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Supporting the development of risk-taking behaviours in the early years: an exploratory study

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Children's opportunities for independent play in natural outdoor spaces, and the associated opportunities to take and negotiate risk, are being eroded despite potential links between such play and the development of positive learning dispositions. This paper reports the findings of an exploratory study that documented the risk-taking behaviours displayed by four-year-old children in the natural environment of a Forest School and within their school outdoor play-space. The data indicated that the Forest School environment was better able to support the development of positive risk-taking behaviours. The environmental features that may have contributed to the observed behaviours are considered.

Introduction

It is widely accepted that children's opportunities for independent play in natural outdoor spaces, and the associated opportunities to take and negotiate risk during such play, are slowly being eroded (Freeman, 1995; Valentine & McKendrick, 1997; Garrick, 2004). Potential links between young children's physical risk-taking behaviour and the later development of risk management strategies and positive dispositions to learning have been suggested (Smith, 1998; Stephenson, 2003). Despite this, within education research and early years literature, children's risk-taking behaviour is rarely considered positively (Little, 2006). This is an issue for consideration by practitioners in Wales in particular, since the guidance material for the proposed Foundation Phase in Wales suggests children should take risks and become confident explorers of their environment, both indoors and outdoors (WAG, 2007).

The aim of this paper is to report the findings of an exploratory study that documented the risk-taking behaviours displayed by four-year-old children in the natural wild environment of a Forest School and within their school outdoor play-space, in order to explore whether these environments support the development of children's positive risk-taking behaviours. Forest School, for those unfamiliar with

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this term as it is used in the UK, normally refers to a school session (morning, afternoon or full day) spent in a wild woodland environment in which the focus of activity is the development of confidence and self-esteem and the approach is playful.

Risk-taking

Smith (1998) states that there is a common assumption that risk is a negative concept that must be avoided or reduced. Many studies relating to risk and children are conducted within this discourse (Harden, 2000; Lejuez *et al.*, 2003; Backett-Milburn & Harden, 2004; Morrongiello, 2004; Boles *et al.*, 2005). A contrasting view of risk is emerging (Plant & Plant, 1992; Smith, 1998; Stephenson, 2003; Little, 2006) and it is this view that was adopted in this study. In contrast to the commonly held negative view of risk-taking, Smith suggests 'a kind of risk-taking that is most physically, emotionally, socially, intellectually and possibly even financially worthwhile' (1998, p. 11). In relation to the child, Smith (1998) contends that this favourable view of risk must be considered in the light of the child's growth and development, but that 'risk is essential to becoming at home in the world' (p. 182). This argument is supported by Plant and Plant (1992) and more recently Stephenson (2003) and Little (2006). Smith argues that for young children, risk-taking in the physical domain is the starting point for taking risks in other domains (emotional, social, intellectual).

Stephenson (2003) conducted an ethnographic study on the physical risk-taking behaviours that young children were displaying in two early years centres. Stephenson found that young children regularly 'seek out and enjoy physical challenges in their play' (Stephenson, 2003, p. 35) and maintains that it is a necessary part of their development. Stephenson identified a number of components which she believed were significant in four-year-old children's physical risk-taking: 'attempting something never done before, feeling on the borderline of "out of control" often because of height or speed, and overcoming fear' (Stephenson, 2003, p. 36). It is argued here that children facing such physical challenges and taking physical risks in their play can be viewed as engaging in positive risk-taking behaviour.

Sandseter (2006) makes the point that 'for children in preschool... not only the child's own risk perception, but also that of the preschool staff will be determining how great a risk the child get [*sic*] to seek in play. The limitations that adults put on children's play are based on the adult's own perception of what is dangerous' (p. 1). Her doctoral research considers what children themselves define as risky play within their early years setting in Norway. The responses from the children are in line with those from Stephenson's study: climbing, high speed, jumping from heights, using dangerous tools, seeking out the unknown. Risky play was consistently identified outdoors but not indoors. Sandseter (2006) reports that the staff interviewed in the setting regarded children's risky play as positive and necessary for children's development. While they stated that their own tolerance of risk may be lower than that of the children they would not prevent risky activity on these grounds and occasional injury was seen as an inevitable part of children's learning. Such a position stands in stark contrast to that described by Tovey (2006), whose study was based in

England. She reports that staff interviewed about risky activity in their early years settings felt considerable anxiety about children taking risks; they were concerned about accountability and uncertain about their role. There is inevitably a cultural aspect to adults' perceptions of children's risky play (Maynard & Waters, 2007).

Dispositional development

Stephenson (2003) supports the case for risk-taking in the early years to be viewed as an important element in the development of positive learning dispositions (Katz, 1999). Positive learning dispositions for early years children may include 'enthusiasm for persisting with difficulty or uncertainty; assumptions about risk and the role of making a mistake in learning; a view of self as someone who persists with difficulty and uncertainty' (Carr, 2001, p. 24). Such a view builds on Dweck's (2000) identification of children who adopt either 'learning' or 'performance' goals (p. 15). Children who adopt learning goals view failure as a sometimes necessary component in learning to master new tasks, meet challenge head on and are more likely to take risks in their learning. Such children are more likely to develop 'mastery responses' (p. 6) to learning situations: they summon their resources to overcome hurdles in their learning and persist with difficulty. Children who adopt performance goals measure themselves on their performance and try to avoid failure as they equate it not with effort, but with ability (Dweck, 2000); such children are more likely to display helpless responses. This may cause the children to doubt their ability, persist less or take the safe option and avoid attempting a task at which they know they may not succeed.

Claxton and Carr (2004) argue that positive learning responses may develop in breadth, i.e. they may spread from the domain in which they were developed into other domains. A child's intrinsic involvement with a topic may form a 'base domain' of knowledge that the child is able to draw upon in other domains (Carr, 2001, p. 29). Claxton and Carr (2004) maintain that a child who has developed a quality such as persistence in one task, may be able to recognise that they are able to deploy the same quality in another unrelated task. Stephenson (2003, p. 41) suggests 'it may be that there is a fundamental link between a young child's developing confidence in confronting physical challenges and her confidence to undertake risks of quite different kinds in other learning contexts'.

The importance of risk-taking for children has been recognised in the Foundation Phase for Wales guidance material (ACCAC, 2005): it is stated that children should 'show curiosity and develop positive attitudes to new experiences and learning, take risks and become confident explorers of their environment (indoors and outdoors) and experiment with new learning opportunities' (p. 18).

Outdoor play

The case for outdoor play has been well made and will not be revisited here in full (Rivkin, 2000; Bilton, 2002; Wellhousen, 2002; Garrick, 2004) other than to state that outdoor play, particularly in a natural, flexible landscape, is being recognised as

especially valuable for young children (Fjørtoft, 2001; Borge *et al.*, 2003; Waller, 2005; Maynard & Waters, 2007).

Fjørtoft (2001) states that 'intuitively children use their environment for physical challenges and play; they perceive the functions of the landscape and use them for play' (p. 111). The concept of *affordance* (Gibson, 1977, Greeno, 1994) is used by Fjørtoft (2001) to refer to what the landscape offered the child (p. 111) and she identified a number of affordances provided by the natural environment. 'There is a strong relation between the structures of the landscape and the functions of play. The forest itself represents an environment for play and learning ...' (Fjørtoft, 2001, p. 117). For example, she described how trees provided affordances for climbing, open areas of woodland provided affordances for running, terraces and slopes provided affordances for sliding, cliffs provided affordances for climbing. While the behaviours that Fjørtoft observed are classified under the wider heading of play, it is felt here that the behaviours described have very similar components to those Stephenson (2003) believed were significant to children's physical risk-taking, and those identified by Sandseter's (2006) young participants.

Forest School

The Forest School movement began in the UK in 1993, its inception heavily influenced by practice in Denmark (Gooding, 2003; Murray, 2003). Over a decade later, Forest School is a fast growing unique educational model (Davis *et al.*, 2006) that aims to meet individuals' preferred learning styles in an outdoor environment with a strong emphasis on the personal, social and emotional development of the child (Bridgwater College, 2004). The aims and philosophies of Forest School are delivered through a series of carefully designed activities in which children master small achievable tasks (Bridgwater College, 2004) and are allowed some time to play freely within the forest environment. Dowling (2000) states that one of the aims of Forest School is that children learn to take risks. Because of the high staff ratio of adults to children, one adult to four children (Gooding, 2003), Forest School allows children to safely take assessed risks, such as climbing trees and lighting fires (Bishops Wood Centre, 2005). As Maynard (2003) states 'Freedom within safe boundaries can be achieved through involvement in Forest School' (p. 4). Although children may eventually be allowed the use of tools and given the opportunity to light fires, the risk that accompanies such activities is managed by the amount of adult involvement in the activity and an appropriate pace being adopted for each individual (Swarbrick *et al.*, 2004). In a study reported by Bilton (2002), which looked at why the outdoor environment seemed to offer such benefits to nursery education in Denmark compared with the UK, it was suggested that it was the positive attitudes of the staff to the outdoor environment that made the difference.

Safety versus challenge

The permissive approach to risk, undertaken by Forest School practitioners, lies in stark contrast to the wider discourse of the 'darker' (Stephenson, 2003, p. 42) side of

risk in which it sits. The term *permissive* has been purposely used to convey the idea that Forest School practitioners not only allow risk-taking but provide for it and support children when they engage in it.

In an attempt to keep children safe from risk, their participation in the public domain has been restricted (Harden, 2000) leading to an erosion of opportunities for independent play in outdoor spaces and wild places (Freeman, 1995; Valentine & McKendrick, 1997; Davis, 1998; Rivkin, 2000; Fjørtoft, 2001; Wellhousen, 2002; Malone & Tranter, 2003; Stephenson, 2003; Garrick, 2004). This risk anxiety, or 'culture of fear' (Sharp, 2004, p. 95), has also permeated early childcare provision; as Stephenson asks 'how can we juggle the requirement for safety with the need to provide children with physical challenges, when the regulations that govern our playgrounds are becoming increasingly restrictive?' (Stephenson, 2003, p. 39). Maynard and Waters (2007) report that reception teachers involved in a study that explored their use of outdoor space with their children stated that concerns about safety were a limiting factor in their provision of outdoor experiences.

Finding a balance between meeting children's need for challenge and meeting safety requirements is a complex issue. On the one hand there is the desire to provide children with satisfyingly risky experiences whilst on the other hand lies the fear of litigation in the event of an accident (Bilton, 2002; Play Safety Forum, 2002). As Stephenson (2003) points out, 'because the consequences of physical hazard are so dire, they frequently overshadow the need to provide children with stimulating and challenging physical play outdoors' (p. 40). It is argued that children have an inherent need for physical challenge and if environments are made too safe this will result in children creating their own risk-taking situations, which can be potentially dangerous (Walsh, 1993; Stein, 1997; Wellhousen, 2002; Stephenson, 2003). Davis (1998) suggests 'in the longer term, the greater risk lies in not giving children the right to play with some freedom in natural settings' (p. 121).

Method

The small-scale exploratory study reported in this paper looked at the risk-taking behaviours children were displaying in two settings in South Wales. The first was the outdoor play-space of a primary school, which was piloting the proposed Foundation Phase in Wales (WAG, 2004, 2007) at the time of the study. The second setting was a local Forest School site located in a nature reserve run by the Forestry Commission, where the children attended one half-day session every fortnight. This session was led by Forest School practitioners. The school was selected for the study on the basis that the Reception class teacher made regular use of the school outdoor play-space and had enrolled the class on a local Forest School program. One boy and one girl, both aged four years and four months, were selected by the teacher following a request to identify the child in her class most likely to take physical risks (child A, boy, risk-seeker) and the child least likely to take physical risks (child B, girl, reticent risk-taker). The teacher's selection was based upon the criteria of risk-taking behaviours outlined by Stephenson (2003).

The study proposed an exploratory question and adopted an inductive approach (Hughes, 2001). Many studies that have examined risk-taking behaviours in adults and adolescents have relied upon questionnaires (Hsee & Weber, 1999; Weber *et al.*, 2002) and self-reporting methodologies (Lejuez *et al.*, 2003). Since this study was looking at young children's behaviours, direct naturalistic observations of children's free play sessions were the central method of data collection. Potential risk-taking behaviours were identified prior to data collection by the practitioners in the two settings (school and Forest School) and by conducting a pilot study. Researcher effect (Edwards, 2001) was minimised by acclimatisation over a number of weeks prior to data collection. Data were collected using a descriptive narrative (Rolfe, 2001) spoken into a Dictaphone worn around the neck of the observer. The context surrounding the target behaviours was then captured and the inevitable time delay of written narrative eliminated. Potentially confounding extraneous variables (Johnson and Christensen, 2000) were controlled, as all observations took place at the same time of day and school and forest observations scheduled for the same week. Each child was observed for at least 30 minutes of free play in both settings on two occasions, two months apart. Informal discussion with practitioners in both settings was also recorded and formed part of the data set.

As a pilot school for the Foundation Phase in Wales, the school setting placed an emphasis on outdoor play (WAG, 2004, 2007). The school outdoor play-space consisted of a flat concrete playground with an access ramp next to one classroom and a rectangular shelter running alongside the other classroom containing resources such as a box of musical instruments. At the far side of this playground was a grass verge sloping downwards on which three small trees were growing and a wooden bench and wooden stumps had been placed. There were also two benches on the playground, a large lorry tyre, a large empty wooden flower box and a number of planters containing flowers. The playground was resourced with bikes and scooters. The area was enclosed by high railings on three sides with a high wall on the fourth. The adult to child ratio was normally one adult to 13 children.

The Forest School site consisted of a large flat wooded area that was enclosed on all sides with wire fencing. In the centre of this enclosure was a glade, positioned within this was the fire circle consisting of the fire pit surrounded by small wooden benches. To the right hand side of the fire circle was a large ditch and behind the fire circle there was a shaded area containing a number of trees with low accessible branches. Although the centre of the enclosure was fairly open, there was a lot of varied low vegetation around the edges and the terrain was rough and uneven in places. The adult to child ratio was normally one adult to four children.

Permission to observe and record in both settings was gained from the practitioners and parents and assent was sought from the children to allow the observer to watch their play. Confidentiality of data and anonymity of the children and the settings were assured throughout the study.

The transcript of the vocal narrative was analysed in order to identify and describe the immediate context surrounding the risk-taking behaviours recorded. As themes emerged during this process, transcripts were re-analysed to confirm or discard the

themes. This inductive process (Cohen *et al.*, 2000) enabled identification of key themes associated with the research question. Analysis of the qualitative data set as a whole allowed for the generation of summary statements about child A and child B.

Findings

Child A

The findings from the study indicate that child A (whom the teacher described as the child most likely to take risks) displayed more varied risk-taking behaviours during free play sessions at Forest School than he did during free play sessions in the school play-space. For example in the Forest School he jumped into the ditch, climbed and jumped off trees, swung on branches, climbed on logs, used sticks to make loud crashing noises on trees. Child A undertook such play activities by himself and with others. During the observations, he was not seen being reprimanded. In the school play-space, he went very fast on the bikes provided and crashed into railings and other children. He did the same with a scooter, roared at other children and ‘tagged’ them appearing to want to entice them into chasing him. Child A climbed on the large empty flower boxes in the play area, at one time appearing to try to use a hoop to enable him to get higher. He played by himself although appeared to want to engage with other children. Practitioners reported that his behaviour in the school play-space was a cause for concern, often resulting in other children being hurt and child A being reprimanded.

Child B

The findings from the study indicate that child B (whom the teacher described as the child least likely to take risks) displayed risk-taking behaviours during free play sessions at Forest School but not during free play sessions in the school play-space. In Forest School, child B took part in climbing and jumping down from trees (with the aid of a Forest School leader in the first instance then independently), jumping into the ditch, swinging on branches, balancing on logs and running fast around the wooded area. A feature of the narrative account of this observation is the excitement shown by child B in this setting that was not observed at any other time. In the school play-space, child B was involved in exploratory activity involving musical instruments and fantasy play in a covered area of the play-space. Practitioners reported that she was a child who was concerned with complying with school rules at all times.

Additional findings

The data collected indicated that both children were displaying learning goals and mastery-orientated responses towards physical challenge and risk in Forest School: ditch jumping and tree climbing appeared to be firm favourites with most children in the Forest School environment and were behaviours that were revisited in most free

play sessions. Both children mastered these behaviours over the course of the study and invented new ways to make these activities more challenging, such as experimenting with rolling and sliding into the ditch and using speed and height.

An inconsistent application of safety rules in the school outdoor play-space was indicated from observation data. For example, one staff member allowed the children to play on the grass whilst another member of staff told them not to do so. The teaching staff in the play-space permitted the children to play in the big flower box but the children were observed being reprimanded by a lunchtime supervisor for doing this. Also, when child A stood on the edge of the flower box, this was ignored by one member of staff and he was told to get down by another. Observation data indicated that the permissive ethos relating to physical challenge in Forest School was clearly and consistently applied. At the beginning of each Forest School session, safety rules were discussed with the children, e.g. 'if you want to climb a tree you must have an adult with you'. This discussion enforced the notion that tree climbing is allowed as long as adults are present.

Discussion

The emergent themes from the data include the learning profiles of the children, their responses to the different environments and the features of the environment that affected the risk-taking behaviours of the children.

Both children were displaying a wide variety of risk-taking behaviours in the Forest School environment but not in the school play-space. It is suggested that there are two reasons for this:

- (i) the rule-bound nature of the school play-space and the contrasting permissive ethos at Forest School;
- (ii) that the Forest School environment afforded more varied and interesting forms of risk-taking behaviour than the equipment provided in the school play-space.

(i) Rules and spaces

It is suggested that the rule-bound nature of the school play-space impacted differentially on the children in this study. Child B, described by her teacher as 'a conscientious child who is very aware of the rules of school and who doesn't like getting told off' appeared to be very compliant and tried to ensure she obeyed school rules. That she did not display any physical risk-taking behaviours in the school environment may suggest that her desire to be seen to obey the rules is far stronger than her drive to satisfy any need for physical challenge.

Child A was described as a risk-seeker and observation data indicated that he would create risky situations, both socially and physically, in his play. While such observations resonate with Stephenson's (2003) suggestion that some children deliberately orchestrate interactions that result in situations of self-induced fear, child

A's pursuit of challenge in the playground often led to his accidental injury of other children resulting in regular reprimand from staff. Child A's apparent need for physical challenge and risk-taking appeared stronger than any desire he may have had to avoid reprimand.

Unlike the school outdoor play-space, the Forest School had a positive and consistent approach towards physical risk-taking in which both children were able to take part in such behaviours without the fear of breaking rules or being reprimanded.

(ii) Affordance of the Forest School space

The second factor that contributed to the greater variety of risk-taking behaviours displayed in Forest School was the natural wild environment. This project was based in a nature reserve on forestry commission land and as such, it has a very diverse topography. As indicated by research (Fjørtoft, 2001; Waller, 2005) children use diverse natural environments and wild spaces to take physical challenges in their play. Research by Titman (1994) illustrated that children displayed a preference for natural wild spaces and valued them over manufactured environments and that children 'actively seek out places and elements which present opportunities for risk and challenge' (p. 67). By contrast, the school outdoor play-space, despite being created to allow for children's outdoor play, offered minimal affordance for physical risk-taking.

Implications for practice

Clearly, satisfying children's need for challenge in the playground or school outdoor play-space is a complex issue (Bilton, 2002; Play Safety Forum, 2002; Stephenson, 2003). If all the children decided to stand on the edge of the flower box at the same time, this would pose a real threat to their safety. The school play-space does not have the same one adult to four children ratio that exists in Forest School (Bridgwater College, 2004). Any serious injuries sustained as a result of accidents in the playground may result in litigation for the school (Bilton, 2002; Play Safety Forum, 2002).

The Forest School program may help children who appear to have very different risk-taking profiles in school to develop positive learning dispositions towards physical risk and challenge. Forest School enabled risk-seeking child A to satisfy his strong drive for physical challenge in an environment where he did not receive a reprimand for this behaviour. Forest School also allowed child B, an apparently reticent risk-taker, to develop a positive disposition towards physical risk-taking that may not otherwise have developed. With the erosion of opportunities for independent play in wild outdoor spaces (Freeman, 1995; Valentine & McKendrick, 1997; Davis, 1998; Garrick, 2004) time spent at Forest School could be the only opportunity that these children have to visit such a diverse natural environment. In light of Stephenson's (2003) argument that there may be 'a connection between successful physical risk-taking and a willingness to undertake risks in other areas of learning'

(p. 42), and Smith's (1998) suggestion that risk-taking in young children first begins in the physical domain and then extends to other domains including the intellectual, Forest School may be a valuable educative tool for young children.

This study did not set out to consider the gender divide within this debate; however, since girls have been repeatedly reported to have a lower propensity to take risks (e.g. Ginsburg & Miller, 1982; Rosen & Peterson, 1990; Boles *et al.*, 2005), such considerations may be particularly important for girls.

It is a concern that Forest School sites created on school grounds and adjacent lands may lose such benefits in relation to physical challenge for two reasons. Firstly, if children perceive these sites to be part of school they may believe that they are bound by the same rules as school. It may also be very difficult for staff to adopt a permissive approach to physical challenge in the forest when they take a regulatory approach in the school play-space (Stephenson, 2003). It may be possible to suggest that inconsistency in the approach taken to risk-taking in this scenario is bound to occur since the ideology of mainstream school does not reflect that of the Forest School and the roles of adults involved in the regulation of behaviour in school are diverse. Such diversity of roles brings with it a diversity of training, experience and understanding. A comprehensive approach to Forest School training for all staff and an explicit policy of consistent application of rules may help combat the mixed messages that inconsistently applied safety rules can convey to children. Secondly, these sites may be built on manufactured spaces and as such may also lose the diverse topography of the natural wild spaces that appear to entice the children to take physical challenges.

Conclusion

This small-scale study found that both children displayed more varied risk-taking behaviours in Forest School than the school outdoor play-space at school, although they possessed different pre-existing tendencies towards physical challenge according to their teachers. The findings indicated that both children were displaying learning goals and mastery-orientated responses towards physical risk and challenge at Forest School and it is suggested that both children were also developing positive learning dispositions towards physical risk and challenge in this setting.

Welsh early years settings will be required to implement the Foundation Phase for Wales from September 2008 (WAG, 2007); as this currently stands there is the requirement within the 'personal and social development, well being and cultural diversity' element of the framework that children should be given opportunities to 'take risks and become confident explorers of their indoor and outdoor environment' (p. 8). Because of the curtailment of outdoor play outside school and children's limited access to diverse natural environments, time spent at Forest School or similar outdoor projects (Waller, 2005) may be the only opportunity some children have to develop positive learning dispositions towards physical risk, persistence and challenge, and to acquire the possible benefits this could produce in terms of their future learning. This precipitates a strong argument for schools to opt into these projects. However, if Forest Schools sites are built on or adjacent to school lands,

because of the close proximity to school they may lose the two characteristics that, it is suggested here, lead to the benefits they offer in terms of development of children's risk-taking behaviours, i.e. the permissive ethos towards physical challenge and the diverse natural environment.

Notes on contributors

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Sharon Begley completed her BSc (Econ) Early Childhood Studies degree in 2006 and is preparing for her PGCE course for 2007–8. She is currently working to support staff and children in the early years unit of a primary school.

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