

How does outdoor play support social development in the early years?

The current portfolio aims to plan a research project and consider what is essential when planning a research project in the early years. In particular, the research project question is, 'How does outdoor play support social development in the early years?'. To answer this question, the current research project involves a small, purposeful sample of six children attending a South Wales afternoon nursery. The sample was selected since most afternoon nursery activities take place outdoors. By doing these, several researchers, such as McClintic and Petty (2015), Thomas and Harding (2011), Dyment, Bell, and Lucas (2009), and more other, as can be seen in the literature section, demonstrate in their studies the importance and benefits of outdoor play in children's social development.

To answer the research project's question, the researcher collects primary data through the observation method, more precisely time sample, which is described with its advantages and limits in the methodological section. Additionally, this section describes triangulation, its purpose, and why it is not needed in the current research project.

Ethical concerns, the last section of the portfolio, provides a critical awareness of the ethical issues associated with working and studying with young children. This section describes how to get permission from participants and how the researcher will know if they do not want to engage; how to guarantee that the researcher can safeguard confidentiality and anonymity; and how to collect and keep the data following guidelines and regulations.

Keywords: outdoor play; social development; sample; observation; time sample; Hawthorne effect; triangulation; ethics; voluntary informed consent; assent

Literature review

According to Welsh Government (2021), all children have the right to play. Furthermore, children have an intrinsic desire to play. Children learn to show a wide range of emotions and get along with others by playing and interacting with other children. At the same time, play is taken seriously by all children. Children learn to be persistent and work together through play, which requires them to pay attention and focus on details. Moreover, Palaiologou (2016) states that play has been examined from many theoretical perspectives, but all these studies have in common that play is something that children do for fun and is an important part of their development.

According to indirect (2018), outdoor play is a natural form for children of any age to engage in physical activities. Furthermore, the Welsh Early Years Curriculum (from 3 to 7) emphasises the importance of outdoor and active play, noting that the Foundation Phase and the outdoors are interconnected (Early Years Wales, 2020).

Moreover, According to Kemple *et al.* (2016) children seem to have more freedom to express themselves outdoors. The evidence illustrates that outdoor play also appears to have social benefits: children are less hesitant and more assertive outside. Therefore, during outside play, kindergarteners demonstrated improved communication and perspective-taking abilities. In addition, Hinkley *et al.* (2018) found that playing outside makes it easier for children to engage with their peers. This suggests that children have more opportunities to promote socialisation, social skill development, and overall social health.

In other terms, McClintic and Petty (2015) state that children tend to be less inhibited in social situations when out; as a result, they are more confident, able to focus for extended periods and experience a greater capacity to learn outside. Moreover, in the openness of outdoor play, friendships are formed and negotiated. Mostly, boys develop bonds by racing one another, chasing each other, and playing superhero games. Therefore, according to Thomas and Harding (2011), children are more inclined to work together and cooperate when allocated outdoor activities such as gardening, construction, and dramatic play. Correspondingly, McClintic and Petty (2015) suggest that constructive, physical, and sociodramatic play are all employed to promote social interaction. As a result, there should be daily opportunities for dramatic play, with various materials and props available in various environments. For

example, around a tree, on a stage, or in a natural area. Also, games with rules, such as obstacle courses, follow the leader, and ball games, are encouraged by open grassy spaces.

Moreover, Dymont, Bell, and Lucas (2009) show that outdoor playgrounds promoted more collaborative, diverse, inventive, and less violent play than traditional (indoor) playgrounds. By contrast, Larrea *et al.*, (2019) conducted a study with 173 children aged three to six years who attended 18 early childhood education programmes in the Basque Country (Spain). This research aimed to see whether the presence of affordances in preschool outdoor surroundings impacts children's social play. According to the findings, a lack of affordances in the preschool outdoor environment has a detrimental influence on children's group social play.

Likewise, Angela, Grindheim, and Sørensen (2021) claim that the pandemic is a crisis for today's children: its occurrence and the reactions to it may affect their early education, social skills, and physical and mental health for the rest of their lives. Therefore, Article 31 of the United Nations Convention on the Rights of the Child (UNCRC) shall be maintained in times of crisis and difficulty. This article specifies the right of all children to rest and enjoyment, to engage in age-appropriate play and recreational activities, and to freely participate in cultural life and the arts. The lack of such activities might be detrimental to children. Therefore, places for children in schools and kindergartens need to have access to nature, open spaces, and outdoor garden rooms. Forests, parks, and other green places allow children to enjoy the health benefits of green areas, get a rich learning environment, and build childhood interactions and memories.

As a result of having more control over their learning environment, children may feel more confident and at ease in this emotional climate. Consequently, the reactions of educators may mirror the disposition of the children within the setting, resulting in interactions that lead to the development of more complex motor skills and possibilities for more extended interactions, according to Tonge, Jones and Okely (2018).

Moreover, according to Dymont and O'Connell (2013), staff attitudes, competencies, experience, training, and centre norms determine how they facilitate outdoor play. According to research, portable play equipment, scheduled activities, and playground markers may impact where and how children play outdoors. Sun exposure, seasonality, and shade availability also impact children's play surroundings.

In conclusion, Tonge, Jones and Okely (2018) sustains that having a free routine and spending more time outdoors are two of the most effective strategies to enhance relationships

in outdoor settings. This suggests that when a free routine is offered at an Early Childhood Education and Care (ECEC) centre, children can freely move between surroundings, peers, teachers, and experiences, and they could be able to regulate their social and emotional experiences.

Methodology

According to Tisdall, Davis and Gallagher (2009), a sample is a part of the entire population of the individuals or events in which the research is interested.

The current research project includes a small, purposive sample of six children who attend an afternoon nursery in South Wales. The reason for choosing the current sample is that in the afternoon nursery, most activities take place outside in different weather conditions. Most of the activities are freely chosen and led by the children, both in the yard and in the forest, under the educator's supervision. In this way, the benefits of outdoor play in social development can be easily observed, as Dymont and O'Connell (2013) illustrated in their study. According to Dymont and O'Connell (2013), the green areas of playgrounds at the preschools highlighted in their study, seemed to help children play differently by engaging them in less structured play and more unplanned free play. They also found that a green school playground had more exploration, creative play, pretend play, active play, constructive play, and social play than the traditional school playground. Overall, this makes it easier to see how children interact with each other.

According to Roberts-Holmes (2018), purposive sampling occurs when a researcher purposefully selects specific situations or children to observe. In other words, purposive sampling has neither a random choice nor a cross-sectional representative sample. When using purposive sampling, the specific environment or group of children may provide a valuable illustration of the topic under examination.

Furthermore, Ioanna Palaiologou, Needham and Male (2016) claim that both general social research and social research with an educational emphasis have favoured observations as a research method. Therefore, according to Mukherji and Albon (2018), observations linked to the practise have a different emphasis, that of supporting children's learning and development, either to guide planning or evaluation or to provide information that will enhance the quality of work performed within the setting. At the same time, observations for the

research question might not help the children or the activities in the setting directly. Observations in research are meant to give information about the study's overall goal or to answer specific questions about the research. The goal of quantitative observations, also called "structured observations," is to collect standardised and quantifiable data to reduce the number of variables and make the conclusions more accurate. Moreover, Roberts-Holmes (2018) suggests that practitioners should focus on specific structured observations as they gain familiarity with the institution.

In view of this, in the current research, the structured method of gathering observations is time sampling. According to Papatheodorou, Luff and Gill (2013), time sampling is a method that includes making short observations at regular intervals over some time. For example, the practitioner observes and reports on every outside activity for three minutes every twenty minutes. These observations may either gather open-ended data on the group of children or employ predetermined behaviours. The essential characteristic of time sampling is that the practitioner creates a time plan, adheres to it strictly, and repeats it at least once more to achieve a complete and uniform image. Notably, as with the checklists, the observer can maintain a detached position and capture just the dynamic behaviour. Moreover, according to Keenan, Evans and Crowley (2016), time-sampling methods are often used when researching a group of participants.

As a result, Greig, Taylor and Mackay (2013) claim that the researcher should be clear about the goals of the study and the specific behaviour that will be sampled. He or she should also assume that the behaviour will happen often enough during the time allotted to find a pattern. Using this method, the researcher may paint a reasonably realistic picture of the activities of the children, including whom they interact with, how frequently, and for how long.

According to Nolan, Macfarlane and Cartmel (2013), triangulation uses various blended data-gathering methods to increase rigour, accuracy, and relevance, providing viable alternative mixed-method approaches.

Moreover, the essential strength of methods triangulation is its ability to reveal distinctive characteristics or relevant information that would have gone undetected if just one strategy or data-gathering methodology had been used in the research. When results coincide, it may provide innovative, reliable discoveries regarding a situation or event and new perspectives on the event or situation. It may also foster a better understanding of a situation or event.

Nonetheless, none of these benefits are guaranteed by triangulation. In view of this, Kelle (2006: 309) repeatedly utilises the term 'can' rather than 'does' when emphasising the potential benefits of mixing qualitative and quantitative research when addressing the possibilities of mixed-methods research. Moreover, Haydn (2019) claims that integrity and competence of the researcher are often more significant to the quality and validity of a piece of study than the use of mixed techniques.

Moreover, the many advantages of triangulation are counterbalanced by some significant disadvantages, such as the additional time necessary to undertake triangulation activities and the possible conflicts between various researchers, concepts, or methods.

Otherwise, some reasons for choosing observation instead of other methods in the current research project are presented by PennState Extension (2018) as follows: Observation allows Early Childhood Education (ECE) professionals to examine their interactions with children and learn how meaningful these interactions are as they come to know and assist children. Moreover, observation is a method of connecting with children and discovering their relationships with others and their surroundings. Children who feel loved, protected, and securely connected with others explore their surroundings to learn and are more willing to learn new skills and do better in school. Another purpose of observing is to stimulate learning and growth. Interaction, partnerships, and connections provide the most significant support for learning. Also, observation integrates many types of information to provide ECE professionals with a complete picture of each child. Moreover, professionals play a vital role in observation, a continuous and fundamental aspect of a quality ECE programme.

Therefore, according to Mukherji and Albon (2018), participant as observer is when a researcher spends significant time with a group and seeks to become a full member of the group but informs the group from the beginning that they are doing research, equivalent to practitioner research in early childhood settings. In that case, the personnel will be aware that the researcher is doing observations (and for what reason). They may provide insightful commentary on what has been recorded or even assist with collecting data. When monitoring children, their parents must give formal consent.

However, a major problem with the observational method is that the presence of an observer can affect the behaviour of an observed subject. For example, being observed may increase effectiveness and adherence to official processes. This effect is sometimes called the

Hawthorne effect, and the fact that it happens might lead to bias, according to Walter, Dunsmuir and Westbrook (2015).

As Ioanna Palaologou, Needham and Male (2016) remind, observations may be considered the art of seeing data, while interviews can be viewed as the art of hearing data.

Consequently, in the current research, the interview, for example, cannot be applied to other teachers, as the children spend their two hours only with one teacher and a teacher assistant (afternoon nursery being a transitory period that helps children to accommodate with school and other children).

At the same time, Morison, Moir and Kwansa (2000) claim that whereas teenagers and adults may react to open-ended queries of the 'Tell me about...' form, younger children are inclined to respond with a blank expression or, at best, a succession of loose associations. In other terms, pre-schoolers are still learning the nuances of social communication. By the age of 3–4 years, children should have learned the concept of "taking turns," albeit they may not always answer every question posed by the researcher. Notably, pre-school children are usually more sensitive to question wording, interviewer persona, and information required. That implies that young children might find it challenging to maintain a conversation without regular encouragement and compassionate verbal and nonverbal replies, partly due to their shorter duration of concentration and distractibility. However, there is a risk of excessively asking questions and using pressured choices, resulting in one-word responses that may be less informative.

Morison, Moir, and Kwansa (2000) also claim that when the researcher attempts to maintain the least possible amount of control over the interaction, young children often express the most significant level of openness.

Ethics

According to Page, Clare, and Nutbrown (2013), all research, particularly that involving children, must follow the most stringent ethical standards. Additionally, according to Keenan, Evans and Crowley (2016), a student doing a research project on children must be aware of relevant ethical considerations. The most prominent ethical problem is the requirement to

protect youngsters participating in the research from harm. A rigorous ethical review will analyse the research project for potential risks to the participants. This suggests that both physical and psychological harm must be avoided to the greatest extent feasible. Moreover, emotional, or psychological damage can occur whenever a child feels insecure or uncomfortable. Regarding, researchers must do everything they can to limit the harmful effects on study participants as much as possible (Keenan, Evans and Crowley, 2016).

Moreover, the British Educational Research Association (BERA, 2019) considers that educational researchers should treat everyone who takes part in or is affected by their research with respect. As a result, individuals should be treated equitably, respectfully, with dignity, and without prejudice, in recognition of their rights as well as differences due to age, gender, sexuality, ethnic origin, class, ethnicity, culture, identity, partnership status, belief, disability, political ideology, or any other considerable characteristic.

By contrast, Anderson (2004) notes that children have been mainly treated as unknowing subjects, but she also acknowledges that as values have shifted, children's status has also shifted. Children are now viewed as conscious and active participants who can have agency in processes directly relevant to their lives and experiences.

Notably, the United Nations Convention on the Rights of the Child (1989) has considerably impacted how research with children is done. It did this by recognising that children are real people with rights. Moreover, every child is seen as valuable, regardless of his or her capabilities, ethnicity, or gender, and his or her thoughts and ideas are valued. Recognising that children have a right to say what they believe about problems that affect them has set the stage for examining the ethical issues of research with children. In other terms, according to Bloom (2014), accepting children's rights not to be damaged and mistreated entails listening to children of all ages and respecting their hesitation, resistance, or refusal. Moreover, even young toddlers can communicate this effectively. Instead of presuming small children are irrational, researchers discover they exhibit significant understanding.

Furthermore, according to Farrell, Sharon Lynn Kagan, and Tisdall (2016), it is essential to keep in mind that researchers must be adaptable when applying ethics to their work. However, Warming (2005) argues that even the most ethical practise might become unethical if researchers neglect to pay attention to their subjects and adjust their methods accordingly.

Particularly, Langston *et al.* (2004) claim that when doing research with young children or infants, researchers need to be attentive during the fieldwork to pick up on children's ways

of providing or withdrawing permission. This is especially important in situations when newborns are included in the study. Young children can withdraw their consent in various ways, including being silent, leaving the research location, crying, refusing to interact with any of the research items or the researcher, and showing anger.

Moreover, according to Mukherji and Albon (2010), in situations when the children do not have a strong relationship with the researcher, it may be beneficial to solicit the view of the adults responsible for the children, such as parents or caregivers. Moreover, according to Farrell, Sharon Lynn Kagan, and Tisdall (2016) the relational component of field research is essential to addressing concerns about informed consent. If researchers are considerate and adaptable to children's preferences, they may allow children to participate in research on their terms actively.

Therefore, according to National Society for the Prevention of Cruelty to Children (NSPCC) (2022), informed consent assumes that researchers request permission for a child to participate in their research, ensuring that both the young person and their parents or caregivers understand what is expected of them.

Moreover, according to Papatheodorou, Luff and Gill (2013), voluntary consent from participants is an essential requirement in any research project. Regardless of the researcher's role and connection with parents and other professionals, he or she must always request and get written informed consent. If the researcher is a professional or practitioner who makes observations as part of his or her usual duties and responsibilities and wants to publish the observations for study or publication, he or she must get informed consent from the participants and adults in charge.

Furthermore, Greig *et al.* (2007) suggest that to obtain informed consent, the researcher should offer sufficient information to consider the quality of the consent gained. The more information the researcher offers, the easier it is for parents and caregivers to reach an informed choice regarding the researcher's findings and determine whether to consent.

The information supplied, according to Papatheodorou, Luff and Gill (2013) is referred to as "participant information." It is typically presented in the form of a letter containing the following details: the researcher's identity, the objective of the observation; its significance and value, relevant data about confidentiality and anonymity; potential consequences for the child, and the intended use of observational records.

It may be challenging to provide information on the study topic due to the open-ended nature of research methods. However, it can also be difficult due to the complexity of effectively tailoring material to the participants' abilities and ages. That might refer to the transmission of knowledge verbally, visually, or in written form. It may be helpful to employ different techniques of transmitting information (such as images or video vignettes), mainly when working with younger children or children raised in circumstances where writing is not a prevalent mode of communication, according to Graham *et al.* (2013).

Papatheodorou, Luff and Gill (2013) claim that, in general, when researchers present information to children, they should reassure them, as they would with adults, that they are not required to participate if they dislike being observed. If they have consented to be watched, the researcher will still ask them each time they are monitored. That is characterised as obtaining the child's assent as opposed to the one-time permission needed from adults. The researcher has discussed the observation with the kid's parents, who have consented to it, but the youngster may still refuse to be watched. The researchers will discuss their findings with their instructor or tutor to understand more about children, and they may discuss their observations with the parents and teachers of the children.

Asking the children's permission, according to Alderson (2004), might make them realise they are being observed, which could make them act differently (Hawthorne Effect). Consequently, there may be a tendency to either not seek informed permission from the child or to undertake covert observations to record what seems to be objective and typically occurring behaviours. There is no one truth when it refers to children's knowledge of being watched. In general, how observational studies and research treat children is based on a balance of three main ideas:

- The Convention on the Rights of the Child, which expresses that children should be informed and given opportunities to express and share their ideas and opinions.
- *Proportionality* involves weighing the possible harms and advantages of performing the observations.
- *Doing good* requires that research and, in effect, observations benefit the participants while not harming anybody else

Notably, understanding children's abilities and rights have led to the development of issues of anonymity and confidentiality in child research on many levels, including theoretical,

methodological, and analytical ones. (Flewitt, 2005; Williamson *et al.*, 2005). In view of this, Coady (2010) suggests that general methods to guarantee confidentiality include deleting any identifying information from publications and presentations about the study; storing the data in a safe location, and ensuring it is anonymised.

Moreover, according to British Educational Research Association (BERA, 2019), researchers must adhere to the legal requirements regarding the storage and use of personal data as specified in the United Kingdom by the Data Protection Act (1998) and any successive similar acts, including, as of May 2018, its alternative: the significantly stricter General Data Protection Regulation (GDPR). In essence, people have the right to know how and why their data is stored, its purposes, and to whom it may be disclosed. Researchers are expected to get the participants' express consent before disclosing their personal information to third parties and to guarantee that these parties are granted access to the information.

The GDPR defines *personal data* as any information belonging to an identifiable or identified person and mandates that sensitive personal data be afforded heightened protection. Compliance must be shown by documenting and reporting any irregularities. Moreover, schools may be required to have a policy for protecting data and a person in charge of protecting data, according to BERA (2019). In view of this, Mukherji and Albon (2018) claims that universities will also have ethical guidelines that regulate the type of research permitted under academic regulations. That would involve research conducted by university staff and research students.

As a result, National Foundation for Educational Research-recommended (and, in some cases, GDPR-required) measures include using secure computer systems, making sure that data is stored on prescribed safety, using strong passwords and encryption keys, avoiding portable data storage devices like laptops and USB sticks, using messenger or secure electronic submission when moving data, making documents anonymous, and making sure that any third-party users of communications networks are correctly authorised. It is also advised to avoid exchanging information over email and other vulnerable platforms to cyber-attacks (BERA, 2019).

In conclusion, according to BERA (2019), researchers should ensure that data is stored securely and that the form of any publication (including those released online) does not directly or indirectly compromise the confidentiality and anonymity of the research or anyone involved in it.

References:

- Anderson, P. (2004) Ethics, in S. Fraser, V. Lewis, S. Ding, M. Kellett and C. Robinson (eds), *Doing Research with Children and Young People*, London: Sage Publications in association with Open University Press.
- Bloom, P. (2014) *Just Babies: The Origins of Good and Evil*. New York: Broadway Books.
- British Educational Research Association (2019) *Ethics and Educational Research*. Available at: <https://www.bera.ac.uk/publication/ethics-and-educational-research> (Accessed: 22 October 2022).
- Coady, M. (2010) 'Ethics in early childhood research', in G. MacNaughton, S. A. Rolfe and I. Siraj-Blatchford (eds), *Doing Early Childhood Research: International Perspectives on Theory and Practice*, 2nd edn. Maidenhead: Open University Press. pp. 73-84.
- Dyment, J. and O'Connell, T.S. (2013). The impact of playground design on play choices and behaviors of pre-school children. *Children's Geographies*, 11(3), pp.263–280.
doi:10.1080/14733285.2013.812272.
- Dyment, J. E., Bell, A. C. and Lucas, A. J. 2009. The Relationship Between School Ground Design and Intensity of Physical Activity. *Children's Geographies*, 7(3): 261–267.
(doi:10.1080/14733280903024423)
- Early Years Wales (2020) *Foundation Phase*. Available at: <https://www.earlyyears.wales/en/foundation-phase#:~:text=the%20Foundation%20Phase%3F>-(Accessed 15 October 2022).
- Farrell, A., Sharon Lynn Kagan and Tisdall, K.M. (2016) *The SAGE Handbook of Early Childhood Research*. London: Sage Publications Ltd.
- Flewitt, R. (2005) 'Conducting research with young children: Some ethical considerations', *Early Child Development and Care*, 176(6): 553-65.
- Graham, A., Powell, M., Taylor, N., Anderson, D., and Fitzgerald, R. (2013) *Ethical Research Involving Children*. Florence: UNICEF Office of Research-Innocenti.
- Greig, A., Taylor, J. and MacKay, T. (2007) *Doing Research with Children*. 2nd edn. London: Sage.

Greig, A., Taylor, J. and Mackay, T. (2013) *Doing research with children: a practical guide*. London: Sage Publications Ltd.

Grindheim, L.T., Sørensen, H.V. and Rekers, A. (2021) *Outdoor Learning and Play: Pedagogical Practices and Children's Cultural Formation*. Cham: Springer Nature.

Haydn, T. (2019). Triangulation in history education research, and its limitations: A view from the UK. *History Education Research Journal*, 16(1), pp.35–49. doi:10.18546/herj.16.1.04.

Hinkley, T., Brown, H., Carson, V. and Teychenne, M. (2018). Cross sectional associations of screen time and outdoor play with social skills in preschool children. *PLOS ONE*, [online] 13(4), p.e0193700. Doi: 10.1371/journal.pone.0193700.

Keenan, T., Evans, S. and Crowley, K. (2016) *An introduction to child development*. 3rd ed. Los Angeles: Sage.

Kelle, U. (2006) 'Combining qualitative and quantitative methods in research practice: Purposes and advantages'. *Qualitative Research in Psychology*, 3 (4), 293–311.

Kristen M. Kemple, JiHyun Oh, Elizabeth Kenney & Tina Smith-Bonahue (2016) The Power of Outdoor Play and Play in Natural Environments, *Childhood Education*, 92:6, 446-454, DOI: [10.1080/00094056.2016.1251793](https://doi.org/10.1080/00094056.2016.1251793)

Langston, A., Abbot, L., Lewis, V., and Kellett, M. (2004) 'Early Childhood', in S. Fraser, V. Lewis, S. Ding, M. Kellett and C. Robinson (eds), *Doing Research with Children and Young People*. London: SAGE. pp. 147-60.

Larrea, I., Muela, A., Miranda, N. and Barandiaran, A. (2019). Children's social play and affordance availability in preschool outdoor environments. *European Early Childhood Education Research Journal*, 27(2), pp.185–194. doi:10.1080/1350293x.2019.1579546.

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. doi:10.1080/10901027.2014.997844.

Morison, M., Moir, J. and Kwansa, T. (2000). Interviewing children for the purposes of research in primary care. *Primary Health Care Research and Development*, 1(2), pp.113–130. doi:10.1191/146342300675316801.

Mukherji, P. and Albon, D. (2018) *Research Methods in Early Childhood*. SAGE.

Mukherji, P., and Albon, D. (2010) *Research Methods in Early Childhood: An Introductory Guide*. London: SAGE.

National Society for the Prevention of Cruelty to Children (2022). *Research with children: ethics, safety and avoiding harm*. Available at: <https://learning.nspcc.org.uk/research-resources/briefings/research-with-children-ethics-safety-avoiding-harm#article-top>. (Accessed: 22 October 2022).

nidirect (2018) *Playing outdoors*. Available at: <https://www.nidirect.gov.uk/articles/playing-outdoors#:~:text=Outdoor%20play%20is%20a%20natural> (Accessed 15 October 2022).

Nolan, A., Macfarlane, K. and Cartmel, J. (2013) *Research in early childhood*. Los Angeles: Sage Publications Ltd.

Page, J., Clare, A., & Nutbrown, C. (2013) Looking beyond what we already know about our youngest children. In *Working with babies & children* (pp. 26-51). SAGE Publications, Ltd, <https://dx.doi.org/10.4135/9781526408099.n3>

Palaiologou, I. (2016) *The Early Years Foundation Stage Theory and Practice*. 3 rd. edn. London: Sage Publications Ltd.

Palaiologou, I., Needham, D. and Male, T. (2016) *Doing Research in Education*. London: Sage Publications Ltd.

Papatheodorou, T., Luff, P. and Gill, J. (2013) *Child observation for learning and research*. Oxon: Routledge.

PennState Extension (2018). *Why Observe Children?* Better Kid Care (Penn State Extension). Available at: <https://extension.psu.edu/programs/betterkidcare/news/2018/why-observe-children>. (Accessed: 20 October 2022).

Roberts-Holmes, G. (2018) *Doing your early years research project a step-by-step guide*. 4th edn. Los Angeles: Sage Publications Ltd.

Rugg, D. (2010) *An Introduction to Triangulation UNAIDS Monitoring and Evaluation Fundamentals*. Available at: https://www.unaids.org/sites/default/files/sub_landing/files/10_4-Intro-to-triangulation-MEF.pdf. (Accessed: 20 October 2022).

Thomas, F., & Harding, S. (2011). The role of play: Play outdoors as the medium and mechanism for well-being, learning and development. In J. White (Ed.), *Outdoor provision in the early years* (pp. 12–22). London, England: Sage.

Tisdall, K., Davis, J. and Gallagher, M. (2009) *Researching with children and young people: research design, methods, and analysis*. Los Angeles: Sage.

Tonge, K.L., Jones, R.A. and Okely, A.D. (2018). Quality Interactions in Early Childhood Education and Care Centre Outdoor Environments. *Early Childhood Education Journal*, 47(1), pp.31–41. doi:10.1007/s10643-018-0913-y.

United Nations (1989) *The Convention on the Rights of the Child*. Geneva: Defense International and the United Nations Children’s Fund.

Walter, S.R., Dunsmuir, W.T.M. and Westbrook, J.I. (2015) Studying interruptions and multitasking in situ: The untapped potential of quantitative observational studies. *International Journal of Human-Computer Studies*, 79, pp.118–125. doi: 10.1016/j.ijhcs.2015.01.008.

Warming, H. (2005) ‘Participant observation: a way to learn about children’s perspectives’, In A. Clark, A. Kjørholt and P. Moss (eds), *Beyond Listening: Children’s Perspectives on Early Childhood Services*: Bristol: Policy Press. pp. 51-70.

Welsh Government (2021) *A curriculum for funded non-maintained nursery settings*. Available at: <https://moodle.uwtsd.ac.uk/course/view.php?id=9761> (Accessed: 19 October 2022).

Williamson, E., Goodenough, T., Kent, J. and Ashcroft, R. (2005) ‘Conducting research with children: The limits of confidentiality and child protection protocols’, *Children and Society*, 19(5): 397-409.

