

Abstract

This research project will explore how effective the mud kitchen is in developing social skills in the early years outdoor environment. Research will be conducted in two early years settings in South Wales. Findings will be explored and analysed of research already carried out in similar fields with the aim of discovering what the benefits are and to get a more in-depth understanding of social skills in role play, outdoor play, with the main focus being on children engaging in play at the mud kitchen. Through purposive sampling the participants chosen will be part of a small sample size of children between the ages of two and four, and also the early years practitioners who care for the children. Ethnographic research will be conducted using a mixed method approach of observations of the young children at play in the mud kitchen and interviews with the early years practitioners to understand their roles, professional opinions and perspective on the subject. Triangulation will be implemented to ensure the validity and trustworthiness of the research project. Once the qualitative data is collected the research findings will be analysed to determine what the effects the mud kitchen has on developing children's social skills. Ethical considerations in line with British Educational Research Association (BERA) (2018) and Ethical Research Involving Children (ERIC) (2020) and University of Wales Trinity Saint David (2022) will be in place throughout the planning and when conducting the research project. Voluntary Informed consent and/or assent will be gained from participants. Participants will be fully informed in regard to all aspects of the research project. What the research is about, its aims, methods, reasons and what is required from individuals' participation. The researcher will be open with all participants and ensure transparency in all aspects of research. Furthermore, the participants will be reassured that the data will be collected and stored safely in accordance with the General Data Protection Regulation (GDPR), to protect their confidentiality.

Literature review

The rationale for this research project is to explore how effective the mud kitchen is in developing young children's social skills in early years settings. Findings from previous research focusing on play in general prove that play is immensely beneficial. Theorists including Piaget, Vygotsky and Froebel have long agreed on the important role of play in children's learning. (Pound, 2005) The importance of play is recognised in the United Nations convention of the right of the child (UNCRC) Article 31 legally states that children have the right to play. (UNICEF 2000) The potential of the outdoor learning environment is also by no means a new phenomenon. Lilley (1967) acknowledged Froebel's belief that the outdoor environment was a place where young children could grow, learn and develop at their own pace. Froebel saw children as active, curious, creative learners who learn best through first-hand rich experiences. This is mirrored in A curriculum for funded non-maintained nursery settings that also recognise that Children have an intrinsic need to play and through play, children can learn and understand the rules of social behaviour, explore a range of emotions, and become more self-aware. (Welsh Government, 2020) The outdoor setting promotes the child's holistic development and wellbeing further as children explore and create they develop a better understanding of the world around them. In recent years there has been a growth in outdoor learning opportunities for young children (Garhart Mooney 2000). Child-led, free flow play now has a pivotal role in early years curriculum and frameworks with great importance being placed on the outdoor environment and open-ended natural resources. Dewey asserts that children learn best when they interact with others and the environment alike through conversation and experimentation. Piaget agrees when he states that children learn best when working hands on to create meaningful interactions (Pound 2005). White (2011) supports these theories adding that outdoor play is able to offer social interactions that build relationships, skills and enjoyment. The outdoors encourages respect for other living things, cooperation and opportunity for authentic questions with the freedom to experiment and replicate real life experiences. There is a lack of research specifically directed at the mud kitchen area at early years settings. The research into children's social behaviours and development however all

note the importance of play, in the outdoors with open ended, natural resources all of these elements are encapsulated in the mud kitchen, the mud kitchen provides a mix of domestic play, baking and the outdoors. Mud kitchens promote social development and emotional understanding whilst providing children with important opportunities to practice their role-playing, turn-taking, and sharing skills. (Martin 2019)

A research study conducted by Coates And Pimlott-wilson (2018) examined primary school children's experiences when engaging in a Forest School programme. The findings suggest that Forest School does successfully blend with mainstream settings and positively contributes to children's social, cognitive, emotional and physical development. These findings are significant because Forest School practice is children predominantly learning through play underpins early years curriculum in wales. The type of outdoor environment is proven important. Children in outdoor play environments with flexible play options engage in their play and display fewer behavior problems than those children in a more traditional playground environment.

According to both (Chawla 2015) and Frost (2004) Children seem to experience greater freedom to express themselves when outdoors, using more complex language, being less inhibited and more assertive using and using more complex language whilst learning through hands-on experiences and sensory learning.

Rees-Edwards (2022) maintains that Role play is when children imitate people in their play. Role play is considered an important part of child development. Children's creativity, imagination and cognitive skills will all be promoted through role play especially when play is child led. Greenway and Hutchings (2022) agree maintaining that role play areas promote children's social and emotional development and well-being. When engaging in pretend play children are able to experience and explore their emotional thoughts and feelings, they can learn to express and regulate their emotions. Greenway and hutchings (2022) .Authentic experiences can create opportunities where children can apply their learning to real life, providing purpose and understanding of their learning. Welsh government recognises that when given the

opportunity children will apply their learning to real-life situations, helping them understand the purpose of their learning thus enhancing their well-being, self-esteem and resilience.

Waite (2009) observed children's engagement during outdoor play and activities and recognised that the freedom that comes with the outdoor environment benefits and supports children's Personal, social and behavioural development. The research also found that practitioners strongly believed in the rich learning that is gained from outdoor experiences. Similarly Maynard & Waters (2007) suggest that outdoor play offers a platform for group play and activities which can develop concepts from across the curriculum. The mud kitchen is a prime example offering rich, authentic, purposeful and real-life concepts and resources

Little (2022) supports these findings, stating that outdoor environments provide a natural setting to meet children's intrinsic drive and innate curiosity to explore the world around them. Through interactions in the environment, children's physical, cognitive, social, and emotional development are supported. Natural outdoor environments promote prolonged engagement in play. Young children specifically benefit from diverse, sensory experiences in physical, play, creative and imaginative play, discovering and engaging with the outdoor environment chawla (2015) confirms that contact with nature can contribute to the health and well-being of children. play helps increase the confidence of young children and build their imaginations. It also aids their speaking and listening skills. The mud kitchen allows children to Work alongside each other in close proximity encouraging them to collaborate together. children talk to their friends as they play, sharing their resources.

White (2013) sums up how mud kitchens encapsulate the benefits of domestic role play with the outdoor benefits stating that Mud kitchens provide a different element to digging in a soil patch. A mud kitchen includes elements of the domestic home corner and cooking from indoor play, enriched through the benefits of being outside and the resources and materials children can work with there.

Methodological considerations

The research will focus on 2 early years settings in South Wales with suitable outdoor provision including mud kitchen areas. The settings care for children aged two, three and four years old. A Sample is the term used for individuals chosen for a research study from a sampling frame. Nolan, Macfarlane and Cartmel (2013) explain that techniques are used to produce a sample that is representative of the larger population when restrictions such as time, cost and access inhibit the possibility of gaining data from the larger population.

According to Roberts-Holmes (2014) purposive sampling is when a sample is selected that specifically applies to the research being undertaken. This is done deliberately in order to provide a good example of information required by the researcher to explore the chosen research subject. The Early years settings will also be selected with the facilities needed to suit the research, in this case settings with an outdoor provision to include a mud kitchen. This research project will require a purposive sample yet, The early years settings are an example of Convenience sampling. The setting may be familiar and in close proximity, allowing the researcher to spend the quality time needed at both settings. Two different settings will be included in the research project to attain qualitative data from broader areas, enabling fair research. The children within the setting who will be observed may be a random sample, designed to reflect the larger population. Each individual has the same chance of being included in the research study as the next, this may be an example of Probability sampling.

Two settings are included in the study to offer a broader sample of participants, time will be spent at both settings prior to any data collection to make participants comfortable with the presence of the researcher this allows for more reliable findings as when participants are content a more natural realistic collection of data can be gathered.

All participants were given a copy of the university approved ethics protocol and were informed of their right to withdraw at any time throughout the research period

The main body of evidence in this research study will be gathered through Observing the children at play. The observations will take place three times a week over a twelve week period. Observations are a valuable way to gather qualitative data and observe real behaviours. Prior to the observations the researcher will spend time at the setting, becoming familiar with participants, with the aim of gaining trust, making the participants feel relaxed and unthreatened. The observer does not want to cause behavioural change from the norm. This change of behaviour when being watched or observed is known as the Hawthorne effect. The researcher will want to avoid the Hawthorne effect. The researcher will do this by making themselves familiar with the children and staff early years settings. The children will be observed in their familiar, natural environment with minimal disruption. (Campbell, Maxey and Watson, 1995) Carroll Mesman (2011) and Mukherji and Albon (2018) both state that Ethnography research involves spending a long period of time in a setting, aiming to gain detailed information. This is suggested to gain more natural and reliable data (Carroll and Mesman 2011) The decision was made not to film any observations as this could offer negative behavioural reactions from the children. Observations will be recorded in note form. Note taking is quick and effective, notes will be written in full following observation. Consent will be gained from parents and ascent gained from children who will be fully informed of all aspects of the research project. Additional consent will be requested for photographs to be taken to support notes made during observations. The children's progress, level of involvement, development and well-being will all be measured over the period of time using the Leuven scale. According to Woods (2006) This is a framework that highlights the levels to which children demonstrate involvement in early years settings. It is used as an observational scale for emotional well-being. There are 5 points to the Leuven scale with the first indicating a very low state of emotional well-being, and the fifth being used as the best emotional well-being a child can experience.

This research will use mixed methods through observations and interviews. A strength of the mixed methods approach is triangulation. Triangulation is approaching a subject from different perspectives by using a range of methods in order to gain a better

understanding of it. (Bell, 2018) Each approach has its strengths and weaknesses. The approach and the methods of data collection chosen will depend on the research study and the type of information required. (Bell 2018) The data collected will be predominantly qualitative data. According to Jarvis et al (2018) quantitative data refers to the procedure of collecting numerical data and qualitative is receiving more in depth non numerical data.

Following the observations, the researcher will conduct interviews with practitioners at the settings with the intention to gain insight into professional opinion in regard to the outdoor social play, in particular the mud kitchen area.

Cohen et al. (2018) states that an interview enables participants to discuss their experiences and personal insights of situations and experiences. Interviews are also an effective method to validate and explore in greater depth issues already raised by other techniques.

The interview process will be explained in full beforehand, allowing the interviewee to be fully informed before granting consent. The interview will be recorded and the data recorded will be stored and used in accordance with General Data protection Regulation (GDPR) and the University of Wales Trinity Saint David (UWTSD) data protection policies. All information is private and confidential. The interview will be semi structured allowing researchers to guide the information sought. Cohen et al. (2018) states that Semi-structured interviews gain a deeper insight to the experiences of those interviewed. They are less formalised and also provide the opportunity for more interaction and discussion in comparison to structured interviews because they are pre-planned and too controlled. (Cohen et al 2018)

The Halo effect is a cognitive bias based on aesthetic appearance and trustworthiness (Nesbitt and Wilson 1977) according to Gabrieli et al. (2021) the term was first used by Thorndike in 1920 to describe the effects one single attribute may have on how other attributes are evaluated. Todotov (2009) explains the halo effect as when perception of

a person's physical appearance is used as a basis for evaluating other attributes that are not related to appearance. Nicolau, Mellinas and Martín-Fuentes (2020) describe the Halo effect as a cognitive bias where opinions are formed on an attribute based on a predisposition towards another attribute. The researcher will avoid using the halo effect throughout my interviews.

This study will not be using questionnaires. Although they receive quick responses and provide anonymity, they can ask open and closed questions which can take a long time to analyse. The participant might ignore the questionnaire, not fill it in properly or take them too long. Interviews and observations allow for more in depth exploration. (Jarvis et al 2012)

Ethical considerations

When planning a research project the researcher must read and understand all policies and procedures of the university and settings in which the research will take place. The relevant data and barrier service (DBS) must be held, risk assessments be carried out and an application for ethical approval should be made to the university being represented.

BERA (2018) supports the United Nations Convention on the Rights of the Child (UNCRC) (1990) The UNCRC consists of 54 legally binding principles which aim to protect and promote children's rights and well being. Article 12 declares that children have the right to an opinion about issues concerning them. Roberts-Holmes (2018) believes that it should be recognised that children are participating members of society and their voices and views in matters concerning them should be listened to and respected. The best interests of the child are the primary concern when children are included in research they will be treated fairly, respectfully and with dignity in accordance with BERA (2018). Children have the right to express their own views and feelings in all matters that affect them if they are capable of doing so. The researcher has the responsibility in understanding and believing in the importance of children having a say in decisions that respect them.

All participants will be asked for their informed consent. The British Educational Research Association (BERA) (2020) promotes the importance of Informed consent of all persons who are to be involved in research. When consent is requested from potential participants in research the consent must be informed. All participants will know what the research is about and what is expected of them. Any risks and benefits will be explained and it will be made clear that participation is voluntary and that all participants have the right to withdraw for any reason at any time (NSPCC 2022). Additionally Brown and Perkins (2019) explains that Once assent or consent has been gained, ethics must remain an ongoing consideration. Children will be updated regularly through the research process and reminded that their participation is voluntary should they wish to withdraw at any time. Children who may not be able to express their willingness to partake in the research will be asked for their ascent. Ascent from the child is not sufficient, the Parent must also give consent to their child taking part. Notably once the parent gives consent for their child to take part in the research study, the child does still need to give their ascent verbally. If there is any suggestion that the child is unhappy, distressed or the researcher notices any cues to withdraw then the research will be stopped immediately. BERA (2018) explains that consent can be given by a person over the age of eighteen. Children under the age of eighteen cannot legally give consent, they can however give ascent which is an agreement to participate given by the child themselves. If the researcher has received consent but the child does not want to participate then the researcher will respect this and not include the child in the study.

ERIC (2023) and BERA (2018) both state that personal information belonging to children, parents, staff and the settings will remain Confidential and anonymous No personal details will be stored or shared in any aspect of the research being undertaken. This will follow the General Data Protection Regulation (GDPR) and the Data Protection Act as UWTSD (2022) state in their guidelines. UWTSD (2022) states that Whilst respecting anonymity and confidentiality are important principles of social

research, there may be situations when the researcher has a duty of care to reveal information that has been provided in confidence, or which the researcher has discovered through interactions or observations. The participants should be aware of this before providing informed consent. For example, if a researcher became aware of signs of abuse, this information would need to be shared with the relevant authority. This disclosure would be stated in original information that participants would consent too. (UWTSD, 2022) A plan will be put in place to use if necessary. All individuals who have access to the data will stick to the GDPR. The data will be kept on a computer rather than portable storage including laptops and memory sticks. The information will have a password attached so that no one else can access this. (ERIC 2023)

Research should always be carried out in an ethically sound manner from beginning to end. It will be ensured that appropriate consideration is given to protect all involved from harm. (UWTSD, 2022) Possible risk may include the risk element of the outdoors causing physical harm, researcher would confirm risk assessment to minimize risk, something could trigger emotional upset, if this was to happen observations would stop immediately and practitioners can settle the child and source relevant help. Before any research takes place, full information will be disclosed to all participants, risk to setting staff and university alike would be risk of reputation if something was to go wrong. (NSPCC, 2018) All policies and procedures are adhered to, and professionalism when conducting the research project is important. Risk to researchers is that of accusation and physical harm, researching will never be the only adult with children to minimize harm and again policies and procedures will be followed.

Researchers should be open and honest, willingly offering information to show transparency, gaining trust and fully informing participants as the research takes place. should aim to be open and honest with participants, researchers have a responsibility to recognise potential risks, and minimize and manage any distress or discomfort that may arise.

Ethical research involving children (ERIC) (no date) insist that although Individual children may best assess any risks to themselves, researchers should have a greater

knowledge and understanding of the potential wider and long-term implications of participation in the research study. Additionally the Nspcc (2022) suggests that researchers must consider whether the research poses any risk of harm to the children or researchers involved. Research shouldn't involve any greater stress than is commonly experienced in day-to-day life.

Data collected in this research project will be in the form of written notes. In order to secure privacy no names or other information that may identify individuals will be recorded instead synonyms or codes eg child A, child B etc will be used.

The General Data Protection Regulation (GDPR) (2018) provides legal requirements in relation to storage and use of personal data that researchers must comply with.

Participants have the right to know why their personal data is being stored, what it is being used for, and to who can view it. GDPR recommends the use of secure computer networks, the use of password protection and data encryption; avoiding portable data storage devices such as laptops and USB sticks; using secure electronic transfer when moving data; anonymising records;

Researchers should ensure that data are kept securely, to ensure the confidentiality/anonymity agreement is not jeopardised.

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