

## Outdoor play

### Does avoiding the risks reduce the benefits?

Helen Little

Shirley Wyver

Institute of Early Childhood, Macquarie University

**ALTHOUGH THE TERM 'RISK-TAKING'** often has negative connotations, the reality is that the willingness to engage in some risky activities provides opportunities to learn new skills, try new behaviours and ultimately reach our potential. Challenge and risk, in particular during outdoor play, allows children to test the limits of their physical, intellectual and social development. This paper examines the current status of outdoor play in urbanised, Western societies such as Australia and provides a critical analysis of the literature to present an argument for the inclusion of positive risk-taking experiences in children's outdoor play, principally in the context of early childhood education. The increasingly restrictive regulation of early childhood services is considered in terms of the impact of risk avoidance in outdoor play for children's optimal growth and development. Finally, a model of possible developmental outcomes resulting from the minimisation of risk-taking in early childhood contexts is proposed.

**WITHIN THE EARLY CHILDHOOD** field, play has long been acknowledged as an important context for children's learning and development. Play is a significant aspect of their lives, reflecting their social and cultural contexts. Consequently, changes within these contexts impact on both the nature and quality of children's play experiences.

This paper aims to examine outdoor play in the light of social and environmental factors that have impacted on children's play experiences, particularly in urban Western culture. It provides a review of the literature since 1990, drawing on findings from a range of disciplines. It is argued that stimulating and challenging experiences involving physical risk are an important and necessary aspect of children's healthy growth and development; yet social, institutional and educational factors apply implicit and explicit pressure on early childhood staff to eliminate or minimise experiences involving physical risk. The reviewed literature was accessed through electronic databases (EBSCO, OVID, Science Direct) and includes empirical research and other scholarly sources such as practitioner viewpoints to provide a comprehensive discussion of the relevant issues. The significant role of early childhood education settings and practitioners in supporting opportunities for well-managed risks in the context of stimulating and challenging outdoor play provision is considered.

#### Value of play

There has been considerable research documenting the vital role of play in fostering optimal growth, learning and development across all domains—physical, cognitive, social, emotional—throughout childhood (Fisher, 1992; Isenberg & Quisenberry, 2002; Stine, 1997). Play provides a vehicle for children to both develop and demonstrate knowledge, skills, concepts and dispositions (Dempsey & Frost 1993; Isenberg & Quisenberry, 2002).

Play provides a non-threatening context for children to learn about their world and gain skills necessary for adult life (Bjorklund, 1997; Bruner, 1972). Through their interactions with the environment during play, children gain control and ultimately mastery over their bodies with the development of a range of manipulative and motor skills. They learn new skills and concepts, discover the world, and learn about themselves and others through their interactions in a variety of social situations. Play also facilitates language development, creative thinking and problem-solving, and helps children deal with complex and competing emotions (Dempsey & Frost 1993; Wyver & Spence, 1999; Zeece & Graul, 1993).

Furthermore, children today are growing up in an era of increasing emphasis on academic achievement and the significance of the early years for learning. Recent

contributions from brain research have provided much support for the early years as a period for optimising learning across all areas. Children's early experiences and interactions, including those during play, affect the way the brain develops and helps shape its structures (Shore, 1997). Within this research there is an acknowledgment of the importance of play as a 'scaffold for development, a vehicle for increasing neural structures, and a means by which all children practice skills they will need in later life' (Isenberg & Quisenberry, 2002, p. 33).

Play has traditionally been the foundation of good practice in early childhood education. While current practice makes no distinction between play and other experiences that foster children's learning, open-ended child-directed play opportunities in a rich environment are still seen as a very important and integral part of early childhood education practice (Stonehouse, 2001).

The significance of play as an essential part of every child's life has also been acknowledged by the United Nations Convention on the Rights of the Child. Article 31 supports a child's right to rest and leisure, and to participate in play and recreational activities appropriate to the age of the child (Office of the United Nations High Commissioner for Human Rights, 1990). Yet recent decades have seen a steady decline in children's opportunities for play, and particularly outdoor play (Rivkin, 1995).

Pellegrini and Bjorklund (2004) argue that, while the lifestyle of most Western middle-class children offers safety, it also involves large amounts of time in formal schooling, structured play activities and television viewing, all of which lead to changes in the amount and quality of play children engage in. Although Pellegrini and Bjorklund argue that these changes may have subtle impacts on children's development, it is equally plausible that the changes are profound and negative—if not for all children, at least for some subgroups.

### **Current status of outdoor play**

In a constantly evolving world, social and environmental factors have greatly impacted on children's opportunities for outdoor play. Where once children may have spent time playing in the street—riding bicycles, playing chasing games and ball games or enjoying other outdoor pastimes—increased traffic has made these areas and play opportunities off-limits for children as the dangers are far too great. Children are now confined to backyards or local parks for relatively safe places to play. Yet even these are changing. With growing populations, the increased demand for housing in many areas, particularly urban areas, is eroding children's play spaces. Housing blocks are becoming smaller and high-density housing is becoming more prevalent. Combined with decreased opportunities for parents to spend time

supervising and participating in their children's play because of increased work commitments, this situation has resulted in greatly reduced prospects for children's engagement in outdoor play (Children's Play Council, 2002; Rivkin, 1995).

Added to this, decreased outdoor play experiences have been attributed to parental fears for their children's safety. A UK survey found that, while 91 per cent of the adults questioned recognised the importance of outdoor play, 60 per cent stated they were concerned about the safety of their children when playing in public places (McNeish & Roberts, 1995, cited in Valentine & McKendrick, 1997). As a result, parents place greater restrictions on children's independent activities. Their fears have contributed to a developing trend towards overprotective parenting, whereby the world is seen as an inherently dangerous place from which children need to be sheltered (National Playing Fields Association, Children's Play Council & Playlink, 2000; Furedi, 2001). This concern for safety exists on a number of levels, including issues related to safety resulting from increased traffic and 'stranger danger' (Valentine & McKendrick, 1997) as well as those related to injury sustained through the use of playground and other equipment (bicycles, skateboards etc.). It is this latter aspect that is of most relevance for this paper.

Parents have always been concerned for their children's safety and wellbeing, but an exaggeration of the risks involved in many common childhood pursuits has resulted in children being denied the opportunity to engage in many worthwhile activities that facilitate their learning and development (Furedi, 2001). Furedi believes this perception of risk as something bad that needs to be avoided is a recent phenomenon, whereas once 'taking risks was seen as a challenging aspect of children's lives' (Furedi, 2001, p. 25). Risky play activities are usually those that involve high levels of physical activity, and Pellegrini and Smith (1998) argue that parents are often ambivalent about their children's engagement in such activities. Potentially, it may not be difficult to persuade parents to curtail children's pursuit of the more physical and risky aspects of play. In reality, however, risk is a complex issue, one which requires a consideration of the task, the risks involved, the likelihood of success or failure in terms of one's abilities, and the severity of any negative outcomes compared to the positive outcomes. What is important is how these experiences are scaffolded to allow for the gradual transfer of risk management to children. Through exposure to carefully managed risks, children learn sound judgement in assessing risks themselves, hence building confidence, resilience and self-belief—qualities that are important for their eventual independence (Children's Play Council, 2004).

Furthermore, a growing culture of litigation has resulted

in the removal of playground equipment from many public places and an increasing fear amongst non-parental carers and educators that they will be held liable for any injury (even minor) suffered by a child while in their care (Children's Play Council, 2004; Department for Culture Media and Sport [DMCS], 2004; New, Mardell & Robinson, 2005; Shepherd, 2004). New et al. (2005) suggest that such concerns are seriously impacting on early childhood educators' capacity to provide many worthwhile experiences that foster children's development and learning. 'Whether out of fears that children will actually come to serious harm or, more likely, to avoid accusations of irresponsibility, teachers now maintain constant supervision over children's activities even as they discourage or avoid potentially "unsafe" activities' (New et al., 2005, p. 4). The problems with this response to safety and fear of litigation are that physical play opportunities for children become so sterile and unstimulating that children may actually place themselves at greater risk of injury as they seek to inject some excitement back into the activity (DCMS, 2004). Such a response also denies children the opportunity to learn about risk and how to manage it in the real world of the communities they live in (Shepherd, 2004). Furthermore, children who conform and adopt more sedentary approaches to play may be exposed to the more sinister risks of chronic illness associated with reduced activity levels. Experimental evidence with preschoolers (Smith & Hagan, 1980) and children in the early school years (Pellegrini & Davis, 1993) demonstrates that children who have been deprived of physical activity for short periods will, when given the opportunity, engage in physical play that is much more intense and sustained. This deprivation effect was found to be more profound for boys than for girls and suggests that risk reduction strategies that restrict physical play are likely to have a direct impact on the quality of play.

Children naturally seek challenge and, despite the adult concerns, engage in risk-taking as they expand their world view, develop an understanding of themselves and others, and endeavour to gain competency in a vast range of skills (Children's Play Council, 2004; Stephenson, 2003). The significance of risk-taking in fostering children's learning and development in the context of outdoor play experiences is further examined in the following literature review.

### **Learning and development in outdoor play**

The outdoors, whether it be the natural environment or playgrounds specifically designed for children, is the ideal context to encourage children to be themselves, to explore, to experiment, to move and make the most of the opportunities offered in a less-restricted manner (Henniger, 1994; Rivkin, 1995; Zeece & Graul, 1993). The

outdoors presents obvious opportunities to move and be active, and for children to discover and engage with the natural environment, as well as the chance for open-ended activities such as sand and water play, construction and pretend play. Furthermore, the openness and space afforded by outdoor environments can provide a relatively unrestricted and spontaneous context for facilitating peer interactions (Frost, Shin & Jacobs, 1998).

While much of the learning that occurs during outdoor play also occurs in other contexts, the space afforded outdoors allows children to engage in more active physical play than indoors (Stephenson, 1998, 2002). Outdoor play provides opportunities for children to learn and gain competence in a vast range of motor skills. This is particularly important during the early childhood years, a period hallmarked by significant development across all domains. Outdoor play provides occasions for children to develop and refine basic locomotor skills, including walking, running, jumping, climbing, hopping, skipping, sliding and tricycling; manipulative skills such as throwing, catching, kicking, striking and bouncing; and stability abilities including bending, stretching, swinging, twisting and beam-walking (Gallahue, 1993; Poest, Williams, Witt & Attwood, 1990). Children need the space for active, spontaneous movement as they consolidate and gain mastery over this range of fundamental movement skills (Bilton, 2002; Gallahue, 1993), and it cannot be assumed that this space is available in their home environment. As noted earlier, there is a significant trend towards high-density living.

Movement is a central aspect of young children's lives and learning that impacts on all facets of their development. As children grow, their capacity to interact with and make sense of their environment is closely linked to their developing movement capabilities. Movement is the means through which children learn about themselves and the world as well as the way they gain greater competence and confidence (Bilton, 2002; Gallahue, 1993). Children not only experience the joy of moving but also gain physical competence and confidence that promotes a life-long participation in physical activity and hence the enjoyment of the benefits of an active healthy lifestyle (Hihiko, 2004). This latter aspect is perhaps particularly pertinent in considerations of obesity prevention. Fundamental movement skills provide the foundation for the more specialised skills used in games, sports, dance, gymnastics and a range of other outdoor education and recreation activities that children may become involved in later in their lives (Gallahue & Ozmun, 1995; Hihiko, 2004). Research indicates that low skill level and low movement competence are associated with reduced physical activity and represent a major barrier to children's participation in sport (Hands & Martin, 2003). Bouffard, Watkinson, Thompson, Dunn and Romanow (1996, cited in Hands & Martin, 2003, p. 47-48) found that

children with low motor competence were 'vigorously active less often, played less on large playground equipment and spent less time interacting socially with their peers'.

Thus not only is the acquisition of movement skills important for children's learning, but lack of confidence and competence in performing these skills can be detrimental for their social and emotional wellbeing. Children who have low fundamental skill ability often experience frustration when participating in sport or dance activities, as they are unable to cope with the complex combinations of movements. The inability to fully participate in such activities can lead to lower self-esteem, a tendency to have fewer friends, and health problems in later life as a result of physical inactivity (Hands & Martin, 2003; Poest, Williams, Witt & Atwood, 1990). In addition, low skill ability and lack of confidence can place children at greater risk of injury (Sutterby & Frost, 2002). The above provides evidence that reductions in physical play in order to minimise risk actually presents children with longer-term and more intractable risk exposure.

It is clear then that, in the preschool years, children benefit from and indeed seek out opportunities for physical outdoor play. Stephenson (1998) describes three types of physical play that preschool children typically engage in outdoors. First is play which might be described as coaching, whereby children seek teachers' assistance to either learn specific physical skills or attempt a particular physical activity. The second type of play combines aspects of physical play and dramatic play—physical activity incorporated with role-playing in dramatic play episodes. Chasing games, such as 'What's the time, Mr Wolf?', are also included in this category. The third type of play relates to the children's obvious desire to physically challenge themselves and extend their skills by 'riding ... the bikes very fast, climbing around the outside of the fort, running across the challenge course, swinging very high, dangling off the edge of the fixed slide and dropping to the ground' (Stephenson, 1998, p. 127). Stephenson notes that the children appeared acutely aware of their own skill level and competence, and the aim of this type of play was to test their own limits and display their physical skills. At times they were focused on the task at hand while at others they sought to display their skills, imploring others, particularly the adults, to look at them. From these examples, it is apparent that the children were engaging in risk-taking behaviour as they endeavoured to learn new skills and gain mastery over their motor abilities.

### **Risk-taking in outdoor physical play**

'Outdoor play provides open-ended, dynamic, varied opportunities which are unpredictable and at times risky. However, the risks and challenges of being outdoors provide rich opportunities for learning, problem-solving

and developing social competence' (Greenfield, 2004, p. 1). Children need the freedom to take risks in play because it allows them to continually test the limits of their physical, intellectual and emotional development (Tranter, 2005).

Preschool children, in particular, enjoy seeking challenge and testing their motor skills (Stephenson, 2003; Taylor & Morris, 1996; Walsh, 1993). As Stephenson's (1998) observations of children's play suggest, risk-taking is an important and necessary part of outdoor physical play. As Stine (1997, p. 29) asserts, 'by taking risks, by facing a challenge, we learn about our competence and our limitations. Trying to exist in a world without some measure of risk is not only impossible but inhibits our lives and the child's need for challenge'.

Henniger (1994) believes that the provision of healthy risk-taking opportunities is a vital component of quality outdoor play. Risky play opportunities introduce excitement and challenge for children to test their skills and try new activities. They gain mastery and a sense of accomplishment, thus further encouraging them to face new challenges. Furthermore, risk-taking has been found to be positively related to self-confidence and creative ability (Goodyear-Smith & Laidlaw, 1999).

Children's physical risk-taking during outdoor play also has implications for learning in other contexts. Stephenson (1998) noted how teachers commented that children who were confident physical risk-takers in the outdoor environment were more likely to take risks during indoor activities. In effect, they had developed what might be termed a risk-taking disposition whereby they sought or accepted challenges in both environments. Risk-taking in both contexts is important for children's learning and development, but adult response varies remarkably. The development of a risk-taking disposition in some contexts is viewed as a positive attribute associated with persistence in the face of difficulty and uncertainty. This persistence has been described by Carr (1997, p. 10, cited in Stephenson, 2003, p. 41) as 'engaging with uncertainty, being prepared to be wrong, risking making a mistake—going on to learn'. However, where parents and teachers accept and even encourage children to take risks and challenge themselves *mentally*, physical risk is more often seen as something negative and dangerous and to be avoided.

The literature evaluated thus far has focused on the benefits of providing opportunities for challenge and hence risk. However, the discussion is not complete without a consideration of the outcomes if children are not given such opportunities. First, insufficient challenge and novelty in the playground can lead to inappropriate risk-taking as children seek thrills in a fearless manner (Greenfield, 2003). This has links with sensation-seeking as highlighted in the literature relating to risk-taking and unintentional injury (see DiLillo, Potts & Himes, 1998;

Kafry, 1982; Potts, Martinez & Dedmon, 1995), as well as risk-compensation behaviour whereby individuals are thought to engage in greater risky behaviour when safety measures are applied to an activity (Pless & Magdalinos, 2006). Second, children are more likely to develop responsible attitudes toward risk if they have experience dealing with risky situations (Barker, 2004). If adults deny children opportunities for worthwhile, positive risks, they also prevent children from developing the decision-making skills necessary to make accurate risk judgements. Children need to learn to take calculated risks. This is difficult for children as their skill level and growth are dynamic, unlike adults where these factors are relatively stable. Finally, Goodyear-Smith and Laidlaw (1999) argue that parents want their children to be resilient, persistent, to develop problem-solving skills and physical competence. They want them to be confident and to be creative, independent thinkers; to make appropriate decisions and take responsibility for their own actions, not only in the physical environment but across all aspects of their lives. From this it could be argued that children need to engage in managed risk-taking if these qualities are to be encouraged and developed.

### **Implications for early childhood education**

The provision of opportunities for risk-taking in children's outdoor play does not mean that safety is ignored. Rather it means that parents and teachers need to be acutely aware of the hazards and take all necessary steps to ensure that the environment is safe (Henniger, 1994), and to have adequate staff ratios to support physical play (Lam, 2005). Even within the injury prevention and playground safety field there is an acknowledgement of the importance of risk-taking during play. Mitchell, Cavanagh and Eager (2006, p. 122) argue that 'children should have opportunities to explore and experiment in an environment that provides a degree of managed risk', because ultimately, no matter how safe the play environment, it will fail in meeting its objective if it is not attractive and exciting for children. Unfortunately, the term risk-taking is usually interpreted with negative connotations, with risk and hazard often being seen as synonymous (Lupton & Tulloch, 2002). Greenfield (2003), however, believes a distinction should be drawn between these two terms; hazard is something the child does not see, whereas risk relates to the child's uncertainty about being able to achieve the desired outcome, requiring a choice whether to take the risk or not. Adults can mostly see the hazards and endeavour to eliminate them. The way is then clear for children to face the challenge and accept the risk should they choose to do so. This also involves providing adequate supervision and support and being aware of those aspects of the child's behaviour that might contribute to serious injury, especially as a result of inappropriate use of playground equipment.

Risk needs to be considered within a much broader context. Tranter (2005) suggests that, when the risks are considered against the benefits of letting children play freely, the risks might include traffic danger, injury from play equipment, injuries sustained from environmental hazards such as broken glass or syringes, bullying from older children and stranger danger. The benefits, on the other hand, include fun, cognitive, emotional, social and physical development, independence and autonomy. In contrast, Tranter argues that not allowing children to play freely and explore their environment has a single benefit (safety) outweighed by multiple risks—compromised development, decreased physical exercise, increased obesity, limited spontaneous play opportunities, lack of road sense in later years, and loss of a sense of place and enjoyment.

Furthermore, what constitutes a negative or unwarranted risk is very much subject to cultural interpretation (New et al., 2005). Activities that many in Westernised urban Australian culture might consider as inappropriate and unwarranted risks are quite different from those of many Indigenous Australians who view play as a survival mechanism within which risk-taking is seen as an important learning process, and thus acceptable in the presence of adults and in accordance with predetermined rules (Johns, 1999). These differences in attitudes towards risk exist in other cultures as well, notably some of the European and Scandinavian countries. In particular, New et al. (2005, p. 3) refer to practices in Reggio Emilia, Italy, which reflect teachers' belief in children's right to engage in activities that test their developing motor and critical thinking skills, adding that 'children generally know when they've gone far enough; they are careful because they don't want to get hurt'. The belief in the benefits to be gained from participation in a wide range of physically challenging (and perhaps risky) activities greatly outweighs any concerns about potential litigation (New et al., 2005). Similarly, in countries such as Norway where valuing the natural environment is part of the culture (Fjortoft & Sageie, 2000), many early childhood settings provide children with a vast array of experiences such as hiking, climbing trees and water activities in natural outdoor environments. Such practices might be considered unnecessarily risky in a Westernised Australian context. Yet these experiences provide children with a much deeper understanding of their environment and of reality, as well as promoting development in all areas, particularly motor fitness and motor ability (Fjortoft, 2001; Fjortoft & Sageie, 2000), in a far more interesting, stimulating and pleasurable context.

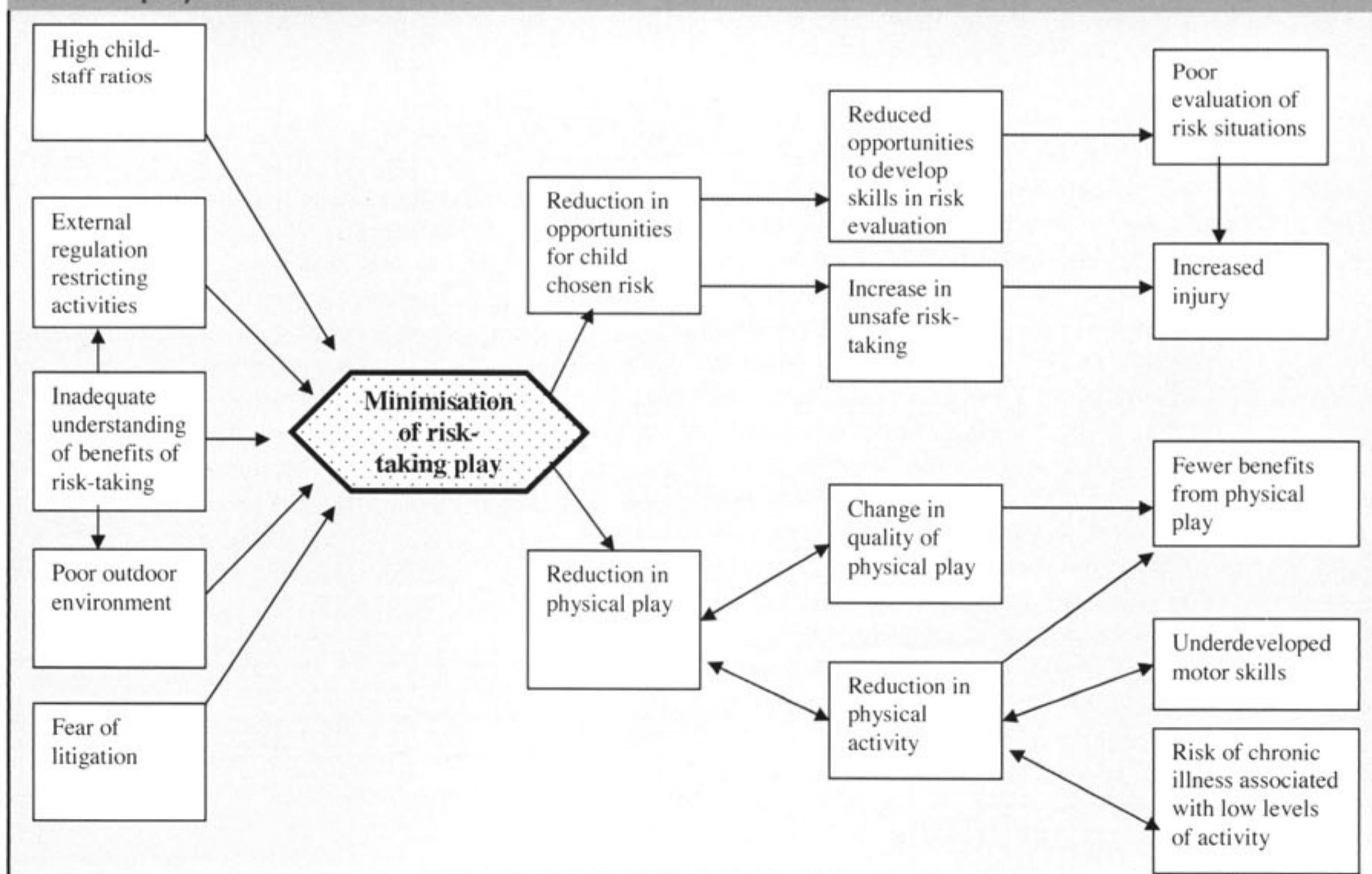
Greenfield (2003) believes that early childhood centres are well-placed to provide children with positive risk-taking opportunities that are not available to them in other contexts. An environment free from hazard is necessary to ensure that children can satisfy their natural curiosity and desire for novelty and challenge, and take risks without compromising their safety. This

does not mean removing all the risks, but rather finding the balance between those that foster learning and those that can result in serious injury, and ensuring appropriate supervision. It also means that the impact of the outdoor environment on play should be monitored closely. Current safety requirements operating within the children's services regulations rely on passive strategies aimed at making the environment safer, independent of the behaviour of those using it (Little, 2006). Often in early childhood, play is considered to be a characteristic of the child rather than a relationship between a child and their environment. Close attention to the quality and quantity of play, especially physical play, is one way of determining whether an appropriate balance has been achieved. Such monitoring requires a high level of practitioner skill; there are significant developmental and individual variations in play that need to be understood before assessments of play quality and quantity can be made. The national Quality Improvement and Accreditation System (QIAS) (National Childcare Accreditation Council, 2005, p. 84) asserts that staff 'should have the skills to assess risk potential, based on their knowledge of each child', allowing them to intervene to prevent harm when necessary while also fostering 'each child's developing independence and competence by supporting the child in some activities that the child perceives as risk taking'.

The notion of finding the balance is central if children are to have the opportunity to experience some risk in their lives. This balance can be achieved when adults respond sensitively to individual patterns of behaviour; to accept and promote children's ability to appraise and manage risks, as well as their desire for challenge and excitement in their play (DCMS, 2004; NCAC, 2005).

Yet, despite the benefits of providing challenging physical play experiences that present children with the opportunity to engage in some forms of risk-taking, legislation and regulations in the early childhood sector are becoming increasingly restrictive and prescriptive with an overemphasis on risk management. These constraints limit early childhood professionals' capacity to use their knowledge and experience to inform their practice (Fenech, Sumsion & Goodfellow, 2006), resulting in the feeling that they are no longer able to provide children with rich and challenging play environments (Shepherd, 2004). The recent study by Fenech et al. (2006) reveals that, while early childhood teachers acknowledge the Regulations and QIAS provide support for their practice, at times their decision-making was adversely affected. In particular, the overemphasis on risk within the Regulations was viewed as detrimental to children's learning and wellbeing, with teachers making comments such as 'I think we have to provide a cotton wool environment', 'All the equipment has become so supersafe that the children don't have any

**Figure 1. Possible pathways from the five main factors that lead to risk minimisation in early childhood play contexts**



risk-taking activities', and 'we are so restricted by things like safety ... all of the time that it really restricts your pedagogy' (Fenech et al., 2006, p. 55). If children are to continue to have access to and benefit from a wide range of stimulating and challenging outdoor play experiences, then a reconsideration of attitudes and approaches to policy and practice in the early childhood education sector is necessary.

Figure 1 shows pathways from the five main factors that lead to minimisation of risk-taking in early childhood contexts through to some of the developmental outcomes. These pathways are supported by the literature reviewed in this paper. It should be noted that these pathways have been described on the basis of available evidence, and it is likely that a much more complex picture will emerge as researchers investigate more aspects of risk-taking in early childhood settings. It should also be noted that, when applied in practice, these pathways need to take account of other factors in children's lives that may make them more vulnerable or resilient when engaged in early childhood contexts in which there is significant risk minimisation (e.g. child temperament, home environment).

## Conclusion

Changing social and environmental contexts in recent decades have impacted on children's prospects for outdoor play. Decreased spaces for physical play combined with changing attitudes towards the risks involved in some physical activities has brought about changes in the quality of children's outdoor play experiences. Practitioners and researchers from diverse disciplines are beginning to recognise the negative impact such changes are having for children's optimal growth and development. This concern has led to movement towards creating child-friendly communities (Karsten & van Vliet, 2006; Tranter, 2005) and a call for play providers to acknowledge children's desire and need for taking risks in their play by providing stimulating and challenging environments that allow children to explore, develop and master their abilities. The goal should be to find ways of managing risk rather than seeking to eliminate it. Supporting children's physical play should be the utmost consideration.

Thus, while safety issues need to be addressed, avoiding all risk is not the solution, as doing so limits children's participation in worthwhile experiences that promote their optimal health and development. On the contrary, failure to provide children with stimulating and challenging experiences through which they can engage in positive risk-taking exposes them to different risks that compromise their health and development. The ultimate aim for parents, teachers and other play providers should be to provide outdoor play environments where the risks of serious injury are reduced, but creativity, challenge and excitement are maintained.

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