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**Understanding perspectives on play and learning experiences outdoors
across EYFS and KS1.**

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Submitted in accordance with the requirements for the degree of
BA (Hons) Primary Education (3-7) with QTS

York St John University
School of Education, Language and Psychology

May 2023

The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

Unfortunately, the amount of time that children spend engaged in child-directed outdoor play has diminished significantly over the last 50 years (Kemple et al., 2016; Sandseter et al., 2019). Therefore, this paper uses existing research to explore the reasons surrounding why children are not experiencing outdoor play and learning in the same manner as they could have done previously. Additionally, the research carried out by the researcher aims to understand the reasons why practitioners within the setting examined did, or did not, carry out outdoor learning and play. Not only this, but the research aimed to give the children within the project a voice and understand their perspectives on outdoor learning and play. The research took place within a typical village school, utilising a case study to collate data through a triangulation approach of participant observation and an online survey. The paper utilises current literature, as well as its findings to discover that as a result of cultural changes, teachers were generally aware of the benefits of outdoor play and learning, yet were often hesitant to take learners outdoors. This was due to a multitude of reasons, ranging from adverse weather conditions, concerns over health and safety, a lack of understanding surrounding benefits for pupil progress, and many more. When considering these findings, implications for future practice were outlined within the paper, and it is hoped that further research will be conducted into this area.

Word count: 6,551.

Understanding perspectives on play and learning experiences outdoors across EYFS and KS1.

Introduction

This study uses a mixed methods case study approach in order to attempt to understand perspectives on play and learning experiences outdoors across early years foundation stage (EYFS) and key stage one (KS1). The study therefore focusses on children aged three to seven, as well as the EYFS and KS1 teaching staff, in a primary school with extensive outdoor grounds. This primary school was the researcher's placement school and as a result of the outdoor spaces available within the setting, experiences of outdoor play and learning became an interest to the researcher. Additionally, outdoor play and learning was chosen as the research focus because of the researcher's concern in the decline in the use of the natural, outdoor classroom in the modern education system. Whilst indoor classrooms have become the 'normal' for formal learning, this only came to fruition in the 19th century as a result of the introduction of mass education (Mann et al., 2021), in comparison to the outdoor environment which had been the setting for learning across the rest of human history (Nicol and Waite, 2020). Despite the positive benefits to child development from spending time outdoors such as increases in cognitive ability, academic attainment and physical activity levels, (Dowdell, Gray and Malone, 2011; Louv, 2008) the researcher was concerned with the lack of time which children spend outdoors, and the impact of this upon children. The study therefore aims to outline perspectives on outdoor play and learning, and add to the understanding surrounding why outdoor play and learning is, and is not, occurring across schools in England. The case study involved two research approaches; observations of staff and children, and a survey which was sent to eight consenting members of staff, who had teaching experience across EYFS and KS1. The unstructured observations of children and staff perspectives took place over a duration of the placement, after consent was gained, enabling the researcher to collect and thematically analyse the data.

Literature review

To define outdoor learning; it is a practice which takes place beyond the classroom setting, either within the immediate locality, or further afield (Beames, Atencio & Ross, 2009; Beames, Higgins & Nicol, 2012). Within current literature, there is a general consensus that outdoor learning and play is valuable for children, particularly for children in their early childhood, yet literature also portrays the image that educators are still not putting time or conversations into the planning and preparation for this (Davies, 1996; Louv, 2008). Educators are responsible for helping children to meet life's challenges by preparing quality learning experiences (Burriss and Burriss, 2011). Therefore, as a result of the research undertaken surrounding outdoor learning, the literature review will detail findings of the three key themes that emerged, which will be discussed within this section. These themes are risk management, barriers to outdoor learning and pupil progress.

Risk management

A great proportion of research into outdoor learning and play indicates the importance of risk when developing the whole child. When using outdoor spaces, practitioners and the outdoor environment work in tandem to offer children the opportunity to take risks and initiate their own learning (Knight, 2009) which can often be known as risky play. Risky play can be defined as a thrilling and exciting activity which involves the risk of physical injury, but provides children with the opportunities to explore boundaries, test their personal limits and learn about injury risk (Little, Wyver and Gibson, 2011). International research into risk management outlines that there have been cultural changes worldwide, resulting in adults' perceptions of children's risky play changing (Maynard and Waters, 2007), and research by Tovey (2010) outlines that risk taking during play has become increasingly controlled, or even removed from children's lives all together. As a result of these cultural changes, expectations surrounding playing outdoors in childhood vary greatly worldwide, with research by Waters and Begley (2007) describing Norwegian teachers as more willing to allow children to engage in risky activities, when compared to their English colleagues. This is further validated by Sandseter, Little and Wyver (2012) who detailed that Norwegian teachers understood the benefits of outdoor learning, and made individual evaluations of risky play

to understand if activities were worthwhile for their learners. Additionally, a study carried out by Waite, Rogers and Evans (2013) discovered that American practitioners' worries were directly impacting upon children's experiences. This was further discovered in Sweden (Oikonomou, 2012) and again in America (McClintic and Petty, 2015). This research detailed that practitioners are experiencing feelings of anxiety regarding health and safety, as well as the risk of injury during time spent outdoors, and therefore opt to remove or not consider outdoor play and learning in their everyday approach to teaching. This could suggest that some countries are putting more emphasis on encouraging staff to allow children to take sensible risks, as by not allowing children to experience this, practitioners are failing to acknowledge the benefits of risk-taking as a feature of children's play and learning (Tovey, 2011). Research by Scott, Boyd and Colquhoun (2014) validates this research, and further enhances it by adding that practitioners were seemingly fearful of injury to their learners, as well as worries about the perceived loss of control, loss of expert status and loss of working relationships. This is further backed by Ernst (2014) and Ernst and Tornabene (2012) who explained that practitioners have concerns about managing children and their behaviour in outdoor learning. Additionally, research by Logue and Harvey (2009) confirmed that teachers attitudes about play, including risky play, influence the play that children are allowed to engage in, both inside and outside of the classroom. Whilst the wealth of research presented here details teachers worries surrounding risk management, it seems that practitioners are sometimes more concerned over the safety of themselves and their pupils, rather than acknowledging the benefits that outdoor play and learning could have. Research by Dymont and Reid (2005); Fiskum and Jacobsen, (2012); Kuo, Browning and Penner (2018) and Largo-Wight et al., (2018) does detail that allowing children to experience risk in a controlled environment can benefit children who find learning within the traditional classroom environment difficult, which therefore results in a reduction in behavioural problems as the children are engaged within the learning. It therefore seems that risky play is seemingly approached differently around the world, with some policies encouraging their practitioners to plan and manage risk, whilst other practitioners are fearful and unsure how to manage risk outdoors.

Pupil Progress

There was a distinct narrative in a great deal of literature, which was the idea that many practitioners do not regard outdoor learning as real work, and distinctions are made between the so-called real work, which happens inside the classroom, and the so-called fun that can happen outside of the classroom (Malone, 2008). Despite this belief, simply being in the outdoors, does not guarantee that the learning is informal, or any less complex for the learners than indoor learning (Waite and Pratt, 2011; Waite, 2013). Whilst the opposite could be argued, as being outdoors does not automatically mean that there are worthwhile educational experiences, research suggests that there is a newfound interest on the impact of outdoor learning upon academic attainment, wellbeing and the development of the whole child, with a growing demand for evidence-based research to approach this form of learning (Rickinson et al., 2012; Department for Education and Skills, 2006). Yet, Cameron (2019) outlines that current education systems in England are focussing upon raising standards and achievement, which poses a challenge for practitioners when incorporating outdoor learning into the curriculum. Often, outdoor experiences are considered to develop children's personal and social skills, rather than being explicitly linked to their academic achievement and attainment (Hawxwell et al., 2018). This is further backed by James (2014) and Prince and Exeter (2016) who explain that schools in England have been pressured by government directives to improve pupil performance, with testing measures in place to report this performance, particularly in the core subjects of English, mathematics and science. Whilst government policies are focussing upon academic attainment, Hanscom (2016) outlines that outdoor learning is important for a child's cognitive development and growth, as playing and learning outdoors is said to allow children to develop problem-solving skills, face challenges and develop teamworking and negotiating skills (Cooper, 2003). It would therefore seem that having contact with nature is beneficial for improving processes to boost attainment, which is further echoed by Kuo and Taylor (2004); Taylor and Kuo (2009); Wells (2000); Ulset, Vitaro, Brendgen, Bekkus, & Borge (2017); Dadvand, Nieuwehuijen, Esnaola & Sunyer (2015) who outline that outdoor learning improves the attention capacity and span in children, therefore alluding to the

idea that outdoor learning is beneficial to the key cognitive processes that children develop as they grow older. Whilst some of this research is outdated, given that there is a vast array of literature with similar findings, it still seemed relevant to mention within this section. Not only is it said to improve cognitive skills, but when learning is taken beyond the classroom, the boundaries between working and playing become blurred, thus meaning that children often do not recognise their activity to be of educational value (Waite, 2007; Waite & Davis, 2007) allowing for increased engagement. This research indicates that outdoor learning equips learners with the skills needed for essential engagement within the school day, therefore improving the potential for pupil progress. Additionally, research into the attainment of eight- to eleven-year-old learners who engaged in a structured curriculum- based outdoor learning programme discovered that these learners made greater progress in reading, writing and maths, in comparison to the control group who undertook this learning indoors (Quibell, Charlton, and Law, 2017). This is in line with research by Maynard, Waters and Clement (2013) which detailed that the cognitive challenge of outdoor activities was higher than indoor activities, which could perhaps be a reason as to why the control group made less progress. It would therefore seem that more outdoor learning needs to occur during the early years of a child's life, but this also needs to continue throughout their education, in an effort to dispel the idea that outdoor learning is not as effective as indoor learning, as well as to benefit attainment and development.

Barriers to learning

A common theme within literature is the perceived, and actual, barriers to outdoor learning. Waite (2010) outlines that the UK government is beginning to recognise value in learning outside the classroom, but barriers to outdoor learning appear to remain in practice. This is further recognised by Dillon et al., (2006) who outline that teachers and researchers understand the effectiveness of taking learning outdoors. Therefore, this demonstrates that the importance of learning outdoors is widely acknowledged, but yet the national curriculum does not have a legal requirement for outdoor learning (Leather, 2018). Instead, research suggests that implementing this approach to

learning requires teachers' ability and motivation to overcome individual challenges and systemic barriers to support students' learning outdoors (Oberle et al., 2021; Waite, 2020). Consequently, it is outlined in literature that educators have many concerns surrounding outdoor learning, with barriers including safety concerns, a lack of time and weather restrictions (Ernst, 2014). These concerns are further reinforced by a plethora of research, which reported additional teachers' perceptions of barriers to outdoor teaching and learning, including a lack of confidence, insufficient time and resources, as well as inflexible curricula (Bentsen et al., 2010; Bixler & Floyd, 1997; Dymont, 2005; Ernst & Tornabene, 2012; Han & Foskett, 2007; Moffet, 2011; Tal & Morag, 2009; Simmons, 1998; Smith, 1999; Taylor, Power & Rees, 2010; Waite, 2011). Despite the fact that some of this literature is outdated, given the wide array of research conducted over time, it seems that these barriers to outdoor learning remain a prominent issue within education, as echoed by Waite (2010) earlier in the piece. As a result of these barriers to learning, one conclusion drawn is that learning within the natural environment is not frequently practiced (Dymont, 2005; Han & Foskett, 2007; Taylor, Power & Rees, 2010). Whilst outdoor learning is not statutory in the national curriculum, the exception is the Early Years framework, which acknowledges that outdoor play is an important part of children's learning and development (Prince and Macgregor, 2022). In the UK, the Early Years framework outlines that children must have access to an outdoor play area, or ensure that outdoor activities are planned and carried out on a daily basis subject to appropriate conditions e.g., weather (Department for Education, 2021, p.36). Yet, despite the benefits of outdoor learning being acknowledged for children in early years, there is not a legal requirement for schools to provide outdoor provision or learning for children within Key Stage 1 or Key Stage 2, and as a consequence of this, research suggests that typically, the frequency of outdoor teaching typically decreases with the student age (Dymont, 2005; Bentsen et al., 2010). In contrast, research by Kisiel (2014) found that there were teachers who actively devote time and effort to ensuring their lessons are taken outside by adapting their practices, worked around the challenge of leadership teams and encouraged colleagues to see the benefits of outdoor learning. It was also discovered that there were teachers who took their teaching outdoors on more of an ad-hoc

basis, when it was convenient for them (Kisiel, 2014). This could further reinforce the idea that some practitioners have a lack of confidence in their knowledge and application of outdoor learning, which links to research by Rea (2008) who detailed that there is a lack of common understanding regarding the meaning behind outdoor learning, and what it truly entails. Similarly, a study carried out by Allison, Carr and Meldrum (2012) discovered that teachers expressed the opinion that their own skills were insufficient to direct out of doors education. It would therefore seem that there are a great deal of factors which are influencing teachers to use, or not use the outdoors in their teaching.

Research method

Research approach

Within this section, the discussion will focus on the research methods used to obtain data and further information surrounding perspectives on play and outdoor learning. A case study approach was used for this small – scale research, in a two form entry village school with 357 children on roll. However, this research focussed specifically on the children and staff within EYFS and KS1, meaning that there were 8 members of staff involved in the research, and 191 children. To define case study, a case study is something which examines a phenomenon within its real-life context (Punch and Oancea, 2014; Robson and McCartan, 2016) to develop detailed understandings of a case (Thomas, 2021). In the case of this research, the researcher was embedded within the chosen school and carried out research to understand perspectives on play and learning across EYFS and KS1. Case studies offer practitioners the opportunity to learn from lived experiences and influence the practice of well-established theories (Leymun, Odabaşı and Yurdakul, 2017) meaning that teaching practice can be analysed, and then further enhanced, to support pupil progress. A case study was chosen as the best approach for data collection due to the limited time frame for the research, as Wilson (2017) identifies case studies as effective in forming detailed understandings of settings within short durations.

Data collection

The data collected for this research was obtained using a triangulation approach, which consisted of two data collection methods: participant observation and an online survey. Triangulation is the process of collecting quantitative and qualitative data on the same topic, at the same time and given equal weight when analysing the findings (Punch and Oancea, 2014). By utilising this mixed methods approach, the researcher is able to gain a greater insight into the research topic (Punch, 2009) and also enables the researcher to increase their understanding of the different aspects of research, whilst simultaneously increasing confidence in the findings (Flick 2004; Heale & Forbes 2013; Flick 2018).

The first method of research to discuss was the observation of children and staff, spanning across the duration of the entire research project. Participant observation involves the researcher participating in the daily life of a group of individuals and listening, observing (Bell, 2014) and therefore understanding the life of the individuals concerned. Despite the fact that participant observation is subject to a degree of bias, this was accounted for during the initial planning of the research project, meaning that the researcher chose not to focus on a specific year group or certain individuals, but instead looked at EYFS and KS1 children and staff as a whole, ensuring that observations were random, and occurred during a range of times during the placement. Despite this risk of bias, participant observation can yield valuable data, as researchers are able to note changes over the course of their period of research (Bell, 2014). Not only this, but observations allow the researcher to immerse themselves within the setting, enabling them to develop a further understanding of the individuals in the context that could not be achieved using other research methods (Check & Schutt, 2012; Lin, 2016).

The second method of data collection was an online survey which was sent solely to consenting members of staff across EYFS and KS1. To define survey research, Check and Shutt (2012, p.160) define it as "the collection of information from a sample of individuals through their responses to questions". This survey was sent to consenting members of staff a short while after

the researcher was embedded into the setting, meaning that the asynchronous online survey allowed participants convenience, allowing survey completion at a time and place that suited them (Lefever, Dal and Matthíasdóttir, 2007; Regmi et al, 2016) helping to create authentic results as participants had several weeks to find time to complete the survey. All questions required a response from participants, therefore ensuring high response rates (Bryman, 2012) which produced quantitative data.

Ethical considerations

Ethical clearance was received from the York St John School of Education, Language and Psychology Ethics Committee and the ethical guidelines were followed stringently throughout. When planning the research project, the most important factor is considering all of the ethics surrounding the project (Punch, 2009). Firstly, gatekeeper consent was sought from the headteacher of the setting, which is essential to ensuring the research is ethical and sound (Burton, Brundett, and Jones, 2014). The gatekeeper was provided with the research proposal form and ethical clearance form, which were read and signed in agreement that the research was ethical, meaning that the research could begin. A further ethical consideration was ensuring that all participants gave informed consent to be a part of the research, through providing all participants with a form detailing what the research involved, and why the research was being carried out. This helped to ensure that the research remained ethical at all times (Lochmiller and Lester, 2017), as all participants had to consent before the research could begin. Not only this, but the form detailed that all participants had the right to withdraw at any point throughout the research (Hammersley, 2016), and they were regularly reminded of this. Additionally, all responses remain anonymous to maintain confidentiality and were stored appropriately. These measures are consistent with the Ethical Guidelines for Educational Research (British Educational Research Association, 2018).

Limitations

To further reflect on the limitations of the project, perhaps one of the most pertinent limitations of this research is the fact that this was a small – scale research project, with a limited sample size. As a result of this, the findings of this case study cannot be generalised to a wider population (Coe et al., 2021; Bryman, 2012, Cohen, Manion and Morrison, 2018). However, this presents the opportunity for further research to be done, with a larger sample size. Additionally, a further limitation is the risk of researcher bias as a result of the researcher's position as a student teacher within the setting, which can potentially limit the validity of the research (Roulston and Shelton, 2015; Teusner, 2016). This was understood by the researcher before beginning the research, and therefore the observations that were made were random, and the exact phrasing of what was said from the participant was written down, and not edited or adapted in any way that would benefit the research. As mentioned earlier, the limited time frame of the research was remediated using a case study approach, which provides rich detail of the setting in a short space of time (Denscombe, 2021).

Findings

As a result of the thematic analysis undertaken when analysing the observations and the data from the online questionnaire, three key themes became evident. These themes are: engagement, behaviour management and lack of understanding. The figures display data analysed from the online questionnaire, and key observations that are relevant to the theme have been selected, displaying a range of perspectives on outdoor learning and play.

Theme 1: Engagement

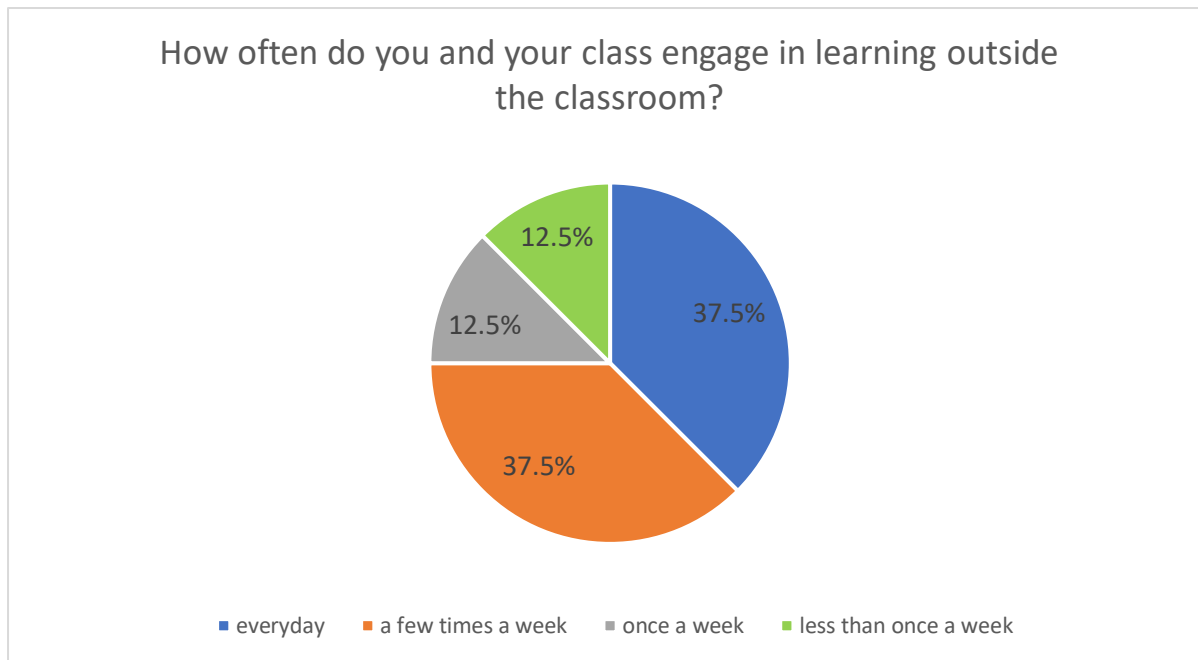


Figure 1

Figure 1 outlines that across EYFS and KS1 within the setting, 37.5% (equal to 3 staff members) take their class out every day, and 37.5% (equal to 3 staff members) take their class out a few times a week, which could suggest that the majority of staff (74%) understand the benefit of taking learning outside. However, this is a direct contrast from the themes that emerged with the observations noted from staff and children. To provide context for the following relevant observations, the children were told to put their coats on, as it was lightly raining outside but the lesson was being held on the field.

Male pupil participant response, January 2023 - "Do we have to?"

Male pupil participant response, February 2023 - "Can I stay in and do a job with Mrs XXXX instead?"

Female teaching participant's response, February 2023 - "I'm not sure I want to go out, let alone the kids!"

These observations indicate that both children, and staff alike were hesitant to go outdoors in all weathers. This is in line with the additional members of staff who outlined that they took their teaching outdoors ‘once a week’ or ‘less than once a week’ perhaps suggesting that weather is one of the key barriers to outdoor learning.

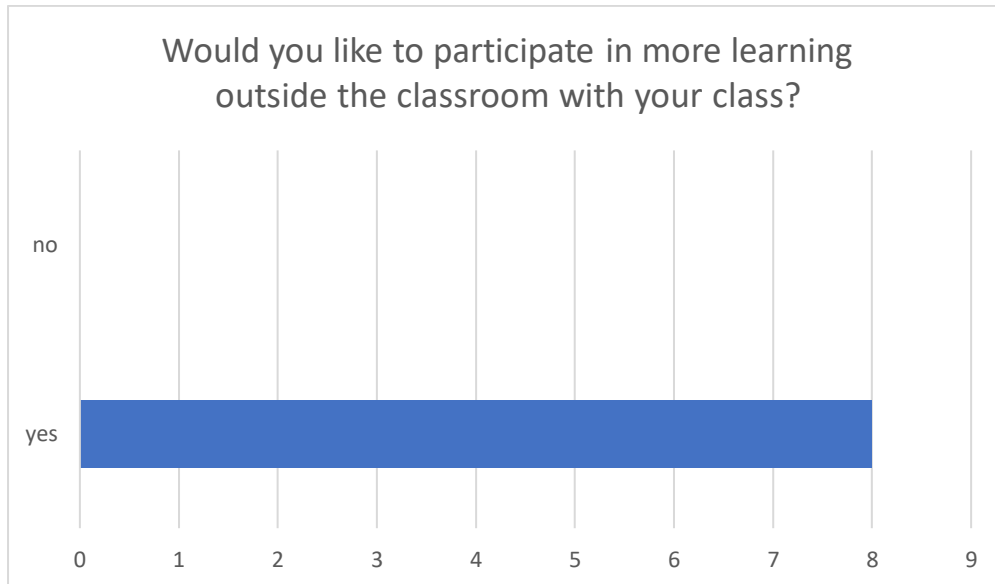


Figure 2

Figure 2 outlines that all 8 teachers surveyed detailed that they would like to take more learning outdoors. This is similar to some responses which were observed from the teachers across several different contexts:

Female teaching participant, March 2023 - “We need to get them in the [outdoor] provision today.”

Female teaching participant, January 2023 - “Let’s hope the rain clears so we can go for a run around.”

Female teaching participant, March 2023 – “I wish we could have gone onto the field, it would have been perfect for this.”

These sets of data outline that staff want to take the children outdoors more frequently than they are currently, perhaps outlining that there are limitations which are preventing the staff from engaging in learning outdoors. For all of these observations, it was noted that children were often

kept indoors as a result of adverse weather, because they had formal learning tasks to complete indoors, or as a result of difficult behaviour. This once again reinforces the possibility of the presence of barriers to outdoor learning, as mentioned above.

Theme 2: A lack of understanding

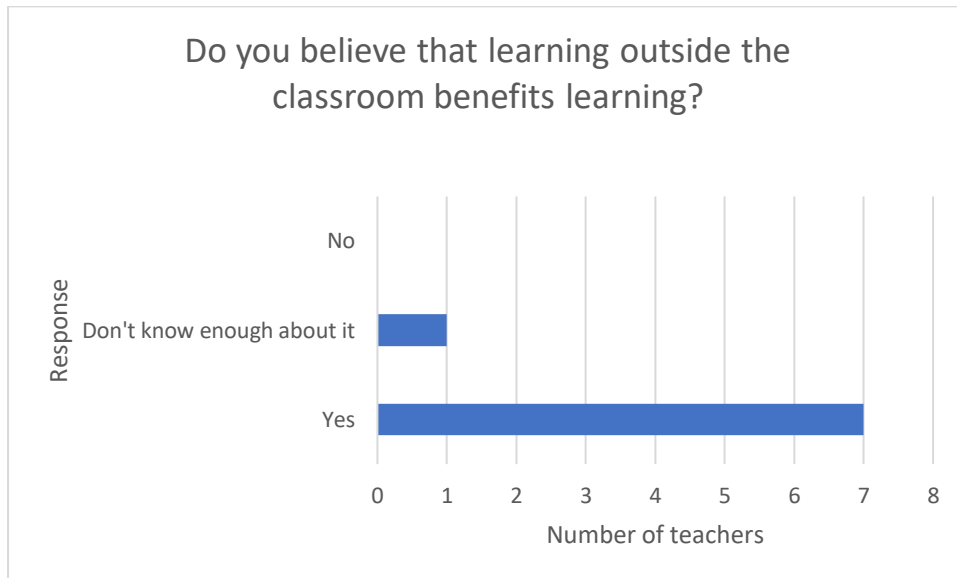


Figure 3

When asked if taking learning outdoors benefits children’s learning, only one teacher out of the eight surveyed shared that they didn’t know enough about learning outside the classroom and the benefit of it to learning. As these results are anonymised it is not possible to understand who selected that they do not know enough about outdoor learning, and so there could be a multitude of explanations for this. For example, this teacher may not have had sufficient training, they may feel unconfident managing behaviour in open spaces, or they may feel that it does not contribute sufficiently to pupil progress. However, as a result of the other teachers selecting that they believe it benefits learning, this suggests that the majority of staff are aware of the benefits of outdoor learning.

If you had the choice of teaching the same lesson indoors or outdoors, which do you feel would yield greater results and therefore result in better pupil progress?

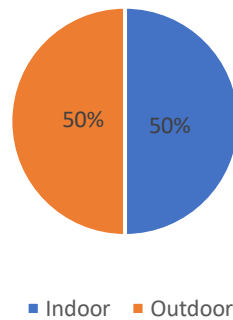


Figure 4

The results from this question were split equally, with 50% of teachers believing that indoor lessons result in better pupil progress, and 50% of teachers believing that outdoor lessons result in better pupil progress. This could indicate a lack of understanding surrounding the benefits of outdoor learning, which could be evidenced by some comments made during the researcher's observations:

Female teaching participant, February 2023 – "They won't listen anyway, so I'm not sure why we are bothering" [going outside].

Female teaching participant, March 2023 – "We come out [to the outdoor provision] every afternoon but I'm sometimes not sure what they [the children] get from it really."

These observations suggest that staff perhaps feel unsure of how to provide high quality learning experiences outdoors, perhaps as a result of behaviour, as evidenced by the comment "they won't listen anyway." It could also suggest a lack of training into the benefits of outdoor learning, if staff are unsure what children are gaining from accessing outdoor provision, as evidenced by "I'm not sure what they get from it really." Despite these observations, there were also some contrasting views from staff, which support the idea that they were aware of the benefits of outdoor learning.

Female teaching participant, February 2023 “The children love coming outside and it’s really fabulous for their gross motor skills.”

Female pupil participant, March 2023 - “I love playing with the music things outside.”

Male pupil participant, March 2023 – “Come on, let’s run around!”

It is worth mentioning that these observations took place during morning nursery, where the children had access to a purpose-built outdoor provision with a variety of areas for the children to explore and had access to the correct clothing and wellington boots to protect the children from the weathers, which perhaps influences the views of the children. It is also worth noting that the female participant was an early years specialist teacher, with a comprehensive understanding of how the outdoor environment benefits children and their learning.

Theme 3: Pupil Management

Theme 3 overlaps a lot with Theme 2, with the idea that often, outdoor learning requires practitioners to have had some degree of training to be able to deliver it effectively and safely.

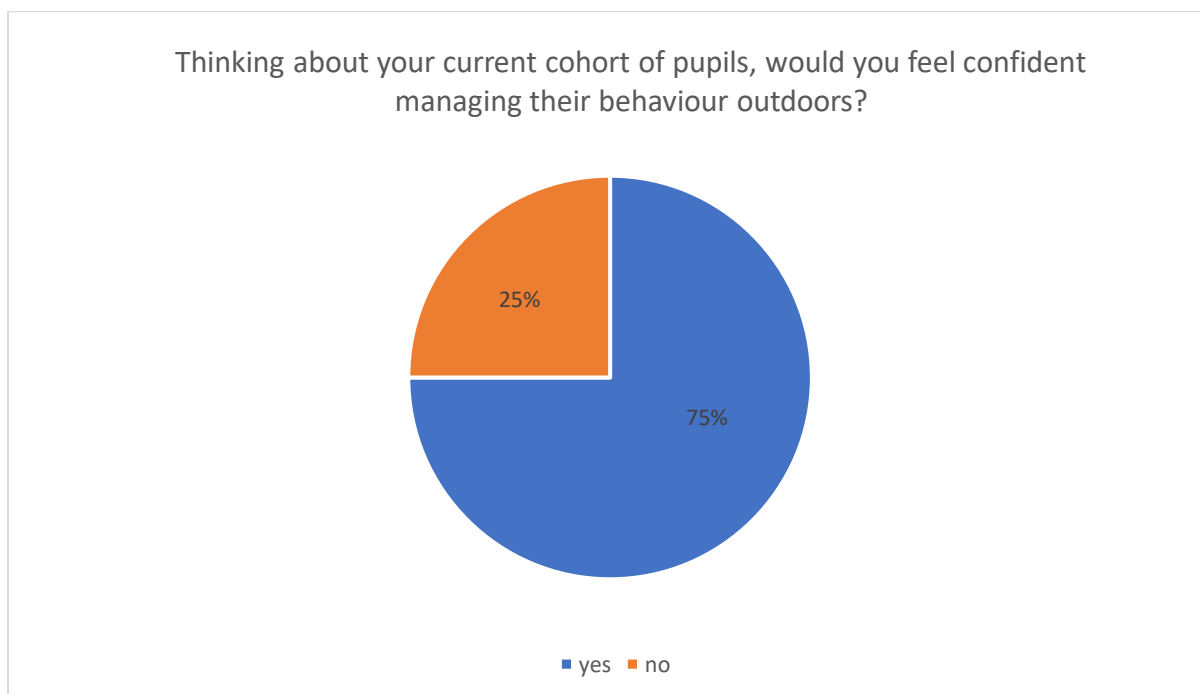


Figure 5

All of the teachers surveyed had been qualified for at least one year, some teachers had been qualified for as many as twenty-five years. Despite this, 25% of staff identified that they would not feel as confident managing behaviour outdoors. Whilst this only equates to two staff out of the eight surveyed, it does indicate that staff may benefit from further training to ensure that they felt confident to lead outdoor sessions. This is further evidenced from observations which were analysed to be discussing behaviour management outdoors, as shown below:

Female teaching participant response, March 2023 - "It's not worth taking them out [side], they end up getting silly and it's too hard to manage."

Female teaching participant response, February 2023 – "We need all hands on deck for this. We can't let anything go wrong."

Despite these observations from the staff, the observations from the children noted that they enjoyed being outdoors:

Male pupil participant response, January 2023 – "I feel free."

Male pupil participant response, February 2023 – "You can do lots more things outside. Let's be robots."

It therefore seems that, from the observations combined with the results of the data, staff do not have the same levels of understanding and confidence surrounding the management of behaviour outdoors and are fearful of anything going wrong when they do go outdoors. Yet, despite this fear, children enjoy being outdoors and feel a sense of freedom.

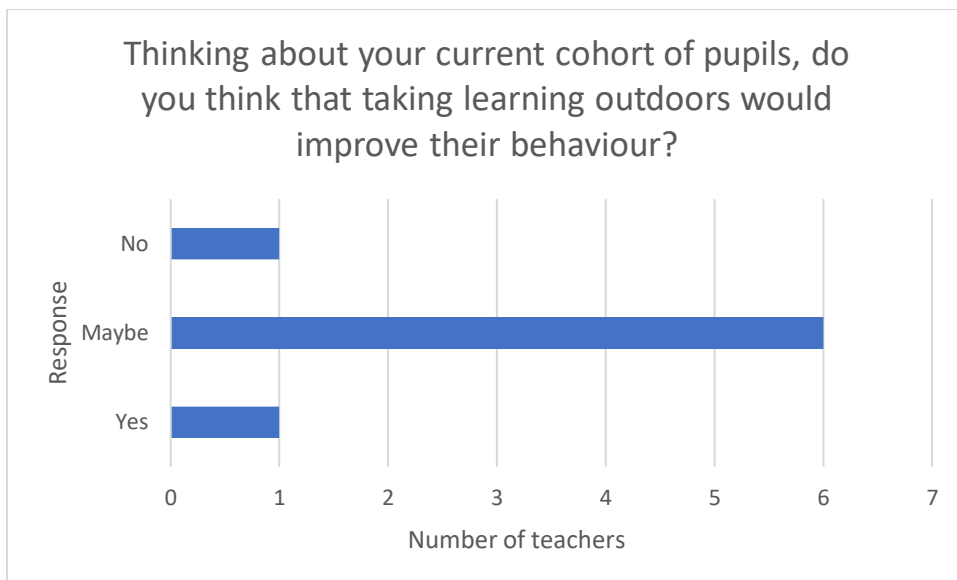


Figure 6

Despite the fact that there were no positive observations noted surrounding behaviour management, 6 out of the 8 teachers (75%) surveyed answered ‘maybe’ when thinking about the behaviour of their cohort when taken outdoors. This suggests uncertainty surrounding effective behaviour management outdoors, once again reinforcing the view that staff may benefit from additional outdoor learning training.

Discussion, including implications for practice.

In this section, the findings from the research of this small – scale research project will be discussed, in relation to current literature surrounding perspectives of outdoor learning, and as a result of this, implications for further practice will be outlined.

Theme 1 – Engagement

One positive finding in theme one is the data which suggests that the majority of staff (74%, see figure 1) within the research setting take learning outdoors regularly (defining regularly here as every day, or a few times a week) which could perhaps be as a result of the fact that the setting had extensive grounds which allow for this. Despite this, the observations noted that participants were hesitant to go outdoors in adverse weather conditions, which is in line with research from Ernst (2014) who outlines that bad weather is often a barrier to outdoor learning, perhaps because

societies have become more risk averse, influencing children to see risks as a negative and something to be avoided (Little, Gibson, and Wyver, 2011; Sandseter, Little, and Brussoni, 2017) rather than explored. This research was reinforced by the observations noted by the children and staff in figure 1 who were observed to have a negative outlook surrounding going outdoors to learn. These observations are in line with research by Ouvry (2003) who detailed that often practitioners appear concerned for the children who might not want to go outdoors in adverse weather conditions, but suggests that it is the practitioners who do not want to go outdoors. Whilst this research is outdated, Mygind (2009) makes a similar contribution and argues that weather conditions and cold reduces children's enthusiasm to play and learn outdoors, which would be evidenced by the observations from the children in figure 1, who expressed the view that they would rather stay inside. Yet, despite these negative findings in figure 1, which were noted on a rainy day when children were going outside to learn, figure 2 displays a collection of viewpoints from teachers who spoke positively about getting the children outdoors, across several contexts. As they have indicated that they would like to take more learning outdoors, this perhaps suggests that there are limitations which prevent the staff from doing this in the first place. This is a well evidenced theory, as whilst the benefits associated with outdoor activities in children are now well established within literature (McCormick, 2017; Schneller et al., 2017; Mann et al., 2022), research by Rickinson et al., (2004) and Edwards-Jones et al., (2018) outlines that teachers are often hindered by factors such as transportation, curriculum requirements, and shortages of time and resources. This is further described by Niehues et al., (2013) who indicated that teachers have constraints on their time within the school day and therefore cannot dedicate additional time to taking learning outdoors. Several studies further evidence the idea that outdoor teaching requires a different approach and feel hindered by the instrumental, indoor view of teaching which is portrayed in current government approaches as best practice (Dyment and Reid, 2005; Maynard and Waters, 2007; Waite, 2011; Passy, 2012). However, to improve future outdoor learning practice, it is important for teachers to integrate the schools' facilities into their practices, as it was discovered by Dyment (2005) and Maynard and Waters (2007) that green school grounds

remained mostly unintegrated into teachers' educational practices, often as a result of teachers unfamiliarity with outdoor learning and a lack of hands – on experiences, and these facilities often require little to no preparation time suggesting that they could be ideal to experiment with.

Theme 2 – A lack of understanding

When asked if outdoor learning benefits learning, 87.5% of surveyed teachers (7 out of 8) teachers responded 'yes', suggesting that teachers have some level of understanding of the benefits to taking learning outdoors. Despite this, the one further respondent outlined that they 'didn't know enough about it' which could suggest that this question specifically was subject to response bias. As professionals who have trained for this career, it may be that the teachers did not want to admit their true levels of knowledge about outdoor learning. Research has shown that people will often modify the answers that meet the social desirability of their answer and will often hesitate when answering the question to think about the desired answer (Caputo, 2017; DePaulo et al., 2003 which affects the study reliability (Cohen, Manion and Morrison, 2018). As a result of these findings, it could be suggested that staff would benefit from having training on the outdoor learning approach, and the benefits of it should be explicitly presented to ensure that it is considered as an approach in their teaching, particularly given the growing recognition from researchers and governments who are understanding that school outcomes need to be broader than focussing on academic grades, and include meta-cognitive and social – emotional skills (Lamb, Maire and Doecke, 2017) to help develop the whole child. This suggestion is evidenced by Borsos, Banos-González, Boric, Staberg, & Fekete (2022) who outlined that teaching in outdoor environments requires creative, well – prepared, and confident teachers, in order to plan quality experiences and interactions for the children (Tonge, Jones and Okely, 2019).

Figure 4 outlined that 50% of teachers responded that the indoor lesson would produce better outcomes, whilst the other 50% responded that the outdoor lesson would produce better outcomes, which could again outline a lack of understanding or belief in the benefits of outdoor

learning. These findings are backed by a study by Waite (2010) who discovered that practitioners understood that outdoor learning offers something distinct and enriches the typical indoor curriculum but were wary of utilising the approach as they were unsure of its performance when compared to indoor lessons. Similarly, literature such as Ernst and Tornabene (2012), Erdem (2018) and Tuuling, Öun and Ugaste (2018) argue that teachers acknowledge there are benefits of outdoor play. However, in contrast, other studies found that teachers had limited perceptions of the benefits of outdoor learning and play (Blanchet-Cohen and Elliot, 2011; Dymont and Coleman, 2012; McClintic and Petty, 2015). Therefore, teachers viewpoints are mixed according to literature, which is in line with the results of this research. This is correlated by one observation which notes that the teaching participant wasn't sure "what they get from it" when discussing the outdoor provision, which displays the idea that this member of staff did not have a sufficient knowledge of the pedagogy behind the outdoor provision. Yet, in contrast, another member of staff commented how coming outdoors was "fabulous for their gross motor skills" which shows a good level of understanding of the pedagogy behind outdoor learning.

Theme 3 – pupil management

Figure 5 outlines that 75% of staff (6 participants) would feel comfortable managing their current cohort's behaviour outdoors, whilst the remaining 25% (2 participants) would not. Over the duration of the research, it seemed that staff were concerned with health and safety, and staff were seemingly aiming to mitigate any possibility of an incident occurring. These findings are in line with findings from a study by Scott et al., (2014) which described teachers anxieties about pupil management across several outdoor context, whilst they also made the observation that learning in outdoor environments could increase engagement for children who might be disengaged indoors. This links to the findings in figure 6, which outlined that the majority of teachers surveyed (75%) of teachers answered 'maybe' in relation to the idea that taking learning outdoors could improve the behaviour of their cohort. This also once again links back to the idea of a lack of understanding within teaching staff, as these staff did not have a sufficient level of

knowledge to understand how learning outdoors can improve behaviour, and thus engagement. As a result of this, it could be suggested that staff need further, or refresher training to support their knowledge of outdoor learning, whilst simultaneously alleviating their anxieties. According to Palmberg et al. (2018), providing teachers with sufficient training is critical to helping teachers realise the effect of outdoor learning on child development and attainment, whilst improving the quantity and quality of outdoor experiences (Bilton, 2020). This suggestion is further evidenced by a study by Cevher Kalburan (2022) which outlined that participants were more able to distinguish between danger, and manageable risk, meaning that practitioners considered their concerns in a different way, and felt calmer about outdoor play and learning.

Yet, despite these findings, positive observations were presented in figure 5 from the children, with the children noting that they felt “free” and that they could “do lots more things outside”. These observations could denote the idea that the children felt freedom and the ability to express themselves more. Despite the limited research into children’s perspectives on outdoor learning and play, Rickinson et al., (2004) outlines that outdoor environments provide children with the opportunity to creatively express themselves and learn through play, which would reinforce the observations noted.

Conclusion

This study aimed to understand perspectives on play and learning outdoors across EYFS and KS1. As a result of the research carried out, findings suggest that there are a wealth of perspectives, of differing viewpoints. Generally, it seemed that both teachers and children had a positive outlook towards play and learning outdoors, though adverse weather conditions impacted upon this outlook. Additionally, it seemed that teaching staff had a reasonable level of understanding surrounding the importance of outdoor learning and play but could benefit from further training into topics such as pupil management, risk management and impacting upon pupil progress. These findings therefore suggest that nationally, and internationally, teachers need further training to understand how to implement outdoor learning and play, and to understand the

benefits of it. It can also be suggested that teachers need to place more of an emphasis on playing outdoors in all weather conditions, in order to promote the love of being outdoors for children. These child – initiated experiences are particularly important for contributions to children’s emotional, cognitive, social and physical development (Dyment and Bell, 2007; Kelz, Evans and Röderer, 2013; Chawla, 2015; Van Dijk-Wesselius et al., 2020) and therefore encouraging children to get outside has become important for future practice. It is hoped that the findings of this research can be transferred to a range of settings, encouraging all teaching staff to use the outdoor space that they have, regardless of size and aesthetics, as even the smallest of yards can be used as an outdoor classroom to teach a wide range of subjects (Rickinson et al., 2004; Dyment, 2005). To further discover additional perspectives of outdoor play and learning, this research project could be extended by creating a larger – scale approach, which would aid the generalisability of the study. The study might be conducted within several schools nationally, utilising schools with varying approaches and varying outdoor spaces. There appears to be a significant gap within current literature surrounding children’s perspectives on outdoor learning and play, which is therefore something which future research could investigate. Therefore overall, it seems that there needs to be additional research into perspectives and understanding of play and learning outdoors, which could advocate for changes in legislation, encouraging governments to give practitioners the freedom to take more learning outdoors.

Reference list

- Allison, P., Carr, D., & Meldrum, G. (2012). Potential for excellence: Interdisciplinary learning outdoors as a moral enterprise. *Curriculum Journal*, 23(1), pp.43–58.
- Beames, S., Atencio, M. & Ross, H. (2009) Taking excellence outdoors. *Scottish Educational Review*, 41(2), pp.32-41
- Beames, S., Higgins, P.J. and Nicol, R. (2012). *Learning outside the Classroom: Theory and Guidelines for Practice*. New York: Routledge.
- Bell, J. (2014). *Doing your research project*. Milton Keynes: Open University Press.
- Bentsen, P., Søndergaard Jensen, F., Mygind, E. and Barfoed Randrup, T. (2010). The extent and dissemination of udeskole in Danish schools. *Urban Forestry & Urban Greening*, 9(3), pp.235–243.
- Bilton, H. (2020). Values stop play? Teachers' attitudes to the early years outdoor environment. *Early Child Development and Care*, 190(1), pp.12–20.
- Bixler, R., & Floyd, M. (1997). Nature is scary, disgusting, and uncomfortable. *Environment and Behavior*, 29(4), pp.443-468
- Blanchet-Cohen, N. and Elliot, E. (2011). Young Children and Educators Engagement and Learning Outdoors: A Basis for Rights-Based Programming. *Early Education & Development*, 22(5), pp.757–777.
- Borsos, E., Banos-González, I., Boric, E., Staberg, R. L., & Fekete, A. B. (2022). Trainee teachers' perceptions of outdoor education. *Environmental Education Research*, 28(2), pp.1-20
- British Educational Research Association (2018) *Ethical guidelines for educational research*. 4th ed. Birmingham: British Educational Research Association.

- Bryman, A (2012). *Social Research Methods*. 4th ed. Oxford: Oxford University Press.
- Burriss, K. and Burriss, L. (2011). Outdoor Play and Learning: Policy and Practice. *International Journal of Education Policy and Leadership*, 6(8), pp.1-12.
- Burton, N., Brundrett, M. and Jones, M. (2014). *Doing your education research project*. Los Angeles: Sage.
- George Thomas, C. (2021). *Research Methodology And Scientific Writing*. New Delhi: Springer Nature.
- Cameron, D. (2019). *Conservative Manifesto 2010 Change Society Raise Standards in Schools» UK General Election*. [online] UK General Election. Available at: <https://general-election-2010.co.uk/conservative-party-manifesto-2010-general-election/conservative-manifesto-2010-change-society-raise-standards-in-schools/> [Accessed 24 Apr. 2023].
- Caputo, A. (2017). Social desirability bias in self-reported well-being measures: evidence from an online survey. *Universitas Psychologica*, 16(2), pp. 1 – 12.
- Cevher Kalburan, N. (2022). Experiences of teachers after training on outdoor education in early childhood. *Journal of Adventure Education and Outdoor Learning*, 1(1), pp.1–15.
- Chawla, L. (2015). Benefits of Nature Contact for Children. *Journal of Planning Literature*, 30(4), pp.433–452.
- Check, J. & Schutt, R, K. (2012) *Research methods in education*. London: SAGE Publications.
- Coe, R., Waring, M., Hedges, L.V. and Arthur, J. (2021). *Research Methods & Methodologies in Education*. 3rd ed. Los Angeles: Sage.
- Cohen, L., Manion, L. and Morrison, K. (2018). *Research Methods in Education*. 8th ed. New York: Routledge.
- Cooper, G. (2003). The demise of real experience and the case for outdoor education. *ECOS*, 24(1). pp.10-14.

Dadvand, P., Nieuwenhuijsen, M.J., Esnaola, M., Fornis, J., Basagaña, X., Alvarez-Pedrerol, M., Rivas, I., López-Vicente, M., De Castro Pascual, M., Su, J., Jerrett, M., Querol, X. and Sunyer, J. (2015). *Green spaces and cognitive development in primary schoolchildren*. *Proceedings of the National Academy of Sciences*, [online] 112(26), pp.7937–7942. Available at: <https://www.pnas.org/doi/abs/10.1073/pnas.1503402112> [Accessed 24 Apr. 2023].

Davies, M. (1996). Outdoors: An important context for young children's development. *Early Child Development and Care*, 115(1), pp.37-49.

Denscombe, M. (2021). *The Good Research Guide for Small-Scale Social Research Projects*. 7th ed. London: Open University Press.

Department for Education (2021). *Early years foundation stage statutory framework (EYFS)*. [online] GOV.UK. Available at: <https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2> [Accessed 25 Apr. 2023].

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

DePaulo, B.M., Lindsay, J.J., Malone, B.E., Muhlenbruck, L., Charlton, K. and Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, 129(1), pp.74–118.

Dillon, J., Rickinson, M., Teamey, K., Morris, M., Choi M. Y., Sanders, D., and Benefield, P. (2006). "The Value of Outdoor Learning: Evidence from Research in the UK and Elsewhere." *School Science Review*. 87(320): pp.107–111.

Dowdell, K., Gray, T. and Malone, K. (2011). Nature and its Influence on Children's Outdoor Play. *Journal of Outdoor and Environmental Education*, 15(2), pp.24–35.

Dyment, J. (2005). Green school grounds as sites for outdoor learning: barriers and opportunities. *International Research in Geographical and Environmental Education*, 14(1), pp.28-45.

- Dyment, J. and Coleman, B. (2012). The Intersection of Physical Activity Opportunities and the Role of Early Childhood Educators during Outdoor Play: Perceptions and Reality. *Australasian Journal of Early Childhood*, 37(1), pp.90–98.
- Dyment, J. and Reid, A. (2005). *Breaking New Ground? Reflections on Greening School Grounds as Sites of Ecological, Pedagogical, and Social Transformation*. [online] Available at: <https://files.eric.ed.gov/fulltext/EJ881791.pdf> [Accessed 8 May 2023].
- Dyment, J.E. and Bell, A.C. (2007). Active by Design: Promoting Physical Activity through School Ground Greening. *Children's Geographies*, 5(4), pp.463–477.
- Edwards-Jones, A., Waite, S., and Passy, R. (2018). Falling into LINE: school strategies for overcoming challenges associated with learning in natural environments (LINE). *Education*, 46(1), pp.49–63.
- Erdem, D. (2018). Kindergarten Teachers' Views About Outdoor Activities. *Journal of Education and Learning*, 7(3), pp.1-16.
- Ernst, J. & Tornabene, L. (2012) 'Pre-Service Early Childhood Educators' Perceptions of Outdoor Settings as Learning Environments', *Environmental Education Research*, 18 (3), pp. 643–665.
- Ernst, J. (2014) 'Early childhood educators' use of natural outdoor settings as learning environments: an exploratory study of beliefs, practices and barriers', *Environmental Education Research*, 20 (6), pp. 735-752.
- Fiskum, T.A. and Jacobsen, K. (2013). Outdoor education gives fewer demands for action regulation and an increased variability of affordances. *Journal of Adventure Education & Outdoor Learning*, 13(1), p.76–99.
- Flick, U. (2004). *A Companion to Qualitative Research*. London: SAGE Publications.

- Flick, U. (2018). *The SAGE Handbook of Qualitative Data Collection*. London: SAGE Publications.
- Hammersley, M. (2016). Childhood Studies: A sustainable paradigm? *Childhood*, 24(1), pp.113–127.
- Han, L-F., & Foskett, N. (2007). Objectives and constraints in geographical fieldwork: teachers' attitudes and perspectives in senior high schools in Taiwan. *International Research in Geographical and Environmental Education*, 16(1), pp. 5-20.
- Hanscom, A.J. (2016). *Balanced and barefoot: how unrestricted outdoor play makes for strong, confident, and capable children*. California: New Harbinger Publications.
- Hawxwell, L., O'Shaughnessy, M., Russell, C. and Shortt, D. (2018). 'Do you need a kayak to learn outside?': a literature review into learning outside the classroom. *Education*, 47(3), pp.322–332.
- Heale, R. and Forbes, D. (2013) Understanding triangulation in research. *Evidence-Based Nursing*, 16(4), pp. 98–98.
- James, C. (2014). Trends in governance and governing of schools in England. *Local Government Studies*, 40(6), pp.893–909
- Kelz, C., Evans, G.W. and Röderer, K. (2013). The Restorative Effects of Redesigning the Schoolyard. *Environment and Behavior*, 47(2), pp.119–139.
- Kemple, K.M., Oh, J., Kenney, E. and Smith-Bonahue, T. (2016). The Power of Outdoor Play and Play in Natural Environments. *Childhood Education*, 92(6), pp.446–454.
- Kisiel, J.F. (2014). Clarifying the complexities of school-museum interactions: Perspectives from two communities. *Journal of Research in Science Teaching*, 51(3), pp.342–367.
- Knight, S. (2009). *Forest Schools and Outdoor Learning in the Early Years*. London: Sage.

- Kuo, F and Taylor, A. (2004). A Potential Natural Treatment for Attention-Deficit/Hyperactivity Disorder: Evidence From a National Study. *American Journal of Public Health*, 94(9), pp.1580–1586.
- Kuo, M., Browning, M., and Penner, M. (2018). Do Lessons in Nature Boost Subsequent Classroom Engagement? Refueling Students in Flight. *Frontiers in Psychology*, 8, pp. 1 – 14.
- Lamb, S., Maire, Q. and Doecke, E. (2017). *Key Skills for the 21st Century: an evidence-based review*. [online] Available at: <https://vuir.vu.edu.au/35865/1/Key-Skills-for-the-21st-Century-Analytical-Report.pdf> [Accessed 2 May 2023].
- Largo-Wight, E., Guardino, C., Wludyka, P., Hall, K., Wight, J. and Merten, J. (2018). Nature contact at school: The impact of an outdoor classroom on children’s well-being. *International Journal of Environmental Health Research*, 28(6), pp.653–666.
- Leather, M. (2018) Outdoor education in the National Curriculum: the shifting sands in formal education, in P. Becker, B. Humberstone C. Loynes, & J. Schirp (eds.). *The Changing World of Outdoor Learning in Europe*. Abingdon, Oxon: Routledge, pp. 139-154.
- Lefever, S., Dal, M. and Matthíasdóttir, Á. (2007). Online Data Collection in Academic research: Advantages and Limitations. *British Journal of Educational Technology*, 38(4), pp.574–582.
- Leymun, Ş.O., Odabaşı, H.F. and Yurdakul, I.K. (2017). The Importance of Case Study Research in Educational Settings. *Journal of Qualitative Research in Education*, 5(3), pp.1–17.
- Lin, Y-H, K. (2016) ‘Collecting Qualitative Data’ in Palaiologou, I. & Needham, D. & Male, T. *Doing Research in Education Theory and Practice*. London: SAGE Publications, pp.156-176
- Little, H., Sandseter, E.B.H. and Wyver, S. (2012). Early Childhood Teachers’ Beliefs about Children’s Risky Play in Australia and Norway. *Contemporary Issues in Early Childhood*, 13(4), pp.300–316.

- Little, H., Wyver, S. and Gibson, F. (2011). The influence of play context and adult attitudes on young children's physical risk-taking during outdoor play. *European Early Childhood Education Research Journal*, 19(1), pp.113–131.
- Lochmiller, C.R. and Lester, J. (2017). *An introduction to educational research: connecting methods to practice*. Los Angeles: Sage.
- Logue, M.E. and Harvey, H. (2009). Preschool Teachers' Views of Active Play. *Journal of Research in Childhood Education*, 24(1), pp.32–49.
- Louv, R. (2008). *Last child in the woods: saving our children from nature-deficit disorder*. London: Atlantic books.
- Malone, K. (2008). *Every Experience Matters: An evidence-based research report on the role of learning outside the classroom for children's whole development from birth to eighteen years*. [online] scholar.google.com.au. Available at: https://scholar.google.com.au/citations?view_op=view_citation&hl=en&user=338PaC8AAAAJ&citation_for_view=338PaC8AAAAJ:LkGwnXOMwfcC [Accessed 24 Apr. 2023].
- Mann, J., Gray, T., Truong, S., Brymer, E., Passy, R., Ho, S., Sahlberg, P., Ward, K., Bentsen, P., Curry, C. and Cowper, R. (2022). Getting Out of the Classroom and Into Nature: A Systematic Review of Nature-Specific Outdoor Learning on School Children's Learning and Development. *Frontiers in Public Health*, 10 (1), p.1-12.
- Mann, J., Gray, T., Truong, S., Sahlberg, P., Bentsen, P., Passy, R., Ho, S., Ward, K., & Cowper, R. (2021). A Systematic Review Protocol to Identify the Key Benefits and Efficacy of Nature-Based Learning in Outdoor Educational Settings. *International Journal of Environmental Research and Public Health*, 18(2), p.1 – 10.
- Maynard, T. & Waters, J. (2007) Learning in the outdoor environment: a missed opportunity, *Early Years*, 27(3), p.255–265.

- Maynard, T., Waters, J. and Clement, J. (2013). Child-initiated learning, the outdoor environment and the 'underachieving' child. *Early Years*, 33(3), pp.212–225.
- McClintic, S. and Petty, K. (2015). Exploring Early Childhood Teachers' Beliefs and Practices About Preschool Outdoor Play: A Qualitative Study. *Journal of Early Childhood Teacher Education*, 36(1), pp.24–43.
- McCormick, R. (2017). Does Access to Green Space Impact the Mental Well-being of Children: A Systematic Review. *Journal of Pediatric Nursing*, 37(1), pp.3–7.
- Moffet, P. (2011). Outdoor mathematics trails: an evaluation of one training partnership. *Education 3-13: International Journal of primary, Elementary and Early Years Education*, 39(3), p. 277-287
- Mygind, E. (2009). A comparison of children's statements about social relations and teaching in the classroom and in the outdoor environment. *Journal of Adventure Education & Outdoor Learning*, 9(2), pp.151–169.
- Nicol, R., Waite, S. (2020). Outdoor Learning. In: Peters, M. (eds). *Encyclopedia of Teacher Education*. Springer, Singapore, pp. 1 – 6.
- Niehues, A.N., Bundy, A., Broom, A., Tranter, P., Ragen, J. and Engelen, L. (2013). Everyday uncertainties: reframing perceptions of risk in outdoor free play. *Journal of Adventure Education & Outdoor Learning*, 13(3), pp.223–237.
- Oberle, E., Zeni, M., Munday, F., & Brussoni, M. (2021). Support factors and barriers for outdoor learning in Elementary schools: A systemic perspective. *American Journal of Health Education*, 52(5), p. 251–265
- Oikonomou, S. (2012). *Academic Teachers' Perceptions and Experiences of Outdoor Education*. Sweden: Linkoping University/NCOE.

- Ouvry, M. (2003). *Exercising muscles and minds: Outdoor play and the Early Years curriculum*. National Children's Bureau. London: Jessica Kingsley.
- Palmberg, I., Hermans, M., Jeronen, E., Kärkkäinen, S., Persson, C., & Yli-Panula, E. (2018). Nordic student teachers' views on the importance of species and species identification. *Journal of Science Teacher Education*, 29(5), p.397–419
- Passy, R. (2012). School gardens: teaching and learning outside the front door. *Education*, 3-13, 42(1), pp.23–38.
- Prince, H., & Exeter, D. (2016). Formal curricular initiatives and evaluation in the UK. In Humberstone, B., Prince, H., & Henderson, K.A, (Eds.), *International handbook of outdoor studies*. Oxford, Routledge, pp. 141–150.
- Prince, H., & MacGregor, L. (2022). Outdoor Learning. In Cooper, H., Elton-Chalcraft, S. (Eds.), *Professional Studies in Primary Education* (4th ed). London, SAGE, pp.348-367.
- Punch, K. F., & Oancea, A. (2014). *Introduction to Research Methods in Education*. California: Sage Publications.
- Punch, K.F. (2009) *Introduction to Research Methods in Education*. London: SAGE Publications.
- Quibell, T., Charlton, J., and Law, J. (2017). "Wilderness Schooling: A Controlled Trial of the Impact of an Outdoor Education Programme on Attainment Outcomes in Primary School Pupils." *British Educational Research Journal*, 43 (3): p.572–587.
- Rea, T. (2008). Alternative visions of learning: children's learning experiences in the outdoors. *Education Futures*, [online] 1(2). Available at: https://educationstudies.org.uk/wp-content/uploads/2013/11/vol_1_issue_2_rea_final.pdf [Accessed 25 Apr. 2023].
- Regmi, P.R., Waithaka, E., Paudyal, A., Simkhada, P. and Van Teijlingen, E. (2017). Guide to the design and application of online questionnaire surveys. *Nepal Journal of Epidemiology*,

[online] 6(4), pp.640–644. Available at:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5506389/> [Accessed 21 Apr. 2023].

Rickinson, M., Dillon, J., Teamey, K., Choi, M.Y. and Benefield, P. (2004). A Review of Research on Outdoor Learning. [online] University of Bristol. *National Foundation for Educational Research and King's College London*. Available at:

<https://www.informalscience.org/sites/default/files/Review%20of%20research%20on%20outdoor%20learning.pdf> [Accessed 8 May 2023].

Rickinson, M., Hunt, A., Rogers, J. and Dillon, J. (2012). School leader and teacher insights into learning outside the classroom in natural environments. *Natural England Commissioned Reports*, NECR097, 1(1).

Robson, C. and McCartan, K. (2016). *Real World Research*. 4th ed. Chichester: John Wiley & Sons Ltd.

Roulston, K. and Shelton, S.A. (2015) Reconceptualizing Bias in Teaching. *Qualitative Research Methods*. *Qualitative Inquiry*, 21 (4), pp. 332–342.

Sandseter, E. B. H., H. Little, and M. Brussoni. (2017). “Risk and Safety in Outdoor Play.” In Waller, T., Årlemalm-Hagsér, E., Sandseter, E. B. H., Lee-Hammond, L., Lekies, K., and Wyver., S. *The Sage Handbook of Outdoor Play and Learning*. London: SAGE Publications, pp.113–126.

Sandseter, E.B.H., Cordovil, R., Hagen, T.L. and Lopes, F. (2019). Barriers for Outdoor Play in Early Childhood Education and Care (ECEC) Institutions: Perception of Risk in Children’s Play among European Parents and ECEC Practitioners. *Child Care in Practice*, 26(2), pp.1–19.

Schneller, M.B., Schipperijn, J., Nielsen, G. and Bentsen, P. (2017). Children’s physical activity during a segmented school week: results from a quasi-experimental education outside the classroom intervention. *International Journal of Behavioral Nutrition and Physical Activity*, 14(1), pp.1-11.

- Scott, G.W., Boyd, M., Scott, L. and Colquhoun, D. (2014). Barriers To Biological Fieldwork: What Really Prevents Teaching Out of Doors? *Journal of Biological Education*, 49(2), pp.165–178.
- Simmons, D. (1998). Using natural settings for environmental education, perceived benefits and barriers. *The Journal of Environmental Education*, 29(3), p.23-31.
- Smith, G. (1999). Changing fieldwork objectives and constraints in secondary school in England. *International Research in Geographical and Environmental Education*, 8(2), p.181-189.
- Tal, T., & Morag, O. (2009). Reflective practice as a means for preparing to teach outdoors in an ecological garden. *Journal of Science Teacher Education*, 20(1), pp.245-262.
- Taylor, A and Kuo, F. (2009). Children With Attention Deficits Concentrate Better After Walk in the Park. *Journal of Attention Disorders*, 12(5), pp.402–409.
- Taylor, C., Power, S., & Rees, G. (2010). Out-of-school learning: the uneven distribution of school provision and local authority support. *British Educational Research Journal*, 36(6), pp.1017-1036.
- Teusner, A. (2016) Insider research, Validity issues, and the OHS professional: One Person's Journey. *International Journal of Social Research Methodology*, 19 (1), pp. 85–96.
- Tonge, K. L., Jones, R. A., & Okely, A. D. (2019). Quality interactions in early childhood education and care center outdoor environments. *Early Childhood Education Journal*, 47(1), pp.31–41
- Tovey, H. (2010). Playing on the Edge: Perceptions of Risk and Danger in Outdoor Play. In P. Broadhead, J. Howard & E. Wood, *Play and Learning in the Early Years*. London: Sage, pp.79-94.

- Tovey, H. (2011). Achieving the balance: Challenge, risk and safety. In J. White (ed), *Outdoor Provision in the Early Years*. London: Sage, pp.86-94.
- Tuuling, L., Õun, T. and Ugaste, A. (2018). Teachers' opinions on utilizing outdoor learning in the preschools of Estonia. *Journal of Adventure Education and Outdoor Learning*, 19(4), pp.358–370.
- Ulset, V., Vitaro, F., Brendgen, M., Bekkhus, M. and Borge, A.I.H. (2017). Time spent outdoors during preschool: Links with children's cognitive and behavioural development. *Journal of Environmental Psychology*, 52(12), pp.69–80.
- van Dijk-Wesselius, J.E., van den Berg, A.E., Maas, J. and Hovinga, D. (2020). Green Schoolyards as Outdoor Learning Environments: Barriers and Solutions as Experienced by Primary School Teachers. *Frontiers in Psychology*, 10(1), pp.1-16.
- Waite, S. & Davis, B. (2007) The contribution of free play and structured activities in Forest School to learning beyond cognition: an English case. In Ravn, B. & Kryger, N. (eds.) (2007) *Learning beyond Cognition, Copenhagen: the Danish University of Education*, Copenhagen: Danish University of Education Press, pp. 257-274.
- Waite, S. (2007). 'Memories are made of this': some reflections on outdoor learning and recall. *Education 3-13*, 35(4), pp.333–347.
- Waite, S. (2010). Losing our way? The downward path for outdoor learning for children aged 2–11 years. *Journal of Adventure Education & Outdoor Learning*, 10(2), pp.111–126.
- Waite, S. (2011). Teaching and learning outside the classroom: personal values, alternative pedagogies and standards. *Education*, 3-13, [online] 39(1). Available at: <https://www.tandfonline.com/doi/full/10.1080/03004270903206141> [Accessed 8 May 2023].
- Waite, S. (2020). Where are we going? International views on purposes, practices and barriers in school-based outdoor learning. *Education Sciences*, 10(11), p.311

Waite, S. 2013. "Knowing Your Place in the World': How Place and Culture Support and Obstruct Educational Aims. *Cambridge Journal of Education*, 43(4): p.413–433

Waite, S., and Pratt, N (2011). Theoretical Perspectives on Learning Outside the Classroom— Relationships Between Learning and Place. In Waite, S (ed.) *Children Learning Outside the Classroom: From Birth to Eleven*. London: Sage, pp.1-19.

Waite, S., Rogers, S. and Evans, J. (2013). Freedom, flow and fairness: exploring how children develop socially at school through outdoor play. *Journal of Adventure Education & Outdoor Learning*, 13(3), pp.255–276.

Waters, J. and Begley, S. (2007). Supporting the development of risk-taking behaviours in the early years: an exploratory study. *Education, 3-13*, 35(4), pp.365–377.

Wells, N.M. (2000). At Home with Nature. *Environment and Behavior*, 32(6), pp.775–795.

Wilson, E. (2017). *School-based research: a guide for education students*. California: Sage.