

# THE RELATIONSHIP BETWEEN THEORY AND DATA FINDINGS: PARENTS AND TEACHERS' VIEWS OF RISKY PLAY IN EARLY LEARNING CENTRES

Lorette Pretorius<sup>1</sup>, Vasti Marais-Opperman<sup>2\*</sup>

<sup>1</sup>*AROS Akademiese Reformatoriese Opleiding en Studies, South Africa*

*Email: [Lorette.pretorius@outlook.com](mailto:Lorette.pretorius@outlook.com)*

*([orcid.org/0000-0001-7046-3738](https://orcid.org/0000-0001-7046-3738))*

<sup>2</sup>*AROS Akademiese Reformatoriese Opleiding en Studies, South Africa*

*Email: [vastim@yahoo.com](mailto:vastim@yahoo.com)*

*([orcid.org/0000-0003-3465-0899](https://orcid.org/0000-0003-3465-0899))*

*\*Corresponding author*

## ABSTRACT

There is a concern that children are deprived of opportunities for responding to challenges and exploring risky situations in outdoor play. Discouraging risky play has detrimental effects on children's development which may hinder their functioning in school and later in life. Risky play opportunities are therefore essential to develop children's confidence, self-esteem, autonomy and independence, as well as their problem solving and risk management skills. The purpose of this study was to gain knowledge of parents and teachers' experiences and views about risky outdoor play; what prevents or supports teachers and parents from permitting risky outdoor play; and how the outdoor learning environment provides opportunities for risky play. This study employed a qualitative approach and is positioned within the interpretivist paradigm. The study consisted of preschool teachers and parents from three different early learning centres, who shared their experiences and views of risky play. Data were generated from semi-structured group interviews, observations of teachers and children during outdoor play and document analysis entailing teachers' daily planning of outdoor activities. Online semi-structured individual interview schedules were utilised to generate data from parents. Findings indicated that both parents and teachers perceive risky play as imperative for children's development. Constraints affecting children's opportunities to participate in risky activities and the concerns thereof were outlined.

**Keywords:** Child/children, Early learning centre, Experiences, Outdoor play environment, Parents, Risky play

## INTRODUCTION

Literature control aims to demonstrate the relationship between existing literature and the findings of this research study. Data generated from each participant during the semi-structured interviews, outdoor observations, teachers' daily planning of outdoor activities and semi-structured individual interview schedules were utilised to compare and contradict the existing literature.

## METHOD

### *Research Design*

A qualitative design was adopted to conduct this research study. An interpretivist paradigm enabled interaction with teachers and form a clear representation of how teachers experience and view risky outdoor play. Moreover, the Covid-19 pandemic required and dictated that we play a different role and adhere to certain government

protocols. In adherence to the Covid-19 pandemic rules and regulations regarding social distancing, a semi-structured individual interview schedule method was employed to generate data from parents. This method eliminated any face-to-face contact whilst still allowing this study to continue. Data was only generated from Early Learning Centres (ELCs) when South Africa moved to level two of lockdown. During the interviews with teachers and the observation of teachers and children outdoors, social distancing was applied and a face mask was worn at all times.

A research design is a strategy that provides methods and instruments to achieve a particular task and to provide credible results (Seabi, 2012). Rule & John (2011) refer to a case study design as a “systematic and in-depth investigation of a particular instance in its context in order to generate knowledge”. Using a case study design enabled an in-depth understanding of the case in participants’ natural settings, taking into consideration the “complexity and context” (Seabi, 2012:83).

Multiple case study design allows for collaboration, to establish rapport and encourages participants to feel that they can share their stories (Crabtree & Miller cited in Nieuwenhuis, 2016b:82). A multiple case study design promoted the development of an in-depth understanding (Seabi, 2012; Rule & John, 2011) of parents and teachers’ experiences and views of risky outdoor play at each site. Moreover, utilising a multiple case study design allowed the opportunity to emphasise real life experiences and difficulties of permitting risky play to young children. Finally, a multiple case study research design allowed the researcher to gain information in understanding parents and teachers’ risky play experiences.

Creswell (2014) describes a research design as “plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis”. Therefore, case studies were selected to outline the rich information gained from parents and teachers’ experiences and views of risky play.

Case studies according to Creswell (2014:43) “is a design of inquiry found in many fields, especially evaluation, in which the researcher

develops an in-depth analysis of a case often a program, event, activity, process, or one or more individuals”. Given (2008) agrees with this statement and further explains that case studies are not limited to one observation.

A multiple case study design enabled the researcher to emphasise the certainties and difficulties of permitting risky play to young children. The multiple case study method was utilised to generate data through semi-structured group interviews, observations and teachers’ daily planning of outdoor activities, as well as semi-structured individual interview schedules from parents.

### *Participants*

Purposive non-probability sampling was utilised to choose participants, thus enabling the researcher to select participants with specific characteristics in understanding the phenomenon under study (Patten & Galvan, 2019).

The main reason for selecting parents and teachers as participants for this study is because they provided rich, informative data (Yin, 2011), regarding risky outdoor play in early childhood. Predetermined criteria were used to select the participants. This criteria for parents included; voluntary participation, language proficient in either English and/or Afrikaans, and presenting diverse cultural upbringings, age, gender, race and socioeconomic status. This criteria for teachers included; voluntary participation, language proficiency in either English and/or Afrikaans, older teachers with more experience and younger teachers with less experience.

Three ELCs were selected within the Pretoria, Gauteng Province, South Africa region. This included the following areas: an inner-city, suburban and urban area. Two preschool teachers from each of the three ELCs (six teachers in total) and three parents from each learning centre (nine parents in total) were selected to participate in the study.

## RESULTS

The data and findings are linked to the theoretical framework of this study. This study confirms Rogoff's (2008) three planes of analysis, which are 1) apprenticeship, 2) guided participation and 3) participatory appropriation. The three planes of analysis underlie parents and teachers' perceptions and children's engagement in risky play activities. This study aimed at gaining a better understanding of both parents and teachers' experiences and views of risky play. It became clear that both had different but also very similar opinions of children's risky play. Therefore, children's participation in culturally risky play activities is highly reliant on parents and teachers' perceptions. However, there are various constraints that both parents and teachers experience with regards to permitting risky play at the ELC and the home environment. These constraints have an impact on the child's activity participation and in turn impacts on the other developmental processes; guided participation and participatory appropriation.

Society has become very risk-averse and safety amongst others is the main concern of parents in allowing children to engage in risky play. Parents have made it clear that they fear for their children to get hurt when engaging in risky play. Teachers expressed that a lack of support from parents is the main constraint when encouraging and permitting risky play at the ELCs. However, both parents and teachers are aware of the developmental advantages and therefore try to 'look the other way' or guide them as they take risks. According to Rogoff (2008), communication and coordination play a key role in the process of guided participation. Therefore, it is vital that parents and teachers facilitate and guide children as they take risks in their play. During research observations, it was noticed how a teacher praised children as they were hanging from monkey bars – in this way the teacher fulfils his/her role in providing children with words of encouragement and supporting them. Interactions between teachers and children were obvious during outdoor playtime at the three ELCs. Collaborations between the child and teachers allow for progression from an inexperienced risk-taking child to an experienced risk-taking child.

As children get more experienced in taking risks, there is a change that occurs within the child. Teachers highlighted the difference in children's risk taking at the beginning of the academic year compared to the middle and end of the year. When a child participates in a risky activity based on experience, the previous participation contributes to the current activity by being prepared for it. In this way, the past spreads to the present and the future.

In addition, the context is not separated from the social activity taking place. Jones and Mistry (2019) confirm that two imperative perceptions regarding children's development are emphasised within the sociocultural theory; (a) the inseparability of person and context and (b) culturally situated meaning-making as the integration of person and context in the developmental process". Furthermore, Rogoff (2008) emphasises that some parts of the risky play activities are separated from others in the foreground without failing to forget about the other parts making-up the whole. A child taking a risk in play (foreground) still includes the environment, resources, peers, parents or teachers (background) in the activity. Therefore, the environment that children are exposed to plays a vital role and contributing to their risky play opportunities. In other words, without the necessary outdoor resources (jungle gyms, climbing walls, swings, slides, uneven surfaces, scooters, bicycles, etc. which are all evident at the ELCs), the risky activity is less likely to take place. Children are exposed to opportunities for taking risks because they are provided with the necessary equipment which allows them to do so.

## DISCUSSION AND CONCLUSION

The theoretical framework that underpinned this study afforded valuable insight into parents and teachers' experiences and views of risky play in ELCs. Although the parents and teachers in this study emphasised their fear for children's safety and teachers expressing the lack of support from parents, the findings confirmed that both permit and encourage risky play at the ELCs and the home environment.

Data generated from each participant during the semi-structured interviews, outdoor observations, teachers' daily planning of outdoor activities and semi-structured individual interview schedules were utilised to compare and contradict the existing literature.

### ***Comparing similarities of existing literature with the findings of this study***

The research findings from participants were stated in line with the three themes and sub-themes as they arose from the analysed data.

### ***Theme 1: Teachers and parents' experiences and views of risky play***

***Sub-theme 1:*** Teachers and parents' perceptions of risky play

#### ***Existing knowledge***

Parents' perceptions and views of risk will have an impact on the risky play activities that children will get to engage (Niehues et al., 2015). An increase in adults' perception that they need to safeguard children from harm (Brussoni et al., 2012). "The supervising adults' risk perception in the situation will influence how they react to the risk-taking child, and thus their actions of interfering, constraining, or encouraging risky play will constitute factors that contribute to the potential risk in the situation." (Sandseter, 2009b:3). Both educators and parents believe that risky play is valuable for children. McFarland & Laird, 2018).

#### ***Findings and interpretations***

Parents view risk as a necessity and they have a positive perception of risk. This is evident when seven parents indicated that they support their children's risky play participation.

The teachers mentioned that risky play is acceptable but within boundaries. They further explained that supervision is important to keep children from getting hurt. Parents specified that it is dangerous if not looked after properly. Therefore, supervision is required. Even though parents and teachers support children's risk-

taking, they fear for children's safety when engaged in risky play activities. A teacher mentioned that, "I can say that we all have that fear when they are playing outside like if they get hurt or something ...". The teacher furthermore stated that: "I am very positive about it. I encourage it. I do not get scared or anxious when children take risks because I know what the impact of it is on them as a child". The majority of teachers and three out of the seven parents indicated that risky play is an essential part of early childhood because of the skills children develop.

***Sub-theme 2:*** Teachers and parents' childhood experiences of risky play

#### ***Existing knowledge***

"It is possible to relate teachers' personal attitudes concerning risk with the value they give on risky play and their risky play experiences" (Keles & Yurt, 2020). "The majority of teachers indicated that there are no changes between their childhood plays and current child plays of children attending their classes" (Keles & Yurt, 2020:440).

#### ***Findings and interpretations***

Seven of the teachers and all parents shared how they participated in risky play when they were children. Only one teacher never participated in risky play as a child and confirmed that she is the more careful teacher. The majority of teachers mentioned that there is not really a difference between their risky play childhood experiences and the implementation thereof at the various ELCs. Whereas, parents indicated that their childhood experiences and their children's risky play are very similar.

***Sub-theme 3:*** The impact of teachers and parents' childhood memories on children's risky play

#### ***Existing knowledge***

Parents who had experienced risky situations, encourage their own children to participate more in risky play activities with the aim of concentrating on the advantages rather than being

overprotective (Niehues et al., 2015). A professional adult must handle serious situations at work with a composed attitude, and experiences to risky conditions prepare one for such work (Kvalnes, 2017). Parents' attitudes to risk, and the way in which these are conveyed, are likely to have a significant impact on their children and the confidence with which they engage with the world (Madge & Baker, 2007).

### ***Findings and interpretations***

Four parents mentioned that both children and their own risky play experiences are very similar. A parent shared that risk-taking as a child has an impact on him as an adult. He said, "*Risky play played a big part in my upbringing, cultivating self-confidence, building self-image and building trust in my own abilities. I understand risk much better, which enables me to coach and pass on risk analysis abilities*". Parents indicated that when children are engaged in risky situations during childhood, it seems to prepare them for handling risks in adulthood.

***Sub-theme 4:*** Risky play in the past versus risky play now

### ***Existing knowledge***

Sociologists have shown how parents have shifted their perceptions in a way that children in modern society are viewed as precious and requiring all parents' time and attention (Einboden et al., 2013). Society's current trend appears to be that children most of the time participate in structured activities, organised by parents, and this may lead to the "domesticated" child (Prince et al., 2013:183). In the past children used to play in natural environments, but this has changed to children playing at home in their outdoor gardens (Sandseter et al., 2019). Parents stated that "nowadays mutual neighbourhood surveillance of children is no longer practised, unlike in previous generations" (Sandseter et al., 2019:13).

### ***Findings and interpretations***

Safety is a major concern and therefore, children have less freedom to play in the streets. Children are exposed to confined spaces in their gardens at home due to safety reasons.

Parents prevent their children from playing with neighbourhood children in the streets as they fear for children's safety. A parent mentioned that "*...the world has changed and it's a dangerous place and we try to protect our children ...*" adding that, children "*had more freedom and less dangers involving the people around them ...*".

### ***Theme 2: Children's risky play and the advantages thereof***

***Sub-themes 5:*** Risky play in the ELC environment

### ***Existing knowledge***

Children are exposed to risky play opportunities and experiences when teachers have positive attitudes and show interest and enjoyment of physical play and the outdoor environment (Stephenson, 2003). Environmental features for instance "wood planks, tires, and plastic crates" are optimised by children and should be integrated within the ECE centres to allow children the chances to partake in risky play (Obee et al., 2020). Experiences with particular kinds of risk assist children in learning how to deal with those risks (Gill, 2007). Both children and preschool teachers' experiences in ECE settings are associated with beneficial risk-taking (Cook et al., 2019).

### ***Findings and interpretations***

All of the teachers provided examples of how children are taking risks at the ELCs. It became clear that all teacher participants have positive attitudes towards children's risky play exposure and supporting them therein. Various apparatus is visible at all the ELCs that provide children with possibilities to participate in risky play. All the teachers agreed that taking risks in play is beneficial for children to learn certain skills and how to handle risks. They mentioned that it is pleasing when children master risky play activities that were previously too challenging.

The teachers mentioned that children who engage in risky play and get hurt, learn from the particular experience.

**Sub-themes 6:** Risky play in the home environment

### ***Existing knowledge***

Parents feel accountable to protect their children from getting hurt and at the same time encourage the development of skills and abilities (Obbe et al., 2021). Parents are stuck between keeping children safe and wanting to support them in taking risks hence developing independence and confidence (McFarland & Laird, 2018). Parents' attempt to afford children a safe outdoor environment under adult supervision is the main aim to keep children from getting hurt (Miller & Azar, 2019; Morrongiello, 2018).

### ***Findings and interpretations***

Parents experience many feelings of fear and anxiety but also feelings of proudness when they see their children taking risks. It became clear that all of the parents support and motivate children to partake in risky play at home. However, fear is prevalent in the responses of all seven parents. Parents revealed that they do allow more risky play, but because they are still young the children preferable need to play under supervision.

**Sub-themes 7:** Advantages of risky play engagement for children's holistic development.

### ***Existing knowledge***

“For ‘taking risks’ we should say ‘making mistakes’ and being able to make mistakes at a young age is vitally important in terms of learning and development” (Armitage, 2011:1). Play have various instant advantages, such as fine and gross motor development, as well as long-term advantages, in providing children with “a sense of morality” (Goldstein, 2012:5).

Risk-taking refers to “actions with a probability for undesirable results or negative consequences” and explains that the ability to evade extreme risks, to recognise own competencies and understand various circumstances, are imperative for children's development (Kleppe et al., 2017). Exposure to risky situations in early childhood is one of the unintentional advantages which construct a basis to understand and deal with risks

(Kvalnes, 2017). Risky play is beneficial for children's overall health, well-being and development (Goldstein, 2012; Little & Eager, 2010; Mardell et al., 2016).

The advantage of risky play for children's physical development and perceptual-motor skills and the process children gain experience in handling dangerous activities (Brussoni et al., 2012). Being exposed to risk-taking in play seems to have an increase in the development of children's self-confidence, risk management strategies, self-regulation skills and social behaviour (Brussoni et al., 2015b; Sandseter & Kennair, 2011).

### ***Findings and interpretations***

One of the main reasons why both parents and teachers support risky play is because of the advantages it holds for children's development. Teachers agreed that promoting children's gross motor skills are essential. Teachers emphasised that children's confidence was identified to be promoted during risky play participation. When children participate in a risky activity based on experience, the previous participation contributes to the current activity by being prepared for it. In this way, the past spreads to the present and the future. All of the parents and teachers underscored the importance of risky play to develop various skills, including physical, emotional, cognitive and social.

Teachers noted that children learn from experience. By taking risks, they learn about their own abilities, as well as how to handle specific risky situations in the future.

Teachers felt that skills such as: creativity, making plans, taking risks, handling severe challenges, planning, wider exploration, being exposed to new experiences, taking chances, learning to break rules and decision making and accepting responsibility, need to be promoted during risky play.

***Theme 3: Constraints affecting children's opportunities to participate in risky play and the concerns thereof***

**Sub-themes 8:** Constraints on children's risky play opportunities at the ELC

#### **Existing knowledge**

"Parents' common concern about risky plays specifically is the possibility of being injured. Therefore, they expect schools and teachers to provide safe environments for their children" (Keles & Yurt, 2020:440). Teachers indicated that "a lack of suitable outdoor space as the main factor hindering children's outdoor play" (Kalpogianni, 2019:168). Overprotective parents hamper children's healthy development when they limit them to take risks (Kvalnes, 2017).

#### **Findings and interpretations**

The majority of teachers stated that parents' views and overprotective tendencies are the key reason for restricting children's risky play at the ELCs. Teachers indicated that they experience parents as the main constraint to implementing risky play at the ELC. Understandably, parents are concerned about their children's safety and in the process put a lot of pressure on the ELC. Teachers indicated that the playground and the amount of space available can be influential as it limits children's risky play opportunities.

Three teachers mentioned that parents' overprotective mindsets limit them to implement risky play at the various ELCs.

**Sub-themes 9:** Constraints on children's risky play opportunities at home

#### **Existing knowledge**

Children's exposure to screen time has increased immensely and seems to be one of the major competitors to children's participation in outdoor play (Skar et al., 2016). The increase of urbanisation and parents' uncertainties and fears for safety, restricts children's freedom and engagement to outdoor risky situations (Nature Play South

Australia, 2017). Many children do not have the privilege to be exposed to an outdoor environment where they can socialise with peers (Kvalnes, 2017). Parents' attitudes have changed in a way

that safety and keeping children away from hazards and harm are the main focus (Kvalnes, 2017).

#### **Findings and interpretations**

Parents belief that technology has an impact on children's playful activities. One parent shared that is he encourages play to be similar to what he has experienced as a child, limiting technology". Parents acknowledged that children do not get enough opportunities to play and ride bicycles in the streets and socialise with neighbourhood children. Two parents mentioned that children are living in confined spaces. It was mentioned by a parent,

*"We played outside in the streets...kids are now confined to a small yard, with little or no trees or garden, playparks are unsafe..."*. Parents indicated that their children like taking risks but that it is them that prevents them. Parents' beliefs and attitudes impact children's risky play participation.

**Sub-themes 10:** Concerns if children do not receive opportunities to engage in risky play  
**Existing knowledge**

Mental or physical health problems, as well as obesity, could become a reality if children are restricted from taking risks in play (Brussoni et al., 2012). Less time spend outdoors, are more likely to have an impact on cognitive development (Wyver, 2017).

Children who are completely removed from any risk-taking opportunities are more likely to develop complications such as a lack of independence and a decline in learning, awareness and decision-making skills (Eager & Little, 2011). "Injury prevention plays a key role in keeping children safe, but emerging research suggests that imposing too many restrictions on children's outdoor risky play hinders their development" (Brussoni et al., 2012:3134). Limiting children's risk-taking activities are likely to result in a risk-averse society where people do not have the abilities to deal with daily events, as well as children exploring more dangerous activities in uncontrolled ways (Sandseter, 2011). Constructing risky play opportunities in early childhood affords children with the necessary

skills to identify possible risks, evaluate the severity of that risk and problem-solving strategies for justifying it (Brussoni et al., 2012).

### ***Findings and interpretations***

Physical problems are evident when children do not take risks in their play. One teacher shared an observation where a child is only interested in her cell phone and not in any of the kinaesthetic activities. The child does not attempt to take any risks. Teachers emphasised the problematic effect of non-exposure to risky play activities which creates great concern. As for academic performance one teacher mentioned that when children reach higher grades, they might find it difficult to complete tests within the given timeframe.

It was further highlighted that children sometimes find it challenging to choose between what is right and wrong when taking risks in play. *“Won’t be able to know that okay, wrong or right, even if I am jumping, I must not jump too high”*. When children are not experienced, they will find it challenging to make such decisions.

New ideas have emerged from the themes and sub-themes after completing data generation and analysis. Two teachers continually mentioned that is imperative for teachers to be aware of children’s capabilities when allowing, supporting and encouraging risky play at the ELC. Teachers from two ELC’s highlighted that there is a vast difference concerning children’s skill levels and capabilities at the beginning of the year compared to the middle and end of the year. At the beginning of the year when children return to school, entering a new phase/class/age group, they are less experienced risk-takers. As time goes by and children are exposed to risky activities in the outdoors, guided by the teachers, they learn how take-on risks and in the process become more experienced in their risky play engagement.

Teachers pointed out that there is a difference between the various age groups parents find themselves in. This means that the younger generation parents were not as exposed to risk-taking as older parents and therefore they are more overprotective and allowing less risk-taking than parents in the older age groups.

All teachers felt that the Covid-19 pandemic had a definite impact on children. They shed light on two different aspects concerning Covid-19. Before the pandemic, children from all age groups used to play together on the playground and the older ones were instructed to be careful of the younger children, hence limiting them to do certain risky play activities. However, this has changed due to social distancing. During the Covid-19 pandemic children were separated according to the various age groups and rotating between the various areas on the playground. As a result, the four- to five-year-old children were less restricted to take risks and have more freedom to explore and participate in risky activities. Teachers mentioned that the Covid-19 pandemic had an impact on the development of some children. During lockdown when ELCs were closed, some children were not actively involved in risky play at home. This was evident as children started returning to the ELC.

In conclusion, the attitudes of both parents and teachers do impact their decisions to either permit or restrict children’s risky play. This finding corroborates with existing literature, that parents and teachers’ attitudes and personal feelings regarding risk taking have an effect on children’s risky play participation (Couper, 2011; Little et al., 2011, Little et al., 2012; Obee et al., 2021; Stephenson, 2003).

Positive attitudes pertaining to children’s risky play were apparent at the three ELC and therefore risky play was permitted.

## **ACKNOWLEDGEMENTS**

### ***Competing interests***

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this research article.

### ***Ethical considerations***

Ethical approval (EDU063/20) was obtained from the Research Ethics Committee of University of Pretoria (Faculty of Education) on the 30<sup>th</sup> of June 2020.



### Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

### Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

### REFERENCES

- [1] Armitage, M. (2011). Risky play is not a category—it's what children do. *ChildLinks. Children's Risky Play*, 3, 11-14.
- [2] Brussoni, M., Gibbons, R., Gray, C., Ishikawa, T., Sandseter, E.B.H., Bienenstock, A., Chabot, G., Fuselli, P., Herrington, S., Janssen, I., Pickett, W., Power, M., Stanger, N., Sampson, M. & Tremblay, M.S. (2015b). What is the relationship between risky outdoor play and health in children? A systematic review. *International Journal of Environmental Research and Public Health*, 12(6), 6423-6454.
- [3] Brussoni, M., Olsen, L.L., Pike, I. & Sleet, D.A.(2012). Risky play and children's safety: balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, 9(9), 3134-3148.
- [4] Cooke, M., Bathurst, N. S. W., Wong, A. S., Ryde, N., & Australia, F. P. (2019). Towards a re-conceptualisation of risk in early childhood education. *Childhood*, 22(1), 5-19.
- [5] Couper, L. (2011). Putting Play Back into the Playground. *Kairaranga*, 12(1), 37-42. <https://doi.org/10.54322/kairaranga.v12i1.151>
- [6] Creswell, J.W. (2014). *Research design: qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE.
- [7] Eager, D. & Little, H. 2011. *Risk deficit disorder*. In: *Proceeding of IPWEA International Public Works Conference*. Canberra, Australia.
- [8] Einboden, R., Rudge, T., & Varcoe, C. (2013). Producing children in the 21st century: A critical discourse analysis of the science and techniques of monitoring early child development. *Health: 17*(6), 549-566. <https://doi.org/10.1177/1363459312472081>
- [9] Gill, T. (2007). No fear. *Growing up in risk averse society*. Londyn: Calouste Gulbenkian Foundation.
- [10] Given, L.M. (2008). *The SAGE encyclopaedia of qualitative research methods*. Thousand Oaks, CA: SAGE.
- [11] Goldstein, J. (2012). *Play in children's development, health and well-being*. Brussels: Toy Industries of Europe.
- [12] Jones, E.P. & Mistry, J. (2019). The sociocultural process of child development. In Brown, C.P., McMullen M.B. & File N. (Eds.) *The Wiley handbook of early childhood care and education* (pp. 59-74). Hoboken, NJ: Wiley.
- [13] Kalpogianni, D. E. (2019). Why are the children not outdoors? Factors supporting and hindering outdoor play in Greek public day-care centres. *International Journal of Play*, 8(2), 155-173. <https://doi.org/10.1080/21594937.2019.1643979>
- [14] Keleş, S., & Yurt, Ö. (2020). “We Enjoyed Our Childhood to The Fullest”: Early Childhood Teachers' Risky Play Memories and Risky Play Managements. *Yaşadıkça Eğitim*, 34(2), 438-450.
- [15] Kleppe, R., Melhuish, E., & Sandseter, E. B. H. (2017). Identifying and characterizing risky play in the age one-to-three years. *European Early Childhood Education Research Journal*, 25(3), 370-385. <https://doi.org/10.1080/1350293X.2017.1308163>
- [16] Kvalnes, Ø. 2017. *Fallibility at work: rethinking excellence and error in organizations*. Norway: Palgrave Macmillan.
- [17] Helen Little & David Eager (2010) Risk, challenge and safety: implications for play quality and playground design, *European Early Childhood Education Research*

- Journal, 18:(4), 497-513.  
<https://doi.org/10.1080/1350293X.2010.525949>
- [18] Little, H., Sandseter, E. B. H., & Wyver, S. (2012). Early Childhood Teachers' Beliefs about Children's Risky Play in Australia and Norway. *Contemporary Issues in Early Childhood*, 13(4), 300–316. <https://doi.org/10.2304/ciec.2012.13.4.300>
- [19] Little, H., Wyver, S. & 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), 113-131. <https://doi.org/10.1080/1350293X.2011.548959>
- [20] Madge, N. & Barker, J. (2007) Risk and childhood. <http://www.actoea.org.au>
- [21] Mardell, B., Wilson, D., Ryan, J., Ertel, K., Krechevsky, M., & Baker, M. (2016). Towards a pedagogy of play. *Cambridge, MA: Harvard Graduate School of Education*.
- [22] McFarland, L., & Laird, S. G. (2018). Parents' and early childhood educators' attitudes and practices in relation to children's outdoor risky play. *Early Childhood Education Journal*, 46, 159-168. <https://doi.org/10.1007/s10643-017-0856-8>
- [23] Miller, E.A. & Azar, S.T. (2019). Additive contributions of social information processing and economic stress to maltreatment risk in disadvantaged rural fathers. *Child Maltreatment*, 24(2), 69-180. <https://doi.org/10.1177/1077559518815616>
- [24] Morrongiello, B.A. (2018). Preventing unintentional injuries to young children in the home: understanding and influencing parents' safety practices. *Child Development Perspectives*, 12(4), 217-222. <https://doi.org/10.1111/cdep.12287>
- [25] Nature Play South Australia. (2017). Learning outdoors benefits/risks. Department of education and child development. Government of South Australia.
- [26] Niehues, A.N., Bundy, A., Broom, A. & Tranter, P. (2015). Parents' perceptions of risk and the influence on children's everyday activities. *Journal of Child and Family Studies*, 24(1), 809-820. <https://doi.org/10.1007/s10826-013-9891-2>
- [27] Nieuwenhuis, J. (2016b). Qualitative research designs and data gathering techniques.
- [28] In Maree, K. (Ed.) *First steps in research* (pp. 82-93). Pretoria: Van Schaik.
- [29] Obee, P., Sandseter, E.B.H., Gerlach, A. & Harper, N.J. 2021. Lessons learned from
- [30] Norway on risky play in early childhood education and care (ECEC). *Early Childhood Education Journal*, 49, 99-109. <https://doi.org/10.1007/s10643-020-01044-6>
- [32] Obee, P., Sandseter, E.B.H. & Harper, N.J. (2020). Children's use of environmental features affording risky play in early childhood education and care. *Early Child Development and Care*, (1), 1-19. <https://doi.org/10.1080/03004430.2020.1726904>
- [33] Patten, M.L. & Galvan, M.C. (2019). *Proposing empirical research: a guide to the fundamentals*, New York: Routledge.
- [34] Prince, H., Allin, L., Sandseter, E.B.H. & Årlemalm-Hagsér, E. (2013). Outdoor play and learning in early childhood from different cultural perspectives. *Journal of Adventure Education & Outdoor Learning*, 13(3), 183-188. <https://doi.org/10.1080/14729679.2013.813745>
- [35] Rogoff, B. (2008). Observing sociocultural activity on three planes: participatory appropriation, guided participation, and apprenticeship. In: Murphy, P., Hall, K. & Soler, J. (Eds.) *Pedagogy and practice: culture and identities*, (pp. 58-74). Milton Keynes, UK: The Open University.
- [36] Rule, P. & John, V. (2011). *Your guide to case study research*. Pretoria: Van Schaik.
- [37] Sandseter, E.B.H. (2009b). Characteristics of risky play. *Journal of Adventure Education and Outdoor Learning*, 9(1), 3-21.
- [38] Sandseter, E. B. H., & Kennair, L. E. O. (2011). Children's Risky Play from an Evolutionary Perspective: The Anti-Phobic Effects of Thrilling

- Experiences. *Evolutionary Psychology*, 9(2). <https://doi.org/10.1177/147470491100900212>
- [39] Sandseter, E.B.H., Cordovil, R., Hagen, T.L. & 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), 111-129. <https://doi.org/10.1080/13575279.2019.1685461>
- [40] Seabi, J. (2012). Research designs and data collection techniques. In: Maree, K. (Ed.) *Complete your thesis or dissertation successfully: Practical guidelines*. (pp. 81-89). CapeTown: Juta.
- [41] Skar, M., Wold, L.C., Gundersen, V. & O'Brien, L. (2016). Why do children not play in nearby nature? Results from a Norwegian survey. *Journal of Adventure Education and Outdoor Learning*, 16(3), 239-255. <https://doi.org/10.1080/14729679.2016.1140587>
- [42] Stephenson, A. (2003). Physical risk-taking: dangerous or endangered? *Early Years*,
- [43] 23(1), 35-43. <https://doi.org/10.1080/0957514032000045573>
- [44] Wyver, S. (2017). Outdoor play and cognitive development. In Waller, T., ÅrlemalmHagsér, E., Sandseter, E.B.H., Lee-Hammond, L. & Lekies, K. (Eds.) *The SAGE handbook of outdoor play and learning* (pp 88-89). Sage.
- [45] Yin, R. K. (2015). *Qualitative Research from Start to Finish*. Guilford Publications.