and technology) completely in order to experience the outdoors fully?" (p. 64). Instructors linked their preference for technology-free practice to descriptions that Outward Bound is uniquely positioned to address young people's reliance on so-called fake online environments for consumption, socialisation, and engagement. Instructors linked narratives of fakeness to the disruption of Outward Bound's learning outcomes, and

considered young people's engagement in designed online environments to restrict the development of immersion, vulnerability, and mindfulness in the outdoors. As described by instructors across the cases such as Lauren, Charles, and Oliver, social media engagement by young people was thought to generate a level of false connection which threatens in-person and in-place relationships at Outward Bound. This speaks to a narrative of delivering *authentic adventure* without mobile technologies and offered instructors further rationale for young people not having their mobile technologies in the outdoors.

Hickman Dunne (2019) described authenticity in relation to the role of technology more broadly in the development of authentic outdoor learning at Outward Bound in the UK. She drew on the writing of Dickson (2004) who considered authentic outdoor experiences to be visual and auditory as well as engaging senses such as taste, smell, and touch. This, Dickson (2004) contends, can result in visceral experiences that are not possible when an adventurous activity is experienced through technology. These factors once again link to Wattchow's (2001) work where outdoor education was positioned as encouraging self-sufficiency, silence, solitude, and remoteness, key components of learning beyond-the-classroom that instructors identified as unattainable when the "fakeness" of social media was present during a programme. However, as I analysed the data, I felt that instructor dismissal of young people's social media on the grounds of fakeness raised important theoretical and practice-based quandaries. Importantly, I think it is necessary to consider whether young people would recognise and agree with this characterisation of social media by instructors given scholars such as boyd (2008, 2010, 2014) and others (e.g., Hodkinson, 2017; Maclsaac et al., 2018) recognise these networked social environments as a fundamental pillar in contemporary youth culture.

To unpack the relationship between instructor preferences on mobile technologies and the importance of digital youth cultures in the lives of young people, the work of Herring (2008) appears well positioned to disentangle this uncertainty. With a focus on technological determinism, Herring (2008) examines the generational biases that may emerge when adults talk about young people's engagement with their phones and social media. She speaks of an experience gap between adult and youth interpretations of technology which draws on the notion that adults consider technology to fundamentally influence childhood in uncertain and damaging ways. This also aligns with Livingstone and Blum-Ross (2020) who described the romanticism that can be associated with the remembered pasts of adults and that such accounts overlook the normalisation of technology in the lives of young people. We see this perhaps most evidently in instructor discussions on young people's technology addiction and the role Outward Bound can have in offering a form of detox for young people, which may be regarded as a hidden outcome that does not feature explicitly in Outward Bound material. It may, therefore, be necessary for Outward Bound to address this and, if maintaining the position that Outward Bound is a form of detox, to incorporate methods of intervention that are evidence informed. The notion of a technology detox rests on the idea that was challenged by Jorge et al. (2023), that is that "young people are often shown as special victims - at both psychological and social levels - of the vicious design and abusive economic functioning of social media platforms" (p. 2). As instructors such as Helen, Immy, and Liam described, they not only consider young people to be addicted to their mobile technologies, but actively consider Outward Bound to offer a degree of intervention or detox that may address this issue.

Instructor perspectives centring on Outward Bound in the UK as a form of outdoor intervention that addresses technology addiction also intersects with Radtke and Harper's

(2018) consideration of NoMoPhobia at Outward Bound Canada. For the present study, interviewed instructors put forward that, yes, Outward Bound programmes are well-positioned to address what they perceived to be young people's addiction to technology. That said, when turning to data presented from Fernandez et al. (2014), only 10% of 11-18 year olds in the UK exhibit phone use that may be characterised as "problematic". Despite this low figure, my interpretation of the instructor data indicates that a degree of absolutism is present in the narratives that centre on disconnection at Outward Bound as a distinct and necessary aspect of young people's residential experiences. Turning to the work from Velthoven et al. (2018) for clarity on this complex issue, it is suggested that no evidence is available that demonstrates digital detoxes to be an effective method of addressing technology addiction. A lack of evidence here places Outward Bound programmes in the UK that either explicitly or implicitly seek to address technology addiction on an uncertain evidential foundation. It also raises important questions surrounding whether Outward Bound programmes are the right place to address forms of addiction and, if they are, whether staff and schools are qualified to manage this.

4.6. The Portable Comfort Zone and Connectivity Beyond the Outward Bound Space as Threat

Whilst instructor perspectives often rested on Hahn's five pillars (Outward Bound, 2022b), as well as on their considerations of young people's addiction to their phones, emphasis was also placed on the comfort mobile technologies can provide young people during their residential experience at Outward Bound. This section examines the notion of the portable comfort zone model (section 4.6.1) and the impact instructors considered young people's connectivity with parents to have in practice (section 4.6.2). These discussions offer insight

into the contrasting positions instructors held surrounding comfort and the role mobile technologies can have in the framing of young people's experiences.

4.6.1. Addressing Therapeutic Education or a Caring Pedagogy? The Portable Comfort Zone in Practice

Instructors readily described how the presence of phones on a programme can help create a comfortable space during a young person's visit to Outward Bound, and instructors considered this to be both a positive and a drawback in their delivery of a programme. The comfort zone model (figure 2) actively features in Outward Bound practice (e.g., Exeter, 2001), and is a model that has often underpinned instruction in OAE environments (e.g., Luckner & Nadler, 1997; Panicucci, 2007). However, the instructors provided an additional characterisation of the model by suggesting that mobile phones provide a *portable comfort zone* for young people. This relates back to the NoMoPhobia discussion present in Radtke and Harper's (2018) dialogue and to the fourth component of NoMoPhobia as described by Ali et al. (2017) and Rodríguez-García et al. (2020), which links the removal of phones in contemporary society to the removal of comfort. This generates an important moment for Outward Bound instructors who, as seen in the data presented, positioned young people's access to a form of connected technology as a form of comfort.

For instructors such as Lauren and Greg, the notion that young people have access to a comforting item on a programme presented a distinct limitation to the development of immersion and learning outcomes. I think these narratives, which often focussed on removing a form of comfort at Outward Bound for the purposes of resilience development, align with aspects of Ecclestone (2004) and Ecclestone and Hayes' (2019) texts. Their efforts plot the development of what they recognise as a therapeutic culture in society

where contemporary education is positioned as developing a group of young people who are hyper-sensitive and emotionally vulnerable. In essence, it is suggested that educators are as much teachers as they are emotion managers. In the words of Ecclestone (2004), “safe spaces” (mobile technology in this case) in education removes the development of critical autonomy and development in learners. Some instructors’ perspectives aligned with this, positioning autonomy and resilience at Outward Bound in the UK as threatened by the presence of a comforting form of mobile technology.

However, the work of Davis-Berman and Berman (2002) provides a note of caution that I personally align with, and which problematises the work of Ecclestone and Hayes (2019) in ways that questions whether ignoring emotional vulnerability generates a safe space for learning. Davis-Berman and Berman (2002) suggest that little emphasis had been placed on “emotional and psychological safety and risk” in outdoor education, and that “outdoor leaders often receive very little instruction in assessing emotional risk” (p. 308). In my analysis, instructors perceived young people to be reliant on their phones, or, as Immy stated, their “safety blanket”. It was this that often prompted the decision for young people’s portable comfort zone to be removed. Through this removal, instructors sought to offer learners opportunity to exercise autonomy and to embrace vulnerability without the comfort of being able to contact a parent or friend. Given Davis-Berman and Berman (2002) acknowledged that outdoor instructors receive limited training on evaluating emotional risk, the analysis has raised an additional question beyond the scope of this thesis which centres on whether the induction and training of Outward Bound instructors in the UK includes evidence-informed discussion on the ways in which young people’s phone use could intersect with maintaining adolescent mental health.

Of course, instructor descriptions of the portable comfort zone and technology addiction are interwoven with the connections instructors frequently drew between removing phones and the development of authentic and challenging experiences in the outdoors. This may also link to the historical foundations of Outward Bound and provides evidence that approaches to moral citizenship and self-discipline still feature in contemporary practice. In particular, these past features appear to play a role in shaping instructor perceptions on what to do with young people's mobile technologies at each centre and when out on activity. The instructors' call for young people to embrace vulnerability by having their mobile technologies removed at Outward Bound is revisited in section 5.4.1 where young people's emotive responses to not having their phones is discussed.

Whilst some instructors' views appeared to align with those of Ecclestone (2004) and Ecclestone and Hayes (2019), other instructors identified the portable comfort zone as important in framing a young person's ability to participate. For instructors such as Alex and Ian, generating purposeful discomfort in learners by removing their phones was acknowledged as the factor that might just push them "over the edge". In direct contravention to Ecclestone (2004) and Ecclestone and Hayes (2019), these instructors recognised that feeling comfortable and safe, if only for a fleeting moment through using a phone, could foreground a young person's ability to participate and challenge themselves in other ways. As I analysed and considered this data, the instructor narratives reminded me of the *pedagogy of care* I outlined with colleagues in relation to a separate research project on the recognised benefits of adventurous education from instructors (Gilkes et al., 2023). Indeed, with the data in the present study indicating a caring approach as an intentional pedagogic strategy around young people's mobile technologies, Outward

Bound instructors may employ the comfort associated with phones as part of their instructing repertoire.

The literature on adventure therapy also holds helpful insight here. Although therapeutic outcomes are beyond the present remit of Outward Bound in the UK, with instructors positioning mobile technologies as a form of comfort zone and that Outward Bound provides young people with a digital detox, the role of adventure for technology therapy is important. There is a well-developed foundation of literature concerning the delivery and effectiveness of adventure therapy programming (e.g., Berman, 2001; Davis-Berman & Berman, 1994; Gass et al., 2020), and Outward Bound programmes themselves have been historically positioned around offering young offenders and substance abusers forms of adventurous therapy (Trundle & Hutchinson, 2021). It may, therefore, be necessary for future studies to evaluate the efficacy and value of Outward Bound as a space for detox. For now, instructor perspectives appear to align with Gabrielsen and Harper's (2018) study and their explanation on how the "technification" of society has led to a "considerable rise in adolescent maladjustment" (Gabrielsen & Harper, 2018, p. 409). What is required to explore this further is the development of evidence-based approaches which acknowledge that not all young people are addicted to their phones. Alongside this, consideration may be placed on the ways in which young people may be sufficiently supported if instructors intentionally frame Outward Bound as a form of detox. The data also suggests that a greater examination may be required on whether Outward Bound instructors exoticize and overlook the foundationally important role networked spaces have within the day-to-day lives of young people.

My concern here comes from positioning young people as “passive victims,” which does not recognise young people as active agents who readily negotiate the collision between their virtual and physical environments (e.g., Hodkinson, 2017; MacIsaac et al., 2018). At times, I felt that this was the position instructors took, positioning Outward Bound programming as a necessary intervention for young people’s technology addictions. When considering such a position, it may be important to acknowledge that “disconnection can be more harmful to adolescents’ psychological well-being than heavy media” use (Hampton & Shin, 2023, p. 642). However, for Gabrielsen and Harper (2018) and others (Gass et al., 2020), adventure therapy has been recognised as a form of antidote within a society increasingly underpinned by technology. Of course, it may also be necessary for future research to consider if and/or how instructors position mobile technologies in relation to young people’s resistance. This is further described from the young people’s perspective in sections 5.2.1 and 5.2.2 in relation to stress and anger when their phones were removed or connectivity was disrupted. For the instructors who described Outward Bound as a form of detox at least, their views intersected with pervasive narratives which centre on young people’s addiction to technology, and the ways in which nature engagement has been positioned to address this.

4.6.2. Removing Transitional Objects and Pushing Back Against Parental Presence: Instructor Constructions of Parent-Free Outward Bound

Whilst instructors positioned the portable comfort zone model as something to be wary of, or as an important component in practice, the perception of young people connecting with parents during a residential often centred on firm beliefs that this would negatively impact a programme. Despite the instructors placing significant emphasis on the role of parents,

the literature in outdoor education makes scant (if any) reference to the role mobile technologies may have in enabling connections between a young person and home. That said, looking beyond the outdoor education literature offers a foundation that places instructor preference for young people not connecting with parents in context. Indeed, Ling (2004) suggested that mobile technologies may offer “a type of umbilical cord between parent and child” (p. 100). For instructors, this sense of reliance and lack of ability to participate without parental contact was positioned as one reason to restrict a young person’s access to their phone. The Outward Bound process, for some instructors, is situated within experiences that are, necessarily in their view, expected to make young people feel uncomfortable. It may, therefore, be important for such a perspective to be placed under scrutiny to assess whether the removal of a comforting and supporting component in the lives of young people causes unnecessary emotional turmoil. A starting point for this scrutiny is presented throughout chapter five, where the voices of young people demonstrate the profound and negative impact the removal of their networked support structures had on their residential experiences.

Particularly pertinent to the discussion here surrounding comfort, phone use, and living away from home is Ribak’s (2009) positioning of a young person’s mobile technology as a *transitional object*, or, as a form of networked support. Reflecting the work of Winnicott (1965, 1971), a transitional object can be an item such as a teddy bear or blanket which can offer comfort to a child whilst, at the same time, enabling a degree of “practiced separation” from a parent. As Ribak (2009) acknowledged, a young person’s phone is not important in terms of *being able* to speak with home, but is an object that offers the always-there *potential* to communicate if required. With instructors preferring young people do not have access to their phones, the potential for communication is being

removed at a point where, often, young people are living away from home without parents for the first time. Following this line of thought, an Outward Bound residential may be considered a distinct opportunity for a young person to engage in “practiced separation” and that a phone offers a sense of connection or comfort if it is required. That said, most instructors recognised parental contact as a distinct limitation on an Outward Bound programme in the UK, perhaps overlooking the important comforting role a young person’s mobile device could have.

A degree of tension is present, then, when considering the perspectives of instructors who acknowledged a phone as a source of necessary comfort at Outward Bound, but who then did not link this to the importance of parental connectivity. Charles exemplified this when suggesting that parental contact during a programme can be a “nightmare,” despite having previously suggested that access to a phone might provide the comfort necessary for a young person to continue participating. This tension centres on instructors adopting a caring pedagogy and using young people’s phones as a portable comfort zone, but then insisting that young people should not contact home for fear of the Outward Bound experience being compromised. The findings from Rosenberg (2019) helps place this uncertainty in context through a study on phone use for backpackers who either remained connected or attempted to disconnect. For the connected backpackers, 89% indicated that connectivity with parents was a primary reason for taking a form of mobile technology, and that a phone provided a symbolic object that facilitated a perceived sense of connection between hiker and parent. In essence, knowing a parent was contactable facilitated a sense of comfort.

Alongside this, the much broader study from Lin (2022) with Taiwanese youth examined the phone as a symbolic object of connection. It was suggested that, even when temporally and proximally disconnected from a significant other, the presence of a mobile device provided young people and parents a sense of *presence-in-absence*. This is important when placed in the context of the instructor narratives in section 4.2.2 where social media and connection beyond an Outward Bound programme were considered fake. The analysis of data presented in chapters five and six implies that young people do not recognise or agree with this characterisation. Throughout the following chapters, emphasis is placed on the important roles mobile technologies and networked spaces had as young people navigated what was often their first time away from home.

With the notion of presence-in-absence in mind, Rosenberg (2019) also outlined that parents placed pressure on their child during their time away to connect with them. It was this sense of pressure on a young person that instructors such as Holly and Lisa identified as a limiting factor surrounding young people having access to their phones. Alongside this, in the event parents have not had contact with their child, instructors told stories of parents ringing the centre or, as Euan told me, even having parents get in contact with mountain rescue. These examples speak somewhat to Lim's (2020) text on transcendent parenting and the role mobile technologies play in developing a need to exercise parenting duties regardless of whether a child is co-present or not. That said, the literature base in outdoor education is limited here, although, once again in the backpacking context, Germann Molz and Paris (2015) found that hikers intentionally sent "signs of life" messages to alleviate the worries of parents back home. In essence, a child may exercise a form of "worry moderation" by sending updates to parents whilst out in the wilderness. For the instructors, it appeared to be the lack of "signs of life" messages from a

young person at Outward Bound to their parents back home that was informing instructor interactions with parents.

The instructor perspectives here present Outward Bound in the UK with an important consideration moving forward. This focusses on how, if a phone is a transitional object that offers parents and young people symbolic connectivity at Outward Bound, but that is purposefully restricted by a lack of clear policy and an underpinning culture of “no technology,” then are attempts to disconnect young people comfortable, educational, and morally supportable within a postdigital reality? In other words, when young people’s mobile technologies are removed, could this impede learning and/or affect learners’ mental health? This is especially pertinent given instructors such as Alex and Naomi described how they do not know what to do in relation to young person – parent connections, and it may be that these considerations around mental health need to be researched further. The link to the postdigital is returned to in chapter seven where I examine narratives of fakeness, comfort, and disconnection through the lens of a collapsed physical – digital binary.

4.7. Chapter summary

The research question I sought to answer through the instructor interviews was: how do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound? The data analysed and presented here has not only offered an answer to this question, it also provides Outward Bound in the UK with robust evidence that document instructor preferences that young people participate phone-free. Falling on one side of the double-edged sword described by Cuthbertson et al.

(2004), most instructors identified young people's mobile technologies to undermine the educational purpose of an Outward Bound residential. Alongside this, a traditionally situated interpretation of nature and engagement with the outdoors is present. This position appears to filter from the historical perspectives of Hahn (1947), which described technology as a factor that disconnects society from immersive and authentic nature engagements (e.g., Fry, 1992; Payne, 2000; Strong, 1995; Wattchow, 2001).

Instructors also recognised that mobile technologies could provide a form of portable comfort during educational experiences that have the potential to be uncomfortable. This perspective supports my previous work which has called for greater acknowledgement that fear and anxiety for the purposes of learning in adventurous environments may generate inadvertent forms of participatory elitism in participants (Gilkes et al., 2023; Reed & Smith, 2023). Of course, whilst mobile technologies were positioned as a form of transitional object that enhanced comfort, tension is present, given instructors unalterably called for young person – parent connectivity to be reduced and even removed. This chapter has uncovered aspects of instructor practices that appear insensitive to the networked day-to-day realities of young people. Outward Bound programmes were positioned as a form of technological counter-narrative, where young people's uses of mobile technologies and social media were considered to detract from Outward Bound's purposes. As discussed in the next two chapters, this position generated significant tension between instructor perspectives and young people's experiences.

Chapter Five

Connectivity, Memory-Making, and Speaking with Home: The Routine and Expected Connectivity Practices of Young People at Outward Bound

5.1. Introduction

With the findings from instructors presented and discussed in the previous chapter, emphasis in the next two chapters is placed on the data generated with young people aged 12-17 through the observations and focus groups. This chapter presents and examines findings that demonstrate young people's routine and expected connectivity at Outward Bound in the UK and draws on the analysis of data from across the cases which focusses on two themes.

1. A lack of connectivity generates stress, anxiety, and anger for most young people at Outward Bound. This is especially in relation to contact with parents (section 5.2).
2. Taking photographs is an important motivator for phone-use and young people seek to take photographs to preserve memories of their Outward Bound visit and to share their experiences with others (section 5.3).

Following the presentation of these findings, section 5.4 evaluates and discusses the findings in relation to germane literature and places emphasis on the always-on networked cultures which permeate young people's lives (Hodkinson, 2017; Marwick & boyd, 2014). To avoid repetition, this discussion does not explicitly include a postdigital evaluation, as this is provided in chapter seven, and the centre names have been anonymised in the same way as in chapter four.

5.2. Young People's Perspectives on Connectivity and Contact with Parents, and Mobile Technologies for Leisure at Outward Bound

5.2.1. *Young People's Routine Uses of Mobile Technologies at Outward Bound*

Throughout my time spent observing and conducting focus groups at each centre, it became clear that engagement with phones for the purposes of remaining connected beyond Outward Bound was expected by young people. Indeed, when participants initially arrived at each centre, they very often had their phones clutched in their hands and attempted to find signal within the centre grounds. Here are three examples from my fieldnotes where young people searched for or found a way to connect during their first afternoon:

Following dinner, I walk back to my room around the side of the main house. I do a quick lap of the entire centre, just to see if any other young people are finding signal within the grounds. Bryony is walking towards me and appears to be on a video call with her Mum. "Shall I show you around the hotel?" she asks, "yeah, go on then," the parent appears excited to see where their child is staying. Bryony runs off towards the dorm rooms, it appears that some young people have found good enough signal to speak with parents on video and voice calls. (Skylark centre, day one)

When queueing for dinner, there is some chat about the Wi-Fi and there's disbelief that it's going off at 10:00pm. "I've got unlimited signal, so haha" Reagan calls to the rest of the group. He seems to be showing off that he is more connected than anybody else. The group now get very animated about Wi-Fi access, and I sense a degree of agitation around not being able to connect. (Smew centre, day one)

As is the way when an Outward Bound week starts, there is a fire drill. I am standing in line next to Ajeet who turns to me and says, “I can't believe it, it [fire alarm] went off when I was looking for my phone!”. “Oh no, have you found it?” I ask. “No!,” he sounds exacerbated. “Have you got any signal then?” I probe further. “Nope, not yet. I'm going to try again in a bit, there has to be some somewhere...!”. (Starling centre, day one)

These three examples are representative of the settling in process young people undertake when initially arriving at Outward Bound. Alongside a tour of the centre, fire drills, and the first activities of the week, finding phone signal and making contact with others beyond Outward Bound is considered both important and expected.

I followed up on the quest for mobile signal during the focus groups, and young people spoke with excitement about the endeavours undertaken to find service. For instance, in my second focus group at the Skylark centre, a group of girls aged 12 and 13 who were sharing a dorm room described their quest to find and maintain phone signal in their room:

“The perfect signal is for whoever is closest to the window. Umm, one of the windows, when you're there, the signal is amazing, the other windows are just rubbish, or anywhere else in the dorm”. (Izzy)

“We've had to share!”. (Katherine)

“Well, for me, it was on and off. Sometimes you could get signal near the windows or outside. It was better to use it there because you've got more signal outside than inside”. (Kayleigh)

“But we do get signal in the dorm window, so we sit down on the ledge just to get signal”. (Emma)

Meanwhile, at the Smew centre, the young people told me with great excitement in the focus groups about all the places they had used their phones so far. For instance, Charlene explained how she had used her phone “everywhere! ... I even took it in the shower, no joke”. Others spoke in reasonably relaxed terms, as exemplified by James, who calmly told the group that his phone use centred around “maybe just checking through my texts. Seeing if people have texted me. Maybe just scrolling through some social media to see what’s happening”. This level of casualness was not replicated across the participants with Tim (Starling centre) telling me how “I wish I had data as well, because there’s no Wi-Fi here, so I have been looking at my phone wondering if I have any notifications, I can’t text my mates”. This frustration around a lack of signal is described in greater detail in section 5.2.2 in relation to speaking with parents.

Whilst the above examples primarily focus on young people’s normalised phone use and searching for signal at each centre, anticipated uses of their phones also spilled over onto activities themselves. For instance, the following excerpt from my fieldnotes comes from a group hike where students from Eastwood Secondary were tasked with climbing a local hill near the Skylark centre:

I have a chat with Jordan on the climb up the hill. “Are you hoping to use your phone this week, then?” I ask. “Yeah! I’ve already downloaded some mods⁹, but it took ages on the Wi-Fi”. Jordan then pulls out his phone, he’s

⁹ “Mod” refers to modifications gamers make to the codified programming of video games to make the game operate in a different manner to the original.

had it in his pocket the whole time. He presses the “on” button, “oh, I have full signal” he tells me with a hint of excitement, and proceeds to download more mods with his “great 4G”. The instructor sees this moment and calls Jordan over, “why are you looking down at that and not up at this?,” indicating to the expansive views all around us. Jordan responds casually “oh, this is just much more fun”. Jordan continues playing on his phone most of the way up the hill. At one point he comes up to me and shows me his Clash of Clans interface and demonstrates the battles he’s taking part in and all of the land that he owns. He continues, saying that his Dad also has it and that they often play together. For Jordan, it seemed that the landscape and place we are in is not important, the most important aspect of this experience is the prevalence of 4G. (Skylark centre, day one)

These forms of casualised engagements with phones, such as what I observed in this example, demonstrate some of the ways in which phone use plays out at Outward Bound across the cases. This was further evidenced at the Starling centre with young people from Long View academy where maintaining Snapchat Streaks became a concern. In the focus group, Tim explained that “we were all worried about our Snapchat streaks” with Nazam (who lost his Streaks due to a lack of signal) quietly suggesting that “I know when I go back to school, they [Nazam’s friends on Snapchat] are going to just give me a lashing ... they are insanely worried if we lose it. So, I have to make sure that I keep it with them”.

The data also demonstrated the covert practices young people engaged in to keep their phones when told to hand them in or leave them in their rooms. In one example, this

occurred during an evening campfire activity where young people were told to leave their phones in their room:

We collect wood from the nearby forest in preparation for our campfire activity. I notice that two phones have been hidden behind one of the bench legs the young people were sitting on, they've certainly been placed in a manner that obscures them from view. Once the fire is lit, the group relax and, before I know it, participants produce their phones and start using Snapchat and Instagram; the group are busy updating their visual-based social media with images of the fire. One of the instructors walks around the back of the benches and says, "can we not look down there and look up here?". This isn't met with young people putting their phones down, and the instructor remains quiet. The other instructor now chimes in, "ok everyone, next activity, we are all going to throw our phones on the fire!". Some of the group appear to take this literally, "I'm not throwing mine on the fire!", one young person responds in a slightly panicked tone. (Skylark centre, day four)

Instances such as this became a regular feature in the observations, as described in the following narrative from the Smew centre:

As we prepare to head to the activity sight, the presence of Hazel's phone becomes evident. Her phone is hidden in her pocket, and suddenly it starts ringing. The high-pitched trill cuts through the rest of the group. She has her harness on, so it is hard for her to get access to her phone. She frantically presses against her trousers, eventually finding the mute button.

As we walk into the forest, she approaches the visiting staff member, “can I ring my Dad? I’m worried that I missed his call” she explains, there’s a degree of anxiety here. The visiting staff member declines Hazel’s request and now goes to the start of our activity as it is her go; I am left in the landing area with the rest of the group. Hazel gets her phone out quickly, she has her back to us and is typing fast! There appears to be a deviant sense here, but also one of desperation (see section 5.2.2 for the importance Hazel placed on speaking with her Dad). (Smew centre, day two)

It became clear across the centres that young people were bringing the typical ways they use their phones in the home environment to Outward Bound. When phone use was purposefully restricted by adults, young people would often hide their phones and seek to use them in a hidden manner. The next section builds on this connectivity expectation and presents data on the importance young people place on being able to speak with home and their experiences when a lack of signal or the removal of phones restricted contact.

5.2.2. *Speaking with Home: Stress, Anxiety, and Anger when Parents are Uncontactable*

Across each week of my data generation, young people often attempted to speak with home, and the adverse reactions that developed when they were unable to do so became a central finding for the study. Whilst young people would often seek signal (as seen in section 5.2.1) for the purposes of contacting parents or wider family, a lack of connectivity often characterised the Outward Bound experience. Of course, such a finding directly relates to the instructor narratives presented in sections 4.4.1 and 4.4.2 around the

portable comfort zone model and instructor preference that young people do not speak with home during Outward Bound activities in the UK. The data presented in this section challenges the argument put forward by instructors, such as Lisa, Charles, and Lauren in section 4.4.2 who each described young people's contact with parents to be a "nightmare". As outlined below, when young people's connectivity with parents was restricted, high levels of both stress and anxiety were present, which, for some, elicited intense anger at the situation they found themselves in.

Speaking with home was identified as a primary motivator for using a phone by young people in the focus groups across the three centres. For instance, at the Skylark centre, Olly, a 13-year-old who was particularly quiet, told me how "I've been chatting with them [parents] about what's been happening and, well, just saying that I miss them and all that. That's all I've been doing and asking how they are at home". For Rachel, she also described the importance of being able to speak with parents, suggesting "I'd feel lost without them, if I didn't have contact I wouldn't be as confident as I was" (Skylark centre). Despite parents not being directly present at the centre, Beth also described parental contact as a factor that provided comfort, telling the group that "I've never been away from my Mum and Dad, I've never been away for this long. I wouldn't have stayed if I couldn't speak to them" (Smew centre). Beth expanded on this and said how without parental contact "I wouldn't survive ... I can't live without my phone. I just have to have it there". Similar narratives around parental contact and comfort were discussed at the Starling centre, with Nazam saying that "I want (to speak with them) just so they know what's going on, so that they know what's happening". Nazam also shared how he spoke with home following a key moment of vulnerability on the expedition when saying "I've spoken to my Mum. Obviously, yesterday I called her to tell her that I threw up [laughs]".

These above discussions indicated the importance young people placed on speaking with home. However, young people's ability to make contact was not always possible if signal was poor, the Wi-Fi was switched off, or phones were removed by an adult. For instance, at the Skylark centre, both focus groups featured animated and emotive discussions on the lack of connectivity and speaking with parents. This ranged from Ryan's conclusion that he had found being unable to speak with home "terrible ... that's all I have to say... [sad tone]. When we first got here, I was really miserable the whole day". Through to Ellie who explained "it's just anger, I get really angry. You can get good signal, but then if you move only slightly it'll just go off and you'll be in the middle of a conversation and that". Blake echoed this anger, saying that "I'm pretty mad, umm, because I can't talk to like any of my mates or any of my family". One young person who was particularly upset when unable to contact his parents was Olly. Over dinner on day three, I chatted with Ryan and Olly from Eastwood Secondary about whether they had made contact with home, the following excerpt documents our conversation:

"I haven't got any signal. I think I'll just have to wait until Friday now. I've searched everywhere, but I just can't get enough," Ryan tells us. Olly joins in, he appears very anxious about not being able to call home. "I tried ringing my Dad, but I couldn't get through. I spoke to him for five seconds, but the line went dead. I rang five or six times, and he rang me too, but each time I couldn't hear him". "And how did that make you feel?" I ask him. "I was really angry, I couldn't believe it, I punched my bed!". "Yeah, he did!" Ryan says and appears very concerned. Olly continues, "I just want to be able to speak to my Dad, it just makes me feel so much better. I can't wait to go home just so that I can speak with him". We continue eating and

the conversation changes to focus on what our evening activity will be.

(Skylark centre, day three)

These forms of experience and conversation also featured at both the Smew and Starling centres. On day three at Smew, I changed groups and headed out to a nearby village on one of the minibuses with an instructor to bring the group back to the centre following an overnight stay in the village hall. When we got back to the centre, kit was being unpacked when Hazel attempted to make contact with home (linked to Hazel's hiding of her phone during the activity in section 5.2.1):

As the bags are being unpacked, Hazel tries to ring her Dad, but can't get through. "Miss, I can't get through to my Dad!", a rising sense of panic in her tone, "I want to speak to him and my sister". It's agreed that she can speak to them a little bit later, but Hazel seems really anxious at not being able to ring, and remains quiet for the rest of the unpacking session. This episode continues when, suddenly, Hazel receives a call. She runs to the back of the room and speaks on the phone. The visiting staff member turns to me and says "she's wanting to go home, and she doesn't like the food. This has all happened because she's had her phone and can speak with home". By not making the clean break from home, contact with a parent is positioned as a core drawback and is considered the reason for Hazel's homesickness. With the help of her Dad, Hazel agrees to stay, and she continues to participate in the week's activities. (Smew centre, day three)

Throughout each week, I also saw parents seeking reassurance from young people. At the Starling centre, Isha explained in the focus group that "they'll check in here and there to

make sure I'm ok ... if it's urgent I'll call them, if not, it's just all through messages and they're fine with it". Meanwhile, in a focus group at Smew, Alaina, who was particularly quiet throughout the week, said in hushed tones that "I miss them because I won't get my pocket money, and I also wanted to speak to my parents because I was crying the other day ... I'm really looking forward to speaking to my Mum and Dad". Through restricting access to phones or through not having access to mobile signal or Wi-Fi, young people's lack of access to the home environment often mediated the ways in which they engaged with their residential experience.

Interestingly, the payphone at the Smew centre became an important area for my data generation. Throughout my visit, I frequently engaged with young people at the payphone as it was directly next to the front door of the main house, and I would often chat to participants waiting in the queue to use it, or to participants who were struggling to work out how to make an outgoing call. During the centre tour on Monday afternoon, the group were shown how it functioned:

We go on a tour of the centre and, as we come through the front door, we are met by the payphone on the right-hand-side. It is very old, but still works! "If you haven't got signal and want to speak with home, this is how you do it," the instructor tells the group. "OMG, that's ancient, I don't know how to use that" Reagan tells the group. The phone does seem quite complex, you have to put money in, pick the receiver up, and press the numbers in a certain way, otherwise it swallows the change. (Smew centre, day one)

The payphone featured again on my first morning, I walked into the main house to get a coffee and was met by Leo trying to ring his Mum back at home in the city:

I walk into the main entrance, Leo has woken up too early, the rest of his room are with him too. They accidentally set their alarm for six rather than seven. Leo seems quite uptight, he is hovering near the payphone, a small piece of paper clutched in his hand. It has two numbers on it. "Are you ok, do you need help with the phone?" I ask. "Yeah, please, I put 50p in to ring my Mum, but it went to voicemail, and I haven't got any more money". "Ok, don't worry," it is clear that he's quite anxious, "do you need to speak to your Mum?". "Yeah, I told her I'd ring every morning at 7:15, it's just a nice way to start my day". I later pass onto a visiting staff member that Leo wants to ring home but has run out of change for the payphone. (Smew centre, day two)

Meanwhile, on day three, when returning from dinner I once again engaged with participants attempting to use the phone:

As is becoming quite usual, there's a small queue for the payphone, and, despite having claimed he had signal, Reagan is on the phone to one of his parents and he is running out of time. It's quite loud in this small space now and he stands super close to the phone with one hand over his ear, "I only have 10 seconds left" he says quickly, "I'll speak to you tomorrow". With that, the conversation is over, and the receiver is placed back on the payphone. I ask him if he is ok, he says "yeah, ok, I can't connect to the Wi-Fi, I just needed to tell my mum that I was ok". "Oh yeah, is that

important?" I ask, "yeah, she worries about me, I don't want that. I only have limited change though, so I can only speak to her for a few minutes". Reagan is clearly anxious. "Did you know that you wouldn't have signal before you got here?" I ask. "No, I can't play my games or anything". Our conversation ends and the next boy in the queue takes the phone and begins inserting coins. (Smew centre, day three)

These forms of engagement became a regular occurrence and the area around the payphone became an important data generation space. This prompted consideration on whether I was only engaging with young people who were taking active steps to contact home. However, I felt I could not avoid the payphone as it is positioned next to the front door to the main house; I recognised that young people's experiences around the payphone interlinked with the hopes and frustration around connectivity expressed by young people away from the payphone area and in the focus groups.

Whilst young people's Outward Bound experiences were often affected by their (non)ability to speak with home, the above narrative from Reagan's use of the payphone further raised my awareness that young people could be experiencing pressure from parents to keep in touch. As Daisha told one of the focus groups at Starling, "when I was leaving to come here, they told me 'ok, *you have* to go on your phone to message us'". At Skylark, Isabel explained how her Nan back in the North-East of England always wanted to know where she is and what she is doing. This means that "when I go out, I normally take my phone because my Nan has anxiety and always wants to know where I am". This sense of pressure to maintain contact links to section 4.6.2 in relation to "signs of life" messaging and provides additional context to instructor views that centred on parental contact being

a “nightmare”. The data indicates an important relationship between a young person’s desire to speak with home whilst at Outward Bound in the UK and parents exerting pressure on their child to keep in touch.

The pressure felt by young people to maintain contact materialised at the end of the expeditionary component at the Starling centre. The young people were challenged to not take their phones on expedition as part of the challenge of living in the wild and being a member of the cadet force. The expedition location was positioned as an environment altogether different from the metropolitan area in which the young people lived. However, following a later than expected arrival back at the centre, young people’s sense of pressure and desire to speak with parents emerged:

After a short while, Tim approaches the visiting staff member, we have been back at the centre for around five minutes. “Can I have my phone back now?” Tim asks very politely, but I can tell there’s certainly a little bit of nervousness coming through in his voice. “We’ll talk about phones in a bit,” the visiting staff member responds. The visiting staff member then announces to the group, “we’ve had lots of parents emailing the school and emailing me saying that they haven’t had any contact from you for over 24 hours, when you get your phones can you please ring your parents and tell them you are in the land of the living?”. A short while later, the group are still unpacking, and Natalie approaches the instructor. “Can I have my phone back now?”. Again, there is a real sense of nervousness here. “How about we give you them back at 5:00pm?,” I take a glance at

my watch, 5:00pm is 35 minutes from now. Natalie looks quite deflated and returns to her bag. (Starling centre, day three)

At 5pm, the group head to the main house to retrieve their phones:

The group have been waiting to get their phones at the front of the house for 10 minutes now, there is a growing sense of frustration. They decide to go into the centre and, just as we are going in, one of the other visiting staff members comes around the corner. In their arms is a big box, this is the “phone box”. The young people who have already gone through the front door turn around and, with great speed, sprint across the driveway to the visiting staff member. Ajeet, who has been getting increasingly agitated over the last few minutes, shouts quite loudly as he is running across the driveway “OMG, my mum is going to kill me! She's going to be so worried”. During this time of intensity, Ikaj grabs his phone with force and immediately rings home, he is emotional and requires the support of others who walk him down the driveway with their arms around him. (Starling centre, day three)

What I think this example demonstrates is the ways in which phone-free time can provide a significant level of disruption if the unexpected happens such as arriving back at the centre later than anticipated.

The data presented here provides a significant counter-narrative to the instructor data where contact with home was often described as one of the worst aspects that comes from young people having access their mobile devices. What became clear, is that contact with parents was not only important, but not being able to connect could be recognised as

detrimentally affecting young people's Outward Bound experiences and wellbeing. Conversations with young people around this topic elicited deep-rooted emotional responses that centred on stress, anxiety, and anger. Interestingly, with instructors positioning mobile technologies as a primary distraction to the purposes of Outward Bound across the cases (see section 4.3.2), on the basis of the data presented here, I would argue that a lack of access to a phone and to parents may generate a greater level of distraction than when phones are present. Such a perspective is evaluated in greater detail in section 5.4.1.

5.3. Memory Making and Memory Sharing: Mobile Technologies as Devices for Remembering

5.3.1. *Young People's Uses of Mobile Technologies to Store Memories of Outward Bound*

In the focus groups and observations, young people often expressed a desire to record their experiences of Outward Bound with their phones. This centred on taking photographs throughout their visit that could then be viewed long after their Outward Bound experience had ended. As Ellie explained in one of the focus groups at the Skylark centre, "I was taking photos because I like to keep memories of where I've been". Using photographs to preserve memories also featured during our rock climbing session at Skylark. I was belaying Giulia who was struggling to reach the final hold:

Giulia is climbing and I am her belay partner. She's doing well but is struggling for the very top and then, with a final push, she makes it.

Everyone is elated. She had been very nervous, but now she had done it.

Before I'm allowed to lower her down, Giulia calls to the visiting staff

member “sir, can you take a photo of me?”. This seems really important, and it appears that Giulia was able to navigate her nerves with the hope of getting a good photo at the top. I lower her down and, as we untie ourselves, I ask her why she really wanted a photo. “It’s so I can remember it” she tells me, “I’ve never done this before, and I want to look back at it when I’m not here”. (Skylark centre, day two)

A similar situation unfolded before a canoeing activity with 14-year-old Isaac at the Smew centre. Of course, water activities are a significant aspect of any Outward Bound week in the UK and phones are not permitted due to risk of breakage. This did not stop Isaac exhibiting annoyance after he attempted to bring his phone on the water:

As we are prepping for the canoe activity in the afternoon, Isaac calls out, “I want to take my phone, I’m going to take my phone!”. “Do you really think that’s a good idea?,” the instructor asks, the answer is quite clear from their tone. “Yeah! I want to take photos”. “No, why would you want to do that?” the instructor responds. Isaac is very disappointed and, as he’s walking back to his room, mutters “urgh, this is getting boring”. (Smew centre, day four)

I followed up with Isaac about this moment in the focus group and asked him why he was so disappointed at not being able to take photographs. He responded by saying that photos were essential “to remember what I did. I’ll probably put them on Instagram because I have friends who would like to see them. That’s what I’ll probably do” (see section 5.3.2 for more on sharing images with others). What is important here is the level of intentionality

young people hold around capturing and storing memories for later use through the use of photographs.

I had similar conversations with participants at the Starling centre who emphasised the value of photographs to remember places that are unlike the metropolitan area they call home. For instance, Ajeet told the focus group that taking photographs is “probably mainly just for memories, like Nazam said, like in [place of school] there are no beaches. There’s a pond, but ... it’s a good way to remember everything, all the views, all the fun we had”. In the same focus group, Isha reinforced Ajeet’s point when suggesting that “I take all of these pictures, so I know where I’ve been and where I want to go”. Whilst the group were hopeful that they could take photographs for memory preservation, the lack of phones during aspects of the week meant young people had to engage in other methods to collect memories:

We have just finished our canoeing activity and are walking back to the centre. I catch up with Nazam who quickly tells me that “I really want my phone right now”. “Oh yeah, why?,” I ask. “Look at the seaweed!,” the seaweed alongside the footpath is floating, the blueness of the water is making it look a fantastic colour, “I’d love to take a photo of it”. Instead, Nazam bends down and picks a piece out of the water and puts it in his pocket. A few moments later, a similar scenario plays out as we’re walking along the road, there’re some fantastic flowers growing over one of the walls, both Nazam and Isha pocket a couple of the flowers, they can’t take a photo and so they bring it with them. (Starling centre, day four)

When we get back to the centre, the flowers picked on the side of the road make a reappearance:

We stand at the front of the centre, waiting for the instructor to return from the kit stores. Isha asks if she can borrow one of my notebooks and, along with Nazam, they arrange the flowers they picked on one of my notebook's inner pages. They take their time over this, arranging the flowers gently and purposefully over the page. Nazam quickly returns to his room to retrieve his phone and carefully takes a photo. "Can you send that on WhatsApp?," Isha asks. They both now pick up the notebook and bring it to me, "these are for you," they say (Figure 10). (Starling centre, day four)

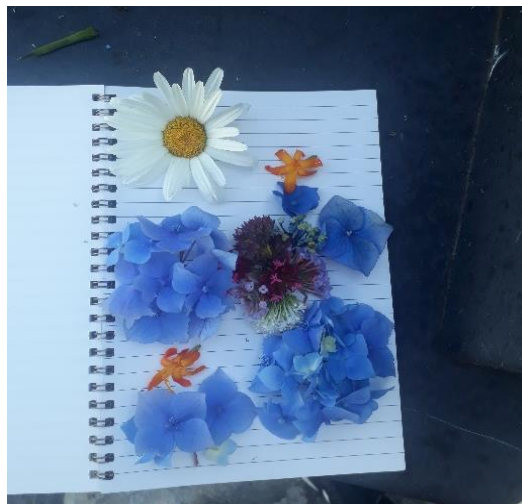


Figure 10. Image of the flowers Nazam and Isha presented to me after they had taken their own photograph.

During this walk back to the centre, and the subsequent laying out of the flowers and taking a photograph, it seemed that young people take recording their experience seriously, and that this is an important part of their Outward Bound visit. Even when

phones are not present, young people may take what is important to them out of nature and bring it back to the centre so that the experience can be recorded.

5.3.2. *Sharing with Others: Photographs and Video for Social Media Content, Sharing with Parents, and Reflection*

Alongside taking photographs for memory preservation, young people readily described their desire to share their images with others who were not in direct proximity to the Outward Bound centre. This often centred on posting images and/or videos to social media and, intersecting with section 5.2.2, sharing moments of Outward Bound with parents. For instance, at Skylark, 13-year-old Oliver spoke openly about his hopes to send images back home when saying “I wanted to show them to my Mum and Dad, you know, like of the mountain and stuff, they’re the ones that I will show to my Mum and Dad because they’re of the views”. For Jawaria at Starling, she too wanted to take images to share with her parents, but on the expedition was unable to as she was told that her phone must be left at the centre. Here are her reflections from the focus group:

I needed my phone just to be able to take photographs. I felt like I *needed* this [looking at phone] to be able to show my Mum and Dad what I’m doing. I was really gutted because the views were so pretty, especially at the campsite. I was like ‘oh, where’s my phone?’ and then I realised I didn’t have it. (Jawaria, Starling centre)

Throughout my time at each centre, young people placed significant importance on sharing images with others and, as has already been discussed in section 5.2.2, expressed frustration when unable to do so.

Interestingly, young people also used photos and videos from previous activities to relive important moments from their experiences whilst still at their respective Outward Bound centre. This reliving of the experience through visual media demonstrated a degree of temporal and place fluidity at Outward Bound where previous, fixed, events could be re-experienced and reflected upon using a phone. For example, at Skylark, visiting staff from Eastwood Secondary were sharing images on the school's Facebook and Twitter pages every evening, which, when young people could get signal, meant that activities from other groups at Outward Bound from the same school could be viewed and assessed. On my final day at the centre, I had breakfast with Giulia and Sarah who were looking at images from the week on the school's Facebook page:

Giulia and Sarah are looking at photos of themselves "ahhhhh! We look horrible, look at this one...". The phone is thrust from person-to-person, they then stumble across pictures from another group who did cliff jumping yesterday. Their group is cliff jumping this morning and so, all of a sudden, they can see exactly where the activity location is and see peers doing it. The jump looks quite high in the images, and this is generating quite a lot of nervousness. "Look how high it is. I'm not doing that, it looks terrifying". (Skylark centre, day five)

Through the school's Facebook and Twitter pages, Giulia and Sarah had visual access to their activity site for the morning long before their instructor had opportunity to talk them through what was going to happen. The act of looking back at previous activities through visual media also occurred during the expeditionary component at Starling where, at our

camp for the night, the only phone the group brought with them (their “emergency phone”) provided access to the jetty jump activity undertaken the previous day:

Following dinner, a small group crowd around Isha’s phone, they're watching footage from the jetty jump this morning. There's quite a lot of laughing and hooting; this feels like quite an important part of the young people’s experience. From my position, the group are contrasted in the evening’s dimming light and the warm glow of the phone screen illuminates their faces. Despite being where we are (figure 11), the phone is allowing them to relive their Outward Bound experiences with the people they spent them with. The footage of the jetty jump provides a moment of bonding between the young people, and they replay videos several times to assess technique and style. (Starling centre, day two)



Figure 11. The view from our campsite with my bivy in the foreground.

Whilst young people were motivated to take images and videos and to share them online or with family, the use of such images to relive moments whilst still participating in an Outward Bound residential indicates an additional line of inquiry regarding whether and/or how mobile technologies relate to the transfer of learning. Such a possibility is described in greater detail in section 5.4.2.

5.4. Expectations of Connectivity and Connectivity Disruption: The Intersection Between Networked Interruptions and Contemporary Youth Culture at Outward Bound

The following section examines and considers the findings presented in sections 5.2 and 5.3 in relation to current literature. Firstly, section 5.4.1 assesses the ways in which networked technologies provided an important and reassuring sense of contact for young people, and the impact on the Outward Bound experience when these forms of connection were interrupted or unavailable. From there, section 5.4.2 examines the data in relation to young people's attempts to remember and share their Outward Bound experiences and their intentional use of mobile technologies to achieve this.

5.4.1. *Normalised Phone Use and Young People's Responses to Connectivity Disruption at Outward Bound*

Throughout each week, it became clear that the limited connectivity in these rural locations, and instructor preference to remove young people's technology, were generating a degree of anguish and frustration. Throughout the analysis of the observation and focus group data, I frequently returned to boyd's (2014) work and the recognition that mobile technologies and social media provide a pivotal and expected link to young people's

social lives. Through intentionally restricting connectivity (e.g., the Wi-Fi being switched off), young people's Outward Bound experiences were often marked by having access to a primary sociocultural referent disrupted. This disruption, as illustrated by young people such as Ryan, Ellie, and Olly at Skylark, was often unexpected and elicited intense feelings of anger and frustration. A finding such as this provides important and much-needed insight into the collision between instructor perspectives on "no technology," and the struggle and desperation young people exhibited to remain connected. This section, therefore, examines young people's quest for connectivity, their experiences of their online networks being disrupted, and their attempts to contact parents.

Returning to Brubaker's (2020) assessment of hyperconnectivity and the self, it is understood that mobile technologies and social media have reformed what it means to be always connected in all places. As Hodgkinson (2017) described, for young people, there exists an expectation that these forms of social space are never off and that this may exert additional social and connectivity pressures. Despite this, and aligning with the instructor positions outlined in chapter four, young people's Outward Bound experiences were often characterised by a connectivity counter-narrative. This narrative served to directly challenge the centrality and importance of young people's always-on networked environments and uncovered the ways in which young people experience instructor perspectives surrounding technology detoxes in section 4.2.3 and the desire for Outward Bound in the UK to be phone-free in section 4.3.1. As I saw during each Monday afternoon when young people had just arrived at the centre, finding and securing mobile signal was significantly important. For instance, during my conversation with Ajeet during the fire drill at the Starling centre, there existed a degree of hope that he would find signal later in the day. Such hope, aligning with Schellewald's (2021) text on the collapsing nature of

previously bounded social relationships, reinforced young people's expectations that the infrastructural components necessary to connect with others (e.g., signal, Wi-Fi, not having to hand a phone in) would be present and accessible at each centre. These formative moments of finding signal (or not) therefore underpinned the extent with which young people could experience co-presence with distant friends and relatives.

Given the importance of attaining a sense of co-presence through social media, it is perhaps unsurprising that young people placed great emphasis on achieving a sense of connection with others during their residential experiences, where, often, they were experiencing away-from-home life for the first time. It is also necessary here to acknowledge the potential impact the Covid-19 pandemic could have had on young people who spent extended periods of time in lockdown at home. This is especially so given Drouin et al. (2020) presented data which suggested young people with higher levels of anxiety during the Covid-19 pandemic increased their usage of social media for the purposes of connection. Whilst the importance of social media for young people has been readily described (e.g., boyd, 2008, 2014; Maclsaac et al., 2018; Zillich & Riesmeyer, 2021), and was on display, for instance, when Charlene explained how she had even taken her phone into the shower, this study is unique in that it sheds light on the situated experiences of young people who are undergoing a period of physical and networked separation from home. This is intriguing given Watkins (2009) and Taylor and Bazarova (2021) described young people as now being available, anytime, anywhere. In essence, the Outward Bound environment in the UK, whether that be at the centre or out on activity, often limited young people's capacity for "always-on" connectivity.

Staying with Taylor and Bazarova (2021), they introduce the concept of *dyadic connected availability*, which recognises that social media provides a degree of always available and reciprocal connectivity between two social actors. Drawing on Licoppe's (2004) outlining of in-person and technologically mediated interactions becoming blurred, Taylor and Bazarova (2021) position contemporary sociality as a hybrid endeavour, one where there is a growing perception that anytime and anywhere connectivity provides "a presumed way of affect regulation" (p. 202). In essence, always available connectivity that can facilitate a sense of support and emotional control is linked to enhancing and supporting wellbeing. However, whilst young people sought support from parents, the expectation for connectivity also meant that parents came to expect a level of engagement with their child. As seen on the driveway at Starling, young people were acutely aware that their parents were expecting contact which, when unable to provide it, generated varying degrees of worry. At this point, it is necessary to say that the parental experiences of young people's connectivity disruption at Outward Bound requires much further scrutiny and is outlined in greater detail in section 5.5.

Although authors such as Taylor and Bazarova (2021) plot the importance of connected availability for emotional support, through engaging in periods of networked absence across the cases, young people's comforting and supporting access to people at home was removed from them either by adults or by a lack of connectivity infrastructure. This removal of a distant support network happened at a time where, perhaps, young people were already far outside their comfort zones (e.g., Reed & Smith, 2023). As was seen with participants such as Alaina, Leo, and Isabel, they actively described that having limited contact with parents was challenging and anxiety inducing. Interestingly, work that evaluates children's online lives rarely draw links between young people and the

importance of contact with parents and family through social media when parent and child are not co-present (e.g., Hodkinson, 2017; Ofcom, 2023). Alongside this lack of literature on child - parent relations on social media, the question from Smith et al. (2022) on whether “interventions with young people in unfamiliar spaces, are working for young people themselves” holds resonance for the study (p. 551). Given the young people I engaged with at Outward Bound were in an unfamiliar residential landscape for five-days, questions of efficacy emerge which centre on whether young people’s inability to speak to someone back home generates a safe and inclusive space for participation and learning.

However, it is interesting in the context of my findings that social media has been readily positioned in the literature as a space for young people to escape parents, with one such example being Carmen in Marwick and boyd’s (2014) study who said how “it’s just uncool having your mom all over your wall, that’s just lame” (p. 1058). Alongside this, in a study with young people in Peru, Arends and Hordijk (2016) suggested that social media provided teens with a space to escape adult control. In essence, young people treated social media as their “territory,” where they can participate in a space that they can call their own (Arends & Hordijk, 2016). For instance, in Livingstone’s (2008) study with 13 - 16 year olds in London, it is suggested that some young people actively hide their content from parents on social media and recognise social media as an intimate space to socialise with friends. In essence, social media has readily been identified as a space where young people can escape their parents and “hang out” with friends and connected others. Whilst participants such as Tim and Nazam told of their desire to remain connected with peers through maintaining Snapchat Streaks, it was connectivity with parents that dominated young people’s desire to communicate beyond the Outward Bound space. This resonates with the findings from Arvidsen and Beames (2019) who found in a study of young people’s

outdoor refuges that maintaining contact with parents remained important. This was despite the young people engaging with the outdoors for solitude and as a place where escape from life's daily demands was possible. In many ways, then, Outward Bound in the UK was seen to facilitate an alternative space where hanging out with friends in-person became normalised and limited contact with parents resulted in intense feelings of anxiety and anger.

Such a perspective provides something of a challenge to the instructor perspective in sections 4.3.2 and 4.4.2 where engagement with parents and phones was thought to provide a level of distraction from Outward Bound's purpose. Indeed, the study's findings may somewhat challenge contemporary narratives of discomfort at Outward Bound and the ways in which instructors linked this to the historical purposes of the trust. By having limited networked access to parents or, at the Smew centre, trying to maintain access through the payphone, the lack of support and subsequent emotional outbursts and descriptions from young people indicated that connectivity disruption restricted the ability of a young person to immerse themselves in their residential experience. Outward Bound in the UK therefore generates a distinctive space for young people in the sense that they may experience, for the first time in their adolescent lives, a sense of connectivity disruption. With no comparable empirical evidence in the residential OAE literature, it is necessary to consider literature beyond residential OAE to untangle young people's experiences and perspectives at Outward Bound. For instance, in Hampton and Shin's (2023) study of connectivity disruption in rural Michigan, it was found that parental restrictive control over a phone or young people's lack of broadband and associated "disconnection can be more harmful to adolescents' psychological well-being than heavy media" use (p. 642). Such a description may be traced throughout the data where

restrictive control over young people's phones and turning the Wi-Fi off at Outward Bound negatively impacted their wellbeing.

Lu and Hampton's (2017) work on the perceived social support that can be felt through social media is also helpful here. Drawing on MacGeorge et al. (2011), who outline social support as comprising *perceived* and *received* support, Lu and Hampton (2017) demonstrate that brief and asynchronous networked interactions on social media can provide the user with a sense of encouragement and emotional security. The young people in the study readily sought both perceived and received support from their parents during their Outward Bound visit, which is a factor Beth described as critically important for her as she "wouldn't have stayed if I couldn't speak to them". Positioning networked connectivity as a primary and much-needed form of support which, without it, generated anger and frustration, finally links to an important consideration concerning young people's mental health and wellbeing when their networked connectivity and support is unexpectedly disrupted.

With young people's social media use often linked to poor mental health (e.g., O'Reilly et al., 2018), the findings presented in this chapter raises important questions concerning the mental health impacts of *not* having access to mobile technologies. However, it is important to say that I am not a psychologist, and the following text is intended to be treated with caution and as a call for further research on the matter. Indeed, participants such as Ryan, Hazel, and Leo, appeared to develop anxious responses when their networked connectivity was disrupted, but I could not follow-up on this further. Hartas' (2021) work here on the relationships between social media, parental support, and youth mental health in the sixth wave of the Millennium Cohort Study, however, appears

to resonate with some of the young people's experiences at Outward Bound. Examining data from when the cohort were approximately 14-years-old, they found that when young people informed their parents of their whereabouts through social media, this was often associated "with increased mental health and wellbeing" because "parents were able to provide autonomy support and encourage explorations" of local environments (Hartas, 2021, p. 553). By removing or limiting young people's networked connectivity at Outward Bound, it may be that young people's wellbeing support network is being removed. It is, therefore, necessary to consider these factors in future research to evaluate if and/or how mental health may be linked to mobile technology use in the outdoors. Here, it may be that we need to "acknowledge the entanglement of virtual and networked spaces with the embodied and physical realities of individual and collective actors" (Reed, 2022a, p. 5).

With notions of entanglement in mind, it may be necessary to re-characterise young people's support networks and wellbeing as existing both within and beyond Outward Bound. This could include teachers and friends within the centre, as well as parents and other family members back home. In the present study, it appeared that removing and disrupting access to networked spaces led to varied levels of discomfort and distraction. Such a perspective builds on the work of Winks (2018) who recognised that discomfort in outdoor education may construct a sense of otherness towards nature. Through adding the discomfort associated with having phone use restricted, it may be that Outward Bound programmes alienate young people from the spaces and places at the heart of the trust's programming. With this perspective, Outward Bound instructors could need to reconsider their position on young people's access to their networked support structures, especially if Outward Bound programmes are to remain effective moving forward.

Given Outward Bound (2023a) explained “that scrolling can be exhausting. Dare we say, dull? Especially when you could trade it all in for actual experiences” (paras 2 - 3), the data has demonstrated a possible disconnect between Outward Bound in the UK and the networked lives of young people. By characterising young people’s uses of networked spaces in a negative sense (as seen in the above quote), the situated, on-the-ground, needs of the networked young people I engaged with were potentially being overlooked. This has returned me to work of Smith et al. (2022) who overtly challenged the place of young people’s discomfort in unfamiliar landscapes. It is suggested that experiences of discomfort can result in injustices which serve to prejudice those who, for any given reason, may not be able to tolerate and learn from their uncomfortable experiences in the outdoors. For the young people in the study, I did not engage with any participant who openly recognised the possible benefits for not having their phone across their five days at Outward Bound. Indeed, through experiencing a disruption to their connectivity, young people’s failure to access support and reassurance from networked others appeared to shape their Outward Bound experience in negative ways.

5.4.2. *Attempting to Remember: The Role of Memory, Mobile Technologies, and Past-Presenting*

Alongside young people’s experiences of connectivity disruption, the (lack of) ability to take photographs featured prominently throughout each centre visit. During both the observations and the focus groups, participants readily spoke about how they wished they could take a photo of where they were, if only they had their mobile phone with them.

These disappointments were extensively linked to young people’s use of mobile technologies as a method of memorising the wild places they visited with Outward Bound

that are, like Ajeet suggested, unlike their home environment. The work of Keightley and Pickering (2014) provided a significant foundation for my understanding of these moments with their characterisation of *mnemonic technologies*. That is, forms of technology that facilitate the capturing and storage of memories from events, places, people, and so on; we may think of “photography as vehicles of memory” (Keightley & Pickering, 2014, p. 589). Alongside Keightley and Pickering (2014), Özkul and Humphreys’ (2015) linking of mobile technologies and photography to the facilitation of a nostalgic sense of place provided further depth. They describe such technology as providing opportunities for past events to be re-presented in ways that can “remind our future selves where we come from and how we used to be” (Özkul & Humphreys, 2015, p. 351). In essence, attempts to conserve memory through photography may be understood as re-presenting and re-constructing our shared histories. For the young people at Outward Bound, their desire to take photographs, to engage in methods of remembering using their mobile technologies, may be viewed as an attempt to capture and consolidate shared and powerful stories that can arise through participation in an Outward Bound programme in the UK.

Tourism literature also holds insight into young people’s desire to record memories at Outward Bound¹⁰. For instance, Robinson and Picard (2009) describe the tourist photographer as engaged in methods of expressive self-creation, who, through snapping images during a holiday, attempt to bring the world home. I think characterising young people’s desire to photograph and commemorate their experience as a method of “bringing Outward Bound home” is a useful lens through which to understand the data.

¹⁰ My use of tourism literature is not intended to position educational visits to Outward Bound as a form of holiday or leisure. See Christie et al. (2014) for insight into the historical challenge to take residential OAE seriously.

Young people actively *wanted* to remember their Outward Bound experiences, which, in the words of Hutnyk (1996), could have facilitated the mnemonic re-presentation of “that what was seen was what was there” (p. 145). Extending on the notion of bringing Outward Bound home through photography (Robinson & Picard, 2009), Nazam and Isha actively negotiated not having their memory recording devices by picking flowers which were then arranged, photographed, and presented to me when we returned to the centre. By bringing flora back to their mobile technologies for the purpose of photography, the performance of remembering Outward Bound spaces and places was undertaken by bringing what was deemed interesting and memorable back to the camera.

Alongside bringing nature back to the centre, the promise of having a photo taken during challenging and fearful moments provided an additional form of motivation to participate. However, unlike the review from Weiler et al. (2021) on risky selfie taking and death, where motivating factors included exhibitionism and adventurous self-presentation, the young people in the study were often motivated to complete what they perceived to be risky activities so they could share images with parents. Linking extensively to the discussion in section 5.4.1, participants such as Jawaria and Oliver described how sending photos of their participation back to parents served as a motivating factor. Whilst the literature has identified young people’s motivations for photo taking and social media sharing in relation to intimacy (e.g., Kofoed & Larsen, 2016) and self-presentation (e.g., Herring & Kapidzic, 2015), the data generated across the cases at Outward Bound indicated that sharing images with parents centred on pride and a desire to share with them the spaces and places in which adventure was undertaken. Through hoping to share images of participation and place with parents, visual media could have re-presented young people’s

Outward Bound experiences to those back home which, in turn, could have also provided the “signs of life” contact necessary to alleviate parental worry.

With young people hoping to send images of participation to parents, and this generating a form of participatory motivation, visual media also served to re-present young people’s Outward Bound experiences back to them whilst they were still participating in their residential visit. This re-presentation occurred at the camp during the expeditionary component at Starling where the group re-engaged with the earlier jetty jump, and during the final breakfast at the Skylark centre where Giulia and Sarah visually accessed their upcoming activity by engaging with photos on the school’s Facebook and Twitter pages. As I have outlined in my review of the edited book from Sava et al. (2020) (Reed, 2022b), Predescu’s (2020) chapter encouraged personal scrutiny on the ways in which the past may be re-presented at individual and collective levels. Predescu (2020) draws on Macdonald’s (2013) description of *past-presencing* where processes that “make the past present affords opportunities for reflection” (p. 233). Personally, I preferred the term *past-presenting* when examining the data, as the visual media young people hoped to remember their Outward Bound experience by would, potentially, be re-presented to them throughout their life course. With a camera being in-built in most mobile devices, there is opportunity here for Outward Bound in the UK to construct a visual archive that a young person could revisit at anytime.

Young people’s intentional and hopeful attempts to remember their Outward Bound experience therefore holds insight for Outward Bound and for other residential OAE providers navigating young people’s uses of mobile technologies. What seems important was the potential for images to have an impact on Outward Bound’s intention to transfer

learning from the residential context into the home environment (see Bobilya et al. (2015) and Hickman Dunne (2019) for Outward Bound's position on learning transfer). Indeed, what Outward Bound are presented with are groups of young people who have the means and desire to record and remember the activities, instructors, and places they interact with. These are interactions that, through an ongoing process of past-presenting, may offer commemorative visual artefacts for participants to share, rediscover, and reflect on. Through encouraging rather than disrupting the construction of a visual archive of an Outward Bound experience, there exists an opportunity for young people to relive their residential experience long after they have returned home. As Blom (2015) described, it is necessary for society, and I add, outdoor education, to now "rethink memory from the ground up" to examine the ways in which participants visually archive, remember, and share their memories of time spent at Outward Bound in the UK (p. 33).

5.5. Chapter Summary

The data analysed and discussed in this chapter have generated two primary findings which directly relate to research question two: In what ways do the presence or non-presence of mobile technologies at Outward Bound affect how young people experience their residential outdoor adventure education trip? Both findings centre on young people's experiences of connectivity disruption through a lack of access to networked infrastructure (e.g., signal or Wi-Fi) and the removal of phones by adults.

1. Connectivity disruption fundamentally affects young people's wellbeing through an inability to speak with parents generating stress, anxiety, and anger. Young people

negotiate a lack of networked infrastructure by actively searching for signal and using their phones in covert ways.

2. Young people explicitly want to take photographs of their Outward Bound experience for the purposes of remembering, but are unable to do so when they are not allowed to have their phones on activities.

Whilst young people brought their routine networked practices to each centre, the Outward Bound environment often interrupted participants' connectivity.

Falling in line with Turner's (2015) synopsis, the young people I engaged with had "become accustomed to interacting and communicating in a world that is connected at all times" (p. 104). However, through having their previous always-available and reciprocal connectivity with home severed, young people's Outward Bound experiences across the cases were characterised and shaped by their (failed) attempts to make contact with those not physically co-present. The analysis indicated that not being able to contact parents negatively affected young people's enjoyment and wellbeing across the centres. Given some instructors in sections 4.2.3 and 4.4.1 recognised young people as addicted to their phones and that their mobile technologies need to be removed as a form of detox, it is suggested that Outward Bound may need to assess the ways in which contact with home could facilitate a method of providing young people with a sense of emotional support and security. Whilst the impact of Covid-19 did not feature in the data, it may be necessary to consider whether and/or how time spent at home during lockdowns could have developed a greater sense of dependency between young people and their parents.

Alongside contacting home, young people readily described their desire to record and remember their Outward Bound experiences by wanting to take images. Much like not

being able to contact parents, being unable to capture key moments elicited intense frustration. Interestingly, when Outward Bound experiences could be recorded and revisited, a degree of past-presenting (Macdonald, 2013) was evident whereby past events, such as jetty jumping, could be re-watched, reviewed, and discussed. Such an outcome provides further insight into the ways in which young people come to Outward Bound in the UK expecting to be connected and how, in these instances, they hoped to record and archive their residential visit. When unable to do so, young people's sense of disappointment was readily shared with me, and even resulted in flora being brought back to the device so that it could be photographed and stored for future access.

Chapter Six

Networked Place Engagements at Outward Bound: Social Media, Video on Demand Services, and Gaming Providing Experiential and Sense-Making Baselines in Nature

6.1. Introduction

With disruptions to young people's connectivity and attempts to remember their experiences at Outward Bound through the use of photographs examined in chapter five, this third and final findings chapter explores the entanglement between digital youth cultures and interactions with peers and nature. Focus is placed on the ways in which spaces such as social media, VOD services, and gaming affected young people's understandings and imaginative place engagements. Reflecting on McNally and de Andrade's (2022) statement that gaming spaces can generate contemporary "ways of seeing and being in nature" (p. 180), this chapter presents and examines the following finding: Online media and gaming provide experiential baselines from which young people make sense of their Outward Bound experiences in nature and with others. In essence, online media reconfigured young people's baseline interpretations of nature during their residential OAE experience.

Outlining young people's experiential baselines is an important and novel finding given Beery et al. (2023) encouraged exploration beyond one-dimensional characterisations of nature disconnection, where separation from the natural world has often narrowly focussed on individual relationships. Instead, they suggest, examinations of nature disconnection must include sociocultural and institutional factors which shape meaning-making across society (Beery et al., 2023). This chapter considers the ways in

which overarching networked structures reframed young people's (aged 12-17) understandings of, and engagements with, nature. It is necessary to note that this finding emerged during the analysis of observational data when it was too late to incorporate it into the focus groups. The data presented here, therefore, were generated through my fieldnotes and some of the data has been previously published in Reed (2023c, 2023d).

6.2. Social Media, Video on Demand Services, and Gaming: Networked Spaces and Making Sense of Outward Bound Experiences in Nature and With Others

6.2.1. *"This is Just like Minecraft": From Virtual Worlds to Outward Bound*

Throughout each week of data generation, the ways in which virtual environments such as Minecraft and TikTok framed how young people engaged with nature was identified as a recurring and prevalent theme. These moments, where young people's interpretations or engagements with nature were filtered through online spaces, occurred regardless of whether mobile technologies were present or not. It was on my third day at the Skylark centre with participants aged 12-13 from Eastwood Secondary when young people's filtering of nature when rowing across the nearby lake became apparent:

As we near our destination, one of the lake's pleasure boats is getting ready to leave from the nearby dock. The waves generated by the much larger vessel means we must hold off some way out to let the boat leave before we could make our approach. The instructor uses this downtime as a learning opportunity and stands at the front of the boat, the group listen. "Look at all of the trees!," the trees are spread across the hillside in front of us, "does anyone know what trees they might be?". "Yeah!," Ethan calls

out loudly from just in front of me, “I know all the trees from Minecraft, there’s Alder, Oak, and Ash”. “Do you play that a lot then?,” the instructor asks. “Oh yeah, it’s educational!” Ethan responds, he seems very pleased to have contributed to this conversation through the knowledge he has gained in Minecraft. “But does it tell you how to start a fire?” the instructor responds, a hint of sarcasm in his voice, but also a hint that Minecraft isn’t “real”. “Yeah!” the group respond, almost as a unit, “you can use flints and start fires really quickly”. The group agree and the instructor sits back down, the pleasure boat has now left so we are ready to approach the jetty. (Skylark centre, day three)

Once we arrived on shore, we now had an exciting climb up a 432m high hill. We planned to hike up and down and then row our way back across the lake to the centre. The following excerpt comes from our climb:

Darius calls out to the rest of the group, “look, guys, this is like climbing a hill on Minecraft”. He bounds up, taking big strides and jumps, the rest of the group laugh, and a couple imitate. Once we reach the top, we take about 30 minutes to take in where we are. I tune into the conversation of three boys, they’re talking in an animated manner about gaming, despite the amazing views and tranquillity of where we are. They talk about “360-no-scopes,” something I’m familiar with from when I’ve played Call of Duty, and they readily compare notes about who has the highest score. However, Mike returns to the conversation we had on the lake about Minecraft, and tells the group all about the swords he had acquired recently. At the

summit, we also see lots of Skylarks fluttering around. The instructor draws the group's attention to them, "you know Angry Birds that go up and down on your phone? This bird is just like that". "Umm, sir, that's Flappy Bird!" Ethan responds. The group laugh, but this appears to be an example of an instructor using young people's online, gaming, baselines to connect them to nature. (Skylark centre, day three)

The hike up the hill and the time we spent on the summit was characterised by young people's understanding of their surroundings through a gaming filter.

Another environment where gaming, and especially Minecraft, featured was during campfire activities. The campfire activity during an Outward Bound week in the UK is often undertaken on the final evening and, with the sociability that comes with sitting around a fire with a group of friends, these activities often facilitate reflection on the week that has passed. At Smew, with young people from Faraday Community High School aged 12-16, Minecraft once again featured:

We walk up into the forest and head for a large parachute that is suspended in the trees. Below the parachute is a fire pit and the sun shines through the trees in such a way that the forest floor is bathed in light and shadow. The group are given a Flint fire starter and some cotton wool and a small little jug in which to try and start their own fire. I sit and watch intently, the group are really engaged with this fire-starting activity. "This is just like Minecraft! OMG this is way harder!". This comes from Emma, who is trying her best to light a successful fire. "I'm good at this on Minecraft, if I only had some Netherrack, that's what I need". "Yeah, I can't get mine to

work at all,” James replies¹¹. The group begin discussing techniques, wondering how a Minecraft Fire Charge might aid their fire-starting endeavours. “Do you all like Minecraft, then?,” the instructor chimes in. Marcus responds, “yeah! It’s educational. You can light fires, I know all about Oak and Birch trees, and I’ve spent so much time exploring caves and cliffs. This fire is way harder to light though”. (Smew centre, day three)

A similar scenario unfolded at Skylark with 13-year-olds Ryan and Mike and reinforced the perspective constructed with instructors in section 4.2.2 that virtual online worlds are thought to be “fake”. However, here it became clear that young people do not agree with such a characterisation:

The group are also given a small cup with some cotton wool in it and a flint fire starter. They can start their own miniature fires if they want to, and the group are really engaged in trying to get a small fire started by striking the flint. “This is way harder than on Minecraft!” Ryan mutters under his breath. The group continue trying when Mike calls out, “look [name of instructor], it’s like Minecraft, I’ve got charcoal”. “Yeah, you have, but on Minecraft it isn’t real, is it?,” the instructor calls back. “Yeah, it is!” Mike says, eyeing the instructor through the smoke of the main fire in front of him. The instructor thoroughly disagrees “nah, on Minecraft you can light a fire with one strike”. “Fine, but it’s how I’ve lit fires on there that has made the charcoal I have here”. The instructor walks off at this point leaving

¹¹ The example from the fire starting at the Smew centre features as an example in Reed (2022a).

Mike to marvel at the small burnt-out embers he created in his mug.

(Skylark centre, day four)

Despite the instructor here not understanding the position of Mike on Minecraft being a real space, when I engaged in an informal conversation about Minecraft with another instructor during a crate stacking activity at Smew, an alternative position was taken. The instructor told me that “young people experience in the virtual, do in the physical. It brings their virtual worlds to life”. Such a statement appears more open to the networked baselines of young people and positions Outward Bound in the UK as well-placed to bring young people’s virtual worlds to life. Even with a statement that appears more open to young people’s networked entanglements, young people’s online engagements were being positioned as passive and less valuable. It is also necessary to note that it is not clear how and/or whether the instructor’s practice reflected this statement, as he was present at the crate stacking activity in an observational capacity.

Alongside Minecraft as a platform for making sense of both nature and Outward Bound’s campfire activities, broader uses of social media such as TikTok also shaped how young people interacted with the environment. Such a moment happened at the top of the mountain during the expedition at the Starling centre. The plan was to summit early, with the group’s sister team summiting a separate mountain directly adjacent to us with the hope that we could signal to each other with Outward Bound flags. Unfortunately, low cloud meant we could not see the other mountain and so our instructor rang the other team on his mobile phone:

The group wave and wave their flag with great enthusiasm, but no matter how hard they try, the cloud is restricting the view. I look on and the

visiting staff member turns to me and says “hey, look, no digital here”. On the surface at least, he is right, there isn’t a phone in sight. At this point, the instructor agrees to ring the other group and connection is made. The phone is put on loudspeaker so everyone can hear. Our group asks if they can shout “Marco” down the phone, it is agreed, despite some uncertainty as to why this is necessary, that they can, and on the count of three they go “ok, 3, 2, 1, Marcoooo!”. The group then listened intently through the instructor’s phone, there is no reply. The other instructor asks them to do it again. “3, 2, 1, Marcoooo!”. The group at the other end of the phone, on the other side of the valley, can hear them through the phone this time and then shout “Poloooo!”. We can't hear them from across the valley, of course, but we can hear them on the phone. The group cheer in jubilation. The whole point of the expedition was to be able to communicate through original means to the other group. However, it is through mobile technologies that the group have been able to achieve their mission.

(Starling centre, day three)

My initial understanding of this moment was a reasonably straight-forward one; the instructor’s mobile technology facilitated success of the team’s mission. Whilst reasonably self-evident, walking back down the mountain revealed an unseen networked entanglement. Speaking with 16-year-olds Natalie and Isha revealed that “Marco Polo” is a gamified call and response prank that is popular on TikTok, where failing to respond results in death. Made popular by influencers such as Guidry (2022) and Ghen (2022), which has resulted in these videos receiving tens of millions of views, on top of a mountain in a

National Park the stimulus for group communication and environmental engagement spawned from a popular phenomenon on TikTok.

The impact of TikTok videos informing place and group engagement also featured in a more obvious way during a rock climbing activity near the Skylark centre. We had just canoed to our rock-climbing location and had our safety equipment on when Emma noticed some nearby ferns:

The group hurriedly get their harnesses on and checked. It's a little warmer today and the sun is trying to poke through, it's a lovely morning for a climb. The narrow track to the crag is slightly uphill and there's a sharp left bend to navigate before we can climb. The track has lots of ferns nearby.

As the group arrive at the crag, Emma calls out to the nearby members of the group "ohh, we could do a fern tattoo like on TikTok!". There is general excitement at this, and I ask what they mean by "nature tattoos".

Apparently, there's a man on TikTok who does nature tattoos, which is where you press a nature-based object, such as a fern, for an extended period and it leaves a semi-permanent imprint. The instructor decides to break off a small bit of fern and Naomi gives it a go and has a little bit of success. She presses the fern hard against the back of her hand and the outline of a fern is present when she removes it. This serves as further encouragement for the group. "Look at that! I'm going to try and do this back home" Oliver calls out after also having some success. The instructor is rapidly becoming quite unimpressed with this, the group are not engaged in rock climbing at all, and it is TikTok-based nature tattooing that

appears to have become the dominant activity so far¹². (Skylark centre, day four)

Reflecting on this moment, and examining the TikTok hashtag #NaturalTattoo, multiple videos are present which demonstrate how to press a fern against skin in order to leave a semi-permanent imprint. In the case of the beauty channel Malavara (2020), one of these videos has had over 42 million views. With both the Marco Polo and nature tattooing examples, it was only through following up with young people after the event, and spending time searching TikTok, that the entanglement between a networked space and in-person interaction with each other and nature became apparent. Alongside this, given young people did not have their phones with them, the pervasive nature of social media meant that content and trends engaged with long before visiting Outward Bound provided the foundational social and cultural structures from which young people interpreted and understood the places we visited. It also seemed that, despite my descriptions of instructors preferring their practice to be phone-free (explained in chapter four), the networked baselines young people brought to Outward Bound were unavoidable and provided an important factor that framed the residential experience.

Another example of young people's networked baselines at Outward Bound came during my first day of fieldwork at the Skylark centre where we undertook jog and dip. Despite it being a warm day, the lake was very cold and Olly, who had a worry about submerging his head, struggled to participate:

Ryan and I submerge our heads together at the same time and the group is busy splashing one another. However, Olly is very nervous and hasn't really

¹² This data was also presented in the outdoor practitioner journal, Horizons (Reed, 2023c).

entered the water yet. He is up to his ankles and the whole group are encouraging him to take a few more steps. I approach him and offer a helping hand and he seems a little more confident. He holds onto my arm tightly, I can feel his fingers gripping my arm tighter and tighter through my wetsuit. We carry on and soon we are at about chest height. The only thing left for Olly to do is submerge his face. He tries on a couple of occasions but can't bring himself to do it. We eventually agree to do it together and we get a big count down from the rest of the group "3, 2, 1, Gooo!". We both submerge our heads and are back to the surface after a second or two. Olly is so chuffed, and we all high five one another. Afterwards, I chat with Olly as we stroll up the path through the trees back to the centre. "How did that feel then?" I ask him, "well, the only reason I did it was because I'd seen someone on YouTube do it before we came here". I wasn't expecting this and probe further. "Oh yeah," he continues, "I watched lots of people doing these sorts of things on YouTube, I've seen them do this sort of stuff and so I know I can do it". (Skylark centre, day one)

For Olly, engaging with YouTubers undertaking similar activities to those undertaken at Outward Bound provided him with a sense of confidence and self-belief. Once again, it was previous engagement in networked spaces that transferred to the physical Outward Bound environment. When I examined this moment with Olly following my time at the three centres, I returned to what the instructor told me during the crate stacking activity at the Smew centre, that is "young people experience in the virtual, do in the physical". Olly's experience reinforced my initial interpretation that the instructor positioned young

people's online engagements in a passive sense. I believe resting on a foundation of passivity overlooks the important role such networked spaces could have in framing an Outward Bound experience in the UK. Indeed, Olly's purposeful engagement with YouTube before the trip provided him with additional support and the self-belief that, if *they* can do it on the screen, then *he* could do it at Outward Bound.

6.2.2. *Young People Digging for the Upside Down and the Role of Netflix in Framing Outward Bound Experiences*

Alongside virtual spaces such as Minecraft and TikTok providing a form of networked lens through which young people viewed and understood their Outward Bound experience, VOD services also significantly featured within this theme. Specifically, two popular Netflix series were on display at both the Smew and Starling centres, namely *Squid Game* and *Stranger Things*. At Skylark, focus from young people was more readily placed on Minecraft and TikTok, and so the Skylark case does not feature in this section. The first excerpt here comes from a day spent undertaking the John Muir Trust Discovery Award¹³, where we had just finished a litter pick near on the shore of a nearby body of water.

We are waiting for the bus, which is late following our beach clean. We are on a patch of grass next to a canal lock. The view is incredible, although it has been raining, so the nearby mountain range towers above us in the cloud. All of a sudden, the group decide to play the first round of Squid Game, the violent game that features in episode one of the series, "red light, green light". When a doll turns around, those still moving are brutally

¹³ For an introduction to the John Muir award, see John Muir Trust (2023).

murdered. The group nominate the “doll” who stands near a hedge with their back to the rest of the group. “3, 2, 1, Go!” cries out Reagan and the rest of the group start advancing, some slowly, some much faster. After a second or two, the “doll” turns around and those who are still moving are “shot” with a football, which is kicked at high-speed towards the young person who was caught moving. They have to fall to the floor and are then “reset”. They run back to the start line and try again. Anyone who gets level with the doll are safe and declared the survivors. This game is played many times as we wait for the bus, young people switch to become the “doll,” and some are excited to be able to throw themselves to the floor if they are still moving. (Smew centre, day two)

Despite having just undertaken a litter pick and being in a stunning location near the base of a nearby mountain range, the group engaged in a playful moment situated within a gory yet popular series on Netflix. Whilst I was alert to the possibility that social media spaces and gaming platforms may filter young people’s experiences following my time at the Skylark centre, this moment added yet one more layer to the ways in which Outward Bound experiences collide with young people’s networked cultures.

Whilst *Squid Game* featured at Smew, it was another Netflix series which featured at Starling. The groups I spent the week with were somewhat obsessed by the series *Stranger Things* and, having watched the various series myself, I frequently engaged in conversations with young people about plot lines and characters. Even when the group met for the first time with the instructor, I noted Netflix as a prominent feature in my fieldnotes:

The group come together for the first time and one of the first things they need to do is select their food for the week. I note whilst this is happening that the group are discussing Netflix. Indeed, there appears to be lots of chat about Netflix in general. The group are particularly interested in the story arc of *Stranger Things*. I wonder whether this might be the experiential baseline that I have seen from platforms such as Minecraft, TikTok, and Squid Game previously. (Starling centre, day one)

Alongside the influence of TikTok trends such as the Marco Polo call and response game, the young people from Long View Academy (aged 13-17) at Starling also engaged with Outward Bound spaces through a Netflix lens. Such a lens came to the fore during the first day of our expedition:

Nazam appears to be suffering from heat stroke and is feeling really rather ill, so we decide to take a short break in the shade. We all get our water out and start to sit down when, suddenly, Ajeet says “wait, if I start digging here, I might make it to the Upside Down”. He slowly walks away, his eyes glued to the floor, and finds a suitable place to start digging a hole, “is Vecna down here?” he calls out. The rest of the group now gather round and agree that they must dig deeper. They run and grab sticks, there are plenty to choose from, and return to where Ajeet continues to dig. The group start talking about what this area would look like in the Upside Down. Having watched *Stranger Things*, I know exactly what they're talking about, and parts of the *Stranger Things* series are positioned within a forest just like this one. The next thing I know, most of the group are digging -

they dig and dig and dig - generating quite a sizeable hole. Tim, who is lying on his belly at this point, leans into the hole and calls “Billy, are you down there?”. A couple of the group members giggle, but then there is silence, clearly there is no response. The group return to their water bottles and prepare to continue our hike to camp. (Starling centre, day two)

In this example, in a similar way to the *Squid Game* narrative, there is a degree of playful and imaginative place-engagement. As I considered these moments afterwards, I have concluded that these forms of interaction are not necessarily “new” to the Outward Bound space in the UK. In reality, young people will have engaged in playful moments such as these long before the arrival of Netflix. However, I have come to think of these moments as being “newly different”. By this, what I mean is that the content engaged with by young people in online environments is always-on and always-available (Hodkinson (2017)).

Alongside this, the portability and ubiquitousness of content means that streaming shows such as *Stranger Things* or *Squid Game* is much easier to access than the time-bounded, place essential, nature of engaging with television shows. Across each week of my fieldwork, this difference emerged time and again, and demonstrates the extensiveness of this content in shaping contemporary youth cultures. That said, it may be that some similarities are present between the constructed narratives from young people in this chapter and other people’s experiences in a time before networked spaces. Greater examination of this may be required, but my sense is that these forms of networked entanglement with nature were shaped in ways that could only be developed in a ubiquitous content-consuming environment such as Netflix. The young people I engaged with across the centres certainly arrived at Outward Bound with various forms of

networked knowledge which appeared to blur the lines between participation in online spaces and situated in-person and in-place engagement.

6.3. Networked Transfer Phenomena and the Mediating Role Online Spaces have in Shaping Young People's Experiences and Interactions at Outward Bound

With the impact online and networked platforms such as Minecraft, TikTok, and Netflix had on both young people's interactions with nature and with others described, these findings are now discussed in relation to the literature. In particular, the ways in which specific cultural foundations and knowledge bases that are established in online spaces may be transferred to the "physical life" of the young gamer, social media user, or VOD viewer (e.g., Barnett, 2014; Ortiz de Gortari et al., 2011). Importance is placed on two key elements that are present in the data:

1. Content engaged with online foregrounded young people's interactions with place and with each other at Outward Bound. The norms present in young people's digital youth culture informed interactions at Outward Bound.
2. Young people's understandings of nature were developed through networked spaces, which calls for a reconceptualisation of nature connectedness within a collapsing dualism or "real" and "fake" nature interaction.

This section, then, examines young people's interactions with nature and with others at Outward Bound across the cases through the lens of *networked transfer*. Again, to avoid repetition, a postdigital evaluation of the data is presented in chapter seven, and is therefore not brought into the discussion here. That said, I think this section is grounded in a postdigital subtext, which is examined in the following chapter.

6.3.1. *Networked Transfer Phenomena: Nature and Peer Engagements Situated within Digital Youth Cultures*

The concept of *game transfer phenomena* posits that a continuum exists between the narratives and common practices that feature in gaming participation and how gamers may link these to their physical lives. For instance, in Ortiz de Gortari and Gackenbach's (2021) research, 91.3% of the young people in the study had experienced game elements transferring to the physical world, including "thinking about using video game elements in real-life contexts" (p. 12). Whilst young people actively transferred the knowledge constructed through playing Minecraft to Outward Bound, the transfer of gaming knowledge featured as just one element of what I am calling a broader environment of *networked transfer*. What was present was a blurring of the viral and always-available online content young people viewed, such as the *Marco Polo* game on TikTok or *Stranger Things* on Netflix, with an Outward Bound space which "brought to life" the networked cultural worlds in which young people engage. As a form of networked transfer, the young people I engaged with across the cases understood the outdoor environment and their interactions with each other through a networked lens which was grounded within a cultural milieu where online content informed in-person interactions. This may be thought of as distinctly different to the medias (such as magazines or television) which may have interacted with residential OAE previously, as the contemporary cultural background informing young people's interactions at Outward Bound are now available anytime, anywhere, and to anyone, provided they have a connected mobile device.

The work of Hjorth and Richardson (2017) is also helpful in unpacking young people's networked transfer of knowledge in relation to nature and each other. Their position centres on the ways in which our digitally-mediated understandings of the world

generate an “ongoing digital and networked augmentation of place and space” and that these forms of networked augmentation generate a “hybrid experience of the lifeworld” (Hjorth & Richardson, 2017, p. 5). By positioning young people’s engagements with place and with each other at Outward Bound as situated within an eclectic and messy mix of in-place and online environments, spaces such as TikTok or Minecraft generated inescapable foundations which provided young people with an initial understanding of what nature is and how to engage with it. This position is expanded upon in section 6.3.2. Instead, the focus here examines how the basis of a connection to nature was foregrounded within digital youth cultures and the ways in which networked spaces offered digitally-situated cultural reference points that informed young people’s participation in the outdoors.

Considerations of digital youth culture are not new, with platforms such as Minecraft (Niemeyer & Gerber, 2015), TikTok (Stahl & Literat, 2022), and YouTube (Chau, 2010) all having been assessed in reference to the construction and maintenance of culture. Of course, youth cultures will have always, in some ways at least, interacted with programmes across the history of Outward Bound in the UK. The analysis presented here provides evidence of some of the latest youth cultural trends interacting with young people’s residential Outward Bound experience, and demonstrates some of the ways in which networked participation and the consumption of content from influencers informs situated engagements at Outward Bound. The works of Hartley and Potts (2014) and Hartley (2018, 2020) on *demes* have provided a contextual foundation from which I have been able to construct an understanding of the collision between digital youth cultures, networked transfer, and five-day residential experiences across the cases. A deme may be considered a “fundamental culture-made group” that is “bonded by culture, language, codes and ‘imagined community’” (Hartley, 2020, p. 3). For Hartley (2018, 2020), children

have formed and participated in demes across the history of humanity, but what has shifted are the ways in which immediacy and global interconnectedness through networked spaces shape and sustain contemporary cultural fabrics. It has been suggested that participation and content creation and consumption in online environments has meant that young people are engaged in a form of “worldbuilding” (Hartley et al., 2021).

The works of Hartley and colleagues on demes and young people as “worldbuilders” through networked participation and consumption offered an important access point as I analysed the data. Whilst I was aware of the importance these spaces hold for young people (e.g., boyd, 2008, 2014; Malsaac et al., 2018), the ways in which influencers and trends in networked environments provide in-person cultural reference points was less clear. For instance, the data presented from Starling on the Marco Polo call and response game was grounded in a TikTok trend that only became clear after I followed-up with Natalie and Isha as we returned from the summit. Drawing on a sense of “worldbuilding,” instances such as Marco Polo, as well as nature tattoos or comparing the Flappy Bird game to a Skylark, presents young people’s interpersonal engagement and constructions of meaning around their Outward Bound experiences as embedded in their networked environments. For Mendelson (2023), platforms such as TikTok provide society with a contemporary and rapidly changing “social script,” whereby the sensemaking of places and/or events are grounded in the ways in which networked users “create new worlds” (p. 14). At Outward Bound, the entanglement of popular digital culture with in-person experiences highlighted how young people’s consumption of online media and viral content shapes their day-to-day interactions between the self, others, and the environment. With chapter five examining young people’s reactions to forms of connectivity disruption, my analysis suggests that Outward Bound in the UK could also

place additional consideration on how programmes interact with young people's social and cultural entanglements in networked spaces, even when their mobile technologies are not immediately accessible.

Rethinking how foundational networked elements in youth cultures transfer to the Outward Bound space also challenges the notion that instructors have a choice regarding whether young people can or cannot have access to their mobile technologies. The findings suggest that greater consideration is needed which accounts for the networked baselines young people bring to Outward Bound, regardless of whether their phones are present or absent. The writing from Tsaliki (2022) offers a helpful access point here in their consideration of the ways in which anxieties have arisen concerning how networked participation provides young people with what are often unregulated mechanisms for cultural production and consumption. These anxieties are present in section 4.2.3 where instructors positioned Outward Bound as a form of detox from technology for young people. However, through drawing on the earlier cited work of Hartley (2020), Tsaliki (2022) calls for a move toward an appreciation of the ways in which the collision between the physical and the virtual shapes young people's explorations and interpretations of self and others within society. Ultimately, the instructors in the present study appeared to somewhat overlook the unavoidable affect networked spaces have in young people's constructions of self, others, and nature. The analysis presented in this chapter therefore serves as much as a call for a critical introspection of Outward Bound's (lack of) policies around young people's mobile technologies, as it does position young people's Outward Bound experiences as irremovably grounded and informed by ever-shifting cultural trends in networked environments. This endeavour will help ensure that Outward Bound programming in the UK remains attentive to the networked lifeworlds of participants,

which may contribute to contemporary learning experiences that are responsive to young people's networked baselines.

6.3.2. *What Impact for Outdoor Education? (Re)conceptualising Young People's Understandings and Connections to Nature in a Networked World*

Drawn from the analysis of observational data with young people, this chapter supports calls for a reconfiguration of literature in outdoor education that has characterised in-person experiences and learning as manifesting at the junction between the self, place, and others. As Quay (2013) suggested, decades of outdoor education have rested on "the trinity of self, others and nature ... as a way of framing experience in outdoor education" (p. 142). In many ways, this trinity could be traced through the instructor data in chapter four where direct contact with nature without the distraction of technology was considered foundationally important to Outward Bound programmes across the cases. However, it is suggested here, given young people's entanglement with networks and the ways in which online content is transferred to outdoor spaces, a fourth component to the foundations of outdoor education may be added: *networked spaces*. Whilst young people may not have their mobile devices in the outdoors, and even if instructors seek to position Outward Bound in the UK as a connectivity counter-narrative (section 4.3), for young people such as Olly and Emma, their engagement with nature in a networked space (e.g., YouTube and TikTok respectively) foregrounded their experiences and provided a primary experiential referent to the places and activities at Outward Bound. By positioning networked spaces as part of the tetrad of outdoor education, greater focus may be placed on the contemporary ways in which networked environments are wrapped up with young people's constructions of self, others, and nature.

The other factor under scrutiny here relates to one of Outward Bound's (2022d) primary learning outcomes, that is, to develop young people's "understanding of the natural environment" (para 10). Such an outcome draws parallels with the position that young people have been considered increasingly alienated from the natural world, and that reconnecting learners to nature is a fundamental purpose of outdoor education (Braun & Dierkes, 2017). As I have navigated the position that young people's understandings and connections to nature are foregrounded and consolidated in online worlds long before they travel to Outward Bound, the work of Freeman et al. (2021) has provided a helpful lens. They draw on Soga and Gaston (2016) to acknowledge that, in hypermobile and fast-paced Global North societies, nature becomes somewhat "othered," and the place of humans in and as a part of nature has been increasingly abandoned. With this in mind, Natural England (2020) published a report on the nature connectedness of children and adults in England that also tested the new *Nature Connection Index*. Whilst television and radio are identified as a possible form of indirect contact with nature in their regression analyses, no consideration is placed on what role networked spaces such as gaming, VOD services, and social media might have in foregrounding or reinforcing a connection to the natural world. It may be that an important networked component in the ways in which young people develop a connection with nature is being overlooked.

Returning just for a moment to the work of Herring (2008), I must outline my own generational bias in this finding. As an early stage member of Gen Z, I too have interacted with nature and developed an appreciation for nature through my screen, and have co-produced a film called "Dear Oak," which sought to offer a level of connection to a dying Oak tree in the Scottish Highlands through film (see Dunn, 2020). Given the insight generated with the young people in this study, that is, online spaces providing a form of

networked transfer phenomena around interactions with nature, I believe that a factor within young people's understandings of nature is being overlooked. That is, the ways in which networked spaces shape young people's understandings of what nature "is," and how to interact with it. From nature tattoos on TikTok, to digging for the Upside Down from Netflix, the data provides insights into the ways in which nature is constructed within the networked lifeworlds of young people and the playful ways in which nature was understood. With my own experience described, I carefully approached the observational component of the study to ensure my own biases did not lead to contradictory evidence being missed or overlooked. I achieved this through the informal conversations I had with young people, and I always sought to check with them that my interpretations of certain moments sufficiently characterised their experiences. My intention with these findings, therefore, is *not* to position young people's networked interactions with nature as a substitution to the irreplaceable value direct nature engagement can have. However, the data has encouraged me to position young people's nature connectedness through in-person and in-place interaction as potentially overlooking how engagements with nature through a screen reconceptualises the baseline from which understandings of nature are consolidated.

Of course, the narratives around the campfire in relation to Minecraft extend beyond descriptions of nature connectedness and, in the example from Mike, operationalises the gap between interpretations of online "realness" and "fakeness" from young people and instructors. Returning to the work of Morse and Emery (2023), their assessment of literature concerning how spaces such as social media affect spatial relationships and mediate people's understandings of place is helpful here. In particular,

their drawing on works from Scannell (1996) and Parisi (2015) hold insights for the current study. Firstly, and as early as 1996, Scannell (1996) described media as offering a *doubling of place*, meaning that sociospatial engagements with an environment can occur both in-person and through a screen. Building on understandings of place doubling, Parisi (2015) suggested that the construction of a sense of place is “intensively defined by the ongoing connection with networked based spatial experiences” (p. 16). It is this that supports my construction of young people’s engagements with nature across the cases, where in-person understandings of what nature “is” could not be decoupled from the networked spaces in which these interpretations were grounded. Or, as Schwanen et al. (2008) put it, contemporary interactions with place may be understood as “an amalgam of interwoven, entangled and dynamic sets of nodes and links where digital and ‘real’ spaces are folded into one another” (p. 525).

The data reinforces the notion that “digital” and “real” engagements with nature are “folded into one another”. Returning to Ruckenstein’s (2015) suggestion that gaming environments may reconstruct interpretations of the physical world, the data generated in this study supports such a notion and provides additional considerations on the ways in which online spaces may reconstruct understandings of nature. Indeed, such considerations further problematise the double-edged sword of technology in outdoor education from Cuthbertson et al. (2004), as young people’s interactions with place are entangled with, and irremovable from, the networked spaces they inhabit. In essence, the narratives of choice that instructors expressed surrounding mobile technologies in their practice in chapter four discounts the always-on and inescapable presence of young people’s online lives. This is especially so when emphasis is placed on the ways in which

networked interactions with nature through a screen inform and shape the perception of nature in-person. There are also implications for how we consider the romantically situated writing from authors such as Pyle (1993) and Louv (2005, 2011). Narratives of experience extinction or nature deficit disorder may need to be re-evaluated. Much like Natural England's (2020) attempts to evaluate nature connectedness where consideration of networked spaces has not been included, it may be necessary for these important discussions to now consider the entanglement of networked spaces in the lives of young people, and the ways in which associations with nature are constructed in a hypermobile online world.

6.4. Chapter Summary

This chapter has built on the important and always-available connectivity and consumptive practices that are often associated with contemporary youth cultures (e.g., boyd, 2008, 2014), and has explored the ways in which networked environments and viral content influences and informs in-person interactions with others and nature at Outward Bound in the UK. Through examining young people's networked transfer to the Outward Bound space, research question three has been considered and offers insight into the entanglement between networked environments and situated experiences across the cases. The research question was developed during my analysis after I returned from the field and was: what impact might online media, VOD services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound? The answer I have constructed centres on the ways in which networked environments provided experiential baselines that underpinned how young people make

sense of, and understand, the environments in which Outward Bound activities take place. My analysis has demonstrated how digital youth cultures facilitated young people's understandings of nature, but also how trends and popular content across Minecraft, TikTok, and Netflix shaped how young people engaged with their peers during their Outward Bound programmes.

Leaning on Hartley et al. (2021), my observations of young people's engagements with the land and with each other demonstrated how young people's online cultural worldbuilding collided with the Outward Bound centres I visited. In many ways, this negated the importance of whether young people's mobile technologies were physically present or not on activities. Alongside considerations on how young people "made sense" of their Outward Bound visit through a networked lens, the analysis holds insights into how young people construct meanings and understandings of nature. Specifically, young people transferred their understandings and knowledge of the natural environment as gleaned through online space which then informed in-person interactions. The data analysed and presented in both chapters five and six have questioned the position of instructors as outlined in chapter four. As seen in this current chapter, the entangled nature of digital youth cultures with in-person nature and peer interactions questions whether attempts to simply "disconnect" young people at Outward Bound in the UK fully considers the ways in which networked spaces frame young people's day-to-day lives. Alongside this, the analysis has also questioned the efficacy of current attempts to measure nature connection (e.g., Natural England, 2020), as such evaluations may not account for the ways in which young people's networked engagements can frame a young person's relationship with the natural world. Whilst beyond the scope of this study, the ways in which young people engage with

nature in networked spaces could be recognised as a functional element in young people's understandings of the natural world.

Chapter Seven

Postdigital Conceptualisations of Outward Bound: Collapsing Binaries and Narratives of Resistance

7.1. Introduction

The three preceding chapters have presented and examined findings from my analysis that centred on outcomes linked to the three research questions. Whilst narratives of entanglement between the physical and the virtual have been present in these chapters, and was outlined in section 2.3.3, a postdigital evaluation of the data has been purposefully omitted until now so that the separate bodies of data may be considered through a postdigital lens together. With the postdigital resting on a foundation that “distinguishing between so-called digital and non-digital spaces becomes increasingly difficult and probably impossible” (Reed, 2022a, p. 2), this chapter discusses the ways in which our increasingly hyperconnected world was navigated by both instructors and young people. As I analysed the data, I was struck by the tension present between most instructor perspectives on mobile technologies and social media and young people’s situated, on-the-ground, experiences of their online networks being disrupted. This chapter begins by examining the ways in which instructors defied the always-on and always-available (e.g., Brubaker, 2020; Hodkinson, 2017) nature of networked connectivity and the impact these perspectives had on young people’s Outward Bound experiences across the cases. Indeed, consideration is placed on the Outward Bound space being a form of postdigital resistance (see section 7.2). From there, section 7.3 discusses my recognition of young people’s postdigitally situated youth culture as well as their constructions of nature. This raises an important question that

centres on whether Outward Bound in the UK can truly disconnect participants from their postdigital architectures.

7.2. Postdigital Tensions and Resistance

Throughout chapter four, instructor perspectives were outlined as often being centred on social media being “fake,” that Outward Bound provided an antidote to young people’s networked lives in the UK, and that phones on a programme could increase comfort in ways that restrict Outward Bound’s outcomes. Chapter five presented evidence of a significant discrepancy between the benefits instructors described around restricting young people’s uses of mobile technologies, and young people’s emotive and occasionally desperate experiences of disrupted connectivity. Most instructors aligned with the perspective put forward by authors such as Brookes (1993) and Wattchow (2001) and centred on the outdoors as a form of counter-narrative to the centrality of technology and connectivity in contemporary societies. There exists, then, a degree of postdigital refusal at Outward Bound which centres on a rejection of and/or lack of awareness for the interrelatedness of the physical and the virtual. Instructors held onto a preference that viewed Outward Bound as placing young people in environments beyond the digital.

Such a rejection of young people’s online lives was often centred within a belief that Outward Bound spaces in the UK offer young people a networked detox and an opportunity to experience life away from their screens. Young people were intentionally placed outside their postdigital connectivity norms for the purposes of learning and development. Indeed, with mobile technologies positioned as a portable comfort zone, the comfortableness associated with postdigital forms of connectivity back home was sometimes associated with

an inability to access Outward Bound’s core learning outcomes. Outward Bound courses were, therefore, positioned by instructors as forming a degree of postdigital resistance which fundamentally shaped young people’s residential outdoor learning experiences across the cases. Of course, such a perspective falls one side of the double-edged sword metaphor provided by Cuthbertson et al. (2004) and, despite the literature acknowledging the entanglement of the physical with the virtual from a postdigital stance (e.g., Fawns, 2022), demonstrates the ways in which the Cuthbertson et al. (2004) text holds resonance in contemporary instructor practices. Taken in isolation, the instructor data positions the “no technology here” approach in OAE as a form of postdigital counter-narrative. Following the work of Mees and Collins (2022), where Outward Bound instructors were recognised to embody the Outward Bound ethos in their lives, it may be that historical constructions of technology as being detrimental in OAE are still shaping contemporary approaches. The data generated with both instructors and young people also facilitated somewhat of a collision between the implementation of a nature – technology binary in instructor practices, and the collapsing of that binary through young people’s postdigital interpretations of nature. Indeed, with instructors positioning Outward Bound as a counterargument to the postdigital in this thesis, there remains an uncertainty in contemporary outdoor education worthy of much further attention.

With chapter four demonstrating the ways in which instructors positioned Outward Bound programmes as a form of postdigital barrier, my time spent generating data with young people directly challenged instructor views on disconnection. In particular, chapters five and six document the ways in which contemporary postdigital youth cultures collided with attempts to disrupt connectivity and instructor attempts to provide young people with a form of technology detox. Such findings raise important questions when considering the

efficacy of postdigital theory in relation to young people's contemporary experiences at Outward Bound. A question I have asked myself is: In what ways might a postdigital basis to my interpretation of the data in some way lose sight of the authentic, traditional, undercurrents at the core of outdoor education? It may be that much greater examination is required to assess this question, but it does facilitate a degree of uncertainty given Nicol (2014) suggested that "the moral significance of our relationship with nature is based on the attention we pay to it" (p. 458). Indeed, might a postdigital attention to nature at Outward Bound facilitate yet one more barrier to nature connection in this time of climate and ecological crises? With this in mind, I now assess young people's experiences of connectivity disruption at Outward Bound through a postdigital lens, and explore the infrastructural components which facilitate the blurring of physical life with our virtual worlds.

Although not situated within postdigital theory per se, Glover-Rijkse (2019) offers an important foundation from which young people's connectivity disrupted experiences across the cases may be discussed. Through drawing on work that has described the role networked infrastructures have in developing a sense of always-available connective proximity (e.g., Ling, 2004, 2012), Glover-Rijkse (2019) suggests that the portability of mobile technologies generates a mobilised connectivity anticipation. In essence, with the postdigital stance that physical and virtual environments are increasingly blurred, it is acknowledged that such "blurring" is made possible by a sprawling networked architecture. Such an architecture may span hardware such as satellites and underwater cables, through to the devices young people brought with them to Outward Bound. It is, therefore, important to acknowledge that the young people in this study arrived at Outward Bound as connected citizens who, as they came off the bus, often held in their hand a device that they expected would offer a form of mobilised connectivity; their online network travelled with

them. As seen in section 5.2.1, when unable to connect, young people actively searched their respective Outward Bound centre for connectivity. Whether it be a dorm window, or hiding a phone so that connection could take place beyond the centre, young people actively sought the infrastructure necessary to maintain their level of expected connectivity.

Whilst young people's mobilised connectivity anticipation showcased the expected connectivity norms that were brought to each case, chapter five demonstrates the fallout when young people's normalised connective mobility was disrupted. This often occurred through either having their technology removed from them, or through the limited mobile and wi-fi signal present within the rural Outward Bound environment. As Glover-Rijkse (2019) described, there is an expectation that we can "create connectivity regardless of territory" (p. 386), and young people arrived at Outward Bound with the anticipation that spaces such as the rural Highlands of Scotland would have the necessary level of networked infrastructure to maintain a networked connection.

This connectivity anticipation aligns with some of the writing present in Adams and Jansson's (2023) text. As I cited in section 2.3.1, Adams and Jansson (2023) suggested that "any such romantic return to a predigital, bounded place seems futile given the entangling force of today's ever-expanding networks of digital communications" (p. 658). Such a statement coincides with young people's experiences of Outward Bound generating disconnected forms of experience in the outdoors where attempts were made to return young people to a predigital life for the purposes of personal development. What Adams and Jansson (2023) go on to illustrate is arguably of importance for Outward Bound in the UK in their outlining of what they describe as a *postdigital sensibility*. A postdigital sensibility acknowledges that truly disconnecting from our hypermobile worlds is "hopeless," but

suggests that through purposeful and strategic engagements with place, it may be possible to disentangle oneself, if only briefly, from our networked architectures.

Following this line of thought from Adams and Jansson (2023), the immediate and unexpected sense of connectivity disruption young people experienced at Outward Bound, especially in relation to parents, arguably generated a sense of *postdigital insensitivity*. By constructing young people's Outward Bound experiences as necessarily disconnected, instructors overlooked the importance of young people's anticipations around their assumed ability to connect with others back home. Maintaining my acknowledgement in section 5.4.1 around anxiety, enhanced mobile connectivity between parent and child, and the Covid-19 pandemic (Drouin et al., 2020), consideration may need to be placed on whether a postdigital insensitivity at Outward Bound is overlooking the emotional needs of a group of young people in post-lockdown societies in the UK.

With young people's adverse reactions to disrupted connectivity in mind, it is necessary to return to the instructors' views that Outward Bound courses provide young people with spaces that are designed to purposefully disconnect young people from their online lives. Essentially, the Outward Bound centres I visited constructed a form of cultural and connectivity obstruction that disrupted young people's routine engagements in a postdigital world. Such a tension returns me to Burnett and Merchant's (2020) work and their consideration that "the digital always seeks to define our situation" (p. 1). Such a statement stands up to scrutiny in relation to the data in this study as, whether mobile technologies and networked infrastructures were present within each case or not, digital youth culture and a connectivity imperative directly shaped young people's residential experiences.

Given young people's experiences of a postdigital insensitivity at Outward Bound centred on stress, anxiety, and anger, there may be a requirement for OAE providers who work with young people from secondary schools to reassess how online spaces coincide and shape the residential experience. Within the acknowledged confines of this qualitative multiple-case study, consideration could be needed on the ways in which young people's postdigital realities can be better understood to sufficiently construct environments for learning that are emotionally safe. In essence, given societies in the Global North have been thought to "not perceive physical and digital spaces as separate entities" (de Souza e Silva, 2006, p. 263), stripping away young people's networked structures for the purposes of learning may overlook the ways in which the digital shapes and sustains the day-to-day lives of learners. I think the postdigital cautions against simply taking learners' technology away for the purposes of, as Strong (1995) might put it, returning young people to the "good life". Doing so risks not only placing young people in a situation where connectivity disruption may negatively impact emotional security, it may also restrict the opportunity to learn from experiences that we know can have a profound impact on learners (e.g., Hickman Dunne, 2019, 2022; O'Brien & Allin, 2022).

Indeed, whilst instructor narratives fell one side of the double-edged sword (Cuthbertson et al., 2004), young people's experiences at Outward Bound extended far beyond the for-and-against argument on the place and use of technology in the outdoors. A postdigital stance informs us that simply choosing between switching technology and connectivity on or off overlooks the entangled nature of our sociotechnical relationships (e.g., Fawns, 2022; Knox, 2019). The for-and-against argument on technology at the centre of the double-edged sword appears to overlook the situated, on-the-ground complexities of young people's postdigital entanglements across the cases. Indeed, the young people in this

study appeared to be caught between their day-to-day realities in the postdigital, and instructor attempts to position Outward Bound as a postdigital counter-narrative. Negroponte's (1998) suggestion that "[l]ike air and drinking water, being digital will be noticed only by its absence, not its presence" intersected with young people's experiences where a lack of connective availability contributed to their engagements with Outward Bound (para. 4). Such a conflict came as a surprise to young people, who often anticipated that the geographical locations of the Outward Bound centres would facilitate the connective mobility that shapes their engagement with family, friends, and broader cultural foundations.

The postdigital stance adopted here also brings into question discussions on technology in the outdoor education literature that often centres on "how might technology be used to enhance learning?," or "what affordances might technology offer the outdoor education instructor?". These considerations, present in conceptual works such as Hills and Thomas (2020, 2021) and van Kraalingen (2022), are important for practice, but the data presented here calls for greater data-driven considerations which extend beyond the facilitation of OAE. Indeed, recentring the focus in discussions around technology in outdoor education from a postdigital platform, it is necessary to acknowledge how always-on digital youth cultures were brought to the Outward Bound residential centres in this study. Whether it be contacting parents, or taking photographs for memory storage, a focus on the following question could be considered: "What impacts will removing or restricting young people's connectivity at Outward Bound have on their ability to learn and participate?". The data presented here goes some way to answering this question, and offers insight into the ways in which a postdigital childhood, where young people have known nothing else other than always-available networked connectivity, shapes their Outward Bound experiences.

Of course, there is a need for a critical stance on the role online media can have in relation to fake news, disinformation, and passive information acceptance. Looking at this through the lens of Alcoff's (2007) outlining of *epistemologies of ignorance*, spaces such as social media may contribute to a sense of "knowing" that is dependent on the evaluation of information and content sharing of others. Spaces such as Outward Bound are well-placed to address such concerns with activities that can hold real consequences for learners (e.g., getting cold or having to cook dinner on expedition). Through encouraging student autonomy in challenging environments, whilst maintaining a level of connective mobility with home, Outward Bound programming in the UK could be well-placed to positively affect learners who cannot simply be removed from their postdigital realities. The tensions present across the data presented in chapters four, five, and six are complex and are worthy of further scrutiny beyond the analysis and discussion I have presented. Evaluating situated experiences in the outdoors through a postdigital lens, where the physical and the virtual are entangled, provides a theoretical platform from which contemporary residential OAE may be evaluated and understood.

7.3. Postdigital Constructions of Nature and Youth Cultures at Outward Bound

With the previous section considering the tensions present in the instructor and young person data from a postdigital perspective, it is necessary to also consider the ways in which online environments and youth cultures constructed and shaped young people's in-person engagements with nature. Presented and discussed throughout chapter six, regardless of whether mobile technologies were present or not, online content and digital youth cultures often framed interpretation and engagement. To date, limited scholarly texts have

considered how postdigital characterisations of society may influence understandings and engagements with the natural world. Whilst authors such as Knox (2019) have outlined key considerations around the impact of the postdigital in and on education, whether and/or how young people develop a postdigitally-derived understanding of nature appears largely absent. That said, Peters et al. (2023) acknowledge that the postdigital has brought a paradigm shift that encourages new questions regarding humanity's relationship with nature. In particular, they draw on the writing of Zwijnenberg (2014) which, although situated in considerations of the biodigital, suggests that there must be a "reconsideration of our traditional notions of nature and the human body" (p. 131). Such a perspective intersects with the data and, at least in an initial sense, calls on scholars and practitioners interested in relationships between young people and the natural environment to consider how a postdigital entanglement may foreground relationships with nature.

Scannell's (1996) work on the *doubling of place* adds an important postdigital consideration here. If we take the view that the physical and the digital are increasingly blurred (e.g., Jandrić et al., 2018; Reed, 2022a), then focus may be needed on how constructions of place at Outward Bound in the UK are wrapped up with young people's digital milieu. Taking a postdigital position that sociospatial engagements are entangled through both in-person and online interactions, then the data presents somewhat of a collision between human relationships with nature, and non-human structures in relation to technology, both of which were engaged with by the young people across the centres. However, much like in the writings of Louv (2005, 2011) or Pyle (1993), approaches to outdoor education tend to focus on returning learners to nature in ways that seek to challenge the dominance of their networked lives (see MacEachren, 2005). For the young people in the present study, an additional layer may therefore be required to understand

the relationships between the self and the natural environment that focusses on the foundational role of young people's networked entanglements.

What became apparent as I engaged with the young people at Outward Bound who feature in this study was that engagements with nature rested on a networked foundation where the so-called "digital" and "physical" were folded into one another (Schwanen et al., 2008). Such a finding adds an additional layer to the hopes of authors such as Malone and Truong (2017) where the separation of humans from nature may be addressed. Whilst caution has to be exercised in relation to the transferability of my small-scale study, it may be that a postdigital consideration could be added when attempting to make sense of young people's relationships with nature. Doing so would remain attentive to the situated networked lifeworlds of young people, and to the writing of Hjorth and Richardson (2017) who suggested that a networked filtering of place (e.g., relating the campfire to Minecraft) generates a level of hybridity between the physical and the digital. Indeed, young people's experiences at Outward Bound extended far beyond the bounded nature of in-place engagement with their residential experiences. From a postdigital perspective, it may be recognised that young people were unbounded from the physical environment whereby a sense of place connection was developed away from Outward Bound itself in online spaces. Given place connection and place responsiveness are cornerstones of outdoor education research and practice (e.g., Greenwood, 2013; Wattchow & Brown, 2011), further attention may need to be placed on the ways in which networked environments foreground learners' understandings and interpretations of outdoor learning.

The data, therefore, gives rise to a three-part postdigital condition for the young people at Outward Bound that consisted of: The individual, non-human networked

architectures, and engagements either online or in-person with nature. For instance, when Emma began subsequent attempts at nature tattoos at the Skylark centre, the postdigital informs us that multiple and overlapping factors were present which sustained engagement with a set of ferns at our rock climbing location. As a form of postdigitally-sustained engagement with nature, certain factors are present which demonstrate the presence of a collision between young people and multiple in-person and non-human factors. By way of example, in the case of the fern tattoo, these could have included:

1. Nature is firstly consumed through a networked environment with influencer narratives informing interactions with and understandings of nature.
2. A host of networked architectures, including hardware, sustained screen-based nature engagement long before the young people arrived at their respective Outward Bound centre.
3. In-person engagement with the ferns animated young people's prior networked interactions with nature, demonstrating the entangled nature of the virtual with the physical.

These three factors are intertwined and demonstrate a host of overlapping networked and physical elements that informed the construction and implementation of knowledge in relation to the ferns at Skylark. This example also reaffirms Greider and Garkovich's (1994) perspective in relation to the ways in which understandings of nature are a sociocultural construction. It may be that online platforms such as TikTok and Netflix are foregrounding the ways in which young people understand and engage with nature. Such a characterisation relates to the work of Searle et al. (2023) and their outlining of what they describe as a *technonatural present* (p. 1). By this, they acknowledge that current

technology and media have reconfigured the relationships between humans and nature. Such a reconfiguration is present in my analysis of the data generated with young people and, from a postdigital perspective, it recognises a complex network of entangled factors which framed and informed young people's Outward Bound experiences. Such a perspective aligns with Smith and Dunkley's (2018) work where technology, children, and flora were identified as being relationally connected to the ways in which young people constructed and understood their roaming pathways in the outdoors. As I suggested in section 6.3.1, my sense is that the entangled nature of technology, young people, and nature deliver additional layers which may extend beyond the previous impacts other media such as magazines or television might have had on constructions of residential OAE. Indeed, the always-on, culture defining nature of young people's networked entanglements appeared to provide the young people in the study with a lens through which to interpret their Outward Bound experiences alongside their peers.

Together with the features outlined in relation to young people's postdigitally-sustained engagements with nature, the data also demonstrated how the postdigital condition informed a sense of cultural knowing and an understanding of what Outward Bound activities would be like. For instance, for Olly at Skylark during jog and dip, his sense of confidence and willingness to participate in submerging his head in the water rested on his prior engagement with YouTube. Alongside this, the examples of digging for the Upside Down or the Marco Polo call and response game at the Starling centre, demonstrate young people's common language as derived from their day-to-day entanglement in networked youth cultures. Returning to Glover-Rijkse (2019), Outward Bound programmes in the UK may be recognised as yet one more venue where networked information and communication flows may be seen to inform ways of knowing. The following statement

from Glover-Rijkse (2019) provides a helpful synthesis of the ways in which young people's prior networked engagement informed their sense of cultural knowledge: online spaces generate "new ways of knowing ... from the endless combination and recombination of information gathered at the intersections of heterogeneous networks" (p. 389). The heterogeneity present in digital youth cultures (e.g., Anderson & Jiang, 2018; Osgerby, 2020; Vanden Abeele, 2016a, 2016b), as seen in the examples I observed in relation to platforms such as Minecraft, TikTok, Netflix, and YouTube, appear to facilitate a sense of "knowing" that informs young people's interactions with nature and with each other. In relation to the work of Crookall and Thorngate (2009), who described the relationships between gaming and knowledge as *action-knowledge*, young people's in-person engagements and expressions of knowing in nature may be recognised as a form of networked transfer (Barnett, 2014; Ortiz de Gortari et al., 2011; see section 6.3).

These considerations of young people's online spaces providing a sense of knowing and networked transfer, returns me to the instructor data. Specifically, to sections 4.3.1 and 4.5.1, where most instructors described their practices at Outward Bound as being more impactful when young people's mobile technologies are absent. Within Outward Bound in the UK, it may now be necessary to consider young people as postdigitally entangled in their online worlds, regardless of whether mobile technologies are removed or not. Crucially, these networked baselines can inform how young people perceive and engage with their Outward Bound experience. To maintain Outward Bound's position as a sector leader in the residential outdoor learning space, it may be that a degree of reframing is necessary which recognises young people as irremovably placed within hypermobile and always-on networked spaces that cannot be switched off. Making room for young people's networked baselines holds promise for taking learners into OAE environments where knowledge

assembled from online engagement may be experimented with and explored in wild and remote landscapes. For the young people in this study, they were very often visiting a National Park for the first time, and so, as the instructor told me during the crate stacking activity at the Smew centre, it is reasonable to assume that “young people experience in the virtual, do in the physical. It brings their virtual worlds to life”. Despite the potential to downplay young people’s online engagements, such a statement could acknowledge young people’s postdigital realities, and remains receptive to what Tsaliki (2022) described as a move toward appreciating the ways in which online worlds frame and shape young people’s day-to-day participation in society.

7.4. Chapter Summary

Throughout my engagements with instructors and young people at Outward Bound in the UK, I often reflected on how postdigital characterisations of perspectives and experiences would help me construct and understand the findings from the study. Section 7.2 outlined a degree of postdigital tension between the instructor and young person data, with instructors falling on the “no technology here” side of the double-edged sword metaphor presented by Cuthbertson et al. (2004). However, when considering texts such as Glover-Rijkse (2019) and Adams and Jansson (2023) on the entangled and inescapable nature of our networked architectures, a sense of what may be labelled a postdigital insensitivity was present in instructor views concerning the removal of young people’s technology at Outward Bound. This centred on the ways in which the centrality of mobilised connectivity and digital culture in the day-to-day lives of young people was often overlooked. Indeed, from a postdigital perspective, young people cannot simply be disconnected from their

networked lifeworlds, and should be recognised as connected and digitally entangled citizens (Fawns, 2022). When adopting this position, the data has presented challenging terrain where, on the one hand, instructors who appear to embody the Outward Bound philosophy position their practices as a form of postdigital resistance and, on the other, young people come to Outward Bound with a postdigital baseline that underpinned their experiences. All of this was in the context of considering what the consequences were of postdigitally-sustained engagements with nature in this time of climate and ecological crises. It may be that online constructions of nature further alienate young people from the outside world.

In relation to the baseline networked knowledge young people brought to Outward Bound, this chapter has also provided postdigital considerations on the ways in which non-human factors, such as hardware and gaming, affected how young people engaged with nature and peers. Reflecting Scannell's (1996) description of a doubling of place, I considered the data presented in chapter six through a postdigital lens which recognises young people's constructions and knowledge of nature to be situated within both physical and virtual space. A level of hybridity was acknowledged where young people's engagements with nature were filtered through a networked baseline (Hjorth & Richardson, 2017), especially given this was the first time most of the young people in the study were visiting a national park. Alongside postdigitally-informed nature engagements, young people's day-to-day interactions with peers at Outward Bound were recognised as being situated within digital youth culture. Following the work of Tsaliki (2022) on the ways in which young people's online worlds frame in-person interactions, it may, therefore, be necessary to consider how young people's networked ways of knowing, or action-knowledge, transfer to and filter the Outward Bound experience (Barnett, 2014; Crookall &

Thorngate, 2009). Doing so could develop a postdigital sensibility within Outward Bound in the UK that recognises, regardless of whether young people's technologies are present or not, how young people's experiences of Outward Bound are entangled and irremovable from foundational digital youth cultures.

Finally, as I have navigated the data in relation to the postdigital, I have felt that a framework may be required which could offer a platform for constructing postdigital entanglements in the residential OAE space and beyond. Such a framework could recognise how human actors, outdoor spaces, larger social structures, and networked architectures collide in the construction of social reality, thus providing an additional lens through which to identify the collapsing binaries between our online and physical worlds. It has been these collapsing binaries, alongside the embeddedness of young people's online worlds with their Outward Bound experiences, that stood out as I analysed the data and prepared this thesis. In essence, regardless of whether young people's technologies were present or not, they remained entangled with and connected to their networked lifeworld.

Chapter Eight

Conclusions, Implications, and Recommendations for Research and Practice

8.1. Study Synopsis and Chapter Introduction

This multiple-case study sought to explore and assess the ways in which mobile technologies and networked spaces affect the facilitation and experience of Outward Bound programmes across three centres in the UK. Through interviews with instructors and observations and focus groups with young people, my analysis of the data demonstrated a tense relationship between instructor preferences and the situated experiences of young people across three of Outward Bound's residential centres. Such a finding has raised important questions for Outward Bound, with emphasis placed on whether removing mobile technologies from young people fosters an empathetic and positive environment for learning. Whilst I had temporary access to contemporary residential OAE at Outward Bound, the participants I spent time with have continued to inspire, and their openness and honesty have provided a constant source of motivation. Whether it be rock climbing at Skylark, the jetty jump at Starling, or the litter pick at Smew, it has been a privilege to construct understandings and knowledge alongside participants, as they navigated their postdigitally situated Outward Bound experiences.

As I mention above, throughout chapters four, five, and six, there is a distinct tension between instructor preferences around phone-free Outward Bound experiences and the situated and, at times, desperate and emotive experiences of young people who were often experiencing a disruption to their always-on connected worlds for the first time. For instance, the interviews with instructors in chapter four often positioned Outward Bound as

a form of connectivity counter-narrative and as a space that directly challenges the centrality of the digital in the lives of young people. This often focussed on Outward Bound as a form of technology detox, and that the presence of young people's mobile technologies stood in the way of instructors achieving Outward Bound's desired learning outcomes in the UK. Here, instructors fell one side of the double-edged sword metaphor provided by Cuthbertson et al. (2004) and often positioned a "return to nature" at Outward Bound as a necessary antidote for young people's increasingly technologically centred lives. Given the tension in the data, it may be that the double-edged sword needs to be acknowledged for its place in the outdoor education archive, but that it could now be replaced by approaches that acknowledge the entangled nature of young people's networked lifeworlds.

As described in chapters five and six, the young people in the study arrived at their respective Outward Bound centres as postdigitally entangled citizens who had anticipated their mobilised connectivity to be sustained during their stay. In chapter five, young people's perspectives on disrupted connectivity demonstrated the negative affects removing or limiting connectivity can have on young people's Outward Bound experiences. Drawing on Turner's (2015) notion that we habitually expect to be connected at all times, the lack of connectivity, which included an inability to take photographs for memory preservation, resulted in intense emotional responses that included both anxiety and anger. Meanwhile, in chapter six, I presented findings from my analysis that I felt demonstrated how young people's online cultural spaces were influencing understandings and interpretations of nature. Drawing on notions of networked worldbuilding (e.g., Hartley et al., 2021), factors such as nature tattooing from TikTok and understandings of flora from Minecraft informed young people's sense-making baselines in the natural world. This, in tandem with the ways in which online spaces such as Netflix and TikTok provided a form of

sociocultural script in the outdoors (Mendelson, 2023), provided evidence of a postdigital entanglement which centred on young people's networked understandings of place and of each other, even when their mobile technologies were absent.

As seen in chapter seven, the data intersected with postdigital theory in ways that were both complex and nuanced. But, if we take as a foundation that “we are increasingly no longer in a world where digital technology and media is separate, virtual, ‘other’ to a ‘natural’ human and social life” (Jandrić et al., 2018, p. 893), then the evidence presented in this study offers initial insight into how a postdigitally entangled childhood can be positioned within residential OAE at Outward Bound in the UK. In this sense, the thesis makes a conceptual contribution in that it provides an empirical “test of usefulness” for the theory. Given empirical evidence in relation to the postdigital is limited, the thesis has demonstrated the efficacy of the theory in relation to deconstructing the relationships between in-person place engagement at Outward Bound, and online, networked, baselines constructed on social media or streaming sites. Through documenting evidence of the “great convergence” between the analogue and the digital (Jandrić & Knox, 2022), the study has provided a much-needed set of evidence that may contribute to the development of postdigital theory moving forwards.

This final chapter initially returns to the three research questions and summarises the study's findings in relation to each (section 8.2). From there, section 8.3 outlines the recommendations for both practice and research, in particular the ways in which postdigital characterisations of social life may further enhance the learning outcomes associated with participation in an Outward Bound programme. Alongside this, the limitations of the study are outlined. Finally, the chapter summary includes some of my own personal reflections

from my PhD journey, as well as my hopes for future research which may build on this initial multiple-case study on the entanglement between mobile technologies, networked spaces, and experiences of residential OAE.

8.2. Returning to the Research Questions

Three research questions underpinned the study and have been at the centre of my attention throughout my time spent online with instructors and in-person with young people across the three centres. This section returns to each research question where they are followed by a summary of my findings.

1. How do instructional staff perceive mobile technologies and social media use by young people during residential experiences at Outward Bound?

Three core findings were constructed from my online interview with instructors. First, instructors preferred their practice to be free of young people's mobile technologies, and evidence of a practice-based approach at Outward Bound was present which centred on how screens were perceived to distract from Outward Bound's purpose in the UK. Instructors often linked this to the second finding, that is, instructors viewed engagement online as "fake" and no substitute for in-person and in-place engagement at Outward Bound. This sense of fakeness was linked to instructors recognising young people as addicted to their mobile technologies and that Outward Bound programmes provide young people with an antidote to their always-connected lives. In some cases, instructors linked this to the historical purpose of Outward Bound encompassing resilience and discipline. This also raised important questions regarding the wider culture present within the trust and was highlighted again in relation to young people's experiences when answering research

question two. Finally, instructors viewed the presence of young people's technologies on an Outward Bound programme as providing a portable comfort zone. Whilst some instructors recognised that it is important for young people to feel emotionally secure during their residential trip, others described a portable comfort zone as standing directly in the way of Outward Bound's learning outcomes, especially in relation to contact with parents.

2. In what ways do the presence or non-presence of mobile technologies at Outward Bound affect how young people experience their residential outdoor adventure education trip?

Two findings were generated in relation to the second research question through the observations and focus groups undertaken with young people. Through not having their mobile technologies, or through a lack of ability to connect (e.g., no signal or the Wi-Fi being switched off), young people expressed significant adverse emotional responses. Although I am not a psychologist, young people's responses centred on what most would recognise as forms of stress, anxiety, and anger in relation to not being able to speak with home. Alongside this, some young people experienced pressure from parents to maintain contact and, at Smew, young people struggled to remain connected through the use of the centre's payphone. Whilst young people told me about their emotional responses around not being able to speak with home with a sense of urgency and disbelief, they also told me how they wanted to use their mobile technologies for the purpose of memory preservation. In particular, taking photographs was a primary motivation for using a phone at Outward Bound in order to remember landscapes that were unlike their home environments. At the Starling centre, two young people brought aspects of nature back to the centre for photography purposes when they did not have their phones on activity.

3. What role might online media, video on demand services, and gaming platforms have in shaping how young people engage with outdoor spaces and places when at Outward Bound?

Through my observations across the three Outward Bound centres, online media and gaming platforms provided young people with an experiential baseline from which engagements with nature and with others at Outward Bound were filtered. Indeed, networked environments appeared to mediate in-person interactions at Outward Bound. Spaces such as TikTok, Minecraft, and Netflix were seen to influence how young people understood the natural environment. My analysis indicated that a sense of knowledge development and transfer is present between young people's online lives and in-person nature engagements at Outward Bound. Alongside this, person-to-person engagements in the outdoors at Outward Bound were often informed by digital youth culture and facilitated a hard-to-see communicative code which underpinned group interaction.

8.3. Recommendations and Study Limitations

This section is split into two and firstly presents the key recommendations that have been developed following the study and, secondly, outlines the study's limitations.

8.3.1. *Recommendations from the Study*

With this multiple-case study offering an initial evaluation of mobile technologies and social media at Outward Bound in the UK, it will be necessary for further research to build on this study to evaluate whether and in what ways the findings may be transferred to other

settings. This is especially given present research on the topic in outdoor education more broadly has recognised technology as a primary threat to the traditional purposes of outdoor education (e.g., Martin, 2010; Payne & Wattchow, 2008; Uhls et al., 2014). When applying this study to future research, it is recommended that researchers acknowledge young people's postdigital entanglements (Fawns, 2022), and that, regardless of whether mobile technologies are present in the outdoors or not, acknowledge how digital youth cultures may inform and filter experiences in nature. Indeed, section 6.3 considered how networked spaces framed how young people understood and connected to nature at Outward Bound, raising important considerations on how nature connectedness is measured and implemented (see Natural England, 2020).

I have also noted a somewhat adult-centric stance in research and conceptual papers that discuss the roles of technology in the outdoors without speaking to young people themselves (e.g., Bolliger et al., 2021; DeHudy et al., 2021; Hills & Thomas, 2020; van Kraalingen, 2021). The present study has demonstrated the requirement for a research base to be developed that is responsive to young people's opinions and experiences in relation to their networked worlds and learning outdoors. Indeed, drawing on the works of Herring (2008) and Smith et al. (2022), I have been cautioned against exoticising young people's uses of mobile technologies, social media, and gaming. Indeed, it may be necessary to develop a research base in outdoor education that focusses on the youth experience, and whether residential OAE experiences "are working for young people themselves" (Smith et al., 2022, p. 551). Alongside this, the inclusion of parents and their situated experiences surrounding their child "moving out" for a short period of time to attend an Outward Bound programme also requires attention. It may be that additional information is necessary to send to parents in advance of their child travelling to Outward Bound to alleviate parental

tensions alongside the pressure young people experienced to maintain connection.

Following engagement with the working group that has been set up at Outward Bound to respond to this research (see section 3.7.1), at the time of writing, the bookings team are consulting on how best to communicate this information with schools, parents, and young people.

For Outward Bound as an organisation in the UK, the discrepancies between the instructor and young person data will require further examination. However, with Outward Bound currently evaluating how learning and adventure can “rebound” following the Covid-19 pandemic, this study’s findings can provide an empirical basis from which young people’s networked, postdigital, baselines can be accounted for. I believe that an Outward Bound that recognises the postdigital condition could be better placed to meet the needs of contemporary learners in their always-on networked worlds. It may, therefore, be necessary for Outward Bound to develop a package of continuous professional development content around young people’s postdigital baselines that can be applied to the current suite of instructor training opportunities that seek to develop learning and adventure strategies. This represents the primary practical recommendation from the study and calls on Outward Bound to develop approaches to practice that are more receptive to young people’s networked baselines. Interestingly, in a response to my research from the director of learning and adventure at Outward Bound in *Horizons*, it is outlined how Outward Bound “have already begun making inroads in this area, with the rollout of training across Outward Bound to increase our understanding of young people and also upskill staff with rapport and empathy-building skills” (Cooper, 2023, p. 23). This includes training on young people’s uses of mobile technologies in their day-to-day lives and responds to the need for empathetic

approaches to young people's residential experiences at Outward Bound. To date, 87% of staff have received training in this area.

Alongside these developments, there may be a need for research on how learning is transferred from Outward Bound to the home environment in this networked world. In particular, it is recommended that organisations such as Outward Bound construct purposeful approaches to the opportunities present in relation to networked contact with parents. This might include the development of TikTok and Instagram reels by young people during their Outward Bound week, which could provide a stimulus for presenting and reflecting on their residential experiences once back home. Indeed, it would be interesting to consider whether photography and past-presenting (see Macdonald (2013) and Predescu (2020)) offer opportunities for a visual archive to be curated by young people that may be returned to throughout the life course. In essence, the Outward Bound experience may be re-presented long after young people have returned to their home environments. Also, following engagement with Outward Bound's Mission and Charitable Funding Oversight Committee where I shared my PhD findings, an idea was put forward that Outward Bound could develop a Minecraft version of its centres. Given the centrality of Minecraft in the data, and the ways in which it framed young people's conceptualisations of the outdoors (see section 6.2.1), encouraging young people to explore their Outward Bound location through Minecraft before they travel to a centre could, in some ways, respond to young people's postdigital realities. Having discussed the study's findings with members of Outward Bound's senior leadership team, trustees, and staff members, my sense is that Outward Bound are not only engaging with the issue, but also identifying ways throughout the trust to help young people navigate their residential outdoor education experiences.

Finally, as I have considered the data and reflected on my time spent at the three Outward Bound centres, I have returned to the United Nations (1989) Convention on the Rights of the Child and the updated comment on “children’s rights in relation to the digital environment” (United Nations, 2021). Two key factors stand out that may be important considering the data presented in this study. Firstly, in section VI, it is stated that young people have the right to access information through technology and “that the exercise of that right is restricted only when it is provided by law” (United Nations, 2021, para. 50). And secondly, in section XI, networked spaces are recognised as promoting young people’s “right to culture, leisure and play, which is essential for their well-being and development” (United Nations, 2021, para. 106). These two factors could be important for Outward Bound to consider in relation to when young people’s mobile technologies, or portable comfort zones, are removed from them for the purposes of learning and development.

8.3.2. Study Limitations

Given Silverman (2021) suggested that a study’s conclusion should as much celebrate the study’s achievements as well as any errors or aspects of the study that could have been done differently, this section details the methodological limitations and personal constraints I have identified throughout the study. Firstly, following Hammersley (2011), it is necessary to acknowledge that any research activity “involves presuppositions on which it necessarily relies – without which it could not be pursued” (p. 36). Whilst I outlined my positionality within section 1.3, a different researcher coming at this study with alternative ontological, epistemological, and practical assumptions may have discovered something altogether different. I have, therefore, taken steps to acknowledge my own biases, including my own

generational partiality, but a natural limitation of this study is me and my values and judgements. This is especially so for the data presented in relation to research question three which drew primarily on observational and informal conversation data. Despite carefully reconstructing the moments I observed in my fieldnotes, it is likely that aspects of young people's networked entanglements with nature and each other were missed and/or overlooked. That said, I also acknowledge that my background and interests may have benefited the identification of young people relating nature to their online entanglements. Alongside this, the low number of participants is a natural study limitation. The findings presented in this thesis come from a small subsection of Outward Bound instructors and of over 20,000 young people who visit an Outward Bound centre in the UK annually. The findings should, therefore, be treated with a degree of caution and are not necessarily transferrable to other contexts without greater examination.

Despite a diverse population taking part in the study, I did not find any differences in the data relating to gender, socioeconomic background, religion, or ethnicity. It may be that these factors did not influence the ways instructors viewed mobile technologies, or the ways young people experienced Outward Bound. However, given literature in outdoor education is replete with data that identifies the field as male-dominated, heteronormative, and situated within Global North societies (see Kennedy and Russell (2021) and Gauthier et al. (2021) for examples), I found it surprising that these factors did not necessarily feature in the data. However, given the recommendations from Holmes (2010) and Parker-Jenkins (2018) on researcher positionality, I absolutely acknowledge that my position as a white, cisgendered, male living in the UK could mean that I am too wrapped up in the cultural foundations of outdoor education to recognise certain cultural phenomena. I therefore make no claims regarding the presence or absence of differences in the data between

separate groups in the study, but I did remain as attentive as possible to this possibility throughout my engagements with participants and the data.

There are also more practical aspects that have limited this study. For instance, the temporal proximity of Covid-19 lockdowns in the UK to my time spent with young people could have influenced young people's sense of dependency on their parents when at Outward Bound. It remains unclear whether, given this was often young people's first trip away from the home environment in over two years, whether this made the links between connectivity disruption and speaking with parents particularly visible. I began generating data 12 months after the final Covid-19 lockdown was lifted in England on May 17th 2021. If the study were undertaken again, it may be that young people's dependencies on parents for emotional safety would not come through so prominently. On the theme of young people's home environments, I did not generate data with parents. Although I did not construct a research question around parental experiences and the mobilised connectivity of their young people, if I could do the study again, I would seek to include the voices of parents. This could have helped me evaluate the online and connected relationships between young people and their parents in advance of young people's Outward Bound visits.

Finally, I made an error in relation to conducting a pilot of the focus group interviews. With so much preparation going on in advance of my trip to the Skylark centre, I overlooked the importance of a pilot despite having valued the pilot interview I undertook before I generated data with the instructors. I only realised this oversight after I had arrived at the centre and so my first focus group became somewhat of a reactive experience, and I had to work hard to ensure this first session stayed on track. Thankfully, I felt that the young

people responded to questions in the first focus group in ways that related to research question two. Following the first focus group, I rang one of my supervisors immediately after and we discussed how it went. As I mentioned, I was happy with the focus group content and spent the rest of that evening reflecting on my position within the focus group and whether any inadvertent power relations were developed between myself and the young people. Ultimately, I think I got away with this error, and I was able to include the data generated in the first focus group. Whilst I had a few weeks' notice in advance of this first visit to an Outward Bound centre for data generation, I think my inexperience and apprehension around my fieldwork initially clouded my clarity of thought. Certainly, if I could do it again, I would conduct a pilot focus group to test the design and focus of the questions and format I designed.

Alongside this, I had not anticipated just how busy young people would be during "downtime" throughout the evenings at each centre. I conducted focus groups during this time, but these data generation episodes were often shoehorned between dinner, activity time, hot chocolate, and sleep. I do not think I could have changed this and, by the time I got to the Starling centre, this time limitation had come to be expected. That said, with the promise of hot chocolate after a focus group, I often sensed a hint of excitement as focus groups came to a close. After all, who would not be enthusiastic at the prospect of an evening hot chocolate after a busy day of adventure? This time limitation generated quite a lot of pressure on me as a researcher and, if I could do it again, I would seek to find an alternative time in the day to conduct focus groups. That said, I was incredibly grateful for the time young people gave me, and I absolutely recognised that a hot chocolate with friends was a high-level priority.

8.4. Chapter Summary and Final Thoughts

A postdigital characterisation of residential OAE remains in its infancy, and there is much more to be done to evaluate the impacts of mobile technologies and networked spaces when taking young people into the outdoors. As Montgomery (2015) previously suggested, we must ask “[h]ow will growing up in this highly connected, data-driven culture affect the way that young people are socialized?” (p. 269). Whilst remaining mindful of works such as Bolliger et al. (2021) on the benefits of technology-free outdoor education, this thesis has examined the influences of highly connected contemporary youth cultures as they intersect with residential experiences at Outward Bound in the UK. Throughout my interrogation of the data, it became clear that the postdigital premise of our online and offline lives being blurred (e.g., Jandrić et al., 2018; Reed, 2022a) was upheld in relation to the young person data. That said, in the instructor narratives, a degree of postdigital resistance is present in that Outward Bound courses are positioned as a form of technology and connectivity counter-narrative. This tension has been examined throughout this thesis and offers the field of residential OAE an empirical basis from which other programmes and organisations may consider the role and impact of mobile technologies and networked spaces on young people’s experiences and learning.

Of importance for young people in the study was maintaining a sense of connection back home. This finding, opposing other research which positions social media as a space for young people to escape parents (e.g., Livingstone, 2008; Marwick & boyd, 2014), recognises the importance of what Taylor and Bazarova (2021) describe as “dyadic connected availability” for young people at Outward Bound (p. 191). A sense of reciprocal networked connectivity with a parent was identified as an important factor in young people’s

residential experiences, which also hold importance for considerations around the construction of safe environments for learning. The study has also provided initial insights into the collision between digital youth cultures and Outward Bound programmes in the UK. Drawing on demes (e.g., Hartley, 2018, 2020; Hartley & Potts, 2014), I identified young people's Outward Bound experiences as being wrapped up in digital youth cultural references, language, and codes. This led to a recognition that young people's entangled online and offline worlds facilitated a sense of "worldbuilding" (Hartley et al., 2021) where participation and consumption in networked environments foregrounded a sense-making baseline for in-person and in-nature engagements at Outward Bound. Reflecting Mendelson (2023), networked spaces provided a rapidly changing social script that, at the point I engaged with young people, provided a foundational lens through which young people generated their engagements, interactions, and understandings of their Outward Bound experiences. The research has generated important questions for Outward Bound moving forward, particularly in relation to instructor approaches which very often sought to withhold young people's access to their mobile technologies and networked support structures.

My time spent online with instructors and in-person across three Outward Bound centres has been and will remain a formative factor in my life. Although it was not that long ago, my time spent at those Outward Bound centres already feels like a lifetime away. I have consistently flicked back through my fieldnotes, not only as a form of data familiarisation, but as a way of looking back at a happy and fulfilling time in my life. Despite young people's disrupted connectivity and adverse reactions to not being able to speak with home, the positive influence of the Outward Bound processes I witnessed cannot be overlooked. There is a need for more research and, perhaps, a greater appreciation of young people's

postdigital entanglements, but, for now, I will leave this thesis with a private note I left myself following the campfire activity on my final evening at the Starling centre:

Well, that's it, tomorrow is my last day of fieldwork at my last centre, I must return to my desk. I feel at home at Outward Bound, in the forests, in the mountains, on the lakes. I will leave here content, but I will also leave with a tinge of sadness, I feel tearful. I've met so many amazing young people in this time, they are why I'm here. It is the young people at Outward Bound who fill me with hope.

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Appendices

Appendix A

Example letter sent via email to the school who participated in the study at the Starling centre.

RE: PHD Study/Aberdovey Centre - [REDACTED]



REED Jack <Jack.Reed@ed.ac.uk>

11/04/2022 16:22



To: [REDACTED]

Hi [REDACTED]

Nice to virtually meet you too. Thanks for your interest in my PhD study!

The research is investigating how mobile technology (e.g., phones) and social media influence young people's experiences of residential outdoor education. Outward Bound and The University of Edinburgh put the PhD together and I started the PhD back in October 2020.

The PhD has two primary phases, phase one has just finished, which consisted of interviewing instructors at Outward Bound. Phase two is now just about to start, which is working with schools travelling to Loch Eil, Ullswater, or Aberdovey. I have a few methods for data collection during this phase, these are:

- Standard observations – basically hanging out during the programme and completing activities to see how the presence or non-presence of phones plays out in practice.
- Two or three short focus groups with students towards the end of their Outward Bound visit. These are based around reflecting on phone use during the week and, I hope, they will be interesting, educative, and valuable for all involved.
- A couple of short interviews at anytime during the week with visiting staff members focussing on their experiences of and perspectives on student phone use whilst at the centre.

Now, that could sound like a lot, but my data collection is intended to be entirely naturalistic and student experiences and learning is absolutely the priority. If you have any questions about any of this, please don't hesitate to get in touch.

The other small issue is that I currently have a diary clash the week you are visiting [REDACTED] get this resolved at my end and I'll keep you posted – but, just to say, I would absolutely love to work with Khalsa Secondary Academy as part of my PhD and I'll work on fixing the diary clash.

In terms of preferred or recommended policy, I am very happy to be led by you and the students. If possible, I'd like to keep everything as natural as possible, and so if phone use is reasonably relaxed, that is totally fine with me and would fit well with the purposes of the research.

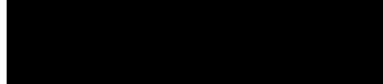
Apologies for the long email here and I'm looking forward to working alongside you.

Kind regards,

Jack

Appendix B

Response to my application requesting permission to undertake research in schools in one of Scotland's cities. Information relating to the location of the school have been covered.



COMMUNITIES & FAMILIES

Mr Jack Reed




Date 20/04/22

Your ref

Our Ref MG/AF

Dear Jack,

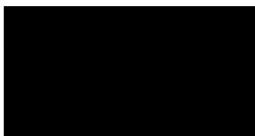
I am writing in response to your application requesting permission to undertake research in schools in 

Your request has been considered, and I am pleased to inform you that you have been given permission in principle to undertake your research. I must stress that it is the policy of this Authority to leave the final decision about participation in research projects of this kind to Head Teachers and their staff, so that approval in principle does not oblige any particular establishment to take part.

I request that you forward a copy of your completed findings to me when they become available. In this case an electronic summary of your thesis would be preferred. Your work may be of interest to a number of staff in the Communities and Families Department.

I would like to thank you for contacting the Communities and Families Department about your work, and wish you every success in the completion of your project.

Yours sincerely



Psychological Services, Communities and Families



Appendix C

The semi-structured interview schedule used throughout the interviews with instructors between January and April 2022.



THE UNIVERSITY
of EDINBURGH

University of Edinburgh,
Moray House School of Education and Sport

Interview Guide

Introduction

- Thank the participant for taking part in the interview.
- Briefly explain the study.
- Outline that the interview is being recorded on a Dictaphone.
- Describe what will happen after the interview: Data storage, transcription, anonymisation of data.
- Ask if the participant has any questions before the interview begins.
- Remind the participant that they can stop at any time, and if they do not wish to answer any of the questions then they do not have to.

Warm up questions

1. Can you tell me what your role is at Outward Bound?
2. Can you also tell me how long you have been working at Outward Bound?
 - a. How long you have worked in the outdoor sector?
3. In this interview, we will be talking about networks (like social media), mobile technology, and connectivity. Could you give me your definitions for these? [Go through each, one by one].

Topic One: Instructor uses of networked spaces and connectivity in their everyday lives

1. I'm interested in your personal engagement with social media, could you take me through a day in the life of [name] on social media? What does that look like?
 - a. When did you first use social media?
 - b. Some people describe their social media profiles as a virtual extension of themselves, does that ring true for you?
 - bb. Tell me more.

2. Can you tell me about what social media platforms you do and do not use?
 - a. Can you tell me about your reasons for using them?
 - b. How often do you use them?

3. Thinking about the social media that you engage with most - what is it about that platform that appeals?
 - a. What is the biggest reason that you would pick up your phone and go on one of these platforms?

4. What roles (if any) do you think social media plays in the lives of young people these days?

Topic Two: Using networked spaces, mobile technology, and connectivity in formal practice

1. In your practice, do you allow young people to bring their mobile technology out onto activities with them?
 - a. Can you tell me more about your decision making process here?

- b. Based on yes or no from the main question, do you employ any strategies or approaches when working and/or negotiating with young people about using or not using mobile technology during their Outward Bound visit?
 - c. How do young people react to your approach toward being allowed or not allowed to use their phones during an Outward Bound course?
 - d. What about on the bus to and from the activity?
 - cc. Can you tell me more about this?
 - e. Would you say that your approach is similar to other instructors at Outward Bound? Why would you say this is?
2. We have spoken a lot there about mobile technology specifically, would you like to add anything about whether you use networked spaces and online connectivity (e.g., social media) in your practice?
- a. Can you tell me more about this?
 - aa. What is the impact?
 - ab. How do young people react to this?
 - b. Is this something that is replicated across Outward Bound?
 - bb. Link here to any cultural norms or management led guidance at each centre.
3. How do/would you feel about using mobile technology and/or networked spaces and online connectivity in your practice?
- a. Is it something you have always done / something you are likely to do in the future?
 - aa. If yes, why? If no, why not?

4. During what activities across a young person's visit to Outward Bound might it be appropriate for them to use mobile technology and networked spaces when out in the field?
 - a. What might you expect to be used? Can you tell me about the reasons for this?
 - b. Are there any specific times of day beyond the delivery of formal activities that it might be appropriate for young people to be using their mobile technology?

Topic Three: Perspectives on networked spaces and connectivity for young people during programme downtime

1. In your practice, do you see (or hear about) young people using their phones during programme downtime (e.g., during mealtimes or at night)?
 - a. If no, for what reasons do you think this might be?
 - b. If yes, what do you think about this?
 - bb. For what reasons do you think young people might seek to use their mobile technology when at Outward Bound?
 - cc. Can you tell me more about this?
 - dd. Do you have any examples from your practice?

Based on above answers, ask one of two questions.

- 2.1. (If no) From your experience, how do you think **not** having access to mobile technology during programme downtime might affect an Outward Bound programme for young people?
 - a. Can you tell me more?
- 2.2. (If yes) How do you see uses of mobile technology during programme downtime influencing the experience of Outward Bound for young people during their residential visit?

3. You have discussed mobile technology and networked spaces as X, can you tell me a little about what has informed your perspective on this?

Topic Four: Big tent questions (for use if necessary/relevant)

1. Do you think young people should be able to access their mobile technology (and therefore networked spaces) during their trip to Outward Bound and can you tell me about the reasons for this?
2. Do you see any negative impacts on networked connectivity and mobile technology playing out at Outward Bound?
 - a. How?
 - b. Where? Formal activities, downtime, somewhere else?
 - c. Any specific groups?
3. Do you see any positive impacts on networked connectivity and mobile technology playing out at Outward Bound?
 - a. How?
 - b. Where? Formal activities, downtime, somewhere else?
 - c. Any specific groups?

Conclusion

1. Is there anything else you would like to tell me about mobile technology, networked spaces, or connectivity in your practice as an instructor at Outward Bound?

2. Do you have any questions for me about all of this?

Then conclude with:

- Ask if they have a pseudonym they would like to be referred to by in the study.
Emphasise that they can offer this at a later date if they would like.
- Remind the participant about their right to withdraw from the study.
- Confirm email address to send the transcript to.
- Thank the participant for their contribution to the study.

Appendix D

Excerpt of the transcript generated from the pilot interview in December 2021, including my comments and reflections on certain parts of the interview.

Researcher: So, the young people specifically?

Mark: Young people specifically, so no, there is a policy, well there's not a policy at [organisation], that's a lie. There's a [pauses], no, young people don't take their technology with them, and that's more often than not, I would assume, because the school has a policy of no technology during, you know, class time, day time, or whatever. Umm, I actually don't know if there's a policy that is driven by [organisation], but in the 5 years that I have worked there with the vast majority of the groups that we have, it's, I can safely say I think that there's never been a group that have been allowed their phones in the evening or in the daytime. Yeah, phones, it's either a no phones rule, or... the only exceptions to that would be if it was for medical reasons. So, umm, occasionally we get young people with diabetes who manage it through apps on their phone and things. Umm, and, yeah, potentially, possibly if there are young people who like, a condition of them coming is the direct contact from home, umm, but yeah, the vast majority, no, young people don't have access to their mobile phones. Umm, from the P7 groups, that being said the Duke of Edinburgh groups, yeah, they've constantly got their phones. You know, like, because they are not part of an organisation as such. They are independently off their own sort of thing. Most of them are, you know, almost adults, or you know, or are adults, so... so yeah.

Researcher: Ah, there is so much to pick up on there, if that's alright?

Mark: Yeah! Of course.

Researcher: I'm really interested in for those young people who aren't allowed to have their phones on an activity, or during the night, or whenever, how do they kind of respond to that? What's the kind of reaction, I guess?

Mark: [sharp intake of breath] Honestly, I think it's just normalised for the vast majority of them because that are in a school environment. Because it is normal at school during class time, so certainly for the primary 7's, it's just a case of, you know, they know they are not supposed to have their phones, and they've either been told not to take their phones or they have had their phones liberated if you like by the teachers before they've come. So, yeah, [pauses] there's never really... and I think the culture at [organisation] isn't one of, you know, [pauses] discussing it in some ways, it's just, it just, like, forget about it, you know. And then, yeah, but sometimes I'll use it as a "oh, you realise you've not had your phone all week," and then the kids will say "Oh yeah! Oh wow, this is the longest I've ever been without my phone" [animated]. Umm, but yeah, it's uh, yeah it is not really a talking point to be honest.

Researcher: Yeah, oh that's fascinating.

Mark: Part of that is because, well no, there's, I guess, to come back to something you said earlier on, there is very limited Wi-Fi and there is no phone signal at [organisation] anyway.

No level of intentionality, watch for this in upcoming interviews.

Beginning to really see an answer to the RQ here - instructor perception and centre culture is emerging as "hesitant to allow YP to use their phones, and the technical architecture of the centre (e.g bad Wi-Fi and no signal) means that they do not need to worry about it in their practice so much, and that this is representative of broader assumptions within the centre.

Appendix E

Feedback from visiting staff members following my week-long engagements at the Starling and Skylark centres.

Starling centre

On reflection I am so impressed with the work carried out by the outward-Bound Trust. Their planning, infrastructure, structured activities, safety measures, quality of food and outstanding instructors created such a valuable opportunity for the 16 cadets to grow and learn about themselves building resilience, teamwork, self-confidence and self-reliance.

To say the week was a powerful stimulus for personal development would be a huge under-statement. We were joined by a researcher from the University of Edinburgh, embedded in our unit and programme for the entire week, completing a study commissioned by the Outward-Bound Trust to determine the impact of mobile phones and social media on outdoor education. The feedback from Jack Reed about our cadets was nothing short of incredible.

The feedback from the Outward-Bound Trust on the performance of our cadets was equally inspiring.

Skylark centre

Some wonderful feedback from [REDACTED]



11/05/2022 13:21



To: REED Jack

This email was sent to you by someone outside the University.
You should only click on links or attachments if you are certain that the email is genuine and the content is safe.

"It was fantastic to have Jack on board. He integrated really well into the groups, I think there were some tears from the students knowing they wouldn't see him again!"

Some wonderful feedback from [REDACTED] after last week's course!

[REDACTED]

The Outward Bound Trust
Hackthorpe Hall, Hackthorpe
Penrith, Cumbria, CA10 2HX
T [REDACTED]
W outwardbound.org.uk

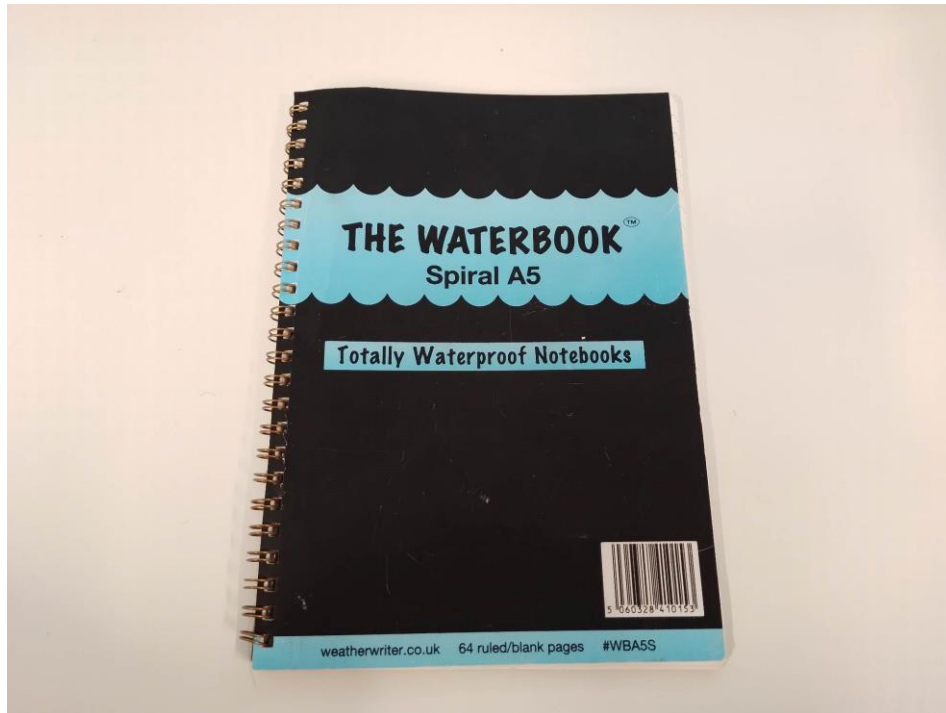
#MORETHANYOUIHINK



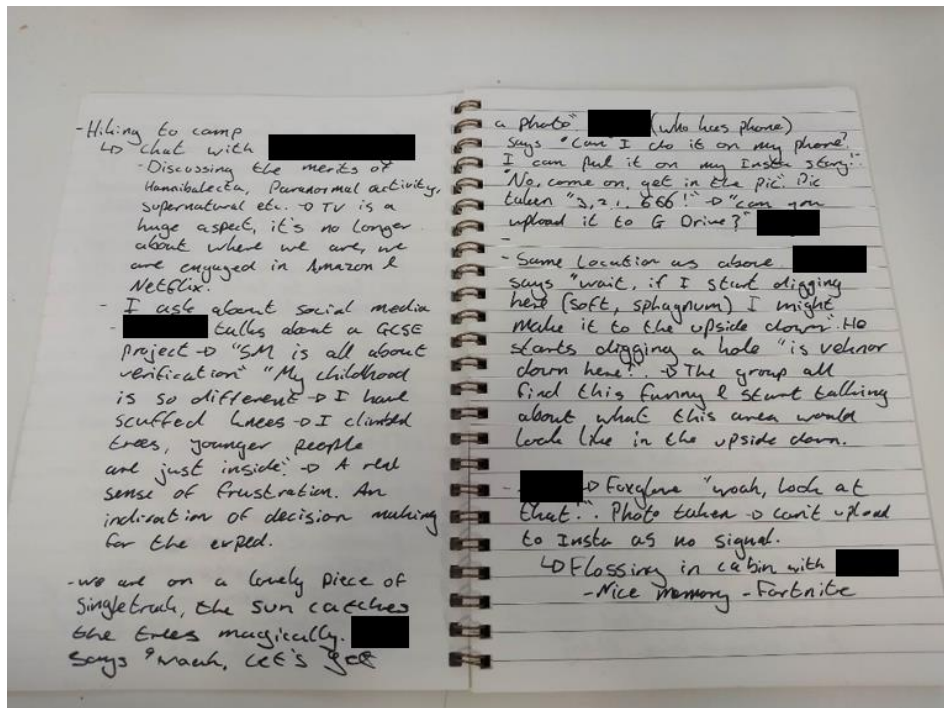
<https://www.outwardbound.org.uk/feeling-good-and-functioning-well>

Appendix F

Selected images of fieldnotes jottings from my field book. This example comes from the second day at case study one where we are on expedition at the Starling centre.



One of three waterproof field books used throughout the research. One book was used for each week.



Jottings from part of day two at case study one. Black bars inserted to protect participant anonymity.

Appendix G

An excerpt from day two of my reconstructed fieldnotes completed following my return to the desk after my engagement with at the Starling centre.

Starling: Fieldnotes and write up

Day 2: Water and expedition

Or meeting with the group on Tuesday morning, I am told that [NAME] Mum wants her to take their phone with them on the expedition. [NAME] seems relieved at this as they have been injured. It seems that maintaining some level of connexion during the expedition is important. I am wondering whether, just like the bus at the Smew centre, whether the tent might become some form of postdigital space?

Water activity on beach

Instead of walking to the beach this time, the instructors decided to take the group there on a minibus. On the way there is lots of chat about Instagram. It appears that each room has been sharing videos from the night amongst each other there has been snoring, sleeping, etc. The short road journey is a really beautiful drive along the coast, but once again the bus appears to be a space for digitally situated communications either alone or amongst the group.

Once we get to the beach, we all get off the bus and head onto the beach where we are going to all run into the sea and submerge ourselves. Once again, it is a really hot day and so the group welcome an opportunity to call off. [NAME], the instructor, demonstrates how to safely run into the water and, as he does this, shouts out “let's all do the salmon”. He dives

in, shaking his body like a salmon in spawn, it is a really funny moment and the entire group are giggling and laughing to themselves and are keen to give the salmon jump a go themselves. [NAME] my pipes up, “oh, it's like that Instagram filter!”. The group agree, and are motivated to do it “just like Instagram”.

Once the swimming activity has been completed, we now move to the jetty jump. [NAME] wants to take a photo of Inder’s jump. Inder is super nervous, and I don't blame him, the jump into the sea is one, quite a long way but, two, is also into moving water and you are required to swim at quite a high speed in order to reach the ladder that you need to get out of the water on. [NAME] calls over to [NAME], “I want to take a video so he can see how brave he is, I'll show him later”. This is helpful for [NAME], the camera is facing his way and, almost like it's a form of motivation for him, he takes a deep breath and jumps into the water shouting loudly as he goes. In many ways I am seeing here an intentional link to memory and to reliving this experience. Through [NAME] having her phone and through her filming of Inder, this moment may be relived for a very long time.

Expedition packing

As we are prepping / packing for expedition, it is now time for the group to hand their phones in. I note that last minute messages are sent, quite a few of the young people are frantically typing. [NAME] asks “can I have it on the bus?”. “No, it's the same for everyone,” this is the visiting staff member. The group seem ok but there is an initial sense of sadness when the phones are asked for. The phones are all placed on a fire hydrant just to the side

of where the group are packing for their expedition. I take this moment to grab a quick picture of the phones placed rather precariously on top of the fire hydrant.

As we pack for the expedition, the other group from the same school are also packing. [NAME] goes over to them and asks what they are doing with their phones. [NAME], the instructor says “we've not had that conversation yet”.

The visiting staff member chimes in in a sarcastic tone,

“ah, well, what will mummy and daddy do? They want to get in touch with them. It's nice for them to take photos too,” this last bit being said in a less sarcastic tone. All the while, I watched three girls at the back of the group they seemed to be acting quite nervously. “I'm not handing my phone in,” says one fiddling with their hair. They almost look wide eyed, “there's no way I'm handing mine in,” another whispers. The chat on phones then passes, no decision is made, the instructor doesn't seem too worried. The group keep their phones.



Appendix H

Focus group guide to help facilitate discussion with young people.

Prompts for focus group

Record

Consent

Places of participants?

Describe what's going to happen

Prompting questions

1. How have you felt when you haven't had access to your phones this week?
2. How have you felt when you did have access to your phones?
3. Have there been any times this week when you wished you had your phone?
4. When you have had your phone, what have you used it for?
5. Where have you used your phone?
6. What's the wi-fi / signal been like?

Tasks for data elicitation

1. Sentence completion

Offer a sentence starter and then ask to complete the sentence.

- "If I had my phone this week, I would have...".
- "When I used my phone this week, I...".
- "The locations I have used my phone are...".
- "When I finish at Outward Bound, the first thing I'll do on my phone is...".

2. Emoji elicitation (Mentimeter or manually)

- “Not being able to use my phone this week made me feel...”.
- “When I did have my phone, I felt...”.
- “The thought of getting my phone back on Friday makes me feel...”.

3. Draw a map of the centre – mark on it where you have used your phones

- Groups of 3 – 4. Where have you used your phones?
- Facilitate discussion.

4. Young people generating a question

Not good for reluctant groups – good for verbal groups.

Each young person devises a question to ask to the rest of the group about phones and social media during their Outward Bound visit.

Appendix I

Semi-structured interview schedule used for the visiting staff interviews.

Questions for semi-structured staff interviews

Consent

Record

Describe what's going to happen

Questions

1. Can you talk me through your schools' approach to phones during this Outward Bound visit?
2. Why has your school taken the approach it has towards phones?
3. What benefit does your approach have for students?
4. Have you worked with Outward Bound at any point during the planning phase around the place and use of phones?
5. What role do parents have in all of this?
 - a. As a teacher, do you feel any pressure to post on social media for parents?
 - b. Do you think young people feel like they need to get in touch with parents while at Outward Bound?
 - bb. Why?
6. From what you have seen, what impact do phones have on young people's experiences of Outward Bound?

Appendix J

Transcript excerpt from instructor interview at the Smew centre.

Charles interview transcript excerpt – Smew centre

Researcher: And how to young people kind of react to those sorts of conversations, are young people getting quite emotional possibly about the prospect of not having their phones, have you seen any of that?

Charles: Oh yeah, yeah, stomping, crying, toys out the pram, “fine, I’m just not going out today” or you know you say it at the start of the week, and then the next day, everyone suddenly develops a stomach bug, it goes right the way through. But also, it is really interesting, I think that’s when it comes from me, so, if there’s a disconnect or there’s not a fairness across the board. If the school as a blanket goes “everyone’s going to hand their phones in at nine o’clock and you’re not getting them back till five,” then everyone kind of goes “oh, well, ok, no one’s got their phone so that’s fine”. But if it’s just my group and they’re like “well, Charice got her phone” and you have to be like “yep, that’s their decision,” and that creates a big upheaval. But yeah, it does, full tears, temper tantrums, and sometimes you just have to ask “what is the overarching reason that they’re here? Is it a week without phones? Or is it to get them into wild places and to maybe appreciate the time where they’re not looking at their phone?”. And you can still do that even with a phone in your pocket, but half of your brain is still going to be on that phone in their pocket. And you could be looking at a great view and they’ll go like “oh, I wish I had my phone to take a photo,” and that will happen every time we go out somewhere, you know. They’ll be like “I wish I had my photo to take a photo,” and I’ll be like “well, you just have to remember it and describe it to people instead, or I’ll take a photo for you, and we can send it to the school”.

And it's like "uhhhh," it's almost as if memory is a forgotten art. You have that instant gratification, but I don't think they want a photo to show people necessarily, they want the photo to gain a reaction from other people and be like "look, this is where I am right now, do you like that?". Yeah if you just gave them a camera, which we do sometimes, they have cameras, it's almost like "you've got the camera there," and they're like "yeah," "why do you need the phone then?". But yeah sometimes you just have to give him because of the outcry that is no phones on session. Which is mad! And then even the time where you're like "everyone's definitely handed their phone in," and then you'll discover it on expedition or something, "why? Why? [downbeat tone]". And then again that creates "urghhhh, Steve has got his phone!". "Yeah, but we did say no one was allowed their phone," and then that comes down to how we want to deal with it. If we've got a member of staff with me, you know from the school, do we take it off people? You've got the added pressure, I guess, with phones, that if we take a phone off someone and then it's in my pocket and it dies, like that's 800 pounds. That is not insured necessarily by Outward Bound and there's a whole safeguarding side of it as well, I don't really want to have a young person's phone that can take photos in my pocket really. Just because there's always that risk that they say well "Charles had my phone in his pocket all night on expedition and when I got back it had these photos on it" and it's one word against the other.

Appendix K

A condensed example of the in-vivo lumper coding table for Helen at the Starling centre.

Instructor interview coding cycle one: In-vivo lumper method

Name: Helen

Where: Starling

Role: Instructor

Part of interview	Code	Description / Notes	Data
Phones and social media in practice	"I think I'm hesitant"	Hesitant to allow young people to take phones out on activity.	"I think I'm hesitant".
	"You don't want them to lose it or break it"	Breakages or losing phones identified as a reason for not taking phones.	"You don't want them to lose it or break it". "I think the main thing is, I don't want them bringing it out, then losing it".
	"I'm gutted (sarcastic tone), we're not going back! (laughing)"	If young people lose their phone, they will not have chance to find it. Tone of voice here indicates a level of frustration and dismissal.	"I have had kids bring their phone and they leave it somewhere and then, three hours later, are like "I left my phone where we last stopped," and I'm like "I'm gutted (sarcastic tone), we're not going back! (laughing)".
	"Kids sometimes hate camping, and if they've got their phones, they'll try and call parents"	Calling parents when feeling uncomfortable is identified as a reason for young people not to have their phones.	"The other one is if we're going out camping, kids sometimes hate camping, and if they've got their phones, they'll try and call parents and all the rest of it".
	"I'll ask myself whether I should play some music off my phone to try and encourage them"	If a group is unmotivated, the instructor will think about playing music to engage the group during challenging activities. Link to below code.	"Sometimes I've had it where you've got a group and they're super unmotivated. And I'll ask myself whether I should play some music off my phone to try and encourage them, they can sing whilst walking".
	"It (playing music) takes away from where they are"	Playing music can remove the sanctity of nature – playing music can generate an inauthentic experience in the outdoors? Link to below code.	"But then I also feel like it takes away from where they are, I've been there and I'm like "oh, even I would like to listen to some music right now".
	"I don't want to make it comfortable"	The role of a phone can make an Outward Bound course. This breaks the cultural expectation that	"They're on the side of a mountain, the whole point of them being uncomfortable and being pushed out of that comfort zone, I don't want to

	(by playing music)"	young people are there to be out of their comfort zones.	make it comfortable, because the whole point is that we're trying to make it uncomfortable so they can see that they can do it".
	"I, personally, would say no, don't take your mobile phones and stuff with you"	Prefers phone-free Outward Bound activities.	"I think there's a really fine line, I think I don't want them taking... I personally would say no, don't take your mobile phones and stuff with you". "With the school groups I'm very reluctant, "nope, you can't take your phone"". "I would say no to phones, because they don't need them".
	"[Instructor] was like "don't take it, we're not taking them, you'll barely have any signal anyway, so just leave them"	Discussion on another instructor's approach to phones during a summer programme.	"[Instructor] was like "don't take it, we're not taking them, you'll barely have any signal anyway, so just leave them"".
	"You're a bit older and we're away for 19 days, so take it, if you manage to save the battery that long, cool"	On the same summer course as the code above, Helen took the perspective that phones could come, but offered a dismissive perspective on their role within this specific programme.	"You're a bit older and we're away for 19 days, so take it, if you manage to save the battery that long, cool, if you find some signal, whatever, you can send the odd text"".
	"You just don't really see them with phones"	Does not see young people using phones at Outward Bound.	"I think with the school groups I'm very reluctant, "nope, you can't take your phone," but then you just don't really see them with phones".
	"I think the schools are also like "no, don't take them""	School policy directly affects whether phones are on a course or not.	"I think the schools are also like "no, don't take them"".
	"There was one lad who was pretty addicted to his phone"	Discussion on one boy who was addicted to his phone during a summer programme. See below code.	"Even on that 19 day course, there was one lad who was pretty addicted to his phone, absolutely addicted to his phone".
	"Helen, where going to be signal?"	Same participant as in code above seeking mobile signal. See below code.	"He was constantly asking me, "Helen, where's going to be signal?".
	"I don't know! We are in the hills, you'll find it where you find it mate"	Helen dismissive of the young person's quest to find mobile signal. See below code.	"I was like "I don't know! We are in the hills, you'll find it where you find it mate"".

Appendix L

Two excerpts of a candidate theme from phase five of instructor data analysis presented alongside the relevant data from the instructor interview transcripts.

Phase five of data analysis: Patterning and candidate themes

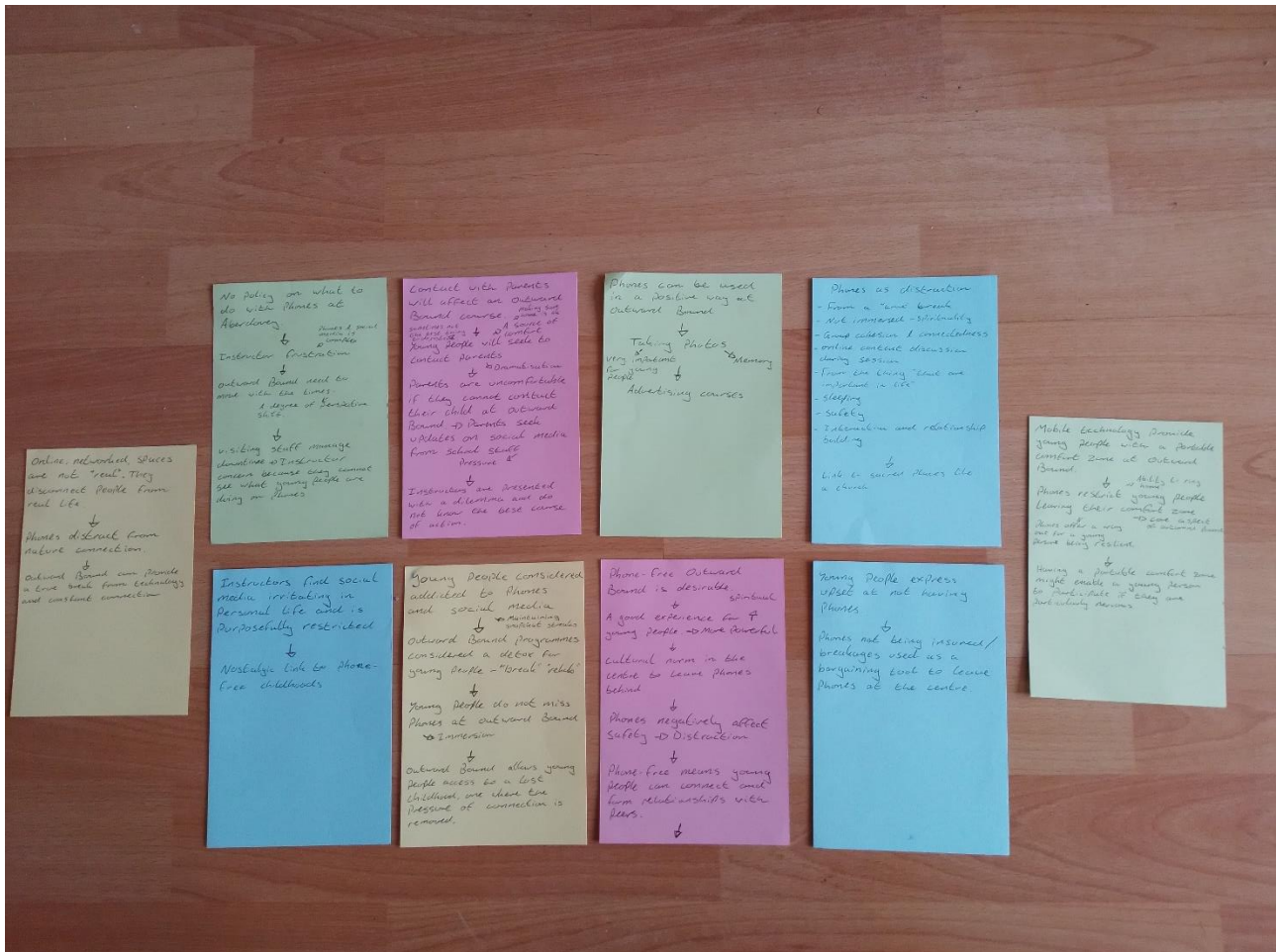
Skylark centre

Candidate theme	Data
<p>Outward Bound’s cultural underpinning dictates a traditional approach to adventure – “no technology here”.</p>	<p>“I think as well, there's a little bit of a culture at Outward Bound of "no, it's the good old outdoors, you go out with nothing," because it wasn't too long ago that it was perceived to be, like on my mountain leader assessment, if you had a GPS, you weren't a mountain leader, you would fail the assessment” (Liam).</p> <p>“Generally, no, we don't have any devices out with Outward Bound” (Oliver).</p> <p>“And we do need to step away from phones, you know, even now I'm looking across to my phone as I'm talking to you. We need to step away from phones and try and build that proper connection with people, and reduce that anxiety, depression, type of stuff which is coming from it” (Oliver).</p> <p>“Our greatest concern is that it becomes a distraction for them. I don't mind it as long as it doesn't become a distraction” (Ian).</p> <p>“I don't think I'd like to see it taking over a large percentage of what we do. So I think it will be good if we could find really good uses for it within our environment” (Ian).</p> <p>“The irony is, when I'm fully engaged in the environment, so, yesterday we were out doing Cam Crag ridge and doing a bit of climbing. And yeah, we were using the phones to take pictures, but then the phone went into a zip pocket, and then it wasn't used because it wasn't appropriate. It would have gone tumbling down the fell or whatever” (Euan).</p> <p>“Yeah, if I if I hear about it, it's always in a negative way, always in a negative way. And I think that's why there is this negative thing about phones, because whenever they're mentioned it's always in a negative way. So "so-and-so was taking inappropriate pictures of themselves and sending them to people," or, "so-and-so called their Mum and now they've gone home and we really thought they'd stay the night," or, "so-and-so has created a Facebook group for them". Actually, that's not true. That isn't true [definitive tone]” (Euan).</p> <p>“I think my understanding probably comes more from having three daughters, than it does from seeing the young people at Outward Bound, because, actually, when young people are at Outward Bound, they are mostly not on social media, but they might have snatches of it” (Benjamin).</p> <p>“I guess, you know, keeping things simple, I'm also a bit of an ascetic at heart, and the idea of just us and the mountains, I think, is generally a helpful thing” (Benjamin).</p> <p>“I'm just not persuaded that it necessarily adds things. I guess there's a conversation a little bit, I think the national curriculum talks about communication, I'd see Outward Bound as part of that and so some people think phones should be included. I think it would be much cleaner to say, "well, actually, that's not what we engage with". I just think it muddies the water. There's plenty of opportunity for that somewhere else” (Benjamin).</p>
<p>Phones provide young people with a portable comfort zone, a place to escape to when feeling anxious. A link to the ‘real’</p>	<p>“The connection to the home or life back home. That's a huge comfort and the ability to not have to engage with people you don't know, or place yourself in an uncomfortable situation because you have the ability to just sit and watch a video or read something on your phone, rather than engaging and getting to know someone new. That social part is actually really</p>

<p>world. Some instructors find this to be a limitation.</p>	<p>difficult for everyone, not just young people, we all do it standing in queues and things like that, we'll get our phone out won't we?" (Lisa).</p> <p>"If they're finding themselves in a difficult situation, they could potentially, not physically remove themselves, but mentally and emotionally for a period of time be able to remove themselves from the situation through the use of their phone" (Lisa).</p> <p>"If they're experiencing confrontation, or if they're experiencing different viewpoints to what they have experienced before in their life, or maybe they've experienced some feedback that is critical but important for them to know, they then might then be able to access comfort through their phone, and be reaffirmed in their belief systems, or their thoughts and feelings, and like, "oh no, actually, you know, what you're feeling is right". Or, "no, your viewpoints are totally in line with all of this community's thoughts and feelings as well". Which I think a lot of people, young people and adults do on the internet, is just looking for that affirmation of being right or fitting in the community, fitting with a group of people and finding that connection again"" (Lisa).</p> <p>"I do understand the safety blanket of it [phones]. It's hard for stuff to go wrong on your phone, it's that instant dopamine release, it's a safe space. If you're sat on your phone, then you're in control of what you see and what you do, which can be really good for some people, because there can be a lot of stuff which is completely out of control when you're at Outward Bound, you don't know where you're going, you don't know what you're doing, Although we tell you what's going on, if you tell someone from an inner city "oh, we're going to go up five contour lines, it's going to be like this". You can tell them that, but they don't know what that means until they've done it" (Liam).</p> <p>"Because it can definitely be a negative thing, if you can just shrink back into your comfort zone, and then it is very comfortable there and it can be hard to get back out. You know? I can see it from both sides, like a good thing and a bad thing" (Liam).</p> <p>"Yeah, yeah. Definitely. Yeah. If you're trying to talk to them about feelings and why they feel certain ways and things like that, quite often people, they'll... they won't pick it up and look at their phone, but they'll have their phone in their hand and then play with it and move it around and things like that. Because they spend you spend so much time with their phone? I have my phone in my hand now, you spend so much time with your phone in your hand, you know the weight of it and everything. It's a comforting thing to know that it's there and you can escape into this digital world if you need to or want to" (Liam).</p> <p>If you're trying to talk to them about feelings and why they feel certain ways and things like that, quite often people, they'll... they won't pick it up and look at their phone, but they'll have their phone in their hand and then play with it and move it around and things like that. Because they spend you spend so much time with their phone? I have my phone in my hand now, you spend so much time with your phone in your hand, you know the weight of it and everything. It's a comforting thing to know that it's there and you can escape into this digital world if you need to or want to" (Liam).</p> <p>"Younger people have developed from a really young age, like from birth pretty much, with having these devices around, and they have a reliance on it now" (Oliver).</p> <p>"You've got this kid just sat on an iPad, or a phone, or whatever, and they'll shut up, "so, great, well, let's keep on doing that. That's my method of behaviour management". So, then, when they get out of that cycle, and they get into an environment where they don't have that box [Outward Bound], that fallback, that safety net in their eyes, then you end up not being able to control their behaviours as well at all. So, you know, the behaviour stuff is massively different down to social media".</p> <p>"Yeah, portable comfort zone, I think I think that's probably quite a nice little synopsis, actually, of how phones and social media work. You know, people project an image that they want to project on social media, and I think being able to do that, you have far more control over how you come across on social media than you do in the real world" (Euan).</p> <p>"I'd love to be able to say, "oh yeah, kids create slideshows and create a presentation for us," but let's be real, they're tired and they want it [phone] to unwind. They want to get a bit of normality back into their routine" (Euan).</p>
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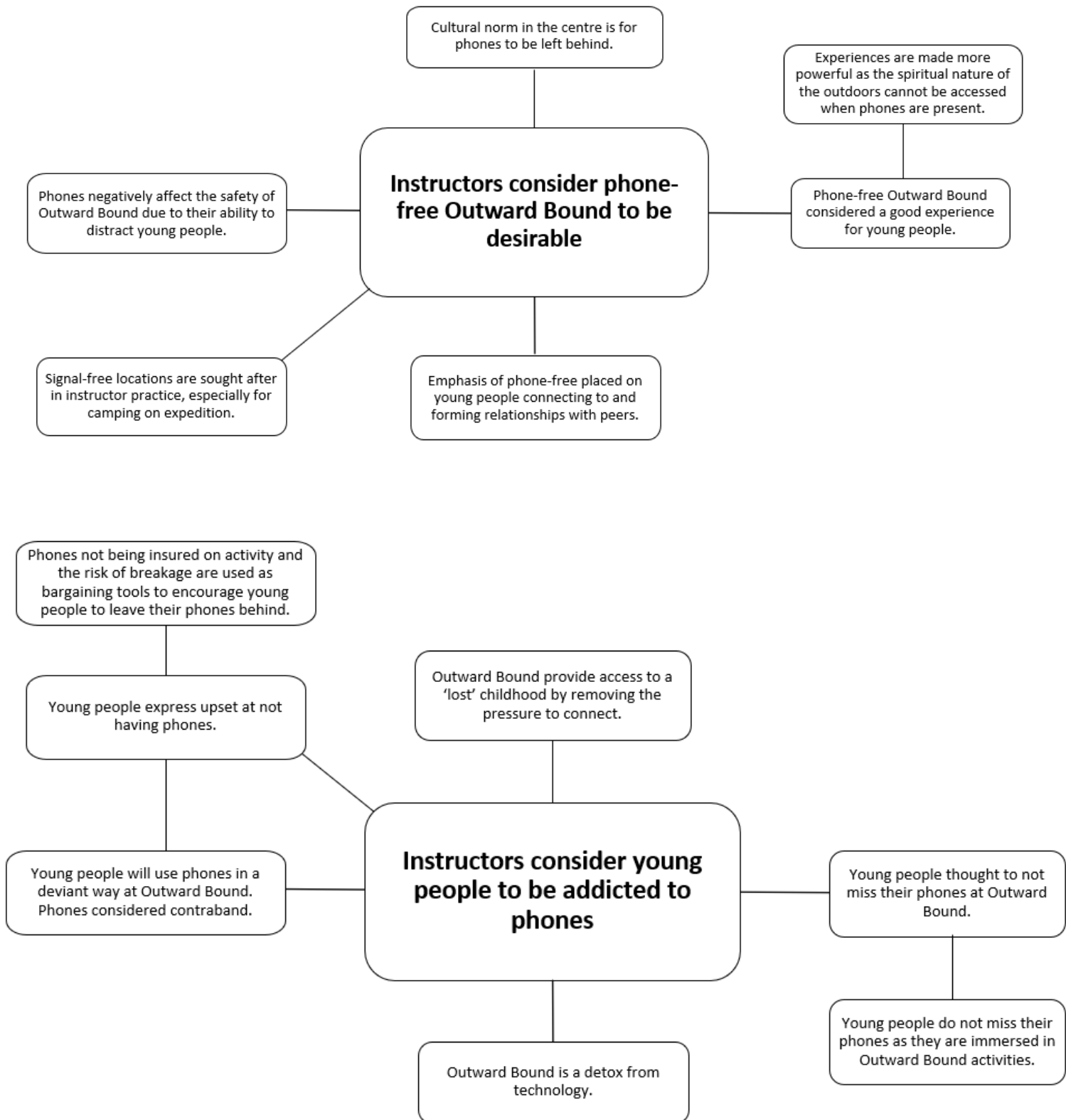
Appendix M

Step six of the instructor data analysis where flashcards were used to synthesise and construct the final themes within each case.



Appendix N

Two examples of the thematic maps from cross-case comparison and merging.



Appendix O

Excerpt of transcript for focus group two at the Starling centre.

Starling: Focus group 2

Researcher: Alright, so, have you felt about using your phones this week? Obviously all the way from arriving on the bus, to then not having your phones during the expedition, how do you feel about how your access has been?

Nazam: I think it's been fine, obviously you "need" [emphasis] time to use it [interrupted with teacher handing out sweets]. I think, at home, my parents enforce not being on my phone that much, so they make me go outside a lot. They sort of control how much I'm on my phone. I think it's fine.

Researcher: What about you, Ajeet? I know that you lost your phone...

[Group laughs]

Ajeet: On the way here, I didn't really use it because I fell asleep. That's pretty much it. I used it a little bit, just every now and then I played Subway Surfers just because I was bored.

Researcher: What's Subway Surfers?

Ajeet: It's a game.

Researcher: A game?

Ajeet: Yeah, I've...

Isha: [To researcher] You don't play Subway Surfers?

Ajeet: It's based off like a real event.

Nazam: It was like a massive trend like two years ago.

Ajeet: It's a trend right now, bro!

Researcher: Right, but now you've lost your phone, is it here somewhere then?

Ajeet: It's somewhere in my room, I guess. I don't mind. I'll just use [name of participant] phone.

Researcher: And then what about you, Isha? I was really interested when you said about the group not taking their phone on expedition. I'd be really keen to hear your thought process surrounding not taking phones and why you wanted to do that.

Isha: Well, when I was younger, I used my phone quite a lot and I used to get in trouble quite a lot. I look back now at what my parents did, and I realise that it is true, that it's really sad if you are sitting as a family and you are on your phone. And so now it just agitates me when I see people on their phone all the time when they are outside. Because I don't see people enough just enjoying the view. So, I didn't want anyone to bring their phone to the trip because I knew that in the tents at night they'd be on their phones, and they wouldn't actually enjoy what's around them.

Nazam: They won't get any sleep!

Isha: They won't appreciate where they are.

Ajeet [Coughs a hushed word] Hypocrite.

Isha: But then, I love my music, that's what I use it for, and I use it for like communication with family, but that's about it.

Researcher: And out of the three of you, have you spoken to your parents at all since you've been here?

Ajeet: Yeah, ten minutes ago.

Researcher: So, how's that panned out?

Nazam: I've spoken to my Mum. Obviously, yesterday I called her to tell her that I threw up, and then also just before we went to the sand dunes just to have a quick talk. Umm, and earlier on I was talking to my sister, so just like saying what we've done and things. She was telling me how it was over 40 in England today.

Researcher: So, I'm interested in this. Is it like an important part of your day to be able to speak to home?

Nazam: I mean, it's not like a massive thing. I want to do it just so they know what's going on, so that they know what's happening. Umm, it's not a massive priority, but it is nice to do.

Researcher: And what about you, Ajeet? You said that you spoke to your Mum just ten minutes ago.

Ajeet: She said that she misses me because, I can't lie, I'm her favourite child [laughs], but don't tell anybody [laughs].

Researcher [Laughs] I'll make sure that goes in!

Ajeet: You can tell her!

Researcher: So, same as for Nazam, is speaking with home important for you?

Ajeet: Yeah, yeah, yeah [quiet tone].

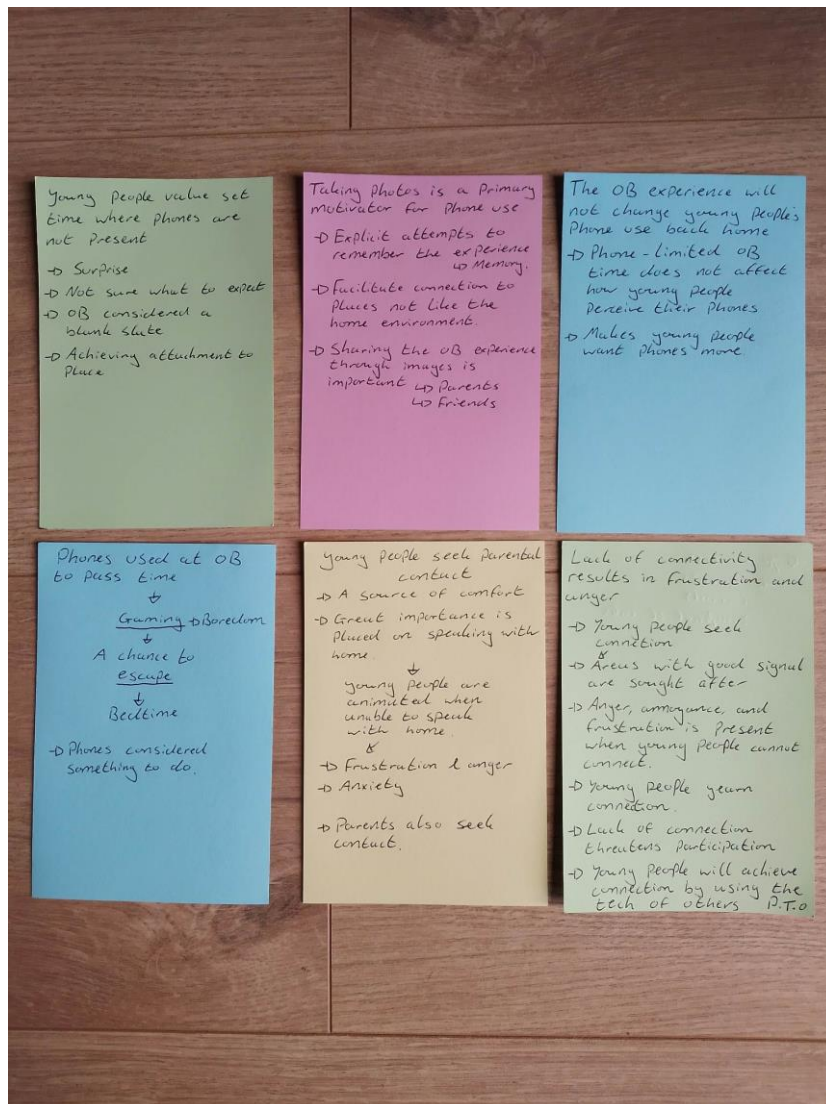
Researcher: And can you tell me why?

Ajeet: Basically, umm, it's like a way of communication in case something is going wrong.

Because she goes out a lot, like, just in case something happens, it's best to know. It's just best for me to know, you know? Just in case something has gone wrong at home.

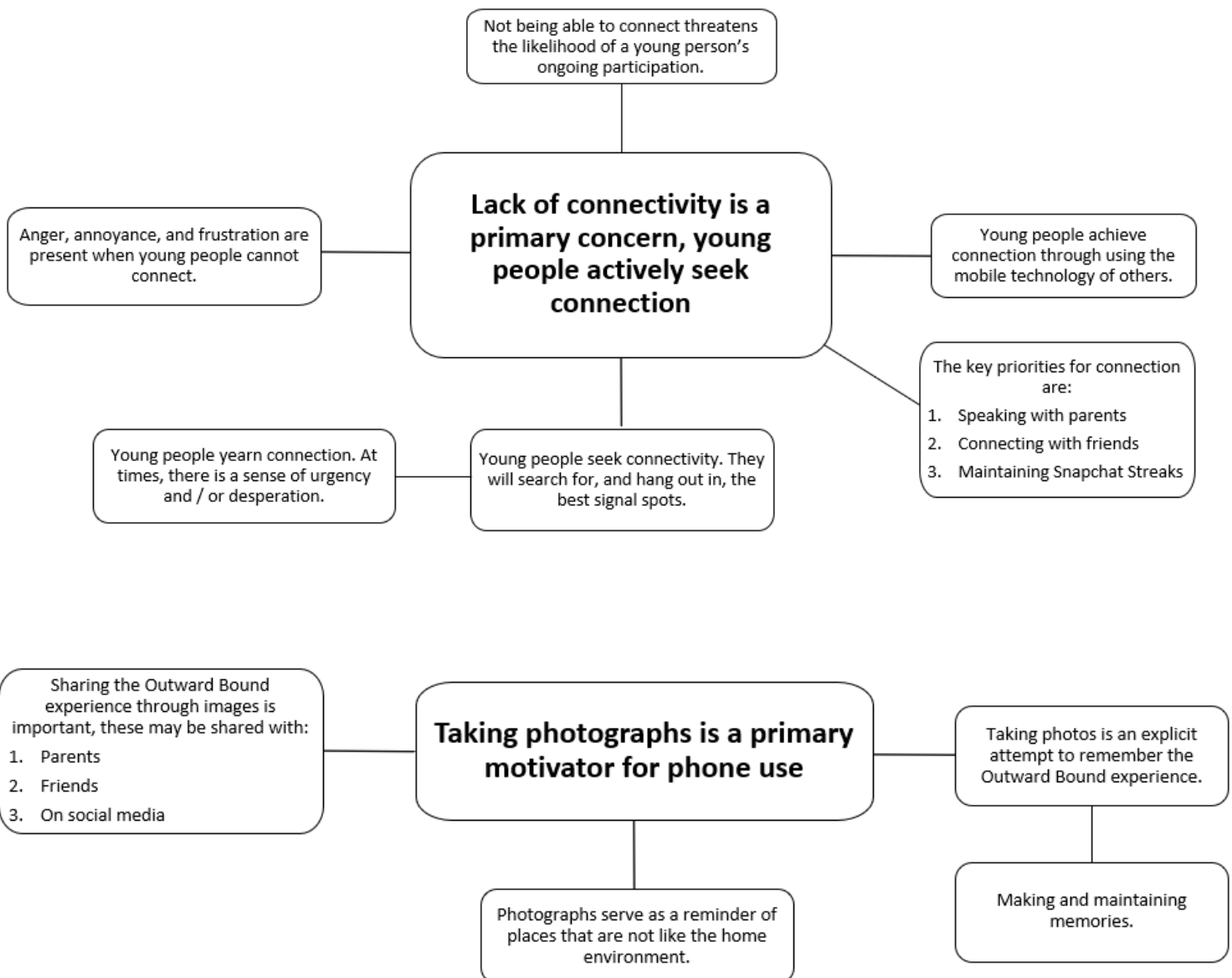
Appendix P

Flashcards constructed to demonstrate common patterns and candidate themes across the cases in advance of developing the thematic maps.



Appendix Q

Example of two thematic maps constructed from the focus group data across the three cases.



Appendix R

Initial categorisation of fieldnotes. This example comes from the campfire activity at the Smew centre. A moment from the fieldnote reconstruction document that was identified as relevant to both research questions two and three.

Fire activity

It is now time for the fire activity, and we walk up into the forest and head for a large parachute that is suspended in the trees. Below the parachute is a fire pit, this is a really, lovely space, and the sun shines through the trees in such a way that it makes you feel incredibly relaxed. Just like at Ullswater, the group are given a Flint fire starter and some cotton wool and a small little jug in which to try and start their own fire. I sit and watch intently, the group are really engaged with this fire starting activity. "This is just like Minecraft! OMG this is way harder!" This comes from [Name], who is trying her best, but frankly not doing so well, to light a successful fire. Once again, the digital space, in this case Minecraft, is offering a form of experiential and sense-making baseline for the young people. I note that the instructor does not follow up on this Minecraft reference, it appears that this is almost normal.

Meanwhile, [Name] sits away from the group by herself. I watch as she neatly balances her phone on a nearby tree stump and practise speaking to her phone and trying to light the fire at the same time. It appears that this is some kind of rehearsal. She then leans forward, and presses record on her phone, it appears that she is on Instagram, maybe even on Instagram live, and she talks to the camera almost like a seasoned presenter. She is telling the people of other end of her phone exactly what she is doing where she is and, sure enough, before she knows it, she has successfully started the fire. She cheers gleefully, shows the fire to the phone, and then ends the recording. She appears to have good enough signal so that she can communicate through a live video to people at home or to followers who could be anywhere in the world. Whilst we are here on the West Coast of Scotland in a forest, this is by no means a bounded environment, young people are communicating their fire-starting activity immediately through the digital space to others far away.

It appears that the fire pit location has reasonably good phone signal. [Name] is on her phone and the visiting staff member asks her to put it away. "But I'm just messaging my mum back! I've not spoken to her since I arrived". "I have not spoken to my mum yet" the visiting staff member calls back. "But you're an adult! My mum is just asking if I'm ok". This is quite a tense moment, and I note a real sense of disconnection between students and staff here. [Name] is expressing an almost desperate need to message her mum back, and yes is being told that she cannot, throughout the rest of the activity [Name] has completely disengaged.

1 Jack Reed Fire starting activity likened to Minecraft (RQ3).
Reply

2 Jack Reed Minecraft operating as a sense-making baseline (RQ3).
Reply

3 Jack Reed Phone used as a method of sharing in live time (RQ2).
Reply

4 Jack Reed Sharing in live time is normalised. Link to theatrical performance? (RQ2)
Reply

5 Jack Reed Using a phone and having good signal to share an experience is met with joy (RQ2).
Reply

6 Jack Reed A sense of geographical and time fluidity. Outward Bound is no longer a bounded space (RQ2).
Reply

7 Jack Reed Hopeful to be able to contact home when signal is present.
Reply

8 Jack Reed When a young person cannot contact home, this generates a sense of frustration and disconnection (RQ2).
Reply

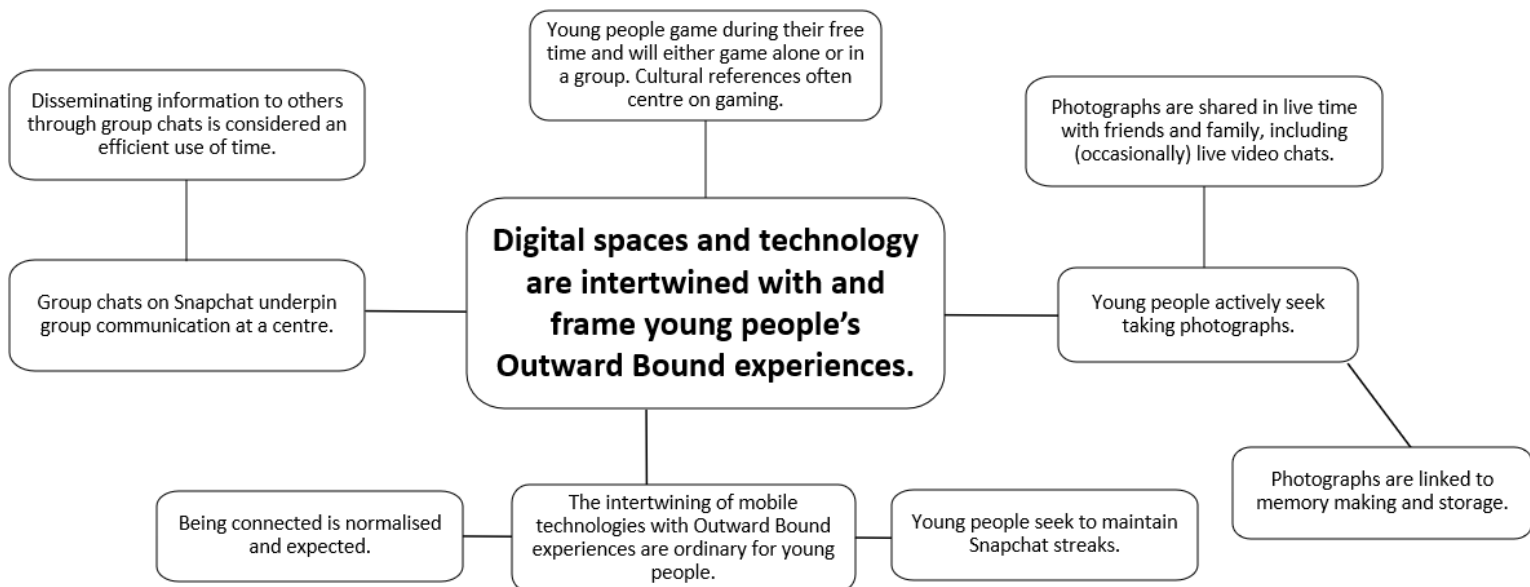
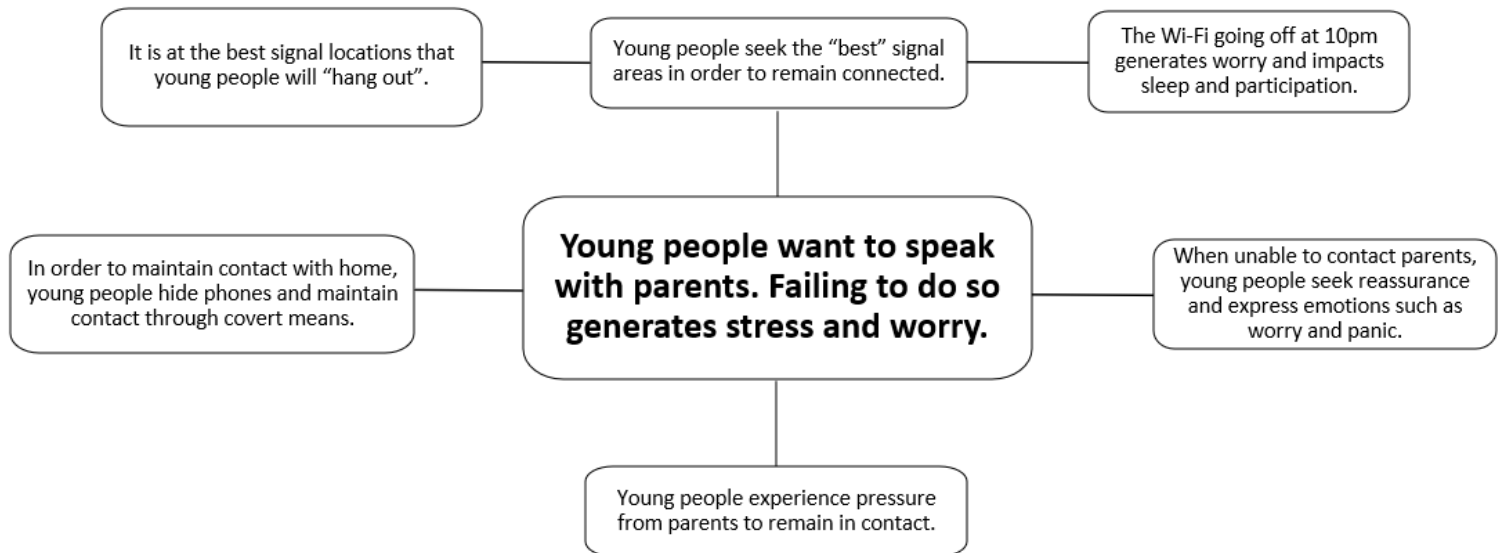
Appendix S

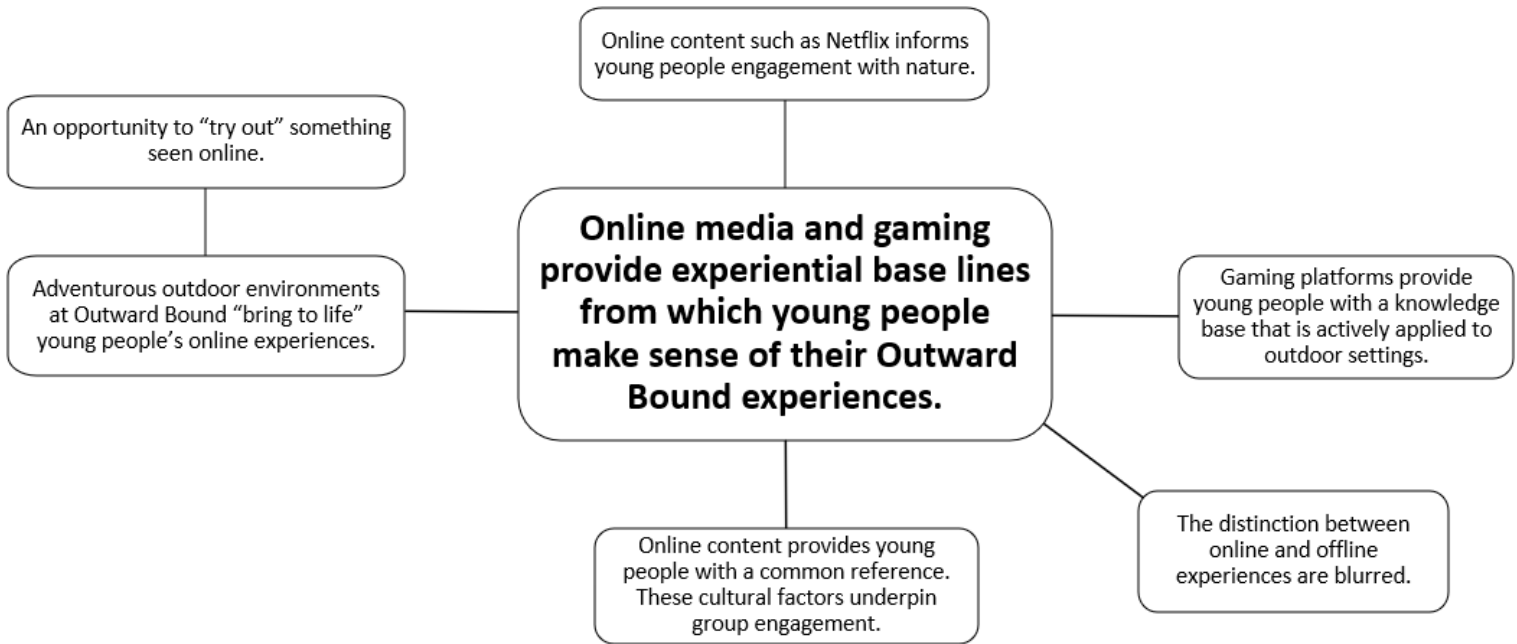
One narrative memo constructed from young people's sense making of the outdoors through Minecraft at the Skylark centre.

At numerous points in the week, Minecraft features as a sense-making baseline for young people. Often, Minecraft is a primary lens through which an activity or place are interpreted. For instance, when on the water, the instructor pointing out the trees whilst we waited for the departing ferry at the jetty was instantly compared to Minecraft. The instructors do not seem to want to engage with these kinds of conversations and often downplay or challenge this characterisation. This centres on Minecraft not being "real". For the young people, however, this appears completely normal and their understanding of the trees, the campfire, or rock climbing as being "like Minecraft" is completely normalised. There is also something in here about generating a sense of belonging and/or cultural knowledge as Minecraft appears to be a common language that the group can understand and engage with.

Appendix T

Spider diagrams constructed as thematic maps from the cross-case analysis of the memos generated from fieldnote data at each case.





Appendix U

Ethical approval confirmation letters from the Moray House School of Education and Sport Research Ethics Committee.



THE UNIVERSITY of EDINBURGH
Moray House School of
Education and Sport

Research, Knowledge Exchange and Impact Office
Moray House School of Education and Sport
The University of Edinburgh
Old Moray House
Holyrood Road
Edinburgh EH8 8AQ

D/D +44 (0)131 651 4846
S/B +44 (0)131 650 1000

www.ed.ac.uk

Ref: JREE20092021

Jack REED
Moray House School of Education and Sport

Date: 1st December 2021

Dear Jack,

Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

The School of Education and Sport Ethics Sub-Committee has now considered your request for ethical approval for the studies detailed in the above application.

This is to confirm that the Sub-Committee is happy to approve your application and amendment submitted in October 2021 and that the research meets the School Ethics Approval criterion for this particular project. A standard condition of this ethical approval is that should any amendment, or deviation from the original protocol outlined in your application need to be made to carry out or continue your research, please notify the Ethics Sub-Committee at MHSES-Ethics@ed.ac.uk

The Committee also needs to be notified if there are any unexpected results or events once the research is underway that raise questions about the safety of the research.

Should you receive any formal complaints relating to the study you should notify the MHSE Ethics Committee immediately by email to MHSES-Ethics@ed.ac.uk

Yours sincerely,

On behalf of:
Dr Fiona O'Hanlon
Director of Ethics



THE UNIVERSITY of EDINBURGH
Moray House School of
Education and Sport

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Moray House School of Education and Sport
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Edinburgh EH8 8AQ

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S/B +44 (0)131 650 1000

www.ed.ac.uk

Ref: JREE02022022

Jack REED
Moray House School of Education and Sport

Date: 21st March 2022

Dear Jack,

Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust.

The School of Education and Sport Ethics Sub-Committee has now considered your request for ethical approval for the studies detailed in the above application.

This is to confirm that the Sub-Committee is happy to approve your application and amendment submitted in February 2022 and that the research meets the School Ethics Approval criterion for this particular project. A standard condition of this ethical approval is that should any amendment, or deviation from the original protocol outlined in your application need to be made to carry out or continue your research, please notify the Ethics Sub-Committee at MHSES-Ethics@ed.ac.uk

The Committee also needs to be notified if there are any unexpected results or events once the research is underway that raise questions about the safety of the research.

Should you receive any formal complaints relating to the study you should notify the MHSE Ethics Committee immediately by email to MHSES-Ethics@ed.ac.uk

Yours sincerely,

On behalf of:
Dr Fiona O'Hanlon
Director of Ethics

Appendix V

Research information sheet for instructor interviews.



PARTICIPANT INFORMATION SHEET

The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

You are being invited to take part in research on mobile technology and connectivity at the Outward Bound Trust. This research is the result of a collaboration between the University of Edinburgh, The Outward Bound Trust, and the Economic and Social Research Council. I (Jack Reed) am leading this research at the University of Edinburgh. Before you decide whether to take part, it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to explore the relationship(s) between technological connectivity (e.g., Wi-Fi, mobile technology, social media, text messaging, emails), young people, and the Outward Bound Trust. This study is exploring a largely under-researched field of enquiry and seeks to assess how mobile technology (and subsequent connectivity) intersects with residential outdoor education.

WHY HAVE I BEEN INVITED TO TAKE PART?

You are invited to participate in this study because you are a full-time instructor or learning and adventure manager at the Outward Bound Trust.

DO I HAVE TO TAKE PART?

No – it is entirely up to you. If you do decide to take part, you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your statutory rights, legal rights, or employment. Please note that your data may be used in the production of formal research outputs (e.g. journal articles, conference papers, theses, and reports) prior to your withdrawal and so you are advised to contact Jack () at the earliest opportunity should you wish to withdraw from the study.

WHAT WILL HAPPEN IF I DECIDE TO TAKE PART?

If you do decide to take part, please keep this Information Sheet. You will be asked to complete an Informed Consent Form online to show that you understand your rights in

relation to the research, and that you are happy to participate. This form may be initialled and signed with Microsoft Word or Apple Pages software.

You will be asked a number of questions regarding your beliefs and perceptions of mobile technology and connectivity (e.g. social media) in your role as an Outward Bound instructor or learning and adventure manager. The interview will take place in a safe environment (Zoom) at a time that is convenient for you. Ideally, I would like to record your responses (and will require your consent for this), so the location should be in a fairly quiet area. Following transcription of the data, the video recording will be deleted, but the audio recording will be kept in a secure location.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

The study may indirectly benefit you through the development of policy and practice within the Outward Bound Trust. This means that the Outward Bound Trust, as an organisation, may directly benefit from the research, but there are no direct benefits at the individual level associated with your participation.

ARE THERE ANY RISKS OR DISADVANTAGES ASSOCIATED WITH TAKING PART?

There are no significant risks associated with participation. However, I will share anonymised excerpts from interviews with members of the senior leadership team at The Outward Bound Trust. Whilst your data will be anonymised, it may be possible that you can be reidentified by internal staff members at The Outward Bound Trust during this process; please see the “How will I use information about you?” for more information on this. Any minor risks have been acknowledged during the ethical approval process and will be continuously under review during the research.

WHAT IF I AM UNWELL?

If you feel unwell then please contact me (Jack Reed, _____), and we will postpone, rearrange, or cancel the research interaction.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

All the information I collect during the research will be kept confidential and there are strict laws which safeguard your privacy at every stage. At the end of the interview, you will be invited to offer a pseudonym which will be used when reporting on the data.

HOW WILL I USE INFORMATION ABOUT YOU?

I will need to use information from you for this research project.

This information will include your name, initials, job title, location of work, and contact details. I will use this information to do the research, but will always refer to you by a pseudonym when discussing or reporting your data. Your personal details will not be shared with either

the Outward Bound Trust or any other organisations. Alongside this, the data you provide will not be combined with any other data.

You will be referred to by a pseudonym in the research, a pseudonym that you can select during the interview. Every measure will be taken to maintain anonymity, including the removal of all personal identifiers when the data is discussed or reported. However, whilst every effort will be made to maintain anonymity, staff members within the Outward Bound Trust may be able to identify you based on your relationship(s) with them. Your transcribed and anonymised data in full-transcript form will only be viewed by me and my research supervisors. Sections of transcribed and anonymised data where all personal identifiers have been removed may be viewed by Outward Bound Trust staff members. These staff members may include heads of centres, directors, the senior leadership team, and with members of an internal working group set up within the trust for this research. The internal working group comprises senior managers from across the trust in relation to research, innovation, marketing, corporate partnerships, and sales teams. It is the sharing of data and findings within these internal management structures that will facilitate the development of policy and practice across the trust.

Before any of your data is shared with any internal staff members within The Outward Bound Trust, you will have the opportunity to review your interview transcript. At that point, you will be able to redact data which will be deleted from your transcript prior to sharing. Redacted data will not be used in this research or in any future research.

All electronic data will be stored on a password-protected computer file and password-protected external hard drive. Your consent information will be kept separately from your responses to minimise risk.

Once I have finished the study, I will keep the transcript for a minimum of four years so results may be shared and published. During the process of data storage and the publication of findings, your data will remain fully anonymised.

WHAT ARE YOUR CHOICES ABOUT HOW YOUR INFORMATION IS USED?

You can stop being part of the study at any time, without giving a reason, and may request for your data to be removed and destroyed at any time.

WHERE CAN YOU FIND OUT MORE ABOUT HOW YOUR INFORMATION IS USED?

You can find out more about how we use your information at

<https://www.ed.ac.uk/records-management/privacy-notice-research>

You can also find out more by asking me (Jack Reed,) or by asking one of my supervisors (Simon Beames,) (Gale Macleod,).

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study may be summarised in my PhD thesis and in published articles, reports, and presentations. You will not be identifiable from any published results. Quotes or key findings will always be made anonymous in any formal outputs unless we have your prior

and explicit written permission to attribute them to you by name. A summary of the findings from the study will be made available to participants who indicate they would like to receive this. This summary will be sent to participants by email.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This study has been organised by me (Jack Reed) and is the result of a collaborative Economic and Social Research Council award between the Outward Bound Trust and the University of Edinburgh.

The study is being funded by the Economic and Social Research Council and is managed by the Scottish Graduate School of Social Sciences.

WHO HAS REVIEWED THE STUDY?

The study proposal has been reviewed by the Moray House School of Education and Sport research ethics committee at the University of Edinburgh.

WHO CAN I CONTACT?

If you have any further questions about the study, please contact me: Jack Reed,

If you would like to discuss this study with someone independent of the study, please contact the Postgraduate Research Director: Dr John Kelly,

If you wish to make a complaint about the study, please contact one of the Directors of Research at the Moray House School of Education and Sport:

- Dr Tony Turner,
- Professor Gillean McCluskey,

Appendix W

Voluntary informed consent form for instructor interviews.

Networked spaces and mobile technology in residential outdoor education
Version 2.
01.12.2021.



PARTICIPANT CONSENT FORM

PLEASE TAKE A SCREENSHOT OF THIS FORM FOR YOUR RECORDS

Study Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Researcher's name and contact details: Jack Reed (Jack.Reed@ed.ac.uk)

Participant ID: _____

Please place an X in the box

I confirm that I have read and understood the Participant Information Sheet (Version 2 dated 01.12.2021) for the above study.

I have been given the opportunity to consider the information provided, ask questions, and have had these questions answered to my satisfaction.

I understand that my participation is voluntary and that I can withdraw from the study at any time without giving a reason and without my legal rights being affected.

I understand that excerpts of my anonymised data will be shared with the Outward Bound Trust and that I will have the opportunity to review my interview transcript before this happens.

I understand that my anonymised data will be stored for a minimum of 4 years and may be used in future ethically approved research.

I agree to my interview being audio and video recorded.

By placing an X in this box, I agree to take part in the above study.

Print name: _____

Date: _____

Appendix X

Participant information sheet for parents.



PARTICIPANT INFORMATION SHEET FOR PARENTS AND GUARDIANS

The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Your child, or the child under your care, is being invited to take part in research on mobile technology and connectivity at the Outward Bound Trust. This research is the result of a collaboration between the University of Edinburgh, The Outward Bound Trust, and the Economic and Social Research Council. I (Jack Reed) am leading this research at the University of Edinburgh. Before you decide whether your child, or the child under your care, can take part, it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to explore the relationship(s) between technological connectivity (e.g., Wi-Fi, mobile technology, social media, text messaging), young people, and the Outward Bound Trust. This study is exploring a largely under-researched field of enquiry and seeks to assess how mobile technology (and subsequent connectivity) intersects with residential outdoor education.

WHY HAS MY CHILD, OR THE CHILD UNDER MY CARE, BEEN INVITED TO TAKE PART?

You child, or the child under your care, is being invited to participate in this study because they are soon to visit an Outward Bound Trust centre and will participate in a residential outdoor education course.

DOES MY CHILD, OR THE CHILD UNDER MY CARE, HAVE TO TAKE PART?

No – it is entirely up to you and your child, or the child under your care. If you do decide that your child, or the child under your care, can take part, they may withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your statutory and legal rights.

WHAT WILL HAPPEN IF MY CHILD, OR THE CHILD UNDER MY CARE, TAKES PART?

If you decide that your child, or the child under your care, can take part, please keep this Information Sheet. You will be asked to complete an Informed Consent Form to show that you understand your rights and the rights of your child, or the child under your care, in relation to the research, and that you are happy for your child, or the child under your care, to participate. The young person will also review a participant information sheet and sign a consent form.

The young person will be observed undertaking formal adventurous activities at the Outward Bound Trust and will also be observed during informal activities such as mealtimes. I will

undertake these observations as a 'participant observer', meaning that I will actively participate in activities. I have experience in undertaking this style of research, and you can find a published article where I undertook a similar observational approach at this link: <https://doi.org/10.1080/14729679.2021.1961092>. During the observations I will record field notes on paper. Alongside the observations, I will also conduct a small number of focus groups with young people lasting approximately 45 minutes. The young person would participate in one focus group during their trip to Outward Bound, and, with your and their permission, these focus groups will be audio recorded. These will be recorded using a Dictaphone and will be transcribed by me. Due to limited capacity and time, it is not guaranteed that your child, or the child under your care, will take part in a focus group during their Outward Bound Trust visit.

Following the research, data in paper form will be stored in a locked filing cabinet in my home, and digital data (focus group transcripts) will be stored on a password-protected computer file and password-protected external hard drive.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

The study may indirectly benefit other young people through the development of policy and practice within the Outward Bound Trust. This means that the Outward Bound Trust, as an organisation, may directly benefit from the research, but there are no direct benefits at the individual level associated with a young person's participation.

ARE THERE ANY RISKS ASSOCIATED WITH TAKING PART?

There are no significant risks associated with participation. The Outward Bound Trust are a collaborative partner in this research and have reviewed my plans comprehensively. The research has also been approved by the Moray House School of Education and Sport's Ethics Review Board at the University of Edinburgh. All activities will be delivered by Outward Bound Trust staff as they would be in any other week. Young person data will be fully anonymised and their contribution to the study will not be traceable back to them or to their exact geographical location. Any minor risks have been acknowledged during the ethical approval process and will be continuously under review during the research.

I have taken specific steps to minimise the risk of exposure to COVID-19 during the study by adhering to the most up to date Scottish Government [guidance](#). These measures include good hand hygiene and surface cleaning, good ventilation, keeping a safe distance, and continued requirement for face coverings in indoor public places. Further, the young person will only interact with a researcher *who in the last 24 hours have had a recent negative lateral flow test*, have not experienced COVID-19-related symptoms, and are not required to self-isolate due to close contact with a COVID-19 positive individual.

However, even with these control measures, there remains some additional risk of exposure to COVID-19 from participating in this study, but we do not assess that this risk is higher than engaging in other day-to-day activities.

UNDERSTANDING RISK FROM EXPOSURE TO COVID-19

It is not possible to eliminate all risk of exposure to COVID-19, and so it is important for you to understand and consider the risks in the unlikely event of exposure.

Your child, or the child under your care, may be more likely to be at high-risk from infection if they have previously been advised to shield from the virus, if they have certain health conditions (including heart disease, lung disease, kidney disease, diabetes, or neurological disease), or if they are taking immunosuppressant medication or steroids. To understand more about potential risk factors, please visit [this NHS webpage](#).

MAKING AN INFORMED CHOICE

It is important that you make an informed choice whether or not your child, or the child under your care, can take part in this research, considering their potential risk from the virus, and the measures in place to reduce the risk of exposure. It is important that you feel that you have all of the information required regarding these risks, and can consider that in light of personal circumstances (e.g. health). You should have had a chance to reflect on these risks, and, if necessary, discussed them with a researcher, prior to agreeing to participate in the study.

STORING CONTACT DETAILS

If the research requires your child, or the child under your care, to be in contact with the research team in an indoor space out with our University campus, then they may be required to provide their name and contact details to the managers of Outward Bound who will store their name and contact details for 21 days after the research interaction. If during this 21 day period, the researcher has a positive COVID-19 test then, if requested, their contact details will be shared with NHS contact tracers, who may then contact you directly. The period of 21 days will ensure full cover of the typical incubation period and additional time during which people may be infectious. This information relating to name and contact details is in addition to the data collected as part of the research study, will be stored separately from the research data, shared with NHS Test and Protect if requested, and the legal basis for collecting these data is substantial public interest.

WHAT IF YOUR CHILD, OR THE CHILD UNDER YOUR CARE, IS UNWELL PRIOR TO THE RESEARCH INTERACTION?

If your child, or the child under your care, feels unwell, experiences COVID-19 related symptoms, have a positive lateral flow or PCR test, or have been required to self-isolate due to contact with a COVID-19 positive individual, then please contact the researcher (Jack Reed,) or the young person's teacher, and we will postpone or cancel the research interaction.

WHAT IF MY CHILD, OR THE CHILD UNDER MY CARE, BECOMES UNWELL AFTER THE RESEARCH INTERACTION?

If your child, or the child under your care, experiences COVID-19 related symptoms, and/or have a positive COVID-19 test following the research interaction, please follow the local government guidance.

WILL MY CHILD, OR THE CHILD UNDER MY CARE, REMAIN ANONYMOUS?

All the information I collect during the research will be kept confidential and there are strict laws which safeguard privacy at every stage. The young person will be invited to offer a pseudonym which they will be referred to throughout the study.

HOW WILL I USE INFORMATION ABOUT THE YOUNG PERSON?

I will need to use information from the young person for this research project. This information will include their name and location of school. I will use this information to do the research, but will always refer to young people by a pseudonym when discussing or reporting their data. The school will be anonymised throughout the research, but I will report on the social and geographical location of the school (e.g., “a school from central Manchester”). A young person’s personal details will not be shared with either the Outward Bound Trust or any other organisations. Alongside this, the data the young person provides will not be combined with any other data.

A young person’s anonymised data in full-transcript form will only be viewed by me and my research supervisors. Sections of anonymised data where all personal identifiers have been removed may be viewed by Outward Bound Trust staff members. These staff members may include heads of centres, directors, the senior leadership team, and with members of an internal working group set up within the trust for this research. The internal working group comprises senior managers from across the trust in relation to research, innovation, marketing, corporate partnerships, and sales teams. It is the sharing of data and findings within these internal management structures that will facilitate the development of policy and practice across the trust.

Once I have finished the study, I will keep the data for a minimum of four years so results may be shared and published. During the process of data storage and the publication of findings, data will remain fully anonymised.

WHAT ARE YOUR CHOICES ABOUT HOW INFORMATION IS USED?

The young person can stop being part of the study at any time, without giving a reason, and may request for data to be removed and destroyed at any time.

WHERE CAN YOU FIND OUT MORE ABOUT HOW PERSONAL INFORMATION IS USED?

You can find out more about how we use information at <https://www.ed.ac.uk/records-management/privacy-notice-research>

You can also find out more by asking me (Jack Reed,) or by asking one of my supervisors (Simon Beames,) (Gale Macleod,).

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study may be summarised in my PhD thesis and in published articles, reports, and presentations. The young person will not be identifiable from any published results. Quotes or key findings will always be made anonymous in any formal outputs. A summary of the findings from the study will be made available to participants who indicate they would like to receive this. This summary will be sent to participants by email.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This study has been organised by me (Jack Reed) and is the result of a collaborative Economic and Social Research Council award between the Outward Bound Trust and the University of Edinburgh. The study is being funded by the Economic and Social Research Council and is managed by the Scottish Graduate School of Social Sciences.

WHO HAS REVIEWED THE STUDY?

The study proposal has been reviewed by my supervisors, the Moray House School of Education and Sport research ethics committee at the University of Edinburgh, and complies with the ethical guidelines for educational research as set out by the British Educational Research Association.

WHO CAN I CONTACT?

If you have any further questions about the study, please contact me: Jack Reed,

If you would like to discuss this study with someone independent of the study, please contact the Postgraduate Research Director: Dr John Kelly,

If you wish to make a complaint about the study, please contact one of the Directors of Research at the Moray House School of Education and Sport:

- Dr Tony Turner,
- Professor Gillean McCluskey,

Appendix Y

Voluntary informed consent form for parents.

Networked spaces and mobile technology in residential outdoor education
Version 1.
18.01.2022.



PARTICIPANT CONSENT FORM

PLEASE TAKE A PHOTO OF THIS FORM FOR YOUR RECORDS

Study Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Researcher's name and contact details: Jack Reed (Jack.Reed@ed.ac.uk)

Please place an X in the box

I confirm that I have read and understood the Participant Information Sheet for Parents and Guardians (Version 1 dated 18.01.22) for the above study.

I have been given the opportunity to consider the information provided, ask questions, and have had these questions answered to my satisfaction.

I understand that my child's participation, or the participation of the child under my care, is voluntary and that I can withdraw them from the study at any time without giving a reason and without my, or their, legal rights being affected.

I understand that excerpts of my child's anonymised data will be shared with the Outward Bound Trust and that this data will be used for the purposes outlined in the participant information sheet.

I understand that my child's anonymised data will be stored for a minimum of 4 years and may be used in future ethically approved research.

I agree that my child may be observed in public places in groups of at least three when at Outward Bound.

I agree to my child's voice being audio recorded for the purposes of data collection during a focus group.

By placing an X in this box, I agree that my child can take part in the above study.

Print name: _____

Date: _____

Appendix Z

Participant information sheet for young people.



PARTICIPANT INFORMATION SHEET FOR YOUNG PEOPLE

The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

You are being invited to take part in research on mobile phones and social media at Outward Bound. I (Jack Reed) am leading this research at the University of Edinburgh. Before you decide whether to take part, it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to explore the relationships between technological connectivity (e.g., Wi-Fi, mobile technology, social media, text messaging, emails), yourself, and Outward Bound. This study is exploring a largely under-researched field of enquiry and seeks to assess how mobile phones and other devices intersect with your experience of residential outdoor education.

WHY HAVE I BEEN INVITED TO TAKE PART?

You are invited to participate in this study because you are a young person who is going to participate in an Outward Bound course.

DO I HAVE TO TAKE PART?

No – it is entirely up to you. If you do decide to take part, you are still free to withdraw at any time and without giving a reason. Please note that your data may be used prior to your withdrawal and so you are advised to contact your teacher at the earliest opportunity should you wish to withdraw from the study.

WHAT WILL HAPPEN IF I DECIDE TO TAKE PART?

If you do decide to take part, you will be asked to complete an Informed Consent Form to show that you understand the research, and that you are happy to participate. You will be observed taking part in formal activities (e.g., canoeing) and informal activities (e.g., breakfast time) during your visit. In some instances, I will participate alongside you, helping steer the canoe, scrambling up gorges, and having a go at rock climbing. During this, you might see me taking notes about interesting things that are happening.

In some instances, I may also ask you to participate in a focus group. This is a group interview which will take place with two or three others from your group and will last around 45 minutes. Your participation in a focus group will not affect what activities you get to do during your visit as we will ensure it is done when we all have some free time; you will only

participate in one focus group. I will record the focus group using a Dictaphone and will need your consent for this. I will transcribe each interview once I return home after your visit to Outward Bound. It is important that you know that your contribution to the study is completely anonymised, and I will never refer to you by your name when I share the study's findings. I will therefore ask you to provide a name that you are happy for me to call you by when I write about your data.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

The study directly benefits Outward Bound and broader outdoor learning environments as courses and programmes develop throughout the UK. However, because you are helping to inform the directions of programmes and courses through this research, there are no direct benefits associated with your participation.

ARE THERE ANY RISKS OR DISADVANTAGES ASSOCIATED WITH TAKING PART?

There are no significant risks associated with participation and any minor risks have been acknowledged during the ethical approval process and will be continuously under review during the research. Remember, you can decide to withdraw from the study at anytime without giving a reason by speaking to your teacher.

I have taken specific steps to minimise the risk of exposure to COVID-19 during the study by adhering to the most up to date Scottish Government [guidance](#) measures including good hand hygiene and surface cleaning, good ventilation, keeping a safe distance, and continued requirement for face coverings in indoor public places. Further, you will only interact with researchers *who in the last 24 hours have had a recent negative lateral flow test*, have not experienced COVID-19-related symptoms, and are not required to self-isolate due to close contact with a COVID-19 positive individual.

However, even with these control measures, there remains some additional risk of exposure to COVID-19 from participating in this study, but we do not assess that this risk is higher than engaging in other day-to-day activities.

UNDERSTANDING YOUR RISK FROM EXPOSURE TO COVID-19

It is not possible to eliminate all risk of exposure to COVID-19, and so it is important for you to understand and consider your own personal risk in the unlikely event of exposure.

You may be more likely to be at high-risk from infection if you have previously been advised to shield from the virus, if you have certain health conditions (including heart disease, lung disease, kidney disease, diabetes, or neurological disease), or if you are taking immunosuppressant medication or steroids. To understand more about potential risk factors, please visit [this NHS webpage](#).

MAKING AN INFORMED CHOICE

It is important that you make an informed choice whether or not to take part in this research, considering your potential risk from the virus, and the measures in place to reduce the risk of exposure. It is important that you feel that you have all of the information required regarding these risks, and can consider that in light of your personal circumstances

(e.g. health). You should have had a chance to reflect on these risks, and discuss them with your teacher, prior to agreeing to participate in the study.

WHAT IF I AM UNWELL PRIOR TO THE RESEARCH INTERACTION?

If you feel unwell, experience COVID-19 related symptoms, have a positive lateral flow or PCR test, or have been required to self-isolate due to contact with a COVID-19 positive individual, then please speak with your teacher, and we will postpone or cancel the research interaction.

WHAT IF I BECOME UNWELL AFTER THE RESEARCH INTERACTION?

If you experience COVID-19 related symptoms, and/or have a positive COVID-19 test following the research interaction, please follow local government guidance.

HOW WILL I USE INFORMATION ABOUT YOU?

I will need to use information from you for this research project. This information will include your name and location of school. I will use this information to do the research, but will always refer to you by the name you would like me to refer to you by. Your school will be anonymised throughout the research, so nobody will know that you contributed to this study.

Your anonymised data in full-transcript form from the focus group will only be viewed by me and my research supervisors. Sections of anonymised data may be viewed by Outward Bound staff members after you have completed your Outward Bound course. Once I have finished the study, I will keep your data for a minimum of four years so results may be shared and published. During the process of data storage and the publication of findings, your data will remain fully anonymised.

WHAT ARE YOUR CHOICES ABOUT HOW YOUR INFORMATION IS USED?

You can stop being part of the study at any time, without giving a reason, and may request for your data to be removed and destroyed at any time. You can do this by speaking with your teacher.

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study may be summarised in my PhD and in published articles, reports, and presentations. You will not be identifiable from any published results.

WHO CAN I CONTACT?

If you have any further questions about the study, there are a few different people you can speak to. You might like to ask your parent, guardian, or teacher. Or you might like to ask a member of staff at the Outward Bound centre. You are also very welcome to ask me any questions during your visit and I would be very happy to answer any questions or concerns that you have. If, after you return to school following your visit to Outward Bound, you decide you do not want to participate, speak to your teacher who will arrange for the data to be deleted.

Appendix AA

Voluntary informed consent form for young people.

Networked spaces and mobile technology in residential outdoor education
Version 1.
18.01.2022.



PARTICIPANT CONSENT FORM FOR YOUNG PEOPLE

Study Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Please read the following information carefully and if you have any questions please ask your instructor, teacher, or the researcher (Jack) who will be more than happy to help.

Please place an X in the box

I confirm that I have read and understood the Participant Information Sheet (Version 1 dated 18.01.2022) for this study.

I have been given the opportunity to consider the information provided, ask questions, and have had these questions answered to my satisfaction.

I understand that my participation is voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that my anonymised data will be shared by Jack for his PhD and that my data will be shared for the purposes outlined in the information sheet.

I understand that my anonymised data will be stored for a minimum of 4 years and may be used in future ethically approved research.

I agree to being observed in public areas for the purposes of the research.

I agree that I am happy to participate in a focus group in a group of three or four young people during my visit to Outward Bound.

By placing an X in this box, I agree to take part in the above study.

Print name: _____

Date: _____

Appendix AB

Visiting staff member research information sheet.



PARTICIPANT INFORMATION SHEET FOR VISITING SCHOOL STAFF

The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

You are being invited to take part in research on mobile technology and connectivity at the Outward Bound Trust. This research is the result of a collaboration between the University of Edinburgh, The Outward Bound Trust, and the Economic and Social Research Council. I (Jack Reed) am leading this research at the University of Edinburgh. Before you decide whether to take part, it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to explore the relationship(s) between technological connectivity (e.g., Wi-Fi, mobile technology, social media, text messaging, emails), young people, and the Outward Bound Trust. This study is exploring a largely under-researched field of enquiry and seeks to assess how mobile technology (and subsequent connectivity) intersects with residential outdoor education.

WHY HAVE I BEEN INVITED TO TAKE PART?

You are invited to participate in this study because you are accompanying young people to the Outward Bound Trust as a visiting staff member.

DO I HAVE TO TAKE PART?

No – it is entirely up to you. If you do decide to take part, you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your statutory rights, legal rights, or employment. Please note that your data may be used in the production of formal research outputs (e.g. journal articles, conference papers, theses, and reports) prior to your withdrawal and so you are advised to contact Jack () at the earliest opportunity should you wish to withdraw from the study.

WHAT WILL HAPPEN IF I DECIDE TO TAKE PART?

If you do decide to take part, please keep this Information Sheet. You will be asked to complete an Informed Consent Form to show that you understand your rights in relation to the research, and that you are happy to participate.

During your visit to the Outward Bound Trust, I will be observing both formal and informal activities undertaken by young people during their trip. Because you will be interacting with young people during these activities, it is likely that I will also record observational data based on these interactions. During the observations, I will undertake a 'participant as observer'

role, meaning that I will participate in activities throughout the week. I would also like to interview you during your visit to the Outward Bound Trust. This is a really important part of the research with the interview focussing on your school's approach to mobile phones and social media, alongside exploring how these forms of technology have arisen during young people's visit to the Outward Bound Trust. The interview will take place in a safe environment during your visit at a time that is convenient for you. Ideally, I would like to record your responses (and will require your consent for this) using a Dictaphone. I will transcribe the interview and the data will always be kept in a secure location.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

The study may indirectly benefit you through the development of policy and practice within the Outward Bound Trust and within broader educational practice surround young people's uses of mobile technology and social media. This means that the Outward Bound Trust, as an organisation, may directly benefit from the research, but there are no direct benefits at the individual level associated with your participation.

ARE THERE ANY RISKS OR DISADVANTAGES ASSOCIATED WITH TAKING PART?

There are no significant risks associated with participation. However, I will share anonymised excerpts from interviews with members of the senior leadership team at The Outward Bound Trust and with members of staff at your school. Whilst your data will be anonymised, it may be possible that you can be reidentified by internal staff members at The Outward Bound Trust and at your school during this process; please see the "How will I use information about you?" for more information on this. Any minor risks have been acknowledged during the ethical approval process and will be continuously under review during the research.

I have taken specific steps to minimise the risk of exposure to COVID-19 during the study by adhering to the most up to date Scottish Government [guidance](#). These measures include good hand hygiene and surface cleaning, good ventilation, keeping a safe distance, and continued requirement for face coverings in indoor public places. Further, you will only interact with a researcher *who in the last 24 hours have had a recent negative lateral flow test*, have not experienced COVID-19-related symptoms, and are not required to self-isolate due to close contact with a COVID-19 positive individual.

However, even with these control measures, there remains some additional risk of exposure to COVID-19 from participating in this study, but we do not assess that this risk is higher than engaging in other day-to-day activities.

UNDERSTANDING YOUR RISK FROM EXPOSURE TO COVID-19

It is not possible to eliminate all risk of exposure to COVID-19, and so it is important for you to understand and consider your own personal risk in the unlikely event of exposure.

You may be more likely to be at high-risk from infection if you have previously been advised to shield from the virus, if you have certain health conditions (including heart disease, lung disease, kidney disease, diabetes, or neurological disease), or if you are taking immunosuppressant medication or steroids. The risks of serious consequences from COVID-

19 are also known to increase on average with age. To understand more about potential risk factors, please visit [this NHS webpage](#).

MAKING AN INFORMED CHOICE

It is important that you make an informed choice whether or not to take part in this research, considering your potential risk from the virus, and the measures in place to reduce the risk of exposure. It is important that you feel that you have all of the information required regarding these risks, and can consider that in light of your personal circumstances (e.g. health, caring responsibilities). You should have had a chance to reflect on these risks, and discuss them with the researcher, prior to agreeing to participate in the study.

STORING CONTACT DETAILS

If the research requires you to be in contact with the research team in an indoor space out with our University campus, then you may be required to provide your name and contact details to Outward Bound. If there is no requirement by Outward Bound to provide such information, then for the purpose of [NHS Test and Protect](#) I will request and store your name and contact details for 21 days after the research interaction. If during this 21 day period, the researcher has a positive COVID-19 test then, if requested, your contact details will be shared with NHS contact tracers, who may then contact you directly. The period of 21 days will ensure full cover of the typical incubation period and additional time during which people may be infectious. This information relating to your name and contact details is in addition to the data collected as part of the research study, will be stored separately from the research data, shared with NHS Test and Protect if requested, and the legal basis for collecting these data is substantial public interest.

WHAT IF I AM UNWELL PRIOR TO THE RESEARCH INTERACTION?

If you feel unwell, experience COVID-19 related symptoms, have a positive lateral flow or PCR test, or have been required to self-isolate due to contact with a COVID-19 positive individual, then please contact the researcher (Jack Reed, _____), and we will postpone or cancel the research interaction.

WHAT IF I BECOME UNWELL AFTER THE RESEARCH INTERACTION?

If you experience COVID-19 related symptoms, and/or have a positive COVID-19 test following the research interaction, please follow the local government guidance.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

All the information I collect during the research will be kept confidential and there are strict laws which safeguard your privacy at every stage. At the end of the interview, you will be invited to offer a pseudonym which will be used when reporting on the data.

HOW WILL I USE INFORMATION ABOUT YOU?

I will need to use information from you for this research project.

This information will include your name, job title, location of work, and contact details. I will use this information to do the research, but will always refer to you by a pseudonym when discussing or reporting your data. Your personal details will not be shared with either the Outward Bound Trust, your school, or any other organisations. Alongside this, the data you provide will not be combined with any other data.

You will be referred to by a pseudonym in the research, a pseudonym that you can select during the interview. Every measure will be taken to maintain anonymity, including the removal of all personal identifiers when the data is discussed or reported. However, whilst every effort will be made to maintain anonymity, staff members within the Outward Bound Trust or your school may be able to identify you based on your relationship(s) with them. Your transcribed and anonymised data in full-transcript form will only be viewed by me and my research supervisors. Sections of transcribed and anonymised data where all personal identifiers have been removed may be viewed by Outward Bound Trust staff members. These staff members may include heads of centres, directors, the senior leadership team, and with members of an internal working group set up within the trust for this research. The internal working group comprises senior managers from across the trust in relation to research, innovation, marketing, corporate partnerships, and sales teams. It is the sharing of data and findings within these internal management structures that will facilitate the development of policy and practice across the trust.

Before any of your data is shared with any internal staff members within The Outward Bound Trust or your school, you will have the opportunity to review your interview transcript. At that point, you will be able to redact data which will be deleted from your transcript prior to sharing. Redacted data will not be used in this research or in any future research.

All paper and electronic data will be stored in a locked filing cabinet and on a password-protected computer file and password-protected external hard drive. Your consent information will be kept separately from your responses to minimise risk.

Once I have finished the study, I will keep your data for a minimum of four years so results may be shared and published. During the process of data storage and the publication of findings, your data will remain fully anonymised.

WHAT ARE YOUR CHOICES ABOUT HOW YOUR INFORMATION IS USED?

You can stop being part of the study at any time, without giving a reason, and may request for your data to be removed and destroyed at any time.

WHERE CAN YOU FIND OUT MORE ABOUT HOW YOUR INFORMATION IS USED?

You can find out more about how we use your information at <https://www.ed.ac.uk/records-management/privacy-notice-research>

You can also find out more by asking me (Jack Reed,) or by asking one of my supervisors (Simon Beames,) (Gale Macleod,).

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study may be summarised in my PhD thesis and in published articles, reports, and presentations. You will not be identifiable from any published results. Quotes or key findings will always be made anonymous in any formal outputs unless we have your prior and explicit written permission to attribute them to you by name. A summary of the findings from the study will be made available to participants who indicate they would like to receive this. This summary will be sent to participants by email.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This study has been organised by me (Jack Reed) and is the result of a collaborative Economic and Social Research Council award between the Outward Bound Trust and the University of Edinburgh.

The study is being funded by the Economic and Social Research Council and is managed by the Scottish Graduate School of Social Sciences.

WHO HAS REVIEWED THE STUDY?

The study proposal has been reviewed by my supervisors, the Moray House School of Education and Sport research ethics committee at the University of Edinburgh, and complies with the ethical guidelines for educational research as set out by the British Educational Research Association.

WHO CAN I CONTACT?

If you have any further questions about the study, please contact me: Jack Reed,

If you would like to discuss this study with someone independent of the research, please contact the Postgraduate Research Director: Dr John Kelly,

If you wish to make a complaint about the study, please contact one of the Directors of Research at the Moray House School of Education and Sport:

- Dr Tony Turner,
- Professor Gillean McCluskey,

Appendix AC

Voluntary informed consent form for visiting staff members.

Networked spaces and mobile technology in residential outdoor education
Version 1.
18.01.2022.



PARTICIPANT CONSENT FORM FOR VISITING STAFF

PLEASE TAKE A PHOTO OF THIS FORM FOR YOUR RECORDS

Study Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Researcher's name and contact details: Jack Reed (Jack.Reed@ed.ac.uk)

Please place an X in the box

I confirm that I have read and understood the Participant Information Sheet (Version 1 dated 18.01.22) for the above study.

I have been given the opportunity to consider the information provided, ask questions, and have had these questions answered to my satisfaction.

I understand that my participation is voluntary and that I can withdraw from the study at any time without giving a reason and without my legal rights being affected.

I understand that my anonymised data will be shared with the Outward Bound Trust, the school I have travelled with, and that I will have the opportunity to review my interview transcript before it is shared with these organisations.

I understand that my anonymised data will be stored for a minimum of 4 years and may be used in future ethically approved research.

I agree that I am happy to be interviewed and/or observed for the purposes of this PhD research.

I would like to receive a copy of the study results via email.

By placing an X in this box, I agree to take part in the above study.

Print name: _____

Date: _____

Appendix AD

Instructor information sheet for observations.



PARTICIPANT INFORMATION SHEET

The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

You are being invited to take part in research on mobile technology and connectivity at the Outward Bound Trust. This research is the result of a collaboration between the University of Edinburgh, The Outward Bound Trust, and the Economic and Social Research Council. I (Jack Reed) am leading this research at the University of Edinburgh. Before you decide whether to take part, it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of the study is to explore the relationship(s) between technological connectivity (e.g., Wi-Fi, mobile technology, social media, text messaging, emails), young people, and the Outward Bound Trust. This study is exploring a largely under-researched field of enquiry and seeks to assess how mobile technology (and subsequent connectivity) intersects with residential outdoor education.

WHY HAVE I BEEN INVITED TO TAKE PART?

You are invited to participate in this study because you are a full-time instructor or learning and adventure manager at the Outward Bound Trust.

DO I HAVE TO TAKE PART?

No – it is entirely up to you. If you do decide to take part, you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect your statutory rights, legal rights, or employment. Please note that your data may be used in the production of formal research outputs (e.g. journal articles, conference papers, theses, and reports) prior to your withdrawal and so you are advised to contact Jack () at the earliest opportunity should you wish to withdraw from the study.

WHAT WILL HAPPEN IF I DECIDE TO TAKE PART?

If you do decide to take part, please keep this Information Sheet. You will be asked to complete an Informed Consent Form to show that you understand your rights in relation to the research, and that you are happy to participate.

I will be undertaking observations of young people taking part in activities delivered by you at Outward Bound. This will include the delivery of activities at the centre and away from the centre. I will participate in some of these activities, undertaking the role of participant as observer, immersing myself in the experiences of young people at Outward Bound. I will

record data, which might include your interactions with young people, using paper-based field notes. These field notes will inform the findings of the study. Before any findings linked to you are shared beyond myself and my PhD supervisors, you will have the opportunity to review your contribution to the study.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

The study may indirectly benefit you through the development of policy and practice within the Outward Bound Trust. This means that the Outward Bound Trust, as an organisation, may directly benefit from the research, but there are no direct benefits at the individual level associated with your participation.

ARE THERE ANY RISKS OR DISADVANTAGES ASSOCIATED WITH TAKING PART?

There are no significant risks associated with participation. However, I will share anonymised data from the observations with members of the senior leadership team at The Outward Bound Trust. Whilst your data will be anonymised, it may be possible that you can be reidentified by internal staff members at The Outward Bound Trust during this process; please see the “How will I use information about you?” for more information on this. Any minor risks have been acknowledged during the ethical approval process and will be continuously under review during the research.

I have taken specific steps to minimise the risk of exposure to COVID-19 during the study by adhering to the most up to date Scottish Government [guidance](#). These measures include good hand hygiene and surface cleaning, good ventilation, keeping a safe distance, and continued requirement for face coverings in indoor public places. Further, you will only interact with a researcher *who in the last 24 hours have had a recent negative lateral flow test*, have not experienced COVID-19-related symptoms, and are not required to self-isolate due to close contact with a COVID-19 positive individual.

However, even with these control measures, there remains some additional risk of exposure to COVID-19 from participating in this study, but we do not assess that this risk is higher than engaging in other day-to-day activities.

UNDERSTANDING YOUR RISK FROM EXPOSURE TO COVID-19

It is not possible to eliminate all risk of exposure to COVID-19, and so it is important for you to understand and consider your own personal risk in the unlikely event of exposure.

You may be more likely to be at high-risk from infection if you have previously been advised to shield from the virus, if you have certain health conditions (including heart disease, lung disease, kidney disease, diabetes, or neurological disease), or if you are taking immunosuppressant medication or steroids. The risks of serious consequences from COVID-19 are also known to increase on average with age. To understand more about potential risk factors, please visit [this NHS webpage](#).

MAKING AN INFORMED CHOICE

It is important that you make an informed choice whether or not to take part in this research, considering your potential risk from the virus, and the measures in place to reduce

the risk of exposure. It is important that you feel that you have all of the information required regarding these risks, and can consider that in light of your personal circumstances (e.g. health, caring responsibilities). You should have had a chance to reflect on these risks, and discuss them with the researcher, prior to agreeing to participate in the study.

STORING CONTACT DETAILS

If the research requires you to be in contact with the research team in an indoor space out with our University campus, then you may be required to provide your name and contact details to Outward Bound. If there is no requirement by the managers of Outward Bound to provide such information, then for the purpose of [NHS Test and Protect](#) I will request and store your name and contact details for 21 days after the research interaction. If during this 21 day period, the researcher has a positive COVID-19 test then, if requested, your contact details will be shared with NHS contact tracers, who may then contact you directly. The period of 21 days will ensure full cover of the typical incubation period and additional time during which people may be infectious. This information relating to your name and contact details is in addition to the data collected as part of the research study, will be stored separately from the research data, shared with NHS Test and Protect if requested, and the legal basis for collecting these data is substantial public interest.

WHAT IF I AM UNWELL PRIOR TO THE RESEARCH INTERACTION?

If you feel unwell, experience COVID-19 related symptoms, have a positive lateral flow or PCR test, or have been required to self-isolated due to contact with a COVID-19 positive individual, then please contact the researcher (Jack Reed, _____), and we will postpone or cancel the research interaction.

WHAT IF I BECOME UNWELL AFTER THE RESEARCH INTERACTION?

If you experience COVID-19 related symptoms, and/or have a positive COVID-19 test following the research interaction, please follow the local government guidance.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

All the information I collect during the research will be kept confidential and there are strict laws which safeguard your privacy at every stage. At the end of the observation, you will be invited to offer a pseudonym which will be used when reporting on the data.

HOW WILL I USE INFORMATION ABOUT YOU?

I will need to use information from you for this research project.

This information will include your name, initials, job title, location of work, and contact details. I will use this information to do the research, but will always refer to you by a pseudonym when discussing or reporting your data. Your personal details will not be shared with either

the Outward Bound Trust or any other organisations. Alongside this, the data you provide will not be combined with any other data.

You will be referred to by a pseudonym in the research, a pseudonym that you can select after the observation. Every measure will be taken to maintain anonymity, including the removal of all personal identifiers when the data is discussed or reported. However, whilst every effort will be made to maintain anonymity, staff members within the Outward Bound Trust may be able to identify you based on your relationship(s) with them. Sections of anonymised data where all personal identifiers have been removed may be viewed by Outward Bound Trust staff members. These staff members may include heads of centres, directors, the senior leadership team, and with members of an internal working group set up within the trust for this research. The internal working group comprises senior managers from across the trust in relation to research, innovation, marketing, corporate partnerships, and sales teams. It is the sharing of data and findings within these internal management structures that will facilitate the development of policy and practice across the trust.

Before any of your data is shared with any internal staff members within The Outward Bound Trust, you will have the opportunity to review how I have used your data. At that point, you will be able to redact data which will be deleted prior to sharing. Redacted data will not be used in this research or in any future research.

All paper and electronic data will be stored in a locked filing cabinet or on a password-protected computer file and password-protected external hard drive. Your consent information will be kept separately from your responses to minimise risk.

Once I have finished the study, I will keep your data for a minimum of four years so results may be shared and published. During the process of data storage and the publication of findings, your data will remain fully anonymised.

WHAT ARE YOUR CHOICES ABOUT HOW YOUR INFORMATION IS USED?

You can stop being part of the study at any time, without giving a reason, and may request for your data to be removed and destroyed at any time.

WHERE CAN YOU FIND OUT MORE ABOUT HOW YOUR INFORMATION IS USED?

You can find out more about how we use your information at

<https://www.ed.ac.uk/records-management/privacy-notice-research>

You can also find out more by asking me (Jack Reed,) or by asking one of my supervisors (Simon Beames,) (Gale Macleod,).

WHAT WILL HAPPEN WITH THE RESULTS OF THIS STUDY?

The results of this study may be summarised in my PhD thesis and in published articles, reports, and presentations. You will not be identifiable from any published results. Quotes or key findings will always be made anonymous in any formal outputs unless we have your prior and explicit written permission to attribute them to you by name. A summary of the findings from the study will be made available to participants who indicate they would like to receive this. This summary will be sent to participants by email.

WHO IS ORGANISING AND FUNDING THE RESEARCH?

This study has been organised by me (Jack Reed) and is the result of a collaborative Economic and Social Research Council award between the Outward Bound Trust and the University of Edinburgh.

The study is being funded by the Economic and Social Research Council and is managed by the Scottish Graduate School of Social Sciences.

WHO HAS REVIEWED THE STUDY?

The study proposal has been reviewed by my supervisors, the Moray House School of Education and Sport research ethics committee at the University of Edinburgh, and complies with the ethical guidelines for educational research as set out by the British Educational Research Association.

WHO CAN I CONTACT?

If you have any further questions about the study, please contact me: Jack Reed,

If you would like to discuss this study with someone independent of the research, please contact the Postgraduate Research Director: Dr John Kelly,

If you wish to make a complaint about the study, please contact one of the Directors of Research at the Moray House School of Education and Sport:

- Dr Tony Turner,
- Professor Gillean McCluskey, Gillean.

Appendix AE

Voluntary informed consent form for instructor observations.

Networked spaces and mobile technology in residential outdoor education
Version 2.
18.01.2022.



PARTICIPANT CONSENT FORM FOR INSTRUCTORS

PLEASE TAKE A PHOTO OF THIS FORM FOR YOUR RECORDS

Study Title: The influence(s) of networked spaces and mobile technology on experiences of residential outdoor education: Connectivity, young people, and the Outward Bound Trust

Researcher's name and contact details: Jack Reed (Jack.Reed@ed.ac.uk)

Please place an X in the box

I confirm that I have read and understood the Participant Information Sheet (Version 1 dated 18.01.22) for the above study.

I have been given the opportunity to consider the information provided, ask questions, and have had these questions answered to my satisfaction.

I understand that my participation is voluntary and that I can withdraw from the study at any time without giving a reason and without my legal rights being affected.

I understand that my anonymised data will be shared with the Outward Bound Trust and that I will have the opportunity to review how my data has been used before it is shared.

I understand that my anonymised data will be stored for a minimum of 4 years and may be used in future ethically approved research.

I agree that I am happy to be observed delivering Outward Bound activities to young people during the young people's visit to Outward Bound.

By placing an X in this box, I agree to take part in the above study.

Print name: _____

Date: _____