

Parents' and Early Childhood Educators' Attitudes and Practices in Relation to Children's Outdoor Risky Play

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Abstract This study contributes to the understanding of early childhood educators' and parents' attitudes and practices in relation to outdoor risky play for children. This study included 26 early childhood educators and 112 parents in rural and metropolitan areas of Australia and the United States. Participants completed an online survey about their perspectives and practices related to the provision of opportunities for children to engage in outdoor risky play. Questions also investigated reasons that prevented participants from providing such opportunities for children. Findings indicated that most educators thought it was important for children to be provided opportunities for outdoor risky play and did provide appropriate activities. Types of outdoor risky play opportunities fell into the categories of supporting large motor skills, supporting free exploration of the environment, and supporting assessment of risk. However, educators located in Australia rated outdoor risky play opportunities as significantly more important compared to educators in the US. Many parents also felt outdoor risky play was important and provided appropriate activities. Opportunities provided by parents fell into the same categories as educators, with additional features of nervousness and a desire to avoid hovering. Many parents identified the young age of the child and safety

concerns as barriers. Implications for research and practice are discussed.

Keywords Outdoor play · Early childhood · Risky play · Teacher beliefs · Parent beliefs

Literature Review

Introduction

Most young children seek out and enjoy challenging outdoor play (Stephenson 2003). Risky play can be defined as a thrilling and exciting activity that includes some risk of injury. Often, risky play provides children with opportunities to challenge themselves, test limits, explore boundaries and learn to make decisions about injury and risk (Little and Wyver 2008; Sandseter 2007). Some “risky” activities include climbing, jumping, balancing, hanging upside down and sliding (Tovey 2010). Sandseter (2007) suggests that common themes in risky play are children's sense of excitement, exhilaration, a desire to overcome fear and feeling “out of control”.

There is little doubt that children's outdoor risky play is beneficial for children (Little and Wyver 2008). However, there are various factors that diminish children's opportunities to take part in outdoor risky play. In today's increasingly regulated and controlled society, safety concerns have led to reduced opportunities for such play (Tovey 2010). Although children's risk of injury may be reduced by these actions, there may be long-term risks associated with lack of risky play opportunities, such as diminished psychological well-being (Tranter 2005) and other detrimental effects of inactivity (Little and Wyver 2008). In fact, today's children in Western cultures spend more time watching

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television and being indoors than they spend being active in outdoor environments (McCurdy et al. 2010).

Morrongiello and Lasenby-Lessard (2007) propose a model which emphasises individual, parent/family factors, social/situational factors and macro-level factors as determinants of children's decision making in risky situations. Children's opportunities for outdoor risky play occur in a variety of contexts, including early childhood education (ECE) environments, at home, and in the community (Little et al. 2011). Thus, the adults in these contexts act as filters for children's available opportunities to engage in outdoor risky play. Although research indicates that it is important for young children to develop independence and learn to manage risks, adults' desires to keep children safe has restricted the development of these skills (Lester and Russell 2008). Thus, it is important to examine adults' attitudes and practices in relation to providing children outdoor risky play opportunities. Although some research on this topic does exist (Cevher-Kalburan and Ivrendi 2016; Little et al. 2011), the current study builds on this research and includes a sample of early childhood educators and parents in two countries (the US and Australia) in both rural and metropolitan areas and focuses on children under the age of six. Other research has described and categorised the types of risky play that young children engage in (Sandseter 2007). However, in the current study we specifically examine the opportunities provided by adults in relation to risky play. The aim of the current study is to build on previous research and examine early childhood educators' and parents' attitudes and practices related to children's outdoor risky play. In doing so, we also examine the barriers that impede these opportunities and examine possible cultural differences.

Benefits of Risky Play

Early childhood is a time for children to develop autonomy (Lester and Russell 2008). Importantly, risky play gives children opportunities to develop decision-making skills about what risks they are capable of taking. In doing so, children learn to assess risks in particular situations, extend their limits and learn new life skills (Tovey 2010). In approaching risky play situations, children may sometimes succeed and sometimes fail. Failures, however can allow children to work out different ways of doing things in the future (Tovey 2010). This, in turn, develops children's sense of motivation to accomplish goals and master new challenges (Stephenson 2003). Other benefits of risky play include feelings of fun, excitement, pride and achievement (Closter and Gleeve 2008). The large and fine motor movements that children practice in risky play are also important for the development of balance, coordination and body awareness. Children who do not have ample opportunities

to engage in risky play may feel uncomfortable in their own physical abilities, have poor balance and develop a fear of movement (Greenland 2010). Given the multiple benefits of outdoor risky play, it is important to understand more about the barriers which can diminish these opportunities for children. Two important contexts where young children spend a great deal of time are the ECE setting and the home environment (Little et al. 2011).

ECE Settings

In Australia, the majority of children between the ages of 3 and 5 years attend some form of ECE setting, and rates of children under the age of three in formal ECE care is increasing (Baxter 2015). In the US, the rates of attendance in ECE settings are similar (Child Trends 2016). Greenfield (2003) argues that ECE settings play an important role in providing young children with opportunities to safely take a variety of risks and extend their skills and capabilities. Such environments can empower children to construct their own learning and develop confidence and resourcefulness [Department of Education, Employment and Workplace Training (DEEWR) 2009]. In fact, the early years learning framework (EYLF), the national early childhood curriculum document in Australia, states that children can reach the outcome "Children have a strong sense of identity" by taking considered risk in their decision making and learning to cope with the unexpected (DEEWR 2009). Although the EYLF specifically states the importance of early risk-taking, there is no mention of this in the national curriculum document for the US, developmentally appropriate practice (DAP) (Copple and Bredekamp 2009).

Despite the important role of ECE settings in facilitating children's risky play, opportunities for this type of play are often controlled by EC educators and determined by teacher beliefs (Little et al. 2011). For example, Stephenson (2003) found that when educators' personal attitudes about risky play were more positive and when they enjoyed being outdoors themselves, they were more likely to support children's risky play. Sandseter (2007) also found that when educators held a more positive view about the benefits of risky play, they were not likely to prevent risky play on grounds of possible injury alone. Additionally, Waters and Begley (2007) found that educators at a Forest School were more likely to support children's risky play compared to educators at a traditional preschool.

It is indeed difficult for EC educators to balance children's safety with opportunities for outdoor risky play. Educators must balance safety regulations and the possibility of children's injuries with opportunities for children to take risks (Sandseter 2011). Evidence suggests that, due to the growing culture of litigation, educators are concerned about being held liable for injuries to children in their care

(New et al. 2005). Educators may have legitimate concerns over injuries and want to avoid taking the blame for accidents (Tovey 2010). However, educators may often put restrictions on children's play based on their own perception of what is risky or dangerous, rather than assessing the children's capabilities of managing risks (Sandseter 2011). This perception may lead to putting controls on outdoor activities that they perceive as risky, which may lead to children feeling disempowered (Stan and Humberstone 2011).

In order to make risky outdoor play available to children in ECE settings, it is necessary to create a well supervised and supportive environment where the benefits of risky play can be balanced by the risk of injury. In doing so, EC educators must recognise the benefits of risky play and use their own professional judgement to create opportunities that are appropriate for the children and families at the setting. Risky play opportunities must also be set up in a way that is age appropriate (Richardson 2013). However, accidents do happen even in the most well-planned and supervised setting, and it is important for educators, as well as children, to learn to deal with them (Richardson 2013). As Warden (2011, p. 13) suggests, "The adult role is to remove hazards that the children do not see, not the risks within the play." Clearly, EC educators have a role to play in the provision of outdoor risky play for children. Importantly, however, so do parents. Educators and parents must work together to ensure appropriate opportunities are provided for children.

Parental Attitudes

There is no doubt that parents play an important role in children's socialization in early childhood (Backett-Milburn and Harden 2004). Research has found that parents' attitudes about risky play can influence children's engagement in physical play (Sallis et al. 2000) and access to risky play (Little et al. 2011). Research finds that parents' safety concerns for their children act as barriers which prevent their children's participation in particular sports and physical activities (Boufous et al. 2004). Other studies have found that parental beliefs about neighbourhood safety impact children's opportunities to engage in independent physical activities (Soori and Bhopal 2002; Weir et al. 2006). Another study based in Australia found that, although parents had positive memories of unsupervised and unstructured play outdoors in their own childhoods, they were not likely to provide such experiences for their own children (Gull-Laird et al. 2014).

Not surprisingly, parents report that they have, on the one hand, a socially assigned responsibility to protect their children from harm but, on the other hand, an obligation to encourage appropriate risk taking (Kelley et al. 1998).

Lewis et al. (2004) and Little et al. (2011) report that most parents believe that their children learn from injury experiences. Thus it appears that parents are pulled in two different directions, wanting to encourage independence and competence in their children, but also wanting to keep their children safe. Parents do indeed have an important role in either facilitating or hindering children's exploration of the environment and engagement in risk taking situations (Chak 2007). Although studies have identified parents as important socializers of children in relation to risky play, most of the research focuses on older children, with few studies focusing on younger children (Little et al. 2011). The current study focuses on parents with children under the age of six.

Methodology

Participants

A total of 26 educators employed in early childhood education centres (ECEC) in rural and metropolitan areas of Australia and the United States participated in the study. Seven educators from one ECEC in a rural town in New South Wales, Australia (population of approximately 50,000) were included. This setting was a long day care centre for children aged 6 weeks to 6 years. Seven educators from one ECEC in a metropolitan city in New South Wales, Australia (population of approximately 4,800,000) were included. This setting was a long day care setting for children aged 6 weeks to 6 years. Of the educators from Australia, 24% had advanced an advanced certificate, 62% had a Bachelor's degree, 7% had a Master's degree and 7% had a Ph.D.

The educators from the US included ten educators from one ECEC in a rural town in TX, USA (population of approximately 33,000) and two educators from one of three ECECs in a metropolitan city in TX, USA (population of approximately 1,000,000). Of the educators from the US 42% had a Bachelor's degree and 58% completed graduate school.

The age break down for all educators from the four sites combined was; 26–35 years (46%), 36–50 years (37.5%), and 51–65 years (16.5%). The majority of educators worked with 0–2 year olds (71%), followed by 3–5 year olds (62.5%) and school aged children (12%). Due to the percentages not adding up to 100%, it is assumed that many of the educators worked in both 0–2 and 3–5 rooms.

A total of 121 parents participated in the study. All parents had children enrolled in one of the above mentioned early childhood centres. Thirty percent of the parents resided in Australia and 70% resided in the US. The parent sample was comprised of 19 from a rural town in New South Wales, Australia; 20 from a metropolitan city

in New South Wales, Australia; nine from a rural town in TX, USA; and 73 from a metropolitan city in TX, USA. Of the parents in Australia, 11% completed Senior High School, 3% completed a trade qualification, 17% completed an advanced Certificate, 42% completed a Bachelor degree, 17% completed a Master's degree and 11% completed a Ph.D. Of the parents in the US, 2% completed some college, 28% graduated from college, 11% completed some graduate school and 59% completed graduate school. The age break down for all the parents combined was; 21–35 years (40%), 36–50 years (60%). Fifty-two percent of parents had one child, 41% had two children, 4% had three children and 3% had four children, with 186 children reported total. Children of these parents ranged in age from 1 month to 19 years old, with 152 (82%) aged 5 and under. Nine children (5%) were under the age of one, 19 children (10%) were one year old, 41 children (22%) were 2 years old, 40 children (22%) were 3 years old, 27 children (15%) were 4 years old, and 15 children (9%) were five years old. 43 children (23%) were aged 6 or over, with most of those (24, 13% of total) were between 6 and 8. Ages listed by parents ranged from 2 months old to 17 years old for older siblings of younger children.

Procedure

Directors of the ECECs involved in the study were first contacted by one of the researchers to inform them about the research and to see if they would like to participate. Once Directors agreed to participate, they emailed enrolled families and educators an information sheet, consent information and a link to the anonymous online survey. A reminder email was sent out 2 weeks after the initial email. Participants could choose to participate by clicking on the survey link and completing the survey.

This research was approved by the relevant University ethics committee. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The survey was anonymous and participants could only be identified by their post code or zip code in order to determine the country and area in which they lived. The centre Directors were not aware of which parents or educators agreed to participate.

Measures

Parent Survey

An online survey was used to collect demographic information and information related to parents' attitudes and

practices in relation to their children's experiences in nature and risky play. The survey contained a range of both qualitative and quantitative questions. Demographic questions included age, education level, zip code or post code, and number and ages of children. Other quantitative questions included in the online survey were taken from the inclusion of nature in self scale (Schultz 2002) and the nature relatedness (NR) scale-short form (Nisbet et al. 2009; Nisbet and Zelenski 2013). The inclusion of nature in the self (INS) scale (Schultz 2001, 2002) was one of the first scales used to measure connection to nature. This scale has been widely used and evaluated and has high reliability (Bruni et al. 2008; Liefänder et al. 2012; Schultz 2002). The NR scale aims to create a deep understanding of the "affective, cognitive, and physical relationship individuals have with the natural world" (Nisbet et al. 2009). The responses to these scales were used to describe the sample in relation to their own feelings of being connected to nature. Sample questions included, "Did you engage in gardening activities as a child?", "How connected to nature do you feel?", and "What is your ideal vacation spot?"

Other qualitative survey questions were created by the researchers to gain a more in depth understanding of how parents thought about their own relationship with nature and their feelings and practices around risk taking in play. Qualitative questions focused on what "nature" meant to parents on a personal level, what structured and unstructured opportunities parents provided for children in nature, parental attitudes about and practices involving opportunities for children's risky play outdoors, and barriers and supports for providing children unsupervised experiences in nature. Sample questions included, "Describe some of the ways you create opportunities for your child to take risks outdoors", "What opportunities do you allow for your children to explore nature?" and "Explain why you feel that risk taking is not important for children (if they indicated this)".

Educator Survey

A separate online survey was created for educators. The same demographic questions were the same as for the parents, except educators were asked about the age of children they work with, rather than their own children, and their years of experience in the early childhood field. Questions from the Inclusion of Nature in Self Scale (Schultz 2002) and the NR scale-short form (Nisbet et al. 2009; Nisbet and Zelenski 2013) were also included. Qualitative questions were similar to those asked in the parent survey, except that they focused on the children with whom educators worked, and their classroom practices. One question, for example, was "Since you indicated that risk-taking is important for children, please describe some of the ways you create

opportunities for outdoor risky play for the children in your classroom”.

Data Analyses

A mixed method approach was used to gather and analyse the data in relation to the research aims. Quantitative and qualitative survey questions were included. Quantitative questions were used to broadly describe the sample, whereas, qualitative questions were used to gain in depth understandings about participants’ attitudes and practices around children’s outdoor risky play. An interpretivist paradigm guided the qualitative analyses. Interpretivism seeks shared patterns of behaviours and acknowledges the human experience as a socially constructed reality (Mackenzie and Knipe 2006). Thus, the study describes social reality of parents’ and educators’ attitudes about children’s risky play. As such, this study was exploratory in nature and not focused on proving facts or universal truths (Creswell 2014).

Qualitative survey responses were analysed keeping in mind the aim of the study was to better understand educators’ and parents’ attitudes and practices related to supporting outdoor risky play for young children. First, analytic induction was used to develop the themes that emerged from the open-ended survey responses. Analytic induction is the ‘systematic examination of similarities between cases to develop concepts or ideas’ (Punch 2005, p. 196). Each researcher read the survey responses and took notes about prevalent themes in the responses. The researchers then met to discuss their initial notes and look for commonalities. The researchers made no attempt to influence the phenomenon under examination; however, it is recognised that, as with all research conducted within the interpretivist paradigm, the backgrounds and experiences of the researchers as educators may have an influence on the questions asked and interpretation of data. Acknowledging this, both researchers came to consensus about the final categories and characteristics in each category. Finally, participant quotes were used as examples to illustrate the themes and their characteristics.

Results

Educator Survey Responses

Descriptive statistics in relation to educators’ connection to nature are provided here as background on the sample. Most of the educators had planted or cared for indoor plants (77%), vegetable gardens (69%), trees (65%), and household pets (77%). Most of the educators indicated they had participated in gardening activities as a child

(73%) and as an adult (54%). All the educators who responded to the question ($n=24$) indicated that they have memories of spending meaningful time in nature as children. Educators were given the NR scale-short-form (Nisbet and Zelenski 2013), and the mean for this sample was 4.03, $SD=0.61$, $n=22$. The educators were asked to use the INS Scale (Schultz 2002) to assess their current connection to nature as well as their relationship with nature as a child. The educators self-assessed their connections to nature as significantly higher when they were children (4.91, $SD=1.34$, $n=22$) than as adults (3.50, $SD=1.439$, $n=22$), $t=-6.560$, $p<.001$.

When asked how important it was for children to gain risk-taking experiences outdoors, 40% of educators said “very important”, 35% said “somewhat important”, 15% said “neither important nor unimportant” and 10% said “very unimportant”. For the two educators who stated that risky play was very unimportant, neither provided reasons explaining why they felt this way. When comparing responses between educators located in the US and in Australia, there were statistically significant differences. Australian educators reported that risky play for opportunities for children were more important (4.63, $SD=0.744$, $n=8$) than did educators in the US (3.50, $SD=1.314$, $n=12$), $t=1.980$, $p=.042$. There were no significant differences between educators in rural and metropolitan areas in relation to attitudes about risky play. Pearson correlations indicated that there were no significant relations between educators’ current or childhood INS scores and their current attitudes about the importance of risky play for children.

Three themes were identified from the qualitative survey responses in relation to educators’ provision of risky play opportunities. These themes were, *supporting large motor skills* (climbing, jumping, balancing, lifting), *supporting free exploration of the environment*, and *supporting assessments of risk*. These and examples illustrating the themes can be seen in Table 1. The two educators that stated that risky play was not important did not give feedback as to why they felt that way.

As can be seen in the educator quotes, the examples of risky play they give indicate age-appropriate opportunities for young children. In the examples given, adults maintain supervision of the activities, but allow children some freedom in making decisions and challenging themselves physically. These examples indicate that though the provision of risky play opportunities, educators are giving children a chance to develop their motor skills (*supporting large motor skills*), directly explore their environment (*supporting free exploration of the environment*) and develop their cognitive and self-regulation skills (*supporting assessments of risk*).

Table 1 Educators' provision of risky play opportunities

Categories	Examples
Supporting large motor skills	<p><i>Give children developmentally appropriate risk such as climbing up a developmentally appropriate climbing wall, jumping off a low block, and walking on a balance beam (Educator 3)</i></p> <p><i>Climbing, carrying large rocks (Educator 4)</i></p> <p><i>I offer building blocks for my children to build and climb on outside. The blocks are 1 foot squares about 6 inches high and they stack. I encourage my children to practice jumping. I encourage them to climb up the peg wall on our playground (Educator 8)</i></p> <p><i>They get a chance to develop gross motor skills at their own pace with balancing, climbing and hanging (Educator 21)</i></p>
Supporting free exploration of the environment	<p><i>Allowing children to explore freely, go barefoot, use their 5 senses to explore their world (Educator 2)</i></p> <p><i>I allow children to freely play with water any way they wish. We also allow children to use climbing equipment in an exploratory fashion (Educator 1)</i></p>
Supporting assessments of risk	<p><i>letting children get hurt to an extent letting them get up and dust themselves off trying out things like climbing trees and ladders and learning the risk for themselves so they are able to take care of themselves (Educator 9)</i></p> <p><i>On bushwalking excursions in particular, encouraging children to think about the challenges they are faced with and whether they feel confident to undertake the behaviour as well as thinking about the best and safest way to approach the risk (Educator 10)</i></p> <p><i>Instead of helping children by holding hands, help them to do risk assessment and identify how they feel about taking risks. There are many challenging opportunities for children we can create but what the most important thing is to be there to encourage, support and celebrate together with them (Educator 23)</i></p> <p><i>Adults are nearby but the children must be able to safely get themselves onto and off of equipment so they learn their own abilities and learn to problem solve when they are using their bodies (Educator 21)</i></p>

Parent Survey Responses

Descriptive statistics in relation to parents' connection to nature are provided here as background on the sample. Most of the parents had planted or cared for indoor plants (77%), vegetable gardens (66%), trees (55%), and household pets (79%). Most of the parents indicated they had participated in gardening activities as a child (77%) and as an adult (78%). Eighty-three percent of parents indicated that they have memories of spending meaningful time in nature as children. Parents were given the NR scale-short-form and the mean for this sample was 3.63, $SD=0.94$, $n=112$. Parents were asked to use the INS Scale to assess their current connection to nature as well as their relationship with nature as a child. Like the educators, the parents also self-assessed their connections to nature as significantly higher when they were children (4.30, $SD=1.687$, $n=111$) than as adults (3.68, $SD=1.301$, $n=111$), $t=-4.05$, $p<.001$.

When asked how important it was for children to gain risk-taking experiences outdoors, 40% of parents said "very important", 41% said "somewhat important", 12% said "neither important nor unimportant", 6.4% said "somewhat unimportant" and 0.9% said "very unimportant". Parents who stated that risk taking was not important for children were also asked to explain why they felt this way.

Comparing the mean responses to this question between parents in the US (mean=4.0) and in Australia (mean=4.3), there were no statistical differences. Comparisons of rural vs metropolitan parents revealed no statistical differences in attitudes about children's risky play. Pearson correlations indicated that there were no

significant relations between parents' current or childhood INS scores and their current attitudes about the importance of risky play for children.

Three themes were identified from the parents' qualitative survey responses in relation to examples of risky play. These themes included, *supporting large motor skills* (climbing, jumping, balancing, lifting), *supporting free exploration of the environment*, and *supporting assessments of risk*. These three categories also emerged in the educator responses. Categories and examples illustrating the themes can be seen in Table 2. Parents who did not think that outdoor risky play was important provided reasons for why they felt this way.

Similar to the themes and examples identified in the educator responses, parents also indicated that they provide their children age-appropriate opportunities to take risks outdoors, whilst providing supervision. The fact that the same themes emerged in the parent responses as the educator responses indicates that parents too are aware of the benefits of supporting children's cognitive, motor and sensory development through risky play.

However, although the same themes emerged, compared to educator examples, the examples from parents differed in that they had an emotional undertone to them. Interestingly, when discussing the ways in which they provide opportunities for their children to engage in outdoor risky play, parents often mentioned their own feelings and emotions about supporting risk taking. This was distinctly different from the educators' responses. Many parents discussed their own *nervousness* in the provision of risky play opportunities.

Table 2 Parents' provision of risky play opportunities

Categories	Examples
Supporting large motor skills	<p><i>Climbing structures so they learn their limitations, climbing down slopes of uneven ground so they can learn balance (Parent 96)</i></p> <p><i>By letting kids climb trees and large rocks. By letting them run a little bit ahead on the trail (Parent 44)</i></p> <p><i>We like our children to take physical risks by using playscapes and fine-tuning their motor skills (Parent 46)</i></p> <p><i>I am supportive of them climbing scary things (Parent 3)</i></p>
Supporting free exploration of the environment	<p><i>We let him explore, get dirty, fall down, etc. we are always close and keep him safe but want him to learn independence, consequences, and survival skills (Parent 63)</i></p> <p><i>Letting them explore nature on their own terms and not holding their hands through every experience (Parent 37)</i></p> <p><i>Allow her to explore as we watch, not telling her where to go or what to do but allowing her imagination and curiosity to guide her to the edge of the river bank and up the branch of a tree (Parent 66)</i></p> <p><i>I let them explore freely outside. They play with rocks and sticks and whatever they find (Parent 42)</i></p> <p><i>We encourage a lot of free and independent play and very few scheduled activities. We encourage her to try new things. We try to give her access to (relatively) safe spaces to explore and interact with nature (Parent 60)</i></p>
Supporting assessments of risk	<p><i>I think it is important to let them discover for themselves the environment, i.e.: they might touch a plant that is sharp/prickly, learn that they can fall if they step in slippery mud, etc.(Parent 110)</i></p> <p><i>We try to instil in our son that he can take chances but that he should listen to his own body when taking risks (Parent 105)</i></p> <p><i>She has gotten some bruises, scrapes, and bites this way, but I think it is important for these experiences to be hers so she learns how to explore and manage risk through her own instincts (Parent 89)</i></p> <p><i>A small bruise or cut now is worth it - it might prevent adult clumsiness, which is harder to treat (Parent 44)</i></p> <p><i>Sometimes, climbing is a risk but I allow her to move freely (without obvious imposed and imminent risk). This often leads to a fall or a slip, but this helps her know her limitations and how to navigate through space (Parent 9)</i></p> <p><i>I watch from a distance (I try my hardest not to tell her no) and try not put her in situations where she will get hurt, but where she will try something new and if she fails, she will try again (Parent 24)</i></p>

When we are hiking, I try to give my child leeway to explore as he wants (climbing, etc.), even if it makes me a little nervous. This can be difficult, because he is still small (age 3) and doesn't listen very well, so I have to balance keeping him safe and letting him explore (Parent 4)

This is hard to do, but I let him climb rocks and trees and limit the amount of "be carefuls" (Parent 22)

Unlike the educators, many parents also discussed the idea of trying to avoid *hovering* or "*helicopter parenting*." It seemed that parents were aware of the benefits of risk taking opportunities, however, they were aware that they needed to find an appropriate balance between "letting go" and being present to intervene, should something go wrong.

I try to avoid helicopter parenting, I take the approach of it's just water (as he lies down in a puddle) or it's just dirt (as he runs like crazy in the mud) etc. (Parent 99)

I don't completely 'let go' but do allow my child to explore her environment without hovering too much (Parent 96)

By not hovering over them when we are outdoors. Allowing the boys to climb trees and feel things in nature that they are curious about (Parent 16)

I try not to hover. If she wants to jump off of a tree stump or splash in a puddle, I let her do it. If she

wants to try to pet an insect or a lizard or a frog I let her go for it (Parent 82)

We allow the kids to explore and try not to hover or help when it's not necessary. We like for the kids to learn through trying (Parent 28)

Allowing them to climb trees and appropriate fences. Giving them freedom without me hovering (Parent 79)

I let them climb high and do daring things without hovering over them. I want them to take risks and get messy (Parent 42)

By letting them splash in rivers. By letting them construct precarious forts in the backyard. It's not always easy, but we try not to helicopter them (Parent 44)

Parents who did not regularly provide risky play opportunities to their children overwhelmingly reported that the child's young age and safety concerns were the reasons for this.

My daughter is 11 months old! I don't need to create any MORE opportunities for her to take risks. There are plenty of them already! (Parent 3)

I don't always do a good job of letting my children take risks. Climbing is the biggest opportunity, which is difficult for me since I am afraid of heights (Parent 35)

I think it's important, but at the same time it scares me to death. They climb trees, play in the creek, throw rocks and bang sticks. I could do more... (Parent 57)
I'm not sure that I do yet. She's only two (Parent 70)
I am more watchful than most, and do want the exploration, but not the injury (Parent 88)
My only concern about taking risks in nature is potential harm to my child (Parent 67)
It is a protective instinct. I don't want to see them get hurt (Parent 119)

These examples demonstrate the strong protective nature that parents have toward their children. Although parents understand that children need to take some calculated risks, they are quite concerned about protecting their children from harm. The possibility of injury seemed to be a big motivating factor in restricting children's opportunities for risky play. This is another interesting point of departure from the educators' responses. Whilst educators seemed to indicate that children could engage in age-appropriate risk-taking opportunities even though they were very young, some parents perhaps felt that there was a certain age restriction to such opportunities.

Discussion

The aim of the current study was to build on previous research about children's risk-taking in play and examine early childhood educators' and parents' attitudes and practices related to children's outdoor risky play. This study expands previous research by including participants in the US and Australia, and by focusing on the early years of childhood (under the age of six). According to the socialization model in relation to children's risk taking in play, a variety of factors including individual, parent/family factors, social/situational factors and macro-level factors, act as determinants of children's decision making in risky situations (Morrongiello and Lasenby-Lessard 2007). The current study focuses on two aspects of these socialization determinants; parent/family beliefs and practices and the social/situational factor, early childhood educator beliefs.

It was found that early childhood educators overwhelmingly believed that outdoor risky play was important for children. Educators also reported providing a wide variety of age-appropriate opportunities for outdoor risky play, which supported children's motor, cognitive and self-regulation skills, which is consistent with other research finding similar benefits of risky play (Little and Wyver 2008). This held true even when educators worked with children under the age of three. None of the educators reported on the barriers to providing such opportunities. These findings contrast other research suggesting that educators often fear

litigation and non-compliance with safety regulations (New et al. 2005). It seems that many of the educators are able to see the value in and provide appropriate opportunities for even the youngest children to engage in risk-taking.

Qualitative descriptions of risky play opportunities provided by educators were classified into three categories; opportunities that supported children's *large motor skills*, children's *free exploration of the environment*, and children's *assessment of risk*. Although other research has described and classified the types of children's outdoor play (Sandseter 2007), few have examined the issues from the perspective of early childhood educators' pedagogy in this area. Sandester's classifications of children's risky play were determined by observing children and interviewing children and educators. These categories do overlap with the types of risky play opportunities described by educators in our study. *Opportunities to support large motor skills* encompasses Sandester's two risky play categories of "climbing, jumping, balancing and hanging from heights" and "swinging, sliding, running, cycling, skiing at great speed". *Free exploration of the environment* has elements of Sandester's category of "exploring alone in unfamiliar environments where one can get lost and disappear". However, Sandester's categories of "using dangerous tools," "rough and tumble play" and "playing near dangerous elements" were not reported by educators in our study. Notably, educators in our study reported on the numerous risky outdoor play opportunities provided which are aimed at *supporting children to assess risks* themselves. Clearly these educators have a good understanding of the benefits of children's outdoor risky play.

Interestingly, when comparing quantitative responses of early childhood educators located in Australia with those in the US, it was found that those in Australia felt outdoor risky play for children was more important than did those located in the US. However, qualitative examples did not differ between educators in the two countries. Considering the lack of research on cross-cultural comparisons, it is difficult to say why this difference emerged. One possibility is that there is a stronger culture of fear of litigation in the US compared to Australia. In fact, the US has been identified as the number one litigious society in the world, whereas Australia does not make the top ten (Worldwide n.d.). Another possibility is that the national curriculum document in Australia, the EYLF, specifically identifies the importance of risk taking in relation to children's learning outcomes (DEEWR 2009). However, the national curriculum document in the US, DAP, does not refer specifically to the importance of children's risk taking (Copple and Bredekamp 2009).

Findings from parents reveal that, like educators, most felt that outdoor risky play was important for children. This finding supports other research in which parents report that

children learn important skills from risky play (Lewis et al. 2004). There were no differences in ratings of importance for parents located in the US and those in Australia. The qualitative examples of opportunities that parents provide for children's outdoor risky play could also be grouped into the same categories as educators' responses; *supporting large motor skills*, *supporting free exploration of the environment*, and *supporting assessment of risk*. However, a striking difference between educators' and parents' responses was that parents' responses included emotional undertones. Specifically, parents reported feeling nervous about children's outdoor risky play, and also tried to balance providing children these opportunities with avoiding hovering or helicopter parenting. This struggle between wanting their children to be independent and wanting to protect their children supports Kelley et al.'s. (1998) findings that parents feel a "socially assigned responsibility" to protect their children. Educators did not mention this in their responses. Clearly the emotional investment in keeping children safe is stronger for parents.

It was also found that for parents who said they did not allow children to take risks, safety concerns and young age were overwhelmingly the most reported reasons. This finding is supported by other research finding that parental safety concerns act as a barrier to children's physical and risky play (Boufous et al. 2004; Soori and Bhopal 2002; Weir et al. 2006). Eager and Little (2011) suggest that this phenomenon of children not being allowed to take risks, called risk deficit disorder (RDD), can have unintended negative consequences. In fact, studies find that when adults do allow children to take risks in their play, that children will attempt risky behaviour without adequate supervision, and will use playground equipment in unsafe ways to create challenge (Copeland et al. 2012; Sandseter 2011).

The present study does have some limitations. Firstly, a single item rating was used to assess parents' and educators' attitudes about risky play. Other more comprehensive instruments do exist, such as the attitudes towards risks (ATR) questionnaire. The ATR measure includes 10-item scales for beliefs in relation to physical and psychological risk (Franken et al. 1992). Also, we did not define "risky play" for the participants. It is possible that participants had varied understandings of this term. Additionally, the small number of educators in Australia and the United States included in this sample limits the generalizability to all early childhood educators in these contexts. Finally, the non-random selection of early childhood educators and parents also limits the generalizability of results.

Despite the limitations, this study contributes to the growing body of literature on children's outdoor risky play. This study revealed the various ways in which early childhood educators and parents support outdoor risky play for

young children. It seems that both educators and parents recognise the importance of risky play in relation to children developing their motor, cognitive and self-regulation skills. Notably, cultural differences were revealed in that educators in the US rated the importance of outdoor risky play as lower compared to educators in Australia. Future research should explore these differences further, in particular, to get a better sense of why these differences exist. It could be the case that national frameworks, particularly DAP for early childhood curriculum, need to be re-written to include specific statements about the provision of risky taking opportunities, as is evident in the Australian Early Years Learning Framework (DEEWR 2009). If indeed it is the case that educators in the US fear litigation in the case of child injury, structures and processes to overcome this must be enacted.

Also importantly, this study included educators and parents of very young children, many of whom were under the age of three. Outdoor risky play for children in this age group has not been a major focus of research. However, it is important to explore how educator and parental educator attitudes and practice influence risky play from a very young age. A better understanding of the facilitators and barriers of children's outdoor risky play will help to ensure that children can take part in opportunities that support their health and well-being.

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