

"You need to touch grass more." A mixed methods study on outdoor adult play and its implications for well-being, social connection and the negotiation of the parent role.

Master's Dissertation

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Declaration



DECLARATION FORM

Master's Degrees by Examination and Dissertation Declaration Form

1. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed:

Date: 29 September 2026

2. This dissertation is being submitted in partial fulfilment of the requirements for the degree of MA in Outdoor Education.

Signed:

Date: 29 September 2026

3. This dissertation is the result of my own independent work / investigation, except where otherwise stated.

Other sources are acknowledged by explicit references. A bibliography is appended.

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ABSTRACT

This study examines the elements of adult play experienced within a family outdoor woodland setting and explores how these experiences may enhance well-being and playfulness. A pragmatic mixed method approach was used to explore adults' experiences across four family woodland sessions. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) and Adult Playfulness Trait Scale (APTS) were used to gather quantitative data, while qualitative data was gathered using observations and group interviews with adults and children. Pre- and post-session questionnaires were completed by sixteen adults revealing a significant increase in well-being scores following participation. Overall adult playfulness did not show a significant change; however, a significant increase was observed in the APTS Initiative dimension. The qualitative findings showed that adults engaged in creative, exploratory, physical and social forms of play, either with or alongside children but this was influenced by their role as a parent or grandparent with supervision and responsibility sometimes creating hesitation about joining in. Therefore, the findings suggest that adults may require social permission and opportunities to move past their usual responsible adult role to engage in play more freely.

The study puts forward that facilitated family woodland experiences can provide opportunities for adult play, social connection and positive well-being experiences. With the findings highlighting the importance of creating an environment where adults feel invited and able to play, alongside their role as a responsible adult. The small exploratory sample limits generalisation, however, the study provides insight into how facilitation, social context and the woodland environment may support adult play within family outdoor experiences.

Keywords: play, adult play, adult playfulness, well-being, parent role, social connection, woodland session

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GLOSSARY OF TERMS

Term	Definition
APTS	The Adult Playfulness Trait Scale, a measure of individual differences in adult playfulness across several dimensions, including Initiative, Fun Belief, Reactivity, Uninhibitedness, Spontaneity and Fun-Seeking Motivation.
Facilitation	The process of organising an activity in a way that makes it accessible for a chosen group of people to achieve.
Permission to play	In this study, the term refers to the acceptance that enables adults to participate in play, particularly when social expectations or their role as a responsible adult may otherwise discourage participation.
Phenomenological principles	An approach focused on understanding peoples lived experiences and how they make sense of those experiences.
Pragmatism	A research paradigm that focuses on the practical use of methods and approaches appropriate for answering the research question.
Social context	The cultural, social, economic and political factors that influence how an individual behaves and views the world around them.
Thematic analysis	A method of identifying, analysing and reporting patterns or themes in qualitative data.
Well-being	A person's overall state of happiness, health and quality of life.
WEMWBS	The Warwick-Edinburgh Mental Well-being Scale, a 14-item questionnaire used to assess mental well-being through positivity-worded statements about thoughts and feelings.

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CHAPTER 1: Introduction

1.1 Why Play?

Background

The rationale for focusing on adult play stems from the recognition that play is a fundamental aspect of human development and well-being, yet it is often underrepresented in adult life. As societal pressures increase, adults face significant mental health challenges, including stress and social isolation. Outdoor play presents an accessible means to mitigate these issues by facilitating relaxation, creativity, and community engagement. The outdoor element combines play with nature. Nature contact and importantly connection is shown to have a positive effect on well-being. This focus aligns with contemporary discussions around holistic experiences, lifelong learning, biophilia and eco-psychology, reinforcing the importance of playful experiences across all age groups in the outdoors.

Play is strongly associated with childhood. Through play, children engage in flexible thought, emotional exploration, and cooperative interaction; skills that form the basis for later learning and social competence. It can support problem solving, creative thinking, collaborative learning, and emotional resilience (Gray, 2013). Adults play, but the way they view and describe play can be very different. Other outdoor activities such as walking, spending time outdoors or supervising children may be seen as play to adults. This raises questions about what is recognised as adult play and whether adults see themselves as people who play. The research focuses on adult play within a family outdoor experience, which for the purposes of this study consists of adults and children in a planned outdoor experience sharing activities within a woodland setting.

The woodland setting provides a range of natural and open-ended materials that can be used in different ways. Sticks, clay, water, fire, and natural materials can support creative, physical, imaginative and exploratory activities without necessarily requiring fixed outcomes. Being outdoors also creates opportunities for adults and children to

share experiences in the natural world. However, adults do not always access and engage in the play opportunities available to them.

Play does not abruptly end in the transition from child to adult, but adult life can reinforce the shift away from play. Work obligations, family responsibilities, and societal values that associate seriousness with success may reduce the time and inclination to play. This could also be important because play does not necessarily appear to be understood or valued in the same way across social and cultural contexts or when considering adult playfulness. As playfulness may not simply depend on an individual's personality or willingness to play; the environment and social situation may also influence whether that playfulness is expressed.

The problem

Although play is widely recognised as important for well-being and development, it is often associated with childhood and given less attention in adult life, particularly within outdoor experiences. There is a gap in understanding how adults experience and participate in outdoor play, and what enables or prevents them from seeing themselves as players within a family outdoor setting.

1.2 Research Aim

The research aim is **to gain a better understanding of adult outdoor play** and explore the impact of an outdoor family play session on well-being and playfulness, to further the limited research on adult play in the outdoors.

The study explores adult participation in a family woodland experience through a mixed-methods approach. It considers the types of play adults engage in. Their reasons for participating, the role of the outdoor setting and the barriers that may prevent or limit participation. It also considers whether participation is associated with changes in well-being and adult playfulness.

1.3 Research question

The primary research question guiding this dissertation is:

What elements of adult play are witnessed in a family outdoor experience, and how do they enhance adult well-being and playfulness?

The research question explores how adults engage with play in a family outdoor setting and the factors that may support or limit their participation.

1.4 Research objectives

To address this question, the following objectives were pursued:

1. To define what is meant by adult outdoor play / playfulness.
2. To critically evaluate the types of outdoor play that adults engage in during a family experience within a woodland setting.
3. To explore the motivations for adult participation in outdoor play and its perceived benefits.
4. To assess how the outdoor setting can effectively encourage playful elements to support adult participation.
5. To examine the barriers adults face in engaging with outdoor play during a family experience in a woodland setting.
6. To define what is meant by adult well-being in the outdoors.

These objectives provide a structure for the research and allow both the practical experience of participating in outdoor play and the wider ideas surrounding adult playfulness and well-being to be considered.

1.5 Research context

The research was carried out by the research facilitator observer during family outdoor experiences at Coed Ailwylt, a woodland setting where adults and children were invited

to take part in a range of play-based outdoor activities. The setting provided natural and open-ended materials allowing opportunities for creative, physical, imaginative and exploratory play.

The family context is important because adults may attend outdoor sessions for their children or to spend time as a family together than specifically to play themselves (Refshauge, Stigsdotter and Cosco, 2012). This research therefore considers what happens when adults are given opportunities to participate in play and the factors that may encourage or prevent them from doing so.

1.6 Structure of the Dissertation

The dissertation is divided into six chapters.

Chapter 1: Introduction presents the research topic and explains the rationale for focusing on adult outdoor play. It outlines the research aim, question and objectives.

Chapter 2: Literature Review examines the existing literature relating to play, adult play, playfulness, outdoor play and well-being. Considering how play traditionally being understood as part of childhood, may influence adult attitudes towards engaging in play.

Chapter 3: Methodology explains the research approach used within the study. It discusses the pragmatist paradigm and the mixed-methods design, as well as the methods used to collect and analyse the data, ethical issues, and the researcher's role as researcher, facilitator observer.

Chapter 4: Findings present the findings from the surveys, observations and group interviews. The quantitative findings examine any changes in well-being and adult playfulness after participation. The qualitative findings explore the types of play adults engage in, their motivations, the role of the woodland setting and the barriers that affected participation.

Chapter 5: Discussion brings the findings together with the literature discussed in Chapter 2. It considers what the findings suggest about adult outdoor play and

playfulness, also considering the role of adult responsibility and supervision, and whether adults need some form of social or personal permission to move from being the responsible adult to becoming a player themselves. It considers the implications of the research for the facilitation and design of family outdoor experiences, identifies the limitations of the study and makes recommendations for future practice and research.

Chapter 6: Conclusion summarises the main findings and returns to the research question.

CHAPTER 2: Literature review

2.1 Introduction

Play is a surprisingly complex idea. An activity which might seem frivolous at first glance could be vital for social, emotional and physical development, strengthen family relationships, and contribute to well-being (Ginsburg, 2007). While childhood play and playfulness has been extensively studied, adult play is often overlooked in both research and society more generally, with limited comprehensive research on adult play in the outdoors. This reflects a wider cultural focus on increased responsibility and productivity in adult life, leaving less time for frivolity (Brown and Vaughan, 2009, Proyer, 2016). For the purposes of this literature review, the scope of research encompasses play in the outdoors more broadly.

At the same time, there is a growing interest in how natural environments support well-being. The World Health Organization (WHO Regional Office for Europe, 2025) has outlined the potential for nature-based solutions to support human health in parallel to ecological resilience, while the 2025 Position Statement on Active Outdoor Play suggests that play is essential for promoting holistic health and well-being across all ages, supporting physical, mental and environmental health. This focus on health and active outdoor play highlights the importance for providers to facilitate equitable opportunities for active outdoor play in everyday settings where people live, learn, work and play (Lee *et al.*, 2025).

This chapter critically reviews literature on adult play and playfulness and their relationship with outdoor environments and well-being. It begins by exploring what play is, then considers definitions, types of play, its importance across the lifespan, the human need for play, opportunities for play, and the changing place of play in education and society. The chapter then focuses on adult play and playfulness, including the influence of socioeconomic factors, places where adults can be playful, and the relationship between playfulness and well-being.

The chapter then considers well-being in outdoor environments, examining the changing relationship between people and nature, the links between nature, health and well-being, and the concepts of nature contact and connectedness. Examining three influential theories frequently used to explain the relationship between nature and well-being, namely: the Biophilia hypothesis, Attention Restoration Theory (ART) and Stress Recovery Theory. Finally, the chapter considers family outdoor play and the role of shared outdoor experiences in creating opportunities for adults and children to play together.

These areas of literature together, provide the foundation for examining adult play within a family outdoor woodland experience and considering how opportunities for play may relate to well-being and playfulness.

2.2 What is play?

Play as a foundation

Play is subjective, primitive and predates culture (Huizinga, 2002). It is recognised as a foundational behaviour, experienced to explore, interpret and respond to environments, leaving scholars long debating how to define it and why it matters (Deterding, 2017, Forbes and Craven 2023, Magnuson and Barnett, 2013, Keary, Garvis and Walsh 2023). Play is often understood as a childhood pursuit and has been extensively studied in Western and Northern European contexts due to its perceived psychological and physical well-being benefits to children (Van Vleet, Helgeson and Berg, 2019). Brown (2009) suggests on a very basic level play is deemed as an activity one does for pleasure; however, he also contends that play is as fundamental to human health as sleep or nutrition. Bodrova, Leong and Yudina (2023), while emphasising a connection between play and childhood social development, also pinpoints constraints and barriers to finding an encompassing definition, suggesting it is owing to the fluid nature of play and the difficulty in reliably measuring play characteristics consistently.

It seems curious that something so integral to humankind, is so difficult to define! Perhaps it is due to play's ability to be highly diverse and multifaceted allowing it to therefore encompass a wide range of behaviours and experiences. Or possibly its lack of disposition towards contexts; its ability to be both voluntary or structured, serious or frivolous, individual or social, making it difficult to capture play in a single definition and contributing to ongoing theoretical debate within literature (Burghardt, 2005).

For the purposes of this literature review an amalgamation of Panksepp (1998) and Sutton-Smith's (1997) definitions of play will be applied to incorporate play **as an activity pursued for pleasure that can shape developmental, social and emotional growth.**

Our innate need to play

If you ask any child what they enjoyed most about their day it is highly likely they will reel off one or more instances of play; play is the universal language of childhood. Indeed, childhood play has for several decades been viewed as more than a recreational activity, given its role in supporting emotional regulation, social connection, learning, and for navigating early understandings of power and imagination (Bruce, 2011; Vygotskii, 2024; Sutton-Smith, 1997). Vygotskii (2024) indicated that during play, children enter imaginary worlds where they take on roles and follow social rules, allowing them to think and behave beyond their everyday abilities, experimenting within a safe environment (Bodrova and Leong, 2015). Vygotsky's concept of the Zone of Proximal Development (ZPD), positions play as enabling children to practice skills they have still not yet fully mastered independently. Through their interaction with peers or more knowledgeable others, children can operate beyond their current level of competence. In this way, play acts as a powerful context for cognitive growth and the development of higher mental functions (Vygotskii, 2024). In a comprehensive review Lillard *et al.* (2013), analysed decades of research on pretend play and identified consistent associations with advances in children's language, storytelling, and emotional self-regulation. While they noted that causal links remain difficult to establish, the overall developmental relationships are strong. However, despite

extensive research into the developmental benefits of play, a lack of attention has been focused on play's sociocultural influence (Sicart, 2014; Lester and Russell, 2010). Nicolopoulou (1993) argues that this gap in the literature highlights the need for further research studying the use of play on social and cultural development.

Time for play

Over the last few decades, opportunities for free self-directed play have declined, particularly in industrialised societies. This reduction in free play has had a detrimental effect on the opportunity for children to learn through social interactions, or to gain mastery when problem solving on their own terms rather than abiding by adult rules (Gray, 2011, 2013). Ferreira *et al.* (2024) suggest that children have less autonomy to experience unregulated play outdoors. Similarly, Loebach *et al.* (2023) cite time limitations, increased messages of stranger danger, the growing influence of social media, and the social anxiety surrounding risky play as reasons for the decline. Their research indicates that allowing children to experience manageable amounts of fear during play can support the development of emotional regulation in these instances. Increasingly, negative messages around risk leave some parents finding it difficult to allow their children the agency to experience fear in play at all (Sandseter, 2009; Gill, 2007). Gray (2011) similarly argued that academic pressure, parental safety concerns, and reduced community spaces have collectively eroded children's capacity for spontaneous play. He linked these trends to higher levels of stress and anxiety in young people, suggesting that reduced playtime may carry emotional costs. As Firth and Powell argue, "Children supported to develop life skills in their early years live up to 10 years longer, and play is a crucial way this can be achieved" (2025, p.43). This evidence underscores the importance of play as a developmental resource with long-term implications for health and resilience. Furthermore, political and social influences, could be said to have a significant bearing on the amount of time and type of play children are able to experience, especially when it comes to public education.

Play in education

Understanding the importance of play has led to the education system trying to incorporate and utilise it for learning. Piaget's theory (1962) offered early insight into play as directly benefitting cognitive development, while in recent years a greater focus on play within the context of early years education has resulted in a focus on play in the Foundation Phase in the UK. Indeed, Article 31 of the United Nations Convention on the Rights of the Child (UNCRC) recognises the right for every child, to access play, stating that children are entitled to engagement in play activities appropriate to their age, (UNCRC, 1989). This is particularly relevant within the current Welsh context, where the Curriculum for Wales places importance on schools offering regular possibilities for children to learn, play and explore the outdoors, including encouragement to provide residential opportunities, recognising the contribution outdoor experiences can have on physical, mental and emotional well-being (Welsh Government, 2021).

Bottrill (2022) emphasises that play is more important to childhood than any educational scheme or learning system, because it supports all development in a fluid and natural way allowing children to intrinsically learn through exploration. Yogman *et al.* (2018), Zosh *et al.* (2018, cited in Rautenbac *et al.* 2024,) and Gray (2013) agree, suggesting play needs to be intrinsic, free, and self-directed to achieve its many benefits, this can be difficult to attain in an education system that still relies on performative testing. Especially when research supports the idea children would like more adventurous play, whereas schools are limited by health and safety policies alongside social pressure to limit risk for fear of physical harm (Jerebine *et al.*, 2024). While play is confidently used as a tool within many early years' settings, once children progress through to the later stages of education, there is much less focus on play, both pedagogically and socially (Gray, 2013). This pattern appears to continue into adolescence, with research indicating a decline in active and unstructured outdoor play as children transition from primary to secondary education.

The gamification of play

During adolescence, rising academic and social demands narrow the scope for imaginative or spontaneous play, replacing it with performance-oriented activities (Proyer, 2012). Consequently, modern childhood often involves structured, rule-bound, or virtual play that differs substantially from the open-ended play once a fundamental characteristic of earlier generations (Cimino, Maremmanni and Cerniglia, 2025). Kennedy-Behr and Webb-Williams (2023) found that although physical play does not disappear in the transition from primary to secondary education in Australia, it does occur less frequently. Similarly, longitudinal research has identified a substantial decline in active play associated with the outdoors between the ages of 10-11 and 12-13 (Kemp *et al.* 2022). While Hofferth (2009) reported that American children experienced a notable decline in discretionary play (free, unsupervised, imaginative) between 1997 and 2003, accompanied by an increase in adult-supervised or screen-based pursuits. Digital technologies have complicated this landscape further, with more secondary education settings including greater instances of playful learning, and the gamification of languages and maths. These are reported to offer cognitive benefits such as improved problem-solving and visual processing, while not replicating the social negotiation or physical engagement found in traditional forms of play (Ginsburg, 2007; Jørgensen *et al.*, 2025; Boehm and Franklin, 2023; Williams and Del Rio 2022). Chu *et al.*, (2024) found in their systematic review that digital play is associated with interactive learning but also with the negative threat of reduced physical activity and risk of addiction.

Indeed, educational professionals face the reality that including playful thinking can be critiqued as “Irresponsibility, an evasion of the serious business of academic progress” (Garfath, 2015, p113). However, with growing levels of adolescents suffering from anxiety and other mental health issues, could play after childhood be of importance when considering mental health, both in view of its relevance to growth and the pursuit of happiness?

Adult play

In adult life, play looks different to remembered childhood instances; it rarely resembles the make-believe and whimsy of children's, becoming structured, organised and rare. Van Vleet and Feeney (2015) define **play in adults as activities carried out for enjoyment, with an attitude of openness, fun, and full engagement**. Importantly, they show the positive emotions and connections it creates and that play in relationships strengthen bonds between people, improving well-being. Research supports play as important for well-being, creativity and resilience throughout life (Proyer *et al.*, 2020; Brown and Vaughan, 2009). However, in many cultures, play is still viewed as a distraction from productivity, which can discourage adults from freely engaging in it, perpetuating the cultural underestimation of play (Tympana *et al.* 2024). Which is possibly the reason research has been limited on adult play as a topic; despite gathering increased attention in recent years there are still significant gaps in empirical research (Van Vleet and Feeney, 2015).

Rather than disappearing in adulthood then, it may be more appropriate to consider how opportunities for play become shaped by social expectation and how responsibilities and perceptions influence adult play behaviour. DiBianca Fasoli (2014) and more recently Yapar (2026) suggest adults' beliefs on who and what play is appropriate for, may also influence children's willingness to participate. Maynard *et al.* (2025) suggests there is an assumption of "adult play guilt" which is perpetuated by social and cultural expectations. They found negative connotations to playing rather than working on something deemed more productive limited the appetite for adult play. This could explain why organised hobbies, sports, social games, and artistic activities, are more commonly associated with adult play. Although they possibly satisfy some similar motivational needs for exploration and connection in the same way that child's play does, these activities allow for adults' play expression in a more socially accepted, controlled and structured way (Deterding, 2018). Therefore, play has become synonymous with leisure time and occurrences of unstructured outdoor play are increasingly rare in contemporary childhood, but even more infrequent in adulthood (UNESCO, 2022).

Although the style and frequency of play evolve in adulthood, there is a growing body of research which supports the idea that outdoor play may serve as an accessible and effective means of promoting well-being, reducing stress and enhancing psychological resilience (Lackey, 2018; Mygind, 2019; Lee *et al.*, 2025; Maynard *et al.*, 2025). This is particularly relevant given increasing interest in preventative and nature-based approaches to mental health. As Williams and Del Rio argue “Experiencing play is an act of mindfulness” (2022, p.1). However, access to play opportunities is not experienced equally across society (Neal *et al.*, 2023).

Socioeconomic divide

Socioeconomic factors such as income, employment patterns, housing conditions, access to green space, and available leisure time can influence both children’s and adult’s opportunities to engage in play. Those experiencing financial insecurity may face barriers including limited access to play facilities, reduced free time and social expectations and related stigma that prioritise productivity, responsibility, and economic contribution over play (Rhea *et al.*, 2023). For that reason, play can become a privilege rather than a universally accessible experience. In addition, inequalities in access to safe outdoor environments and recreational spaces may further restrict opportunities for play, highlighting how social, economic and environmental factors shape who is able to engage in playful activities and under what circumstances (UNESCO, 2022; Loebach *et al.*, 2023). There is relatively little research examining inequalities in adult play. Most recent literature discusses inequalities in recreation, green space access, romantic life and outdoor activity, leaving a clear gap in empirical research (Van Vleet and Feeney, 2015; Brauer, Proyer and Chick, 2021). Therefore, more questions need to be raised examining whether opportunities for adult play are equitably distributed across contemporary society, which would provide greater insight into how social inequalities influence participation in play across adulthood (Cantor *et al.*, 2022; Cock *et al.*, 2025).

2.2.1 Playfulness

If “play is the work of the child” then playfulness is the forgotten pastime of the adult (Montessori, 1967 cited in Chaffin, 2023). Whereas play is recognised as an essential childhood staple for human development; playfulness is a personality trait, which distinguishes a person's temperament and propensity to participate, alongside the influence of intrinsic and extrinsic motivators (Feniger-Schaal *et al.*, 2024; House *et al.*, 2023). Although contrary to this Bateson (2014) indicated playfulness as a mental or emotional state, fixed in that expression of time. However most modern researchers consider playfulness as a personality trait.

In recent years adult playfulness has been studied to a greater degree than adult play, it is seen as a more socially acceptable construct for adults, than spontaneous, imaginative play. Adults appear to be afforded the ability to be playful in work or social settings alongside other instances of maturity. Neuroscientific research demonstrates that playful experiences stimulate dopamine and promote neuroplasticity, fostering creativity and emotional regulation even in adulthood (Panksepp, 2007). These traits are stable over time and environment, making them a consistent indicator of a person's reactions, feelings, or thoughts as opposed to a fixed state (Proyer *et al.*, 2019), allowing playfulness to be nurtured, mastered and measured. Therefore theory-based measures, such as the Adult Playfulness Trait Scale provide valid and reliable quantitative data (Barnett, 2007; Proyer, 2016; Glynn and Webster, 1992). This has enabled researchers to explore the relationship between playfulness and a range of psychological and social outcomes, including well-being, creativity, stress management and interpersonal relationships. Despite this, the debate continues whether playfulness can be fully understood through psychometric approaches alone, as they do not consider social, cultural and environmental influences that shape playful behaviour (Sutton-Smith, 1997).

For the purposes of this study Barnett's definition of playfulness will be used; “the predisposition to frame (or reframe) a situation in such a way as to provide oneself (and possibly others) with amusement humour and/or entertainment” (2007 p.955). The

adult playfulness trait scale will also be implemented to gather the data for this research study.

Places for adults to be playful

Occasions for adults to experience playfulness outdoors may be influenced by both social expectations and the environments in which play takes place. Adults often feel the need to be the mediator or observer in areas such as playgrounds, prioritising their child's safety rather than experiencing play in that environment for themselves. Indeed, Rhea *et al.* observes that adults who exhibit playful behaviours could be limited by environment, recognising that most playgrounds and parks are designed for children. Their study revealed that most of the adults preferred being outdoors (84%) taking part in nature activities, providing a strong rationale for exploring adult play within outdoor settings (p. 20, 2023). This highlights a potential tension between adults' apparent desire to engage playfully outdoors and perceptions of where adult play is acceptable.

Playfulness is also associated with creativity, curiosity, flexibility and psychological well-being (Proyer, 2012; Lieberman, 1977, cited in Whitebread *et al.*, 2019). Although there has been historical evidence of confusion between playful and disruptive, impulsive behaviour, these characteristics should not be viewed as defining adult playfulness (Barnett, 2007). Instead, playful qualities such as humour, flexibility and spontaneity, may be valuable in the workplace, especially when linked to creativity (Proyer and Sendatzki, 2025). This suggests that playfulness does not disappear with age but may be expressed or experienced differently depending on the social context and whether adults feel permitted to play.

Playfulness and well-being

An expanding body of research suggests that playfulness could be a significant contributor to adult well-being, with potential applications in mental health promotion and therapeutic practice. Guitard, Ferland, and Dutil (2005) developed a model of adult playfulness to monitor the effectiveness of play used in therapeutic sessions. Similarly,

Proyer (2012) developed the Short Measure of Adult Playfulness scale (SMAP), to measure adults' general tendency towards playfulness. Studies using SMAP and other measures such as the Adult Playfulness Trait Scale (APTS) have shown that adults who are more playful tend to have higher levels of life satisfaction, stronger relationships with physical activity and better-defined imaginative skills (Proyer, 2013; Lieberman, 1977; Glynn and Webster, 1992). Magnuson and Barnett (2013) also identified significant links between playfulness, adaptive coping, and positive emotional well-being, with more adult students reporting lower stress and greater positive emotions. Highlighting that playfulness could potentially contribute to life satisfaction and psychological well-being across everyday adult life. However, Brown (2010) suggests that adults can also experience incidents of shaming or social stigma for playing in adulthood, reflecting wider cultural associations between seriousness and productivity. So, although playfulness is increasingly recognised as extending beyond childhood, social and cultural barriers could continue to limit its application and acceptance for adult mental health and well-being practices.

2.3 Well-being in the outdoors

The cultural shift from nature

Until relatively recently, humans lived in close relationship with the natural environment, in a very personal and profound way for survival. However, industrialisation and technological advancement have contributed to a gradual distancing from the natural world. Resulting in less time engaging with nature. Adults and children spend less time outdoors, although children in previous generations were expected to play outside unsupervised for extended periods of time, cultural shifts, greater periods of adult supervision and risk aversion have reduced children's autonomy and opportunities for an independent relationship with nature (Gill, 2007). Farbo and Rhea comment "The loss of unstructured play ... especially outdoors...is devastating for the healthy development of the child" (2021, p.2). This shift away from the outdoors is, in parallel to the development of more affordable technology (Louv, 2005). McCormick (2017) highlights the positive relationship between green space

exposure and well-being in children and adolescents, suggesting that regular access to natural environments can support mental health, cognitive functioning and overall quality of life. This relationship although complicated, has prompted growing interest in the role of the outdoors and nature connection in supporting well-being and human development.

For the purposes of this study, well-being in the outdoors is defined as the positive impact engagement with outdoor and natural environments can have on an individual's physical, emotional and psychological health, particularly through opportunities for physical activity, social interaction and nature connection (Pretty *et al.*, 2005; Barton & Pretty, 2010). If concerns regarding the long-term implications of declining outdoor play opportunities become increasingly restricted during childhood, and play becomes culturally associated with children, what happens to adults' opportunities to play outdoors? The potential of outdoor environments to enhance wellbeing has become an increasingly important area of research, particularly in response to growing concerns surrounding mental health.

Well-being and health

A substantial body of research supports the idea that nature and the natural environment have a positive impact on our health and well-being (Charan *et al.*, 2024; Biassoni *et al.*, 2023; Heezik *et al.*, 2021; Adams *et al.*, 2018). Early work by Ulrich *et al.*, (1991) suggested that exposure to green environments may promote stress recovery and improve mental health outcomes. However, Fromm argued that modern society remains too disconnected from the natural world to fully experience the benefits of biophilia. Fromm maintained that until humans can live in greater harmony with the natural world and each other, and achieve greater “security, justice and freedom”, society will continue to fall short of experiencing the true restorative potential of biophilia and human nature relationships (1973, cited in Gunderson, 2014, p.182).

Several theoretical frameworks help explain the relationship between the natural environment and well-being, including Stress Recovery Theory (SRT), Attention Restoration Theory (ART) and the Biophilia Hypothesis (Ulrich, 1983;1991; Kaplan &

Kaplan, 1989; Wilson, 1984). Together these theories provide complementary explanations for nature's ability to promote physical and psychological well-being offering valuable frameworks for understanding the benefits associated with outdoor play and engagement in natural environments.

Stress Recovery Theory (SRT) proposes that exposure to natural settings can reduce physiological stress responses and promote emotional recovery (Ulrich *et al.*, 1991). Similarly, Attention Restoration Theory suggests that natural environments support cognitive functioning and stress reduction, and reducing mental fatigue (Kaplan & Kaplan, 1989) In contrast, the Biophilia Hypothesis suggest that humans possess an innate tendency to seek connections with nature and other living systems (Wilson, 1984). Collectively, these theories suggest that regular engagement with natural environments may contribute positively to psychological resilience, stress reduction and overall well-being. These perspectives are particularly relevant within contemporary societies where stress, anxiety, and mental health related illnesses are increasingly prevalent (NHS England, 2025). In contrast, Louv's (2005) concept of nature-deficit disorder highlights the potential consequences of reduced contact with nature, suggesting that increasing disconnection from the natural world may negatively affect physical health, psychological well-being, and opportunities for meaningful engagement with outdoor environments. Collectively, these perspectives reinforce the importance of outdoor play as a means of fostering human-nature relationships and supporting well-being across the lifespan.

Nature contact or connectedness

Although children and adults still encounter nature during outdoor organised activities and fitness pursuits, like running and sports, nature contact and connectedness are two related but distinct concepts. While nature contact refers to simply being exposed to nature, nature connectedness describes a deeper emotional, cognitive and experiential relationship with the natural world. Capaldi, Dopko and Zelenski (2014) argue that to truly achieve the benefits of nature, such as increased physical and mental well-being, there must be prolonged and marked connectedness rather than

simply being exposed to it. Both have been increasingly associated with positive psychological outcomes, although the benefits of nature may be influenced by the quality and meaning of the experience (Zeng *et al.*, 2022). Barton and Pretty (2010) suggests that even relatively brief interactions with nature can produce measurable improvements in well-being, demonstrating that nature contact alone can have positive effects. Rather than viewing these perspectives as contradictory, Martin *et al.* (2020) argue that both nature contact and nature connectedness should be promoted, suggesting that the greatest benefits may be achieved when regular exposure to nature is accompanied by deeper sense of connection to the natural world. Active and sensory engagement with the natural environment during outdoor play may provide increased opportunities for both nature contact and a deeper connection with nature.

Well-being and policy

Well-being has become an increasingly important focus within Welsh and UK policy, reflecting growing recognition of the relationship between health, quality of life, and wider social and environmental factors. In Wales the *Well-being of Future Generations (Wales) Act 2015* places a duty on public bodies to work towards seven well-being goals, including health, resilience and cohesiveness in Wales (Welsh Government, 2015). The Act uses a holistic understanding of well-being that extends beyond physical health to encompass social, cultural, economic and environmental dimensions; considering the bigger picture around health and well-being (Keever, 2025). This focus on holistic well-being is also reflected in the *Curriculum for Wales*, which places health and well-being as one of the six areas of learning and experience. The curriculum recognises the importance of physical health, mental health, and emotional and social well-being (Welsh Government, 2021).

At a UK level, well-being has similarly gained prominence through initiatives such as the Office for National Statistics (2023) National Well-being Programme, which includes environmental factors alongside measures of health, happiness and life satisfaction, highlighting an increasing policy awareness for the relationship between outdoor environments and well-being (McCormick, 2017; Barton *et al.*, 2016). The inclusion of

environmental sustainability and community well-being within contemporary policy frameworks reflects a growing recognition of the contribution that access to outdoor spaces, and natural environments can make to both individual and community health and well-being.

2.4 Outdoor play

The unpredictable and less structured nature of outdoor environments is believed to encourage independence, resilience, problem-solving and imaginative enjoyment in ways that are often less accessible within indoor settings (Kemple *et al.*, 2016). Outdoor play refers to **voluntary and self-directed playful activity present within outdoor environments, where individuals experience greater opportunities for active movement, sensory and imaginative engagement and interaction with natural surroundings** (Tovey, 2007; White, 2011). Rather than viewing risk as something to be eliminated an emphasis is placed on the developmental value of managed, risky play and adventure in supporting children to develop judgment, physical skills, and resilience. This is an idea supported by Gill (2007), who suggests that a social adversity to risk has had a negative impact on the amount of time children spend outdoors.

Millennials (born 1980-1995) and Gen Z's (born 1996 –2000s) would have experienced a childhood with increased amounts of team sports and after school clubs compounded by a higher percentage of families with both parents working and increasing instances of organised childcare. This could explain why outdoor play research tends to be focused on leisure time and activities (de Lannoy *et al.*, 2023; Rhea *et al.*, 2023). Indeed, indoor activities are becoming more common and accepted; physical activity rates are decreasing, while sedentary behaviours, obesity and mental health issues are on the rise, creating the perfect storm for reduced well-being and heightened health problems (Farbo and Rhea, 2021; Rhea *et al.*, 2023). This is the case even though exposure to outdoor spaces has been associated with reduced stress, improved mood, increased physical activity and enhanced emotional regulation, and research suggest families who play together report stronger relationship bonds (Tovey, 2007; White, 2011; Foulds, 2023). Nature and outdoor spaces for family sessions may then, enhance the benefits

of unstructured play (Dankiw *et al.* 2020; Kemple *et al.*, 2016; Louv, 2016 cited in Rhea *et al.*, 2023).

2.5 Family outdoor play

Family outdoor play has increasingly been recognised as an important context for promoting well-being, social connection and positive family relationships. Shared outdoor experiences can provide opportunities for communication, cooperation, and emotional bonding, while also encouraging physical activity and engagement with the natural environment (Mattsson, 2022; Tam *et al.*, 2025). Research suggests that family participation in outdoor recreational and playful activities may strengthen feelings of belonging and connectedness, supporting both individual and collective well-being (de Paula Figueiredo *et al.*, 2024). Furthermore, family engagement may help foster children's confidence, autonomy, and connection to nature through shared experiences and parental modelling of outdoor behaviours (Wu, Ji and Jin, 2023).

However, opportunities for family outdoor play are often shaped by wider social and environmental factors, including time pressures, work commitments, socioeconomic circumstances, access to safe green spaces and cultural attitudes towards risk and outdoor activity (Visser and Van Aalst, 2021). Also, the increasing expectation for parents to monitor and respond to their children's needs may position adults primarily as carers and supervisors, rather than as participants in play themselves (Day, 2023). Contemporary family life can therefore limit opportunities for unstructured and spontaneous outdoor play, despite growing recognition of its benefits for physical and psychological health. As a result, family outdoor play may represent an important yet increasingly constrained space for fostering relationships, well-being and meaningful engagement with nature across generations (Tam *et al.*, 2025). There is a gap in research which explores what adult play looks like within a woodland family experience and how adult participation relates to well-being and adult playfulness. Indeed, Lee *et al.*, (2025) calls for more research with regards to adult active outdoor play and a move away from the premise that play is purely a childhood activity.

This study aims to add to the small body of research placing adults at the forefront of outdoor play research. It will focus on adult play motivations, types and barriers, that influence participation, well-being and adult playfulness by using a mixed methods approach to utilise data from both quantitative measures of well-being and trait playfulness with qualitative accounts and observations of adult play. The following chapter outlines the methodological approach used to investigate:

What elements of adult play are witnessed in a family outdoor experience, and how do they enhance well-being and playfulness?

Chapter 3: Methodology

3.1 Introduction

The purpose of this chapter is to set out the methodological approaches including the paradigm, resulting in the methods used to answer the research question:

What elements of adult play are witnessed in a family outdoor experience, and how do they enhance well-being and playfulness?

This study employs a mixed methods approach, which combines quantitative and qualitative methods to provide a more comprehensive understanding of the research problem than either qualitative or quantitative could achieve independently (Creswell and Clark, 2017). The study adopts a convergent mixed method design. This involved collecting quantitative data in parallel to gathering qualitative data and analysing both together to help expand the understanding of both data sets.

This chapter will begin by firstly establishing the research paradigm and the rationale behind the research and conceptual framework. Secondly, it will outline the purpose of the research and describe the study site and participant selection process. Thirdly, it will describe the methods of data retrieval and analysis. Finally, it will set out a timeline for the study project, while defining any ethical considerations that arose because of the study.

3.2 Research paradigm and rationale

This study is situated within the pragmatist research paradigm and employs a convergent mixed-methods design. Pragmatism is considered an appropriate paradigm because it allows the researcher to utilise both quantitative and qualitative methods to address the research question. Morgan (2007, cited in Cohen et al., 2018) suggests the use of the term approach, rather than paradigm when discussing pragmatism in mixed method research positing, it allows for the understanding that knowledge can be

developed in different ways depending on the nature of the research question. Indeed, Johnson and Onwuegbuzie (2004) argue that mixed methods should be appreciated as the third research paradigm, hoping that researchers will utilise mixed methods as a means to both minimise weakness, and benefit from the strengths of gathering both types of data in a single study. Rather than prioritising a single philosophical position, pragmatism focuses on selecting methods that best answer the research question and provide meaningful insights into the phenomenon under investigation, which in this instance suits the study well (Creswell and Clark, 2017; Morgan, 2014). De Lannoy *et al.* (2023) suggests there are several gaps in research which considers the outdoor environment and family involvement when studying adult play.

Philosophical position

The ontological position of this study acknowledges that instances of adult play, well-being and playfulness may be experienced differently by different people and therefore, this study acknowledges the existence of multiple realities, shaped by the experience of individuals (Morgan, 2014). In relation to this study, these realities may include personal experiences, family relationships, and interactions with the outdoor environment (Creswell and Creswell, 2023; Lincoln, Lynham and Guba, 2018).

While this study is situated within a pragmatic mixed methods paradigm, the qualitative element draws on phenomenological principles, by exploring how individuals experience and explain their understanding of play within an outdoor family setting. By also focusing on the personal experiences of the participants during the woodland session, it allows the researcher to explore the adult participants' own thoughts and lived experiences of adult play in the woodland setting alongside the quantitative data from their wellbeing and playfulness scores (Creswell and Creswell, 2022; Creswell and Plano Clark, 2017).

Epistemology

The epistemological position of this study is informed by pragmatism, it recognises that social science research and educational research have complex problems that do not always fit perfectly in quantitative or qualitative methods alone and mixed methods research allows for impactful research gathering (Fetters *et al.*, 2013).

In this study, neither quantitative nor qualitative evidence is considered more valuable than the other. When both are treated equally, each contributes a different perspective to a common understanding of adult play. If the quantitative phase adopts a more deductive approach, by using validated measures to identify patterns in participants' well-being and playfulness, then an inductive qualitative phase allows for the exploration of participants' experiences, adding to the development of deeper interpretation to explore the facets of play within an outdoor family setting. Using these different approaches together enables the researcher to move beyond identifying measurable changes and consider the experiences and meanings that may explain them (Thomas, 2017), hopefully shedding light on motivations, which becomes more complicated when considering family dynamics (Norton *et al.*, 2017). This practical rather than idealistic approach reflects a pragmatic epistemology, where different forms of knowledge can be brought together to answer the research question as comprehensively as possible (Morgan, 2014; Creswell and Creswell, 2023; Creswell and Plano Clark, 2018).

Methodology

Previous research exploring adult play and playfulness has tended to adopt either qualitative or quantitative approaches (Lubbers *et al.*, 2023; Rhea, Farbo and Campbell-Pierre, 2023; Guitard, Ferland and Dutill, 2005; Blanche, Chang and Parham, 2024; Walsh, 2019). While these studies have provided valuable insights, each approach has limitations when used in isolation. Thomas (2017) suggests quantitative methods identify measurable patterns and changes across participants but do not provide insight into the lived experiences of the participant that may explain the findings. Qualitative methods, on the other hand, offer a richer understanding of

participants' perspectives and experiences but are less suited to scrutinising patterns across larger groups. Johnson and Onwuegbuzie (2004) and Fetters *et al.* (2013) both discuss the benefits of using a mixed methods approach. A convergent design that gathers quantitative data allows the researcher to gain statistical data for a group, that can then be integrated with the gathering of qualitative data, which highlights environmental factors and together provides a holistic understanding of the phenomena (Cohen et al, 2018).

This study adopts a convergent mixed-methods design, incorporating pre- and post-intervention quantitative surveys alongside a qualitative phase that gathers experiential and observational data which can be used to further explore the quantitative data expanding upon the quantitative group findings (Creswell and Plano Clark, 2018). The design is well suited to the aims of this study because it allows validated measures to record changes in well-being and playfulness, measured before and after, exploring how participants experience and interpret their own experiences of play alongside researcher observations within an outdoor family setting. In doing so, the study allows quantitative findings to be explored in greater depth through qualitative inquiry. The importance of this study is clear to observe; indeed Bupa (2024) suggests the benefits of play for the whole family is undervalued. Therefore, if outdoor family play can influence adult well-being and playfulness then integrating these forms of evidence enables a more comprehensive study.

Triangulation

Using both quantitative and qualitative methods also provides an opportunity for methodological triangulation. The validated survey instruments generate measurable data on changes in well-being and playfulness, while the semi structured group interviews offer participants the opportunity to describe and reflect on their experiences in their own words. Bringing these sources of evidence together allows the quantitative findings to be considered alongside the lived experiences of participants, providing context that would not be available from survey data alone. This process not only enriches the interpretation of the findings but also strengthens the overall

credibility of the study by developing a more complete understanding of adult play within an outdoor family setting (Denzin, 1978; Creswell and Plano Clark, 2018; Fetters *et al.*, 2018).

The purpose of the study is to contribute to the growing body of research concerning adult play, an area identified by Forbes and Craven (2023) as requiring further investigation. Existing research has largely focused on the benefits of children's outdoor play and its developmental benefits for physical, cognitive, emotional and social development (Barnett, 1990; Robinson *et al.*, 2018 cited in Keary, Garvis and Walsh, 2023; Rouse and Wishart, 2025). In contrast, relatively little research has explored the role of free play in adulthood, despite increasing evidence linking playfulness to positive mental health outcomes (Proyer, 2013). This disparity in the literature leaves important questions unanswered, particularly regarding how opportunities for shared play in outdoor family settings may contribute to adult well-being and playfulness. By exploring these experiences using a mixed methods approach, this study seeks to address this gap and extend current understanding of adult play within a family context.

Children's voice and power struggles

This study was incorporated into a family outdoor experience, as such consideration was also given to including the voice of the children in the pre- and post-session data, recognising the importance of creating agency for the children present during the experience (Lundy, 2007). However, the researcher did not identify an appropriate measure which considered the range of ages of the children attending and therefore, quantitative data could not be included (Liddle and Carter, 2015). This is acknowledged as a limitation, and the study focuses on the viewpoint of the adult primarily despite children also being an important part of the family context.

Rationale

The rationale for this study stems from the increasing concerns over the declining opportunities for adult play. Thiel *et al.* (2016) suggests modern lifestyles may have contributed to physical inactivity and a reduction of play for adults. While there are other forms of acceptable play for adults such as organised sports, romantic play and gaming, Forbes and Craven (2023) argue adult free play is largely overlooked in research due to it being seen as frivolous or time wasting in today's work culture. This lack of research on how social dynamics in unstructured physical activity affects wellbeing, highlight the gaps that potentially exist within the outdoor education sector that family play and adult well-being and playfulness remain underexplored, providing a clear rationale for the present study.

This study seeks to fill this gap by exploring if and how play in outdoor family settings can enhance adult well-being and playfulness.

3.3 Background

Participants

The study was undertaken in 5 acres of woodland on the Carmarthenshire and Pembrokeshire border over a two-year period during the months of July and August. The site was chosen due to being adjacent to a Greener Camping campsite, which mostly hosts families during the months of April to October. The campsite acted as the venue for convenience sampling used to recruit participants. The participants came from all areas of the UK and some international regions. The campsite fees are such that it does not attract low-income families, and so the participants would fit into a middle-class demographic. The local school also acted as a venue for convenience sampling. Participants were recruited with the use of posters, both located on the campsite and at the school; see Appendix 1. They also completed consent forms before proceeding any further with the study; see Appendix 2.

Furthermore, the ethos of the campsite may attract families who are already predisposed towards outdoor recreation and unstructured play. Therefore, a limitation

could be the proximity to the Greener Camping campsite and use of convenience sampling. Participants will have already chosen to stay in nature and spend their leisure time in the natural environment. As a result, participants' experiences may not be representative of families who engage less frequently with natural environments. This could present a self-selection bias, which may influence participants' perceptions of play, well-being and the outdoor experience, limiting the transferability of the findings beyond similar populations (Cohen *et al.* 2018; Ram and Hall, 2022).

3.4 Research Methods

Instrumentation

To collect data on well-being, the Warwick-Edinburgh Well-being Scale (WEMWBS) was used for adult participants. The WEMWBS a 14-item questionnaire was chosen due to its reliability and effectiveness in a wide range of settings (Maheswaran *et al.* 2012; Collins, *et al.* 2012).

To collect data on playfulness, the Adult Playfulness Trait Scale (APTS) has been chosen and distributed alongside the WEMWBS. Although originally the APTS was conducted with a 7-point scale, the researcher has opted to use the 6-point version as documented in the user guidelines (Shen, 2023). Both data surveys can be found in appendix 3.

Phase 1 and 2 – Survey

In Phase 1 the wellbeing and playfulness surveys were accessed either through a link sent via email sent to the lead camper, which includes the consent form in most cases at least two weeks before the experience, or by following a link electronically to a website which then directed participants to the consent form and surveys created and administered through the university's secure server. The consent, and survey data was then appropriately stored; password protected on the university's secure server. The surveys were readministered during the woodland experience in phase 2 before the

semi structured group interview. This was conducted to note any changes in well-being directly after the woodland experience.

The researcher aimed to collect 18 adult participants for the study, with a larger number of children present, although not included in the survey stage. It is acknowledged that this is a small sample size and would not be representative of the general population. However, the sample would be considered appropriate for this exploratory, small-scale study considering the aims and context of the study rather than sample size alone (Creswell and Plano Clark, 2018). It provided an opportunity to examine patterns in adult playfulness and wellbeing within the specific context of a family woodland experience. The findings were therefore interpreted with caution and not generalised to the wider population.

Observations

During the family woodland sessions, the researcher was a facilitator observer. The researcher made notes during the sessions and wrote up a more detailed description of events after the session.

A limitation of being a facilitator observer, is the risk that the enthusiasm and views of the facilitator around outdoor adult play could influence the data set, while the reliability of the researcher's memory could also be called into question without a second researcher to verify details (Mulhall, 2003). This will be addressed using a structured observational checklist alongside fieldnotes to record observations as accurately as possible. See Appendix 4.

Semi-structured group interviews

During the play sessions, semi-structured group interviews were conducted in person and with the researcher present. Open-ended questions were used and designed to initiate discussion within the group to explore adults' experiences of adult play, including how the woodland session may have affected mood and well-being. Semi-structured group interviews allow the participants to share and create ideas during their

interactions with each other and upon discussing the shared and differing experiences of their time in the woods, create a shared understanding from those experiences (Thomas, 2018).

A sample of the interview transcript is available to view in appendix 5. The audio was recorded by a handheld recording device, and all recordings were destroyed after being uploaded as transcripts to the Universities secure database and in line with GDPR regulations.

Leshem, (2012, cited in Cohen, Manion and Morrison, 2018) suggest the drawback of group interviews is the possibility that participants may not reveal their true feelings in a group of people they have only just met. However, in this instance interactions between the family groups reflected the social and family context in which the play sessions took place and are considered time efficient for gathering data when timescales are limited as in this instance.

3.5 Data Analysis

Analysis of the quantitative data focused on finding any changes between the pre- and post-session surveys. WEMWBS scores were calculated using the conceptual framework proposed by Tennant et al. (2007), which emphasizes a comprehensive view of mental well-being incorporating both hedonic and eudaimonic characteristics. With higher scores indicating higher levels of mental wellbeing. Any scores over 3 are considered significant. Descriptive statistics were used to summarise the data, including a means and standard deviation score.

The researcher has developed an observation checklist and open-ended group interview questions. Observational data from the checklist and field notes were reviewed, coded and put into themes, to try and identify any patterns in adult play and wellbeing behaviour. Initial codes were developed from the data and then grouped into broader themes relating to adult play, wellbeing, the outdoor setting, social and family interaction, barriers to participation and experiences of playfulness.

Analysis of the APTS will be carried out using Shen's (2023) user guidelines. The analysis considered both the overall playfulness score and the individual dimensions to identify any changes between the pre and post session measures.

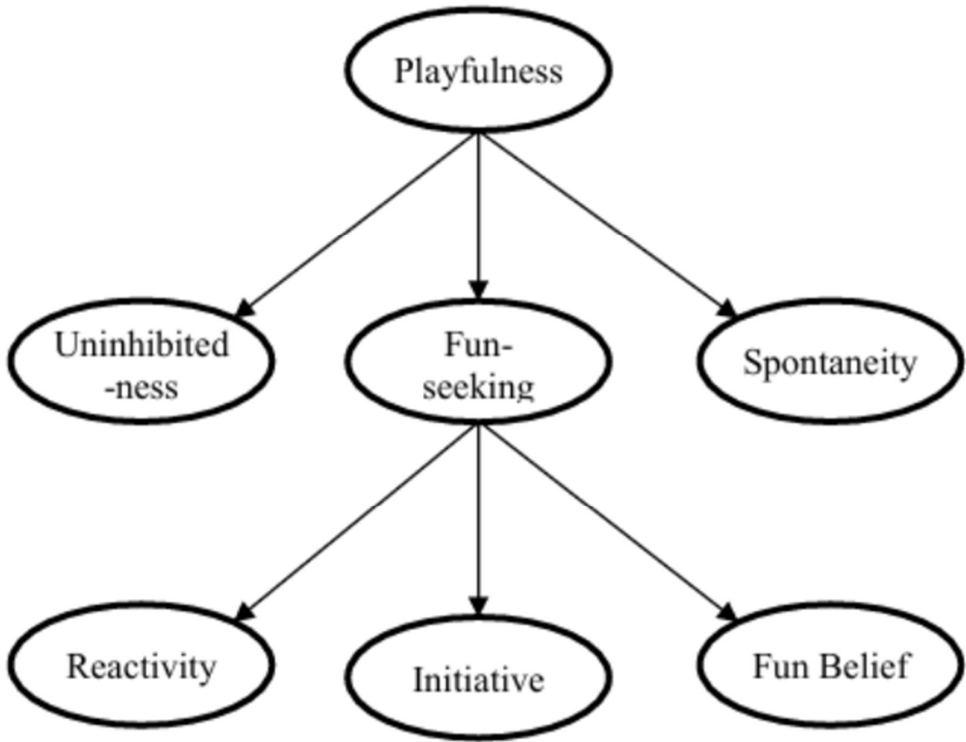


Figure1 The conceptual Model of the APTS.
This model shows how the model is split into six dimensions of playfulness. Demonstrating that adult playfulness consists of several distinct dimensions. Source: adapted from Shen et al., 2014a, cited in Shen, 2023.

The themes generated were used to interpret and expand upon the quantitative findings, allowing the study to develop a more comprehensive understanding of how outdoor family play influences adult well-being and playfulness (Braun and Clarke, 2022).

3.6 Ethical considerations

A PG2/E1 Application for ethical approval form in line with UWTSD's research integrity and ethics code of practice (University of Wales Trinity Saint David, 2025-26) was completed and approved before any data was collected; see Appendix 6. Permission was granted by the University of Warwick, as required, to access and use the WEMWBS. Participants were fully informed about the study's aims before taking part in the outdoor experience and their rights, including the right to withdraw at any time. Informed consent was obtained prior to participation, and measures have been taken such as not collecting sensitive personal information, to ensure confidentiality and anonymity (BERA, 2024). Additionally, the researcher endeavoured to create a supportive environment for all participants and consideration was given to the emotional impact of discussing personal experiences related to play and well-being. A detailed risk assessment was completed, and a sample can be found in Appendix 7. With these ethical considerations addressed, the following chapter presents the findings from the quantitative and qualitative data collected during the study.

Chapter 4: Findings

4.1 Chapter Introduction

This chapter presents the mixed-methods findings from the study exploring adult playfulness and wellbeing within a family woodland experience. It sets out the quantitative findings first from the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) and the Adult Playfulness Trait Scale (APTS), as in keeping with a convergent mixed-methods design, followed by qualitative findings from semi-structured group participant interviews, observational data and photos taken of artwork created during the woodland sessions during the same time frame.

4.2 Participant Characteristics

In total, 42 adults were recruited and consented to the study. Of the initial 42 adults, 22 adult participants attended the sessions. Sixteen participants completed both the pre- and post-surveys and were therefore included in the paired quantitative analysis (n=16). Six participants completed the pre-survey but not the post-survey and therefore were excluded from the pre-post analysis; however, they were happy to be included in the group interviews and observations. A total of 30 children also attended the woodland sessions as part of the family groups; they were not included in the quantitative analysis.

The study was conducted over four sessions. Two were in August 2025, and two further sessions were in July 2026. Participants ranged in age from 25 to 70 years and came with at least one child or grandchild. They all travelled to the site in their own vehicle; 10 participants were staying at the neighbouring Cowpots Camping site, while 12 lived locally and travelled to the woodland site for the session. The 12 local adult participants were recruited from the local primary school and consisted of parents and grandparents of children who attend the school.

Therefore, the qualitative data comprised observations and group interview contributions from the 22 adults who attended the sessions; the paired quantitative analysis was based on the 16 participants who completed both surveys.

4.3 Quantitative findings

Warwick – Edinburgh Mental Wellbeing Scale (WEMWBS)

WEMWBS scores increased significantly from M = 46.38 (SD =6.73) pre-session to M = 49.25 (SD = 5.12) post-session. This represented a mean increase of 2.88 points. A paired-samples t-test indicated this increase was statistically significant; $t(15) = 2.73$, $p = .015$, with a medium effect size ($d = 0.68$).



Figure 2 Mean WEMWBS Scores. Showing a significant mean increase from 46.4 to 49.3 after the woodland experience. Source: Author’s own data, analysed using the WEMWBS Data Analysis Spreadsheet (University of Warwick, 2026)

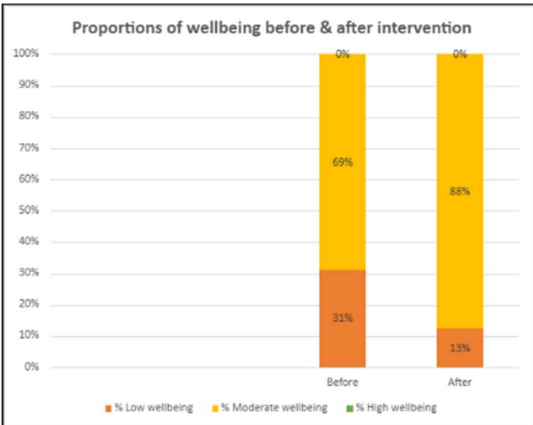


Figure 3 Proportions of well-being before and after intervention. Source: Author’s own data, analysed using the WEMWBS Data Analysis Spreadsheet (University of Warwick, 2026)

Adult Playfulness Trait Scale (APTS)

Overall playfulness did not change pre- to post-session, remaining at M = 4.48 (SD = 0.73). However, Initiative increased from M= 4.25 (SD = 0.72) pre-session to M = 4.58 (SD = 0.69) post-session. A paired-samples t-test indicated this increase was statistically significant; $t(15) = 2.34$, $p = .033$, with a medium effect ($d = 0.59$).

Table 1 Descriptive statistics for APTS (n =16).

Showing a significant change in initiative to 0.33 (Source: Author's own data, 2026).

APTS Measure	Pre M	(SD)	Post M	(SD)	Mean Change	Change SD	t	p	Cohen's d
Fun Belief	5.53	0.62	5.41	0.66	-0.13	0.65	-0.77	0.45	-0.19
Initiative	4.25	0.72	4.58	0.69	0.33	0.56	2.34	0.03	0.59
Reactivity	5.42	0.51	5.17	0.58	-0.25	0.49	-2.02	0.06	-0.51
Uninhibitedness	4.16	0.82	4.19	0.71	0.03	0.67	0.15	0.88	0.04
Spontaneity	4.23	1.15	4.21	1.01	-0.01	0.86	-0.06	0.95	-0.01
Fun-Seeking Motivation	5.07	0.52	5.05	0.56	-0.02	0.49	-0.13	0.90	-0.03
Overall Playfulness	4.48	0.73	4.48	0.65	0.00	0.53	-0.01	0.99	0.00

Relevance of Quantitative findings

The quantitative findings provide an overall indication of how participants' well-being and playfulness changed following the woodland experience. Although overall APTS playfulness did not change significantly, the significant increase in Initiative across all four sessions suggests that some aspects of playfulness may alter more with a short outdoor experience than others. WEMWBS scores also increased significantly, suggesting an average improvement in well-being across the sessions.

This non-uniformity across the groups is consistent with another mixed-method study exploring woodland activities, where quantitative measures showed an increase in well-being, while qualitative data provided further insight into the social experience associated with the sessions (Gittins et al., 2023). Together, the quantitative findings provide an important starting point, but do not explain how or why these findings occurred. The qualitative findings therefore provide an opportunity to explore participants' experiences of play, playfulness, well-being in the outdoors, social interactions and any other factors that may have supported or constrained their participation. See appendix 8 for full table of individual participant findings.

Session 1	Pre	Post	Change	Session 3	Pre	Post	Change
Fun Belief	5.17	4.83	-0.33	Fun Belief	5.00	5.25	0.25
Initiative	3.75	3.92	0.17	Initiative	4.00	4.63	0.63
Reactivity	5.44	5.33	-0.11	Reactivity	5.17	3.87	-1.30
Uninhibitedness	3.53	3.67	0.13	Uninhibitedness	3.40	3.70	0.30
Spontaneity	3.87	3.60	-0.27	Spontaneity	3.00	3.90	0.90
Fun-Seeking Motivation	4.79	4.69	-0.09	Fun-Seeking Motivation	4.72	5.07	0.35
Overall Playfulness	4.06	3.99	-0.08	Overall Playfulness	3.71	4.22	0.52
WEMWBS	52.67	53.00	0.33	WEMWBS	46.50	48.50	2.00
Session 2	Pre	Post	Change	Session 4	Pre	Post	Change
Fun Belief	5.60	5.70	0.10	Fun Belief	5.83	5.50	-0.33
Initiative	4.05	4.60	0.55	Initiative	4.75	4.88	0.13
Reactivity	5.40	5.00	-0.40	Reactivity	5.50	5.17	-0.33
Uninhibitedness	3.96	4.16	0.20	Uninhibitedness	4.90	4.63	-0.27
Spontaneity	4.32	4.24	-0.08	Spontaneity	4.73	4.60	-0.13
Fun-Seeking Motivation	5.02	5.10	0.08	Fun-Seeking Motivation	5.36	5.18	-0.18
Overall Playfulness	4.43	4.50	0.07	Overall Playfulness	5.00	4.80	-0.19
WEMWBS	39.00	49.00	10.00	WEMWBS	41.00	46.00	5.00

Figure 4 Pre-post session changes per session.

The four groups showed varied patterns of change in playfulness and well-being; however, Initiative increased consistently across all four sessions, while WEMWBS scores increased for every group (Source: Author's own data, 2026).

4.4 Qualitative Findings

The qualitative findings showed adults enjoying physical, creative, exploratory and social play, with participation influenced by the woodland setting, family and social interactions, adult responsibilities and opportunities to feel able to play. The study used thematic analysis as outlined by Braun and Clarke (2006) to identify recurring patterns and themes, an approach effectively used by Down *et al.* (2023) to study participant experiences of outdoor learning, well-being and participation.

Theme 1: Managing the adult role

A recurrent topic of the sessions was adults needing to manage or negotiate their role between supervising their children and participating in the activities themselves. Supervision was evident within both the observations and the group interviews across all the sessions. A recurring distinction within the interview was between spending time outdoors and engaging in outdoor play. Adults described walking and supervising children as a common form of outdoor activity, **"You've got to keep an eye, haven't you"** [AP] (S4). These were not necessarily experienced as play. One participant explained when walking in the woods with children, their role was primarily to **"Walk and supervise"** [AP] (S2), upon which their child commented on the length of the walk: **"Walking for hours"** [CP] (S2). The child subsequently described the adults' experience as **"Not really [to] have fun"** [CP] (S2). Several adults described needing to supervise their children while playing outdoors.



Figure 5 Adult participant fire lighting during Session2.

Source: Author's own photograph, 2026.



Figure 6 Adult participant fire lighting during Session 2.

Source: Author's own photograph, 2026.

During the observations it was noted that while many of the adults closely supervised their children or grandchildren, this was not the case for all adults present. Some participants were able to find their own place away from the supervision of their children to engage independently in activities of their own choosing. On a few

occasions across the sessions adults were observed negotiating their role as a parent and as a participant, finding it difficult not to take over the task from their child in order to execute a different plan or create a more polished outcome as seen in Figure 18.

The interviews revealed that adults attended the family woodland session to provide something for their children, rather than seeking to play themselves. One participant did mention “**playing together**”, as seen in Figure 11.



*Figure 7 Clay objects made by adult participants in session 1.
Source: Author's own photograph, 2026.*



*Figure 8 A coil clay pot created by an adult participant during Session 4.
The participant was excited to create a pot using a technique they had seen online but never tried before.
Source: Author's own photograph, 2026.*

Adults were also observed facilitating child participation by encouraging children to try new activities within the woodland. This was observed when, in one interaction the father gestured for his daughter to try lighting the fire first with a fire steel and cotton wool, even though the facilitator had passed the fire steel to the father to try first. However, the daughter then replied, "**No daddy, you try first, I have done this before in school, you need to try**" [CP] (S1).

Adults specifically encouraged den building and creative activities such as clay; nature prints or drawing with charcoal. In these instances, adult involvement appeared to primarily focus on encouraging and enabling their children to take part, rather than initiating play for themselves. It should be noted that adults who were facilitating play with their child did display verbal and physical expressions of joy and surprise at completing a den, lighting a fire or creating art together. One adult actively encouraged their child to play by the stream, although this was an exception to the rest. In two other encounters parents warned of the risk of getting wet feet, both talking about their own footwear and their children's.



*Figure 9 A den made by child and adult participants during Session 4.
Source: Author's own photograph, 2026.*



*Figure 10 A charcoal drawing by an adult participant during Session 1.
Made using charcoal created on the fire during the session. The adult drew a flower and part of a tree.
Source: Author's own photograph, 2026.*



*Figure 11 A charcoal drawing by an adult participant during Session 2.
Made with charcoal created on the fire during the session. The adult chose to depict a tree. Source:
Author's own photograph, 2026.*

This represented a different form of adult engagement, where the play undertaken by the adult did not rely on child involvement.

In the final session one adult described the relief of having somebody else to facilitate and take responsibility for the organisation of the outdoor session. While another described the value of having "**A free space to leave them**" [AP] (S4), talking about the children.



Figure 12 Charcoal images drawn on trees during Session 4.
 An insect and slug drawn onto tree trunks. The participant exclaimed "I'm really enjoying the charcoal. It's really tactile and great on natural things" [AP] (S4). Source: Author's own photograph, 2026.

Theme 2: Moving from hesitation to play

Across all the sessions there was an observation of initial hesitation to actively take part from some of the adults in the game of hide and seek, fire lighting and the creative activities. **"I thought the hide and seek for grownups was, fun, funny for everyone...I loved the reaction of, gosh, it's going to be us!" [AP] (S1).**

Although there were signs of reluctance at first, most adults subsequently participated and appeared to enjoy the activities, taking them seriously by running to find the best hiding place and exhibiting joyful behaviour like smiling and laughing when found by the children. This pattern of adult hesitancy then participation was evident across all four sessions and not limited to responding to invitations of play from children.



*Figure 13 A football goalie and wooden goal post made by an adult participant, with acorn ball during Session 2.
Source: Author's own photograph, 2026.*

Adult initiated play was also observed across three of the four sessions, including playful interactions with both children and other adults. However, adult facilitation of children's play was considerably more common than adults' initiation of play for themselves.

Theme 3: Outdoor contexts, memories and opportunities for play

When asked to describe their most recent experience of play adult participants mentioned the beach during three of the four sessions as their most recent play destination. With a few of the adults unable to recall the last time they played outside, one adult stating "**Probably when I was a child**" [AP] (S3). Adults reported playing chase, building sandcastles and running into the sea, while one adult recalled Kayaking the previous week as the last instance of their own outdoor play. In comparison all the children had played in the last 24 hours prior to the session. These adult examples show that participants continue to engage in outdoor play at the beach as part of current family experiences.



*Figure 14 Clay creatures made by adult participants during Session 4.
The adults created a snail, flower and dragonfly. Source: Author's own photograph, 2026.*

Participants discussed memories and recollections brought about through physical experiences within the woodland session sometimes linked to sights, smells and activities. One adult recalled the smell of the fire evoking memories, while another claimed, **"I haven't played with clay for a long time, a long time ago, I have never dug it out of the stream myself though!"** [AP] (S1). While a grandparent when observing their grandchild in the stream playing, suggested **"Children should be outside more, they don't get enough time to play like this, like we did!"** [AP] (S3) Participants struggled to remember instances of their own recent play experiences outside suggesting recent walks including with their dogs as a regular outdoor activity.

Participants also identified several factors that could make outdoor activities more difficult. One participant mentioned that **"working restricts time"** [AP] (S1) while weather and seasonal dark nights were also mentioned as barriers which affect opportunities to be outdoors. In contrast, during the summer season an adult commented that outdoor play had been easier for their grandchildren this summer because **"the weather has been nice"** [AP] (S4).

Theme 4: Experiences of wellbeing

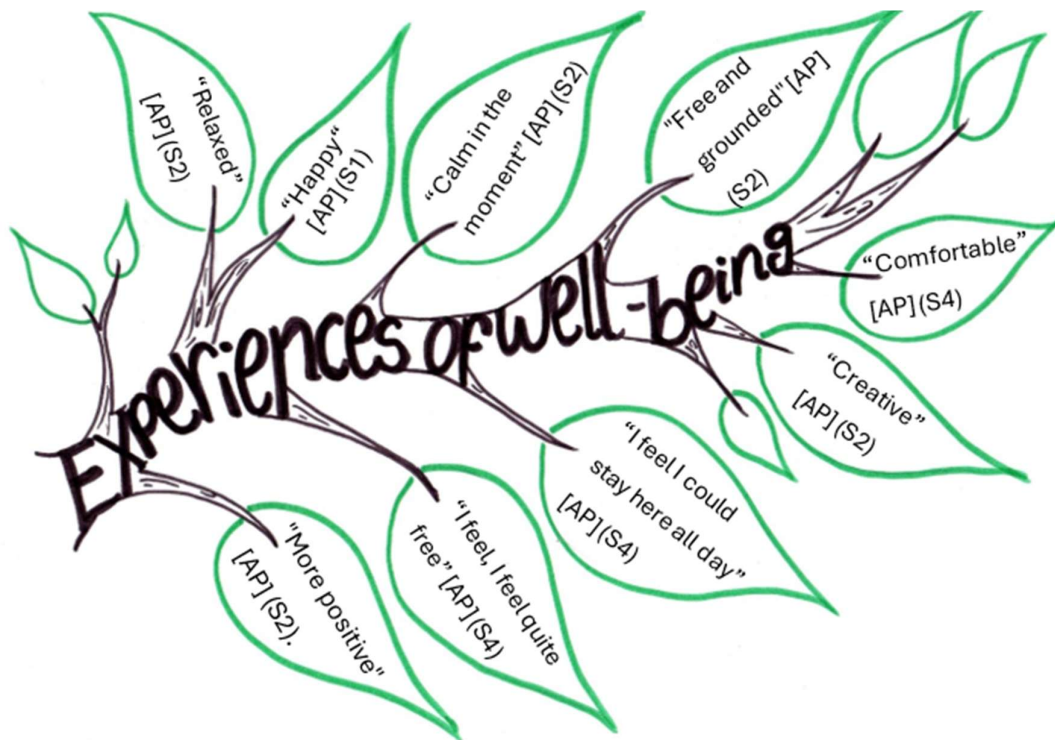


Figure 15 Experiences of Well-being.

A sample of quotes from adult participants across the sessions. Source: Author's own data, 2026.

Overall, participant accounts reflected positive emotional and social experiences following their participation in the woodland sessions, with a selection of quotes presented in figure 13. The quantitative and qualitative findings showed a similar pattern in relation to participants' experiences of well-being in the outdoors. The WEMWBS scores increased significantly following the sessions, with a medium effect size supported by the adult participants' qualitative accounts describing several positive emotional responses to the session. Together, the findings suggest that playfulness facilitation and the outdoor environment may provide opportunities for enjoyment, connection and well-being, although these experiences are shaped by the social context in which adults participate.

Chapter 5: Discussion

5.1 Chapter Introduction

This study set out to observe the elements of adult play that are witnessed in a family outdoor experience and to discuss if and how they enhance well-being and playfulness. By implementing a mixed method approach the researcher looked to utilise the data from well-being and playfulness surveys and observational and group interview data which informed the findings discussed in the previous chapter. This chapter will now discuss those findings stating practical implications for outdoor facilitation of woodland sessions with a view to providing recommendations for future practice and research.

5.2 Types of outdoor play

During the woodland session, a range of opportunities for play and group activities were organised and led by the researcher facilitator, affording both adults and children a selection of opportunities for play in the woodland, including group hide and seek, den building, craft with clay, cotton nature prints, charcoal making and drawing, exploration in nature, dam building and water play in the stream, and fire lighting. These provided opportunities for physical, creative, imaginative, exploratory and social play. However, during the group interviews, adults and children did not always identify the same activities as their favourites. Children frequently identified fire lighting, playing in the stream and den building as their favourite activities, while adults mentioned den building and hide and seek. Balci and Ahi (2017) also found differences in play preferences between parents and their children; however, in the woodland setting, unlike Balci and Ahi's findings, the children were more adventurous than the adults.



Figure 16 Clay faces made by an adult participant during Session 1. The adult participant chose to use natural materials having remembered creating similar faces in trees during the Covid 19 pandemic. Source: Author's own photograph, 2026.

The observations provided evidence of adults engaging with the creative activities, including, clay, charcoal and cotton nature printing. Blanche *et al.* (2024) suggest adults may experience play through creativity, adventure, mastery, restoration and deep engagement, these activities were not specifically identified by adults as their favourite experiences during the group interviews, but could suggest differences in experience (Proyer *et al.*, 2018). Although, like Balci and Ahi (2017), LaForett and Mendez (2016) suggest adult preferences support and influence children's play behaviours. However, it was observed in the woodland session that the adults encouraged the younger children to take part in activities they felt the children would enjoy, before considering their own preferences.

Permission to play and the responsible adult

While some adults appeared to naturally engage and explore playful activities, others required more time before becoming involved, displaying an initial hesitation. This was particularly noticeable during the hide and seek activity, where several adults initially appeared hesitant to take part before embracing the activity and showing signs of enjoyment. As Deterding (2017) said, this could be because adults do not always immediately embrace an opportunity to play. Jensen et al. (2022) cite self-consciousness in young adult learners newly navigating the adult world as a reason for play hesitation; however, in this study it appears the social situation, role of the facilitator, or the presence of other adults actively participating may have helped adults to move from hesitation to participation (Walsh, 2019). While the structure and environment of the family sessions may have provided more than access to a suitable physical environment, they could also have created a social setting where adults resulted in feeling more comfortable participating alongside their children (Reimer and Moreno, 2024). Deterding (2018) suggests that adults may use such justification to make play more socially acceptable within expectations of adulthood, responsibility and productivity. Similarly, Maynard *et al.* (2025) found that adults can experience guilt around play when it is perceived as unproductive; however, if framed as productive or beneficial, it is easier to justify. This suggests that increased consideration of environmental influences and social conditions should be considered when looking to encourage adult playfulness.

5.3 Adult outdoor play and playfulness

The overall APTS score did not show a significant increase in overall playfulness following the woodland sessions, suggesting that the experience did not result in a measurable change in participants' underlying trait playfulness. This is unsurprising, as playfulness is understood as an individual characteristic (Proyer *et al.*, 2020). Interestingly, however, the significant increase in the APTS Initiative score is supported by observations of adults moving from an initial state of hesitation to increased participation in support of their children's experience, and then in some cases, towards

play for themselves; this aligns with Pursi and Lipponen's (2018) observation that adults do actively participate in play with young children.



*Figure 17 A dog created in clay by an adult participant for their child during Session 2.
Source: Author's own photograph, 2026.*

The quantitative findings provide some support for this observed movement towards participation. However, this should not be interpreted as evidence that a single session changed an underlying personality characteristic. Rather, the qualitative findings indicate that the social situation and woodland setting may have together provided opportunities for existing aspects of playfulness to be expressed. This explanation of playfulness as static in characteristic but expressed due to situational conditions offers a possible explanation for an increase in Initiative (Shen, 2020; Shen, Chick and Zinn, 2017). An adult may therefore be playful but not necessarily have the opportunity, confidence or social permission to express this in every situation; reflecting why participants became more willing to take an active role within the context of the session, rather than demonstrating a change in their underlying trait playfulness (Shen, Chick and Zinn, 2017).

With research suggesting that social expectations can influence adult play behaviour and relationships (Proyer *et al.*, 2018; Deterding, 2017; Walsh, 2019) and shared experiences can enhance the emergence of playfulness (Lubbers *et al.* 2023), it seems

possible that the family woodland sessions may have functioned not only as a physical space for play but as a context where play was socially permissible. While the setting may have created space for adult participation, examining the initial motivations for attending provides further insight into adult play facilitation.

5.4 Motivations for adult participation



Figure 18 Motivations for adult participation.
A sample of quotes from adult participants across the sessions. Source: Author's own data, 2026.

Personal play was not the primary reason for adults to attend; it was largely a desire to provide an experience for their children or grandchildren while spending time as a family. Figure 16 shows quotes from adult participants, which reflect the wider literature on family outdoor recreation, identifying support for children's outdoor experiences and shared family connection as important influencers on motivation for adult participation (Foss *et al.* 2024; Refshauge, Stigsdotter and Cosco, 2012; Lee, Graefe and Burns, 2008). A combination of personal, social, and experiential factors mentioned in group interviews appeared to explain the increased engagement in solo

activities, indicating a shift from participating primarily as a parent to taking part and spending time exploring outdoor activities for themselves. The finding that family time can also provide personal benefits for the adults is supported by the work of Izenstark and Ebata (2022) and Izenstark, Sunkari and Sharaievska (2025). Foulds (2023), also reports that parent-child relationships and parents themselves benefit from playing with their children. However, they acknowledge that cultural differences in parental perceptions of play should be explored further. Other studies are trying to understand the different motivations for play (Warburton, Bartholomew and Beaumont, 2026; Foss *et al.* 2023; Koo, 2023; Deterding, 2017; Neal, 2023). Understanding these motivations would help to predict what facilitation may be important when trying to create an outdoor session that would provide both adults and children with meaningful nature experiences. This study adds to that body of knowledge by highlighting how adults may shift from primarily participating in a parental role to engaging in the outdoor activities themselves.

5.5 Outdoor setting

The woodland provided a convenient setting for a large range of different possibilities for play, natural materials such as clay, sticks, plants, access to running water, and enough space to light fires, providing resources that could be explored and used in a multitude of different ways. This allowed activities to develop naturally and according to the interests of the participants. Childhood memories of the outdoors also seemed to influence how some adults connected with the experience. Fasting and Høyem suggest "memories are considered as revitalizations of moment(s) of the past, placed in time and stored as bodily experiences" (2024, p.2). This supports the observation that memories were triggered by senses such as the smell of smoke from the fire, clay dug out of the stream by hand and the woodland environment, which evoked childhood memories of their own outdoor experiences.



*Figure 19 A den made by adult and child participants.
A father explaining the process of building it together "We weren't sure how it was going to end up, were we? we just added to it and changed it, so it was really nice to make it, make it work." [AP] (S1) Source: Author's own photograph, 2026.*

In three of the four sessions, the beach was mentioned as the last place many of the adults had played, building sandcastles, playing chase and kayaking. These findings are consistent with Rhea *et al.*'s (2023) suggestion that the environment can influence experiences of adult play; however, they also suggest that it's not simply related to physical characteristics of the surroundings but could be more to do with a lack of regular opportunity for adults to play or the temporary suspension of the societal expectations around adult play that allows it to be an environment adults feel comfortable playing in. Ashbullby *et al.* (2013) similarly found that the beach can support adults not only to facilitate play for children but to actively participate in play themselves. This was reflected in the current study, as when discussing the beach, participants appeared to accept an existing meaning of play as considered acceptable for adults, while in contrast the woodland environment was mentioned as a place for walking, or for their children to climb trees, but not as a place where they would naturally play in, even though it is rich in play opportunities. This may suggest that some environments are more readily perceived as legitimate places for adult play than others, a concept explored by Fasting and Høyem (2024) when they returned young adults to places of play experienced as children, while O'Brien, Morris and Stewart (2014) discussed the expectation of woodlands as places to walk with associated

health benefits. This increases the chance that access to adult play is influenced not only by the physical environment and its affordances but also by social context and understandings of how natural environments are used (Boyd *et al.*, 2018). In the present study, the woodland provided numerous play opportunities, yet adults did not necessarily recognise these as opportunities for their own play.

5.6 Barriers to play

Supervision emerged as an important influence on how adults felt about attending the session with their children. Across the sessions, adults described their primary reason for attending to create children's play experiences and frequently described their role as being responsible for keeping their children safe in outdoor settings. Adult play appeared to be secondary to this responsibility. Tang, Yang and Dong (2023) identified different modes of adult involvement in children's outdoor activities, including playing with children and supervising them, highlighting that adults can remain involved in children's outdoor activities without necessarily participating directly in play. This suggests that any adult participation took place alongside the adults existing responsibilities and parental role, rather than replacing them. Although opportunities to play were also available to the adults, only some adults chose to utilise this opportunity to play, while still maintaining an awareness of where their children were and what they were doing. The grandparents in the third session chose not to participate in play, this is in keeping with the ideas of Tang, Yang and Dong (2023) but also appears to be in keeping with Gill's (2007) ideas around the societal fear of risk and perceptions of safety. This reflects current research describing parents as gatekeepers of children's outdoor play (Boxberger and Reimers, 2019). However, in this study, supervision and the adults influence appeared to affect not only the child's opportunity to play but the adult's own ability to participate.

Hesitation when the facilitator suggested the adults play hide and seek provides another example of this initial reluctance to step away from the parental role. In the smallest session, where only two adults attended, both grandparents, the game of hide and seek was only played by the children with the adults choosing to observe rather

than participate. Whereas, in the three other sessions, although there was hesitation from the majority of adults when adult participation was required for hide and seek, all adults appeared to enjoy themselves, as noted in observations with smiling faces and exclamations of joy. Some adults became more involved following the hide and seek experience, independently engaging in solo play.

This was also evident during the crafting activities when some adults found it hard to step away, becoming absorbed in facilitating their children's activities and finding it difficult to allow them agency, becoming fixated on producing the perfect craft, **"I can't stop taking over, it needs to look good."** [AP] (S4). This focus on producing a successful or aesthetically pleasing object may reflect a need for adults to create a productive outcome or to justify play through a more socially acceptable purpose, rather than simply engaging in play for its own sake (Forbes, 2023). This may help explain why some adults appeared more comfortable engaging in creative tasks with a tangible outcome, while the less structured activity of hide and seek was approached with caution. However, the findings also show that once adults participated in hide and seek, they appeared to enjoy the experience. This could suggest that adults may not need play to be productive to enjoy it but may need a sense of permission to initially move into a more playful role.



*Figure 20 Nature prints created by adult and child participants during Session 4.
The adult participant acknowledged taking over the activity. Source: Author's own photograph, 2026.*

An interesting observation was the lack of participation in the smallest group possibly due to no other adults to initiate playful behaviours or potentially provide social encouragement to take part. It is not possible to determine whether group size or age of participants influenced participation; Tang, Yang and Dong (2023) also suggest generational factors could influence the types of play adults engage in, highlighting the potential importance of age and relationships within outdoor play. This raises the possibility that the presence of other adults and the social context in which play takes place may influence adults' willingness to participate.

Further research could therefore explore the role of social play situations, including whether the presence of other playful adults provides a form of social permission for adults to engage in outdoor play or if the age or relationship of the adults to children has a bearing on participation.

All adults present across the sessions appeared to enjoy the experience, and this was also reflected in their group interviews. The quantitative findings provide an interesting point of comparison, as initiative was the only APTS score to show a statistically significant increase. This may provide some support for the observed movement from

hesitation towards participation and, for some adults initiating behaviour. However, the qualitative findings provide a more subtle picture, suggesting that this movement into play was not immediate or experienced in the same way by all adults.

5.7 Adult well-being in the outdoors

The significant increase in WEMWBS scores suggests that the woodland experience was associated with an improvement in adult well-being; the majority of adult participants described feelings of calm, relaxation, happiness, grounding and comfort, while also displaying relaxed and happy expressions and postures, smiling, laughing and playful behaviour.

It is interesting that adults' motivation for attending appeared to be primarily for their children's enjoyment and social interaction in nature; however, they also appeared to find a space to play and relax, themselves. It is possible that the woodland created a temporary space within which adults' responsibility could be negotiated, allowing adults to move from a supervisor parent to the role of player. The woodland experience afforded the adults opportunities for a positive sensory, emotional and relational experience. However, the findings raise several questions surrounding how we are to understand the relationship between the woodland and well-being. Participants did not simply spend time in the woodland setting; they played, created, explored and socialised with family and other participants. This is important when considering Attention Restoration Theory (Kaplan and Kaplan, (1989, cited in Ohly *et al.* 2016) or Stress Recovery Theory (Ulrich *et al.*, 1991) as they both provide good explanations for the calm and relaxed nature of the participants' experiences but fail to take into account the social and playful nature of the experiences which is consistent with van Bakkum *et al.* (2026) who argue that well-being in nature is context dependent and shaped by an individual's perception of the experience in natural environments, rather than just nature contact.

While participants' positive responses to the woodland could be interpreted as a natural connection towards nature, the increase in WEMWBS score findings also raise

questions surrounding the Biophilia Hypothesis (Wilson, 1984). It is difficult to say if the improvement in well-being was purely down to the restorative nature of the woodland setting or down to the social and sensory interactions during the session. Relationships with nature have recently been discussed as cultural and contextual rather than the same for everyone, which calls into question the universality of the Biophilia Hypothesis (Stonebridge *et al.*, 2025). This study set out to create a playful and social experience which makes it difficult to separate the exposure to nature as an isolated factor. However, this may also be an important finding, as the woodland experience did not involve nature in isolation. It brought together play, social interaction, sensory experiences and family connection.

The relationship between well-being and playfulness is similarly complex. The WEMWBS scores increased significantly while the APTS did not experience a significant change in overall scores, which could suggest that an improvement in participants' well-being did not require a change in their underlying disposition to playfulness. Instead, it is possible that the woodland setting provided an opportunity for any existing playfulness to be expressed in a setting that also supported the participants to feel relaxed and engaged with both nature and their family.

This is an important distinction as it suggests that the well-being value of outdoor play may not depend solely on how playful an adult is but could support the creation of an environment where social connection, playful behaviour and natural connection can occur together.

The findings therefore support the value of outdoor family experiences for adult well-being but suggest that their overall effects are better understood as multifaceted and context dependent, rather than as the result of playfulness or nature exposure alone. With this finding in mind if carrying out this study in the future the researcher would consider using a different adult playfulness scale, that measures playful state rather than trait playfulness.

5.8 Recommendations for practice and research

On consideration of the findings the researcher would make several recommendations both for future research and the design and facilitation of family woodland experiences. The natural play settings allowed adults to experience, open-ended resources, space and opportunities for exploration that appeared to encourage adults to participate and engage in several different types of playful behaviour, however the environment alone may not be enough to encourage everyone to take part. Therefore, it is recommended that practitioners should deliberately and carefully consider how to include instances of play for adults when designing family sessions. Clear discussions about the site boundary and safety before the session has started in earnest, should help put some of the parents fears at ease. This makes it clear that parents can and should take part in activities they are drawn to and including enough resources to accommodate their play needs, while incorporating activities that the adults gravitated to, such as den building, creative tasks, including clay, charcoal and nature printing.

Signposting to areas of play rather than over facilitating activities also allows the adults time to experiment and explore on their own terms. These invitations to play help to alleviate some of the hesitation to play, clarifying the experience is safe to participate in, creating permission to play. This is especially important as it appeared the children enjoyed seeing their parents taking part in the activities, with one child exclaiming **"You need to touch grass more"** [CP] (S2) when talking to their father in the group interview. Although this was an individual comment, it illustrates how children may notice and value adults participating in outdoor experiences alongside them. Creating opportunities for adults to play may therefore contribute to shared family experiences rather than positioning play as something primarily for children. A practical resource based on the findings, including ideas for encouraging adult participation in family woodland play, has been included in Appendix 11.

Further research is needed to examine adult outdoor play in a woodland setting, both with and without children present, and with parents or grandparents allowing for adult play habits to be more directly studied. The difference in willingness to take part in the smaller session in contrast with the larger sessions warrants further research, including

an exploration into whether adults' willingness to participate is affected by changes in social culture around play, perceived permission to play and the influence of both other adults present and the participant's age. Future studies could examine whether age plays a role in playfulness in an outdoor setting, as well as longer-term and larger-scale studies, to both examine and further the findings of the current study in more depth. A more prolonged examination of trait playfulness in a woodland session would be a more appropriate use of the APTS scale. Continuing the use of the WEBWBS scale on a longitudinal study would add to the growing body of data surrounding the outdoors as a factor for well-being and health, considering the contribution of play, nature exposure, social interaction and family connection to adult well-being, as the present study cannot isolate these factors.

5.8.1 Towards a conceptualisation of adult outdoor play

For this study, adult outdoor play is understood as a voluntary form of engagement; adults have agency to participate in activities for enjoyment, exploration, creativity or playful interaction, rather than remaining only in the supervisor, carer or facilitator role. In an outdoor setting, this may be supported by the physical, sensory and social opportunities provided by the natural environment.

The findings suggest that providing opportunities for play does not automatically result in adults taking part. Adults enter woodland experiences with existing responsibilities and expectations, particularly around the supervision of their children or grandchildren. The involvement of other adults, facilitation and a sense of permission may help adults move from their usual role as supervisor towards becoming players themselves. Figure 21 showcases the interview and observational data alongside a reflection of the adult role in practice.



Figure 21 Managing the adult role.
Source: Author's own data 2026.

5.9 Limitations

The researchers limited experience as a facilitator observer led to a few limitations to the study. An inability to pinpoint each participant through the observations and interviews, meant that it was impossible to pinpoint changes in the survey scores with individual observations and interview data. During the second session the researcher accidentally mentioned what could be seen as a possible theme exclaiming **“I wonder at what point that we decide that we can't go as an adult and play outside? That's really interesting isn't it?”** [R] (S2). The researcher realised after the session this had been mentioned and ensured it was not a bias mentioned again in later sessions. For future studies the researcher would look to utilise a more systematic way of linking individual participants' quantitative and qualitative data with the use of codes alongside the observation checklist. They would also consider including a second researcher for the full duration of each session. This would hopefully support consistent identification and recording of individual participant behaviour while the researcher facilitates the session.

The following chapter draws these findings together to provide an overall conclusion of the study, considering the extent to which the research question has been addressed and any reflections the researcher has on the contribution and limitations of the research.



*Figure 22 Children in the stream during Session 2.
Source: Author's own photograph, 2026.*

Chapter 6: Conclusion

This research explored the question: What elements of adult play are witnessed in a family outdoor experience, and how do they enhance well-being and playfulness?

The findings show that family outdoor experiences can provide adults with opportunities for physical, creative, imaginative, exploratory and social play. These experiences were associated with enjoyment, relaxation, connection and positive experiences of the woodland environment. The quantitative findings also showed a significant change in well-being following participation, alongside a significant increase in the Initiative element of adult playfulness. However, there was no significant change in overall adult trait playfulness or in the other APTS subscales. This is important because the findings do not suggest that a single outdoor session changes an individual's underlying trait of playfulness.

Instead, the qualitative findings suggest that the experience may have created opportunities for adults to express playfulness that was already present. Adults often hesitated before fully joining in, particularly when they felt they were the responsible adult, supervising the children in their group or were unsure whether it was acceptable for them to play. However, once involved, many of the adults appeared to experience enjoyment and some chose to engage in independent play. This suggests that adult play may be influenced not only by individual playfulness but could also be shaped by the social context and conditions in which play occurs.

The woodland environment provided affordances and real opportunities for adult play, through materials present and by the motivations to spend time in the setting with family. The setting did not however, provide adult play automatically. Facilitation and social context are important for creating an environment where adults feel able to participate in play freely.

Although there was no significant change in APTS trait playfulness, Initiative did increase significantly. However, possibly more importantly the WEMWBS revealed a significant increase in well-being scores on average across all 4 sessions.

Overall, the study therefore suggests that adults may need permission to play and sufficient freedom to step temporarily outside their role as the responsible adult. The woodland setting appeared to have an impactful bearing on opportunities for adult play, providing natural materials, space and experiences that encouraged participation. Family outdoor experiences may therefore provide opportunities not only for children to play, but for adults to reconnect with play, social connection and the outdoor environment.

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I acknowledge the use of Grammarly (<https://www.grammarly.com/>) on 28 September 2026 to check my work using the prompt(s): 1. Please check the following text for readability, grammar and syntax. I confirm that I have not presented any AI generated text as my own work. I confirm I have copies of my drafts, notes, and other resources I used before, and after the use of AI tools which I may be asked to provide in evidence.

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Appendix 1 – Recruitment poster



Research participants needed!

Free Family Woodland Experience.



Take part in a short (5 min) well-being and playfulness survey when signing up, then during a 2 hour free family woodland experience at Coed Ailwyllt (Woodland attached to Cowpots Camping).

2 hour sessions, 10am till 12pm



Fill out the consent form to sign up.



Book today!

1. Either scan or click on the link and fill out the consent form first.



Family woodland session at Cowpots Camping - Research Consent Form 2026



2. Then follow the link at the end of the consent form to complete the survey for each adult booked onto the session.

Contact the researcher:
Rachel Calvert-Bowman
0202502@student.uwtsd.ac.uk



Saturday 25th July
Sunday 26th July
Tuesday 28nd July
Friday 31st July



You will need..

- Appropriate footwear like walking boots, wellies or sturdy trainers (No sandals or crocs) you may get wet in the stream!
- we advise long trousers and tops (to keep the midges away and stop scratches)
- A coat/ waterproofs if it is wet
- A water bottle or drink
- Enough time to get to us! (about a 10 minute walk from the campsite)

The ground is uneven in places, please be alert when walking in the woods.

The path is steep but beautiful!



Terms and conditions - Minimum of one child and one adult 18+ per family group. No maximum! All children must be accompanied by at least one adult 18+. Children recommended age 5+, but younger children are welcome to come to the woodland experience upon prior arrangement with the researcher.

Appendix 2 - Consent form.

Family woodland session at Cowpots Camping - Research Consent Form

Your Personal Information and Research Participation

What am I asking you to do?

Come to the woodland directly adjacent to Cowpots camping and enjoy some time spent in a relaxed environment with a campfire and beautiful natural surroundings with a group of other families. Take part in some fun activities like woodland games, playing in the stream and some fun around a campfire. **Share your experiences in my research** through a short survey (no longer than 10 mins), artwork activities and an informal reflective chat (focus group).

What is this for?

I have over 20 years experience in the tourism and education sectors, but my passion is to use the wealth of knowledge I have, to encourage people of all ages back into our wild and outdoor spaces in Wales. I am an Outdoor Education Masters student examining **What elements of adult play are witnessed in a family outdoor experience, and how do they enhance well-being and playfulness?** I'll be writing the data gathered into my masters dissertation.

What actually is the data I want?

- Some **personal info** to help me contact you; make the woodland session accessible for you.
- **Survey questions** to find out about your mental wellbeing and relationship with playfulness.
- **Artwork** made by you to creatively represent your experience.
- My **written observations and reflective chats** (recorded focus group).

Will anyone know it's me in the data?

No. All results will be anonymised – different names will be used. Mentions of places/schools/groups will be replaced with fake names to ensure you are not traceable. Data will be stored online behind 2-factor authentication and it will be encrypted for security. It will be anonymised before being shared with anyone outside the research team or archived in the university's database. Hard copies will be stored in a locked area until scanned and stored online in the same way, and physical copies destroyed.

Can I change my mind?

Yes you can do this at any time. If the session has started you will be able to continue the session without being part of the research, or sit out as you choose. This will not affect how you are treated.

If you have any questions, there is a box at the end of this form, or you can e-mail me directly at

222222@student.wales.ac.uk

1. I agree to my data being used for the above stated purposes and understand I can ask questions any time and change my mind by contacting Rachel at the above email address. *

☐ I agree

☐ I disagree

2. Which session would you like to book onto? All sessions will be 10 am till 12 pm. (Contact will be made after you have booked, to confirm your slot and the location details) *

- ☐ Saturday 25th July 2026
- ☐ Sunday 26th July 2026
- ☐ Tuesday 28th July 2026
- ☐ Friday 31st July 2026

3. How many adults would like to take part in the woodland session? (This can change nearer to the date) *

4. How many children would like to take part in the woodland session? (This can change nearer to the date) *

Your details

5. Full Name *

6. Please provide an email address (only for the researcher to contact you regarding the experience it will NOT be passed to any other parties)

7. Year of birth *

8. Do you need to add another adult? *

- ☐ Yes
- ☐ No

2nd adult's details

9. Full Name *

10. Please provide an email address (only for the researcher to contact you regarding the experience it will NOT be passed to any other parties)

11. Year of birth *

12. Do you need to add another adult? *

☐ Yes

☐ No

37. Emergency contact name

38. Emergency contact relationship to you (Family member/friend, etc)

39. Emergency contact telephone number

Other information relevant to session

40. Do you have any known allergies? (either, food, plants or materials)

41. Do you have a health condition that may affect you while you're participating? If so, please share relevant details. (Example: "I have mild asthma and will keep my inhaler in my bag".)

Final thoughts

42. Please use this box to include any further information you feel is relevant or to ask any questions prior to the woodland session.

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.



Appendix 3 - Adult survey.

Family woodland session at Cowpots Camping - Adult Form

Please fill out a new form for **each** adult booked into the family woodland session.

- All answers and personal information will be kept confidential.
- You have the right to withdraw from the research at any point.

Children between the ages of 5 - 17 are welcome on the woodland session. Children younger than 5 are also welcome with the prior agreement of the researcher. All answers will be used in Masters research supported by University of Wales Trinity Saint David conducted by Rachel Calvert-Bowman. Thank you for taking part!

* Required

1. Full name *

2. Year of Birth *

3. Contact details (Email address or phone number) *

4. Below are some statements about feelings and thoughts.

Please select the answer that **best** describes your experience of each, over the last 2 weeks.

Answers from Non of the time - 1 to All of the time - 5

	Non of the time - 1	Rarely - 2	Some of the time - 3	Often - 4	All of the time - 5
I've been feeling optimistic about the future	☐	☐	☐	☐	☐
I've been feeling useful	☐	☐	☐	☐	☐
I've been feeling relaxed	☐	☐	☐	☐	☐
I've been feeling interested in other people	☐	☐	☐	☐	☐
I've had energy to spare	☐	☐	☐	☐	☐
I've been dealing with problems well	☐	☐	☐	☐	☐
I've been thinking clearly	☐	☐	☐	☐	☐
I've been feeling good about myself	☐	☐	☐	☐	☐
I've been feeling close to other people	☐	☐	☐	☐	☐
I've been feeling confident	☐	☐	☐	☐	☐
I've been able to make up my own mind about things	☐	☐	☐	☐	☐
I've been feeling loved	☐	☐	☐	☐	☐
I've been interested in new things	☐	☐	☐	☐	☐
I've been feeling cheerful	☐	☐	☐	☐	☐

5. Below are a number of statements that can be used to describe people and their beliefs in general.

Please respond as quickly and accurately as possible by indicating the extent to which you agree or disagree with each statement.

Answers from Strongly disagree to strongly agree.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately agree	Strongly agree
1. I believe in having a good time	☐	☐	☐	☐	☐	☐
2. Fun is a very important part of my life	☐	☐	☐	☐	☐	☐
3. I try to have fun no matter what I am doing	☐	☐	☐	☐	☐	☐
4. I can make almost any activity fun for me to do	☐	☐	☐	☐	☐	☐
5. I can find fun in most situations	☐	☐	☐	☐	☐	☐
6. I am often the person who starts fun things in a situation	☐	☐	☐	☐	☐	☐
7. I appreciate fun things started by other people	☐	☐	☐	☐	☐	☐
8. When someone else starts something that is fun, I'm happy to follow along	☐	☐	☐	☐	☐	☐
9. I enjoy fun things that other people initiate	☐	☐	☐	☐	☐	☐
10. If I want to do something, I usually don't let what other people may think stop me	☐	☐	☐	☐	☐	☐
11. Sometimes I can do things without worrying about consequences	☐	☐	☐	☐	☐	☐
12. I understand social rules but most of the time I am not restricted by them	☐	☐	☐	☐	☐	☐
13. I don't fear losing anything by being silly	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately agree	Strongly agree
14. I don't always follow rules	☐	☐	☐	☐	☐	☐
15. I often do unplanned things	☐	☐	☐	☐	☐	☐
16. I often do things on the spur of the moment	☐	☐	☐	☐	☐	☐
17. I often act upon my impulses	☐	☐	☐	☐	☐	☐
18. I often follow my spur- of-the-moment feelings	☐	☐	☐	☐	☐	☐
19. I often pursue my spur-of-the- moment thoughts	☐	☐	☐	☐	☐	☐

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.



Appendix 4 - Observational checklist

1. Type of Play Behavior Observed (Tick all that apply)

Date	Time	Weather		
Play Type	Description	Adults?	Children?	Notes
Physical Play	Climbing, running, balancing, chasing, rough-&-tumble			
Creative Play	Making art from nature, storytelling, imaginative roleplay			
Exploratory Play	Touching, smelling, examining natural objects			
Constructive Play	Building dens, structures, crafting with natural materials			
Social Play	Playing games with children or other adults			
Symbolic Play	Pretend play, mimicking animals, role-based behavior			
Risk-taking Play	Climbing high, using tools, balancing on logs, etc.			

2. Social Interaction

Behavior	Observed	Notes
Adult-initiated play with children		
Child-initiated play with adult		
Adult playing independently		
Adults playing with other adults		
Adults guiding or supervising rather than playing		

3. Emotional & Physical Cues

Cue	Adults?	Children?	Notes
Smiling / laughter / excitement			
Verbal expressions of joy or surprise			
Expressing curiosity or wonder			
Relaxed posture / uninhibited movement			
Hesitation / discomfort with play			

4. Environmental Interaction

Behavior	Adults	Children	Notes
Engaging with natural materials (leaves, sticks, stones, etc.)			
Climbing on or interacting with natural features (trees, logs, streams)			
Taking initiative in setting up or creating play spaces			
Willingness to get messy or wet			

General Notes

Appendix 5 - Sample of group interview transcript.

31st July 2026

Session 4 (S4)

Researcher: [R]

Adult participant [AP]

Child Participant [CP]

(Fire lighting activity substituted for nature prints due to increased risk of wildfire due to drought)

Pre Session

[R]: Okay so my 1st question is **why did you come today?** Does anybody know why you have come today? Or what you fancied doing today?

[AP]: We like playing outdoors, don't we.

[R]: so, you've come because you like playing outdoors

[AP]: we like being creative like making dens

[CP]: making fires

[R]: so, you saw that and thought that's a good idea I'd like to do that, nice, is there any other reasons why you came today?

[AP]: learn about plants and outside

[R]: okay yeah yeah lovely

[AP]: learning about nature

[R]: fantastic anybody else got any reasons why you came

[CP]: just want to explore

[R]: great reason, okay fantastic so **when was the last time you played outdoors?** this is a question for adults and children when was the last time you played outdoors?

[CP]: last night

[CP]: yes yesterday in the garden

[R]: amazing in the garden

[R]: fantastic when did you last play outdoors?

[CP]: last night

[R]: last night, fantastic what about you?

[CP]: I played outdoors when, when some times its a bit cold.

[R]: Do you, you sometimes play outside even though it's a bit cold, amazing did you play outside yesterday?

[CP]: yes

[R]: did you play outside this morning?

[CP]: yes

[R]: oh my goodness you've already had a play this morning amazing (who) adults when was the last time you played outside

[AP]: yesterday, I have to play

[R]: do you play on your own or do you play with children

[AP]: I just follow them making sure they're playing safe it's not okay or not trying to beat each other up. So we were in a big park in Cardiff yesterday so yeah you've got to keep an eye haven't you?

[R]: What about you guys?

[AP]: I used to, all the time, but I can't remember now

[AP]: we went for a walk in the woods about 2 weeks ago

[R]: okay yeah

[AP] yeah

[R] yeah that's fine

[AP]; probably in Colby woods,

[AP] oh yeah we went there the other day

[AP]: we made mud pies the other day

[AP]: oh yeah we made mud pies

[R]:oh nice in Colby woods?

[AP]: it's like a week or so ago

[R]: or yeah yeah amazing sometimes it's not easy to actually remember and when we say play it evokes different thoughts of what it actually is and what is it and that's partly why I'm here today so that's really interesting it doesn't matter if you don't know when the last time.

[AP]: we played on the beach yesterday I would say

[R]: Oh yeah yeah and what sort of things did you play with on the beach

[AP]: we played chase, got in the sea we got some stones

[AP] any sandcastles? (to child)

[CP]: No I don't think so because I don't think we brought our bucket

[R]: oh yes you need a bucket wouldn't you for a sandcastle. well today we're going to do some playing and so the 1st thing we're going to do. I'm going to stop that now so we're going to do a little bit After

3 min 32 sec

Post Session

[R]: **So how did it make you feel on our session today?** And this again is for adults and children how just how did it make you feel?

[CP]: super fun

[CP]: I have fun oh you feel creative

[CP]: I feel hurt

[R]: Yes because you did fall

[AP]: but you're okay now aren't you

[CP]: yeah yeah

[AP]: I feel I feel quite free

[R]: oh free

[AP]: and grounded and happy (a)

[AP] I'm gonna make a snail now like (name)

[CP]: good I feel good I didn't make good oh

[R]: anybody else? Otherwise how you feel after the sessions

[AP]: hungry hungry

[AP]: more positive

[R]: that's nice

[AP]: comfortable

yes you're feeling a bit maybe I don't a bit hesitant

(a) maybe or a bit maybe not that's kind of yeah now I feel I could stay here all day (a)
okay nice okay great

[R]: **Do you get opportunities to spend free time outside?**

[CP]: NO

[AP]: you are outdoors every single day. yeah having like a safe space I think for me, having 3 yes, being on my own with them most of the time, yeah having somewhere I know that wander around and they're not gonna be by a road or you're not, not near a car park you know that's really good

[R]: having being able to have a free space to leave them have a bit more independence as well

[AP]: yeah keep an eye on 3 is tricky yeah but they've been able to wander around its been great

[CP]: that's like me, that was like me, you actually keep an eye on me, because I walk to everyone.

[AP]: yes you while you still do that now but we've learned just relax and yeah

[R]: so how about you guys? Do you feel like you have enough opportunity to get outside?

[AP]: Yeah we get outside a lot but I guess restricted

[R]: okay

[AP]: so we will like we'll be outside, we'll walk the dog or yes and that feels restrictive then because you're like our dog is a bit naughty (a)

[CP]:or play Frisbee

[AP]: or we play Frisbee but yeah

[R]: but sometimes you feel like you don't get yeah but you're restricted to us to what you can do when you're outside

[AP]: yeah

[R]: okay how about you guys or opportunities to be outside

[AP]: I think probably they're are more opportunities than we but sometimes I think sometimes it's easier not to

[R]: okay

[AP]: psychologically maybe, okay because I feel like I'd always be running in my head the kind of like okay what are we doing next, what's happening next, whereas some yeah something where you know you're going to be here, for this amount of time and someone else is kind of taking on that it's really nice

[R]: okay so sometimes the sometimes the thought of organising the outside time puts you off having the outside time

[AP]: I think so yeah okay

[R]: interesting yeah

[AP]: yeah

[R]: is that with children or is that just you?

[AP]: know with children, yeah

[AP]: yeah you're pretty good at for children

[AP]: I would have just gone off very today and not really worried about where I was going to be worried about where I was going

[AP]: I prefer to stay indoors

[R]: that has not come across today but that's interesting so you prefer to say that's interesting

[AP]: I think it's the logistics of getting out and having the things that the kids need or want, entertaining isn't it, entertaining constantly it's exhausting so having you take over that it's been great here we are do this do that yeah yeah that taking that over yeah bringing supplies (for the outdoor activities)

[R]: yeah okay yeah that does yeah

[AP]: that's really (great) yeah

Appendix 6 -Ethical approval

4 min 23 Sec

Appendix 6 – Ethical Approval



PG2 / E1 FORM

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to paresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Rachel Calvert-Bowman			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
3	Institute/Academic Discipline/Centre:	University of Wales Trinity St David			
4	Campus:	Carmarthen			
5	E-mail address:	0202502@student.uwtsd.ac.uk			
6	Contact Telephone Number:	07584292105			
For students:					

April 2022' 1PG2 Ethical Approval Form

7	Student Number:	0202502
8	Programme of Study:	Outdoor Education
9	Director of Studies/Supervisor:	Maria Trevino Gonzalez

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☐	NO	☒
2	If Yes, please indicate source of approval (and date where known): <i>Approval in principle must be obtained from the relevant source prior to seeking ethical approval</i>	Research Degrees Committee	☐		
		Institute Research Committee	☐		
		Other (write in) Maria Jose Trevino	☒		20/01/25

SECTION C: Internal and External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.		
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	[List any other relevant documents here]	☐

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution	
2	Contact person name	
3	Contact person e-mail address	
4	Is your research externally funded?	YES ☐ NO ☒
5	Are you in receipt of a KESS scholarship?	YES ☐ NO ☒
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary YES ☐ NO ☒
7		Employed YES ☐ NO ☒
8	Is the research being undertaken within an existing UWTSD Athrofa	If YES then the permission question YES ☐ NO ☒

	Professional Learning Partnership (APLP)?	below does not need to be answered.				
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
	If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).				

SECTION E: Details of Research Activity

1	Indicative title:	3-2-1, ready or not, here we come? A study on outdoor adult play and its implications on well-being, social connection and environmental stewardship.		
2	Proposed start date:	25 November 2024	Proposed end date:	31/3/2026
	Introduction to the Research (maximum 300 words per section) Ensure that you write for a Non-Specialist Audience when outlining your response to the points below: <i>Purpose of Research Activity</i> <i>Proposed Research Question</i> <i>Aims of Research Activity</i> <i>Objectives of Research Activity</i> Demonstrate, briefly, how Existing Research has informed the proposed activity and explain <i>What the research activity will add to the body of knowledge</i> <i>How it addresses an area of importance.</i>			
3	Purpose of Research Activity The rationale for focusing on adult play stems from the recognition that play is a fundamental aspect of human development and well-being, yet it is often underrepresented in adult life. <i>(this box should expand as you type)</i>			
4	Research Question How can outdoor play be integrated into a family outdoor experience to enhance adult well-being and social connections? <i>(this box should expand as you type)</i>			
5	Aims of Research Activity The research aim is to gain a better understanding of adult outdoor play and explore the impact of an outdoor family play session on well-being and social interaction, to further the limited research on adult play in the outdoors. <i>(this box should expand as you type)</i>			

6	Objectives of Research Activity - To define what is meant by adult outdoor play. - To critically evaluate the types of outdoor play activities that adults engage in within a family woodland play session. - To explore the motivations for adult participation in outdoor play and its perceived benefits. - To assess how the outdoor setting can effectively encourage playful elements to support adult participation. - To examine the barriers adults face in engaging with outdoor play during a family play experience. (this box should expand as you type)					
7	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project. A mixed-methods methodology will be employed for this research, utilizing - semi structured interviews, - participant observation, - focus group - A questionnaire. (this box should expand as you type)					
8	Location of research activity Identify all locations where research activity will take place. The researchers home address, which is a business site. Cowpots Camping Penback Farm, Ciffing, Carmarthenshire SA34 0NG (this box should expand as you type)					
9	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this. (this box should expand as you type)					
10	<table border="1"> <tr> <td rowspan="2">Use of documentation not in the public domain: Are any documents publicly available?</td> <td>NO</td> <td>☒</td> </tr> <tr> <td>YES</td> <td>☐</td> </tr> </table>	Use of documentation not in the public domain: Are any documents publicly available?	NO	☒	YES	☐
Use of documentation not in the public domain: Are any documents publicly available?	NO		☒			
	YES	☐				

11	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with the current data protection law of the country in question and that of England and Wales. <i>(this box should expand as you type)</i>
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Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?		YES	NO
12	A prosperous Wales	☐	x
13	A resilient Wales	x	☐
14	A healthier Wales	x	☐
15	A more equal Wales	☐	x
16	A Wales of cohesive communities	x	☐
17	A Wales of vibrant culture and thriving Welsh language	☐	x
18	A globally responsible Wales	x	☐
19	If YES to any of the above, please give details:		
	As societal pressures increase, adults face significant mental health challenges, including stress and social isolation. Outdoor play presents an accessible means to mitigate these issues by facilitating relaxation, creativity, and community engagement (13 & 16). The outdoor element combines play with nature. Nature contact and more importantly connection is shown to have a positive effect on well-being (14). This focus aligns with contemporary discussions around holistic experiences, lifelong learning, biophilia and eco psychology reinforcing the importance of playful experiences across all age groups in the outdoors (18).		

SECTION F: Scope of Research Activity

Will the research activity include:		YES	NO
1	Use of a questionnaire or similar research instrument?	x	☐
2	Use of interviews?	x	☐
3	Use of focus groups?	x	☐
4	Use of participant diaries?	☐	x
5	Use of video or audio recording?	x	☐
6	Use of computer-generated log files?	☐	x
7	Participant observation with their knowledge?	x	☐
8	Participant observation without their knowledge?	☐	x
9	Access to personal or confidential information without the participants' specific consent?	☐	x
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	x

11	Performance of any acts which may cause embarrassment or affect self-esteem?	☒	☐
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.		
	Details of any other primary data collection method:	☐	☒
	(this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☒	☐
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups:	☐	☒
	(this box should expand as you type)		

Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected? 18 adult participants and 10+ children (this box should expand as you type)

11	Who will the participants be?	Adults over the age of 18 and children accompanied by a parent or legal guardian for the duration of the session. <i>(this box should expand as you type)</i>
12	How will you identify the participants?	Willing voluntary participants will be offered the free play session and to take part in the research while staying at the campsite at the same address or from the local area. <i>(this box should expand as you type)</i>

Information for participants:		YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	<i>(this box should expand as you type)</i>			

Information for participants:		YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	<i>(this box should expand as you type)</i>			

SECTION H: Anticipated Risks

Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.						
1	Full risk assessment completed and appended?	<table border="1"> <tr> <td>Yes</td> <td>☐</td> </tr> <tr> <td>No</td> <td>☒</td> </tr> </table>	Yes	☐	No	☒
Yes	☐					
No	☒					
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information					
	Risk to participants: Physical harm - Slips, trips and falls - Burn Emotional distress - Sensitive information discussed Emotional distress - Participants change their mind about permission <i>(this box should expand as you type)</i>	How you will mitigate the risk to participants: - Participants advised to wear appropriate footwear. - Participants will be made aware of uneven ground or tripping hazards - Fire to be always attended by a responsible adult - Participants will not be required to answer any questions they do not want to and will be able to opt out of the research at any point. - Questions will be semi structured - Participants may pull out at any time <i>(this box should expand as you type)</i>				
3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities					
	<i>(this box should expand as you type)</i>					
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest					
	Risk to the researcher: Physical harm - Slips, trips and falls - Burn <i>(this box should expand as you type)</i>	How you will mitigate the risk to the investigator: - Researcher will wear appropriate footwear and clothing. - Due care will taken on uneven ground or tripping hazards - Fire to be always attended by a responsible adult <i>(this box should expand as you type)</i>				
5	University/institutional risks For example: adverse publicity, financial loss, data protection					
	Risk to the University: Data protection, GDPR leak <i>(this box should expand as you type)</i>	How you will mitigate the risk to the University: Researcher will follow University data guidelines, keeping any personal data secure in line with GDPR legislation. <i>(this box should expand as you type)</i>				
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems					
	Risk to the environment:	How you will mitigate the risk to environment:				

Damage to the surrounding area from the fire <i>(this box should expand as you type)</i>	- The Fire will be in a clear area away from other flammable trees or grasses. - The fire will be contained in a stone circle. <i>(this box should expand as you type)</i>
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Disclosure and Barring Service			
If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7 Does your research require you to hold a current DBS Certificate?	☐	☐	x
8 If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when? Participants that would like feedback will be able to list their email address at the end of the questionnaire. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation. Participants will fill in a consent form before the commencement of the study. They will also be asked to give verbal consent on the day of the activity after receiving an information sheet about the study to confirm they still provide consent. Parents of the child participants will be asked to sign a consent form for the child and assent will be gained from any child participants. They will be made aware they do not have to take part, or can opt out at any point before, during or after the session. <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case. All written data will be anonymous, the researcher will keep the identity of the participants confidential. All data will be kept in the Universities password protected OneDrive. It will not be shared with anyone outside of the research study. <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
1	"Personal data" means any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier	x	☐

	such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.		
2	If YES, provide a description of the data and explain why this data needs to be collected: The focus group will be recorded and any semi structured interviews so that the data given can be analysed. <i>(this box should expand as you type)</i>		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes).	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	<i>(this box should expand as you type)</i>		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☒	☐
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	☒
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation: Data including audio recordings and transcripts will be stored on the universities cloud storage system in the Office 365 programme. Any identifiable information will be anonymised to keep participants identities confidential. <i>(this box should expand as you type)</i>		

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☐	☐

14	Sharing of data with others at the University outside of the immediate research team?	☐	X
15	Sharing of data with other organisations?	☐	x
16	Export of data outside the UK or importing of data from outside the UK?	☐	x
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	X
18	Publication of data that might allow identification of individuals?	☐	X
19	Use of data management system?	☐	X
20	Data archiving?	☐	X
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate): Data including audio recordings and transcripts will be stored on the universities cloud storage system in the Office 365 programme. Any identifiable information will be anonymised to keep participants identities confidential. <i>(this box should expand as you type)</i>		
22	List all who will have access to the data generated by the research activity:		
	Student supervisor and Myself <i>(this box should expand as you type)</i>		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	Myself <i>(this box should expand as you type)</i>		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	Data including audio recordings and transcripts will be stored on the universities cloud storage system in the Office 365 programme which is password protected. <i>(this box should expand as you type)</i>		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (Most relevant to academic staff)		
	N/A <i>(this box should expand as you type)</i>		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	X
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	X

SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	RCa Ivert-Bowman Date: 9/1/25

For STUDENT Submissions:

2	Director of Studies/Supervisor:	Maria Jose Treviño Gonzalez	Date:
3	Signature:		20/01/2025

For STAFF Submissions:

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☐	I have read the guidance notes supplied before completing the form.
☐	I have completed ALL RELEVANT sections of the form in full.
☐	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☐	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☐	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pairesearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendix 7 - Sample of risk assessment.

L - Low M - medium H - High					Likelihood
Site Location: Coed Ailwylt Risk Assessment ~ Site & Activities					
Potential Risk/ Hazard	Risk Level	Control / Action	Who Will Implement Action?	New Risk Level	
Uneven, muddy ground. Roots / stumps sticking out of the ground. * Slips or trips - falls	L M	- Participants required to wear appropriate footwear. Warned of risk of slips / trips	Session Leader (SL)	M	
* Cold / hot / wet weather Hypothermia Hyperthermia	M	- Participants required to wear appropriate clothing pre session SL first aid trained Building located on site. Advised to drink during hot weather	SL	L	
* Other participants Being aggressive / Showing aggressive behaviour * Physical or emotional harm	M	- Participants not required to do anything they do not want to. - Asked to leave if exhibiting dangerous behaviour police called if behaviour continues	SL	L	
* Thorns and brambles - Pointy thorns on plants / bushes. Cuts to skin / rash Splinters Sharp plant edges Sharp wood / stones	L	Plasters kept in first aid kit Participants warned of brambles etc. Appropriate clothing that covers advised Wear protective gloves when pulling plants conservation activities	SL	M	
* Cut skin	L	SL to supervise	SL	L	
* Proximity to Snake habitats and stinging insects Bites and stings	L	Participants advised to walk on paths or look when walking through brush. - let snakes please do not pick up In unlikely event of snake bite: advise a medical professional to assess. Glangwili or Wyllybush are local medical centres with A&E	SL	L	

Appendix 8 – Quantitative Data Table (Colour coded by session)

Participant Id	Fun Belief Pre	Fun Belief Post	Fun Belief Change	Initiative Pre	Initiative Post	Initiative Change	Reactivity Pre	Reactivity Post	Reactivity Change	Uninhibitedness Pre	Uninhibitedness Post	Uninhibitedness Change	Spontaneity Pre	Spontaneity Post	Spontaneity Change	Fun-Seeking Motivation Pre	Fun-Seeking Motivation Post	Fun-Seeking Motivation Change	APTS Pre	APTS Post	APTS Change	WEMWBS Pre	WEMWBS Post	WEMWBS Change
P002	4.00	4.00	0.00	3.25	3.25	0.00	5.00	5.00	0.00	3.40	3.80	0.40	3.60	3.40	-0.20	4.08	4.08	0.00	3.69	3.76	0.07	58	55	-3
P005	6.00	6.00	0.00	4.25	4.75	0.50	6.00	6.00	0.00	3.40	3.80	0.40	3.00	3.00	0.00	5.42	5.58	0.17	3.94	4.13	0.19	52	56	4
P006	5.50	4.50	-1.00	3.75	3.75	0.00	5.33	5.00	-0.33	3.80	3.40	-0.40	5.00	4.40	-0.60	4.86	4.42	-0.44	4.55	4.07	-0.48	48	48	0
P004	6.00	5.50	-0.50	5.00	4.75	-0.25	6.00	5.00	-1.00	4.00	4.60	0.60	4.40	4.00	-0.40	5.67	5.08	-0.58	4.69	4.56	-0.13	56	54	-2
P008	6.00	6.00	0.00	5.00	5.00	0.00	5.67	5.33	-0.33	4.60	5.00	0.40	5.60	5.40	-0.20	5.56	5.44	-0.11	5.25	5.28	0.03	52	49	-3
P009	5.00	6.00	1.00	4.00	5.50	1.50	5.33	5.00	-0.33	5.00	4.40	-0.60	6.00	5.80	-0.20	4.78	5.50	0.72	5.26	5.23	-0.03	37	42	5
P012	5.50	5.50	0.00	2.75	3.50	0.75	5.67	5.33	-0.33	3.40	2.80	-0.60	3.00	3.40	0.40	4.64	4.78	0.14	3.68	3.66	-0.02	50	57	7
P013	5.50	5.50	0.00	3.50	4.25	0.75	4.33	4.33	0.00	2.80	4.00	1.20	2.60	2.60	0.00	4.44	4.69	0.25	3.28	3.76	0.48	50	54	4
P023	5.50	6.00	0.50	4.50	5.25	0.75	5.67	6.00	0.33	2.80	3.60	0.80	2.00	4.60	2.60	5.22	5.75	0.53	3.34	4.65	1.31	46	52	6
P024	4.50	4.50	0.00	3.50	4.00	0.50	4.67	4.67	0.00	4.00	3.80	-0.20	4.00	3.20	-0.80	4.22	4.39	0.17	4.07	3.80	-0.28	47	45	-2
P019	6.00	6.00	0.00	5.00	5.50	0.50	6.00	6.00	0.00	5.20	5.00	-0.20	5.20	6.00	0.80	5.67	5.83	0.17	5.36	5.61	0.26	36	44	8
P021	6.00	5.00	-1.00	5.00	4.75	-0.25	6.00	4.33	-1.67	5.20	4.00	-1.20	5.20	4.00	-1.20	5.67	4.69	-0.97	5.36	4.23	-1.12	39	41	2
P022	5.00	6.00	1.00	4.25	5.00	0.75	5.33	5.33	0.00	4.80	4.20	-0.60	4.00	4.40	0.40	4.86	5.44	0.58	4.55	4.68	0.13	42	44	2
P025	6.00	5.00	-1.00	5.00	4.50	-0.50	5.00	4.67	-0.33	4.80	5.00	0.20	5.00	4.40	-0.60	5.33	4.72	-0.61	5.04	4.71	-0.34	47	48	1
P026	6.00	6.00	0.00	4.50	5.25	0.75	5.67	6.00	0.33	4.80	5.60	0.80	5.00	5.20	0.20	5.39	5.75	0.36	5.06	5.52	0.45	37	48	11
P027	6.00	5.00	-1.00	4.75	4.25	-0.50	5.00	4.67	-0.33	4.60	4.00	-0.60	4.00	3.60	-0.40	5.25	4.64	-0.61	4.62	4.08	-0.54	45	51	6

Appendix 9 – Qualitative Data Analysis

Thematic framework (Codebook)

Main category	Code	Definition	Example
Adult role	Supervision	Adults watching monitoring rather than participating	Adults described being in a "supervisory role"
	Parental responsibility	Responsibility for safety, clothing, food, water, etc.	"I have to think about everyone else's needs"
	Facilitating children's play	Adults encouraging/supporting children to participate	Adults encouraged children to try den building and creative activities
	Guiding children's play	Helping children know how/where to begin	Adults helped children begin den building, clay and stream activities
	Adult control	Adults directing or taking over children's activity	Adult control noted during den building// adults wanting to take over printing
	Stepping back	Deliberately allowing children to take over/play independently	Parent described stepping back because children were old enough
	Independent adult activity	Adult engages without children	Adults independently made clay faces, drew with charcoal and made clay objects
Participation in play	Adult participation	Adults directly engaging in an activity	Adults participating in creative activities and hide and seek
	Adult-initiated play	Adult starts or introduces play	Adult-initiated play observed, particularly at the beginning
	Child-initiated play	Child begins activity/play involving adult	Children led aspects of den building/problem solving
	Adult-to-adult play	Play between adults	Adults played together in the water and encouraged another adult to try clay
	Shared family play	Adults and children participating together	Families described doing activities "as a group"
Transition into play	Hesitation	Initial reluctance/discomfort when invited to play	Adults appeared hesitant before hide and seek
	Invitation/permission	Being invited or given permission to participate	Researcher invited adults into hide and seek
	Increased confidence	Adults becoming more comfortable/confident	Adults became more confident and children became more confident too
	Enjoyment after participation	Enjoyment following initial hesitation	Adults initially hesitant but appeared relaxed after joining
Types of play	Physical play	Running, climbing, balancing, chasing, movement	Mainly children/ adults rarely observed doing physical play
	Creative play	Making, drawing, clay, natural art	Adults and children used clay, charcoal and natural materials
	Constructive play	Building/making	Den building, fire building, clay construction
	Exploratory play	Examining, finding, touching and investigating	Adults examined natural objects and collected materials
	Social play	Playing/interacting with others	Adults/children played together, some adult-to-adult interaction
	Imaginative/symbolic play	Pretending, creating imaginary scenarios	Children created villages and pretended/mimicked animals
	Risk/challenge	Use of tools, fire, physical challenge	Mallets, fire lighting, fire steels; adults supported children

Creative engagement	Den building	Adult/child engagement with dens	Adults and children built dens// adults identified den building positively
	Clay	Digging, handling and creating with clay	Adults played with clay and made objects/faces
	Charcoal	Drawing/mark-making with charcoal	Adults drew with charcoal independently and alongside children
	Natural materials	Leaves, sticks, stones, acorns, moss etc.	Adults collected and used natural materials
	Tactile/sensory creativity	Enjoyment of touching/manipulating materials	"It's really tactile" referring to charcoal
Outdoor context	Beach as current play	Recent adult/family play at beach	Beach play was reported within the previous week
	Walking	Outdoor activity not necessarily described as play	Walking described alongside supervision rather than play
	Woodland exploration	Engagement with woodland environment	Natural objects, stream, trees, clay etc.
	Environmental interaction	Physical engagement with natural features	Stream, trees, leaves, sticks, stones
Memory/reconnection	Childhood memories	Memories of previous childhood outdoor experiences	Adults unable to recall recent play and referred to childhood
	Sensory memory	Memory triggered by sensory experience	Smell of fire evoked memories
	Clay memory	Previous experience of playing with clay	Adult recalled making clay faces previously
	Observing children's play	Children's play triggering adult memories	Watching children in the stream
Barriers	Weather	Weather restricting outdoor opportunities	Weather mentioned across 3/4 sessions
	Darkness/season	Reduced daylight/darker evenings	Mentioned several times in one session
	Time/work	Work limiting time outdoors	"working restricts time"
	Supervision as barrier	Responsibility limiting adult participation	Adult unable to leave child to play hide and seek
Emotional experience	Happiness	Feeling happy	Adults reported feeling happy
	Relaxation	Feeling relaxed	"relaxed" reported after activity
	Calm	Feeling calm/in the moment	"calm in the moment"
	Freedom	Feeling free	"quite free" / "free and grounded and happy"
	Groundedness	Feeling grounded	Participant explicitly used "grounded"
	Reduced worry	Not feeling worried	"not really worried"
	Positivity	Feeling more positive	"more positive"
Social/contextual	Family time	Being together as a family	"have some fun together"
	Social permission	Others/session context making play acceptable	Adults joining when invited during hide and seek
	Adult modelling	Adults' participation encouraging children	Adult confidence linked with children's confidence
	Shared responsibility	Someone else taking responsibility for the session	Adults valued facilitator taking over organisation and safety

Initial coding framework

Broad area	Current codes	Evidence/pattern identified
Adult role & supervision	Supervision, parental responsibility, need to supervise, difficulty stepping away, stepping away from supervision	Supervision discussed across sessions; some adults felt they needed to supervise
Facilitating children's play	Encouraging children to have a go, suggesting den making, encouraging creative arts, supporting children's creativity, enabling participation	Appears to be more common than adult-initiated play
Adult participation	Joining children's play, shared play, participating alongside children, taking part when invited	Hide and seek
Adult-initiated play	Starting/inviting play, initiating play with children, initiating play with other adults	3/4 sessions , but less prominent than facilitation
Independent adult play	Stepping away, own activity, self-directed creative activity, playing independently of child, adult time/space	Some adults took themselves off to do in their own creative activities
Hesitation & transition into play	Initial hesitation, reluctance, uncertainty, accepting invitation, transition into participation	Hide and seek 3/4 sessions/ adults initially hesitant but appeared to enjoy it in the end
Fun & enjoyment	Fun, enjoyment, laughter, pleasure, playful atmosphere	Recurring in existing data
Spontaneity	Spontaneous participation, unplanned play, acting in the moment	Existing code
Creativity	Creative activity, expressions, making, imagination, experimentation	Den building, clay, charcoal drawing
Den building	Construction, creativity, collaboration, adults preference, shared activity	Adults said den building was their favourite activity
Creative arts	Clay, charcoal drawing, woodland art, making	Adults encouraged in these activities
Fire lighting	Fire lighting, excitement, challenge, novelty	Children loved making fires/favourite activity, child told Father to go first
Risk & challenge	Risk-taking, climbing, uncertainty, trying something new	Existing code
Outdoor experiences	Walking, beach, woodland experience, being outdoors	Walking mentioned a few times, beach mentioned in 3/4 sessions
Childhood memories	Childhood play, memories of playing, remembered outdoor experiences	Adults discussed childhood memories
Beach as remembered play	Beach, previous outdoor play, last time they played	Mentioned in 3/4 sessions
Walking	Walking, everyday outdoor activity, outdoor recreation	Mentioned several times but not as current play
Environmental barriers	Weather, poor weather, weather limiting outdoor activity	Weather mentioned in 3/4 sessions
Seasonal barriers	Darker evenings, reduced daylight, seasonal limitations	Several mentions within 1 session ,
Social connection	Shared activity, parent-child interaction, adult-adult interaction, social play	Adults played with children and some other adults
Adult-to-adult play	Playing with other adults, shared adult play, social interaction	Observed alongside adult-child play
Wellbeing – positive affect	Happy, good, more positive	Mentioned in 3/4 sessions
Wellbeing – calm/relaxation	Relaxed, calm, comfortable, reduced worry	Mentioned in 3/4 sessions
Wellbeing – freedom/presence	Free, grounded, in the moment, not really worried	Interesting responses after the session

Appendix 10 – Sample of observations

First session

22nd August

Session time 10am till 12 pm

Weather Dry, Warm, Sunny

The weather had been wet the day previous, which meant that some of the floor and the grass and things were a little bit wet, but on the day it was dry and bright and quite sunny and warm.

Age range / Observations about participants

The youngest was a toddler up to a teenager. A few of the families came at One of the families came as a full family, both parents and children, whereas most of the groups came with one adult or two from that family and children. All of the adults were able to drive themselves to the site and had their own cars. One of the families was camping on the site itself.

Adults looked to manage and show children how to make dens. And one adult decided. To explain to his child that he had done it the wrong way and try to show him a different way of doing it. The child let the adult do that, although it was obvious that the child was unhappy about the change being made to the den. The adult went on to make a completely different den with the child to what they'd first envisaged. Adult made the comment that they already had two tarpaulins and that it was possibly a bit greedy to have a third one when the child came and asked me for another tarpaulin. But the child took the tarpaulin anyway and used it.

One mum with her son said that she had enjoyed building the dens. I like it. As I was walking past. It was very much working together. And the adult felt the need to suggest different ways that the child could make the den. In some instances this was to try and change what the child had envisaged, but the mum didn't change it, she suggested, and

when the child said that they didn't want to do it that way, she left it be and let them create their own creation.

One parent commented on the fact that it was difficult not to get involved and tell the children what to do to make a better den. She said that she was stepping back because her children were now old enough to have ago themselves, saying she let them make food and what they wanted. She commented that there was still the urge to step in and help them when she felt that she could give them the answer.

When the adults were doing art with the smaller children. They were more inclined to do their own art alongside the child doing art, and the children were looking at what the adults were doing and sometimes copying and sometimes doing their own. The adults seemed more comfortable to let the children do the art without telling them what to do, or without explaining ways for them to do it better. Adults created their own art alongside instead.

One parent was trying to console a child who was not happy and at the time, crying. The parent had explained that the child was finding it difficult and had had a bad night. That parent found it difficult to take part in any of the activities because they spent most of the time with the one child trying to console them but also get them engaged in the activities. That parent suggested lots of the activities and took part in the clay in order to encourage the daughter to have a go at things.

Physical play

Children seen running, climbing, balancing, chasing. They siblings were running after each other, balancing on rocks in the stream. One child was seen climbing a tree. No adults were seen doing the physical play as part of the checklist?

Creative play

Adults did take part in the creative play making art from nature and Some of the children pretended to have a home in their den's. And they made faces with the clay, using leaves for the hair. Adults also and used natural resource is to make faces.

One adult said, "I haven't played with Clay for a long time, a long time ago. I have never dug it out of the stream myself though". The parent enjoyed getting the clay and asked the question of did I know how old the clay was?.

One parent took themselves away from the other group and in order to create their own woodland faces in a tree with clay and natural resources. The adult exclaimed that they had done some clay faces during COVID and really enjoyed it and hadn't had the opportunity to do the same thing since. They mentioned that as soon as they had seen the clay, they had thought that they wanted to do this activity again. They were enjoying time away from what the children were doing as they felt the their daughter was old enough to do their own thing. They enjoyed being creative in their own way.

Exploratory play

One adult said the smell of the fire evoked memories, and somebody touched the Moss and liked the feel of it, so they were examining natural objects.

Constructive play.

The building of dens and the making of fires. However, that was part of the structure of the session. Not all of the groups decided to make dens, but quite a few of the children and adults did together. During the den building there were some problem solving and that was child-initiated play with the adults. But there was also a lot of adult control in that session.

Social play.

Lots of the children played with their own adults. I didn't see many of the adults initiating the social play with participants outside of their family. Some of the children who were present knew each other and they there was lots of working together with each other.

There was lots of adult initiated play with the children especially to begin with. Children needed the encouragement to take part in the activities that were offered. But it was more child led with more confidence if the adults took part. So, when the adults

became more confident in what they were doing the children became more confident too.

Adults were seen playing with other adults during splashing in the water, and all adults were asked to play part of hide and seek at the beginning of the session, but again, that was led by the session leader.

Some used mimicking birds flying with their arms so they were symbolic play mimicking animals and pretending.

Risk taking play

There was the use of the mallet. Some of the children used the mallet; they used the fire lighters or the fire steels and froe. The adult, the parent of the child helped explain to the child how to use the froe and how to split the logs and then let the child have ago.

Sometimes supervision was too much. Guidance was inferred with the child's play or imagination. Sometimes the adults were supervising play. Some children needed support to guide them in the start in the activities. In particular, they needed help to know where to begin when done building or with the clay art or even in the stream. And this helped the adults themselves to initiate their own play and get involved. So maybe because the adults needed to take the initiative to get started, that helped them to become more involved in the activity.

Emotional and physical cues.

There was lots of smiling, laughter and excitement. And they all seemed happy and relaxed with the activities. There was verbal expressions of joy and surprise, the sense of achievement of completing dens both from adults and children. There was fun and splashing around in the river, and also both parents and children enjoyed lighting the fires. One of the parents exclaimed yes when they managed to light their fire. And. Expressing curiosity or wonder. Some of the adults found insects and then explain them to the children. They also found a birds nest which they explained to the children. Relaxed posture or movement? Yes, the adults and the children, especially when able to explore and choose their own activities. Hesitation and discomfort There was hesitation from adults and not so much from children. Initially some adults seemed

hesitant, but then all seemed relaxed to join in. Hide and seek was a good warm up activity for interaction, in particular for the adults because they had to take part.

Environmental Interaction.

Engaging with natural materials, so making dens. They use leaves for the artwork, throwing sticks and logs, stones, leaves into the river and to watch them float. Climbing on or interacting with natural features. The children were climbing up trees. And there was wading in the water and splashing. Some of the children created a little village from the first base of an original den.

End of session 1 observations.

Appendix 11 – Supporting adult play in family outdoor experiences resource.



SUPPORTING ADULT PLAY IN FAMILY OUTDOOR EXPERIENCES



Adults may need more than just an opportunity to play. They may need **permission**, **encouragement** and **space** to step beyond their usual responsible adult role.

Key themes: Permission to Play • Responsible Adult • Social Connection • Woodland Affordances • Well-being

Here are six recommendations for practice to support adult play in family outdoor experiences.

1 Give adults permission to play

Practitioners should:

- Explicitly invite adults to join in
- Tell adults that the activities are for them too, not just the children.
- Model playful behaviour as the facilitator.
- Use phrases such as:
 - “Adults, come and have a go!”
 - “There’s no right way to do this”
 - “You can play too.”

Key message: Make adult play visible and socially acceptable.

4 Support well-being through play

Find opportunities for:

- enjoyment
- laughter
- connection
- calm
- sensory engagement
- family interaction
- exploration
- increased willingness to participate

Create the conditions for play rather than trying to manufacture a particular well-being outcome.

3 Build a culture of play

Adults may be more willing to join in, when play feels socially acceptable

Practitioners could:

- Start with low-pressure activities.
- Introduce activities as a whole-family invitation.
- Use facilitator modelling to make joining in feel natural
- Encourage groups rather than putting one adult on the spot.
- Use humour and modelling to reduce self-consciousness.

Key message: Seeing other adults play can make it easier to join in.

2 Create opportunities for adult play

Offer activities that naturally encourage adults to get involved:

- Hide and seek
- Clay and natural art
- Simple collaborative challenges: fire lighting, den building and bridge building.

Key message: provide activities where adults can participate alongside children rather than simply supervise.

5 Use the woodland as a play resource

Don't just use the woodland as a backdrop
Use its natural materials

- Sticks
- Clay
- Water
- Fire
- Trees and spaces
- Natural materials

Key message: Let the environment invite play rather than relying solely on prepared equipment.

6 Make space for adults to let go

Being responsible can make it difficult for adults to fully enter play.
Practitioners can:

- Create safe opportunities for adults to step back from supervising.
- Let children take ownership of their play.
- Avoid unnecessary adult direction
- Provide activities where there is no right way to do it
- Encourage adults to observe without needing to manage

Sometimes supporting play means stepping back, not stepping in!

Practitioner checklist

Before the session: ☐ Have I explicitly invited adults to participate? ☐ Are there activities that adults might enjoy too? ☐ Have I considered opportunities for social play?	During the session: ☐ Am I modelling playful participation? ☐ Am I giving adults permission to step away from supervising? ☐ Am I allowing the environment to become part of the play?	After the session: ☐ What encouraged adults to play? ☐ What made adults hesitate? ☐ How could the next session make adult participation easier?
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Evidence base: Blanche, E.I., Chang, M.C. and Parham, L.D. (2024) 'Experiences of Adult Play', The American Journal of Occupational Therapy: Official Publication of the American Occupational Therapy Association, 78(4), pp. 7804185040 Available at: 10.5014/ajot.2024.050436 • Deterding, S. (2017) *Alibis for Adult Play* SAGE Publications. • Foss, K., Liu, H. and Carotta, C.L. (2023) 'The Influence of Parents' Outdoor Recreation Preferences on Children's Outdoor Activities in State Parks' Sagamore Publishing, LLC. • Maynard, D., Elwanger, L., Dahier, L. and Jagacki, M. Play Guilt Experiences Among College Students A Grounded Theory Investigation • Rheda, D.J., Farbo, D. and Campbell-Pierre, D. Adult Outdoor Play Preferences: Why Nature Space Design Matters. • Shen, X. and Crawley, Z. (2025) How does playfulness (re)frame the world? Evidence for selective cognitive and behavioral redirecting in times of adversity Frontiers Media SA.