

Ten Ways to Restrict Children's Freedom to Play: the problem of surplus safety

SHIRLEY WYVER

Institute of Early Childhood, Macquarie University, NSW, Australia

PAUL TRANTER

School of Physical, Environmental and Mathematical Sciences, University of New South Wales, Australian Defence Force Academy, Canberra, Australia

GERALDINE NAUGHTON

Centre of Physical Activity across the Lifespan, Australian Catholic University, Victoria, Australia

HELEN LITTLE

Institute of Early Childhood, Macquarie University, NSW, Australia

ELLEN BEATE HANSEN SANDSETER

Department of Physical Education, Queen Maud University College for Early Childhood Education, Trondheim, Norway

ANITA BUNDY

Occupational Therapy, Faculty of Health Sciences, University of Sydney, NSW, Australia

ABSTRACT Play and playgrounds provide essential experiences for young children's growth, development and enjoyment of life. However, such play experiences are now limited for many children due to excessive fear of risk, or 'surplus safety'. In this article, the authors examine the pervasiveness of surplus safety in the lives of young children. They argue that restrictions now imposed on children's play to promote safety may, paradoxically, expose children to more serious short and longer term threats of illness and limit children's life opportunities. By comparing experiences from Australia and Norway, the authors demonstrate that surplus safety is not a necessary outcome of living in a modern Western society.

There is now a vast research literature identifying the importance of active, outdoor play (e.g. Guldberg, 2001; Isenberg, 2002; Bergen, 2002; Golinkoff et al, 2006; Pellegrini & Holmes, 2006; Bundy et al, 2008). Our argument is that an excessive concern with certain types of safety is leading to the reduction of children's freedom to play, and that this has long-term consequences for children's well-being. Concerns with children being injured while playing, traffic danger and stranger danger have led to an individualistic response by many parents, where they try to remove children from 'dangerous' areas and activities, rather than a collective response in which our society and our urban spaces are made safer for children. The consequence is that other longer-term risks for children are emerging as legitimate concerns when surplus safety takes hold. Children miss out on important developmental experiences without access to play opportunities (physical development as well as social, intellectual and emotional development). Children are now more likely to become overweight or obese, and to develop a range of health problems related to inactivity (e.g. type II diabetes). Children are exposed to higher levels of in-vehicle pollution, as

they spend more time inside cars (International Center for Technology Assessment, 2000). Traffic danger is increased, ironically, by parents driving their children to keep them safe. And parents are obliged to spend large amounts of time transporting and supervising children (Tranter, 2006; Tranter & Sharpe, 2008).

It is clear that risk-taking in play is part of normal development, has large individual variation, and is essential for growth and development of infants and children (e.g. Boyer, 2006). All activities that involve risk-taking can, of course, lead to adverse outcomes - otherwise there would be no risk. Management of risk therefore becomes an important 'duty of care' for parents and professionals working with young children. We argue that management of risk in a climate of surplus safety negatively impacts on the rights of children and their growth, development and quality of life. The term 'surplus safety' was originally introduced when Buchanan (1999) interviewed Tom Jambor about playground design. The term captures the excessive measures adults take to prevent an injury from occurring, no matter how minor, regardless of whether the injury has any enduring negative (or positive) impacts and regardless of cost. We argue that surplus safety can be found at many levels, including policies relating to early childhood environments, interactions with young children and beliefs about children's abilities. To examine the pervasiveness of surplus safety in early childhood contexts, we identify some of the areas in which attempts to manage risk curtail children's freedom to play. The examples we have selected are not intended to be exhaustive; instead they provide insight into the multilevel problem of surplus safety. These examples were selected to highlight the paradox of surplus safety, namely that excessive attempts to keep children safe may expose them to unnecessary risk, and disadvantage both children and their parents. We draw most of our examples from Australia, the United Kingdom and USA, countries in which surplus safety is known to prevail. However, it is not assumed that surplus safety is universal. Examples from Europe, particularly Scandinavia, are used in places to demonstrate that (1) understanding cultural differences is important when deciding what might otherwise be considered normative, (2) surplus safety is not a necessary by-product of living in a modern Western society, and (3) surplus safety restricts children's freedom to play in ways that are detrimental to their development and quality of life.

Our list of 10 ways to restrict children's freedom to play is intended to highlight some of the implicit and explicit assumptions commonly made about children's outdoor play. Clearly, not all parents and professionals make all of these assumptions all of the time. In our discussion of each assumption, we examine evidence of surplus safety and consider the impact on children's play.

1. Assume that Adults are the Best People to Manage Children's Risk-Taking

In most countries, data are collected on unintentional injuries in young children. Such data collection is important in determining strategies for preventing significant injuries that may lead to death, disability or significant pain and suffering (Grossman, 2000). Strategies for prevention of injuries usually involve adult management of children's environments and behaviour (e.g. use of seatbelts in cars). Strategies that save lives and prevent significant injury are clearly advantageous. Does this mean that adults should manage all aspects of infants' and children's environments that might result in injury? To address this point, we consider the risk of falling and whether strict management of environments by adults might underestimate the abilities of infants and children and diminish their opportunities for learning.

Throughout each day, infants are exposed to different terrains that may lead to falls. Adolph (2008) argues that when infants fall, they do not merely learn by cue-association to prevent future tumbles. Instead, they learn to problem solve. She refers to this as 'learning to learn'. In a range of studies, she has demonstrated that in the early stages of locomotion, infants will fall when they encounter steep slopes, but as they develop, infants become increasingly exploratory when they encounter novel or unsafe terrain. The important component of their learning is not, however, that a slope of a particular gradient may lead to a fall. Instead, the infant learns to gather information relevant to solving the locomotor problem. For example, when confronted with a new problem, the infant will explore in order to gather the relevant information, and might decide that the most efficient and stable method of crossing the surface will involve crawling. This type of problem solving is important throughout the lifespan. Consider the example of an older child or

adult walking on gravel in unfamiliar shoes. They will make postural adjustments to maximise stability and efficiency. Very young children do take longer to learn from falling than adults (Joh & Adoph, 2006), possibly because external visual cues have not previously provided important information about falling. This is partly due to the majority of falls being a consequence of poor motor control rather than surface variation but also due to early protection from falling. For example, parent diary records in Joh & Adolph's study revealed that although infants cross a range of surfaces with different colours and textures each day (e.g. floor coverings, furniture), these surfaces did not have large variations in stability.

Learning from falling, including falling that involves cuts, bruises and other injuries, is widely recognised as important for children, even by professionals and organisations involved in injury prevention. For example, the Royal Society for Prevention of Accidents (RoSPA, n.d.) note on their website that healthy play can result in painful injuries, and this is something that should be considered part of normal development for children of all abilities. Children learn from experience of injury, but also are often much better at making judgements about risk of injury than is evident to adults involved in their care (Christensen & Mikkelsen, 2008).

Nonetheless, poor decisions are frequently made when adults attempt to manage risks associated with injuries such as falls. Franklin & Cromby (2009) argue that the 'better safe than sorry mantra' is often used, especially as adults over-evaluate hypothetical (but unlikely) adverse outcomes. These attitudes, based on fear and genuine concern for children, lead to a situation of surplus safety in which adults cast the net widely and capture many positive play activities involving risk in order to eliminate some isolated problems. Statistics related to playground injury can be alarming, especially when presented without reference to other important information, such as frequency of the play behaviours in which accidents occur. If it is clear that X number of children are hospitalised with breaks or fractures from playground injuries, doesn't it make sense to be more vigilant about safety? This problem was examined in a study of play in public schools and parks in Brisbane, Australia (Nixon et al, 2003). Frequency of use of playground equipment in 16 parks and 16 schools was obtained by direct observation and compared to injury data from a single year of hospital records, noting whether the injury occurred in the playgrounds in which observations were conducted. The researchers were able to estimate injury rate as a proportion of average equipment use. For school playground equipment use, the injury rate was 0.59/100,000 uses of equipment and 0.26/100,000 for parks. The authors caution that attempts to reduce injury rates may have negligible impact on the target injuries, but would be at the expense of activities that are developmentally appropriate, challenging and enjoyable for children.

2. Assume There are Good and Bad Playground Surfaces

Surplus safety is expensive and can direct resources away from the areas of most need. In the United Kingdom, the cost of covering playground surfaces with rubber to improve safety is estimated at £200-300 million, even though the risk of dying from a playground injury is 1 in 30 million (Gill, 2007). Although it is reasonable to argue that 1 in 30 million is too many, this should be considered in the overall context of unintentional injury. Factors related to poor housing, for example, contribute significantly to child death or serious injury (e.g. O'Campo et al, 2000) and money spent here may have a more substantial impact on overall child health and well-being than modification to playground surfaces.

From a developmental perspective, uniform surfacing of playgrounds can only be seen as a limitation to learning. Consider the earlier discussion of learning to learn through falling. A child whose major play experiences are on consistent, predictable surfaces is likely to miss many valuable learning experiences relating to locomotion, physics and aesthetics. Additionally, research on children's injuries leads us to question whether the substantial allocation of resources and interference with children's learning can be justified on the basis of children's health. Norton et al's (2004) review of playground surface research revealed that overall injury rates were reduced when safer surfaces were used. However, when more serious injury such as arm fracture was considered, there were no differences between surfaces (although it should be noted that studies reviewed did not necessarily test the safest level rubber surfaces). Norton et al argue that falls from height cause the most significant injuries and there are biomechanical reasons why safe surfaces may not offer

protection from the injuries that occur from these falls. Gill (2007) points to emerging evidence that the use of safe surfaces actually increases the likelihood of broken arms when falls occur. He speculates that the increase in injury severity may either be due to biomechanical changes in falls on the safer surfaces or children engaging in risk compensation; in other words, increasing the risk level of their play in direct response to the perceived safety of the environment.

3. Prioritise Regulation over Pedagogy in Early Childhood Centres

In Australia, concern has been raised about the impact of the regulatory environment on the experiences available to young children in early childhood centres, especially experiences which may be risky (see, for example, Little, 2006; Bown & Sumsion, 2007; Little & Wyver, 2008). Although regulations have been welcomed as providing a necessary minimum standard in child care, it has been argued that the Australian regulatory environment can have a negative impact on quality outcomes for young children (see, for example, Fenech & Sumsion [2007] for more detail of regulation in Australia and teacher perceptions of the consequences). Regulation in Australia, particularly in the state of New South Wales, ensures that early childhood centres employ staff with expertise in early childhood pedagogy, trained at bachelor's and diploma level. However, the regulatory environment in which these staff work can restrict their decisions regarding implementation of challenging experiences for infants and young children. Grieshaber (2000) notes that '[i]nstead of being based on professional knowledge and beliefs, young children's achievements are now judged in technical terms of outcomes and indicators specified by the state' (p. 5).

Early childhood education settings provide an ideal context for children to challenge themselves and take risks safely. Within these environments children have the support of welleducated professionals with knowledge of child development and an understanding of the individual children in their care derived from ongoing observations of the children's abilities. However, a recent qualitative study (Little, 2010) of early childhood (EC) practitioners' beliefs about children's risk-taking behaviour revealed that the contradictory discourses inherent in the documents that govern and inform EC teaching practice represent a source of tension between the EC practitioners' pedagogical beliefs and compliance with the regulations. On the one hand, the Quality Improvement and Accreditation System (National Childcare Accreditation Council [NCAC], 2001) and Early Years Learning Framework recognise and support that opportunities for healthy, calculated risk-taking are an important aspect of children's learning, development and social and emotional well-being. Healthy levels of positive risk-taking play a vital role in fostering children's emerging autonomy and agency, resilience and self-esteem (Department of Education, Employment and Workplace Relations [DEEWR], 2009). In contrast, the over-emphasis on safety and protection within the Children's Services Regulations (Community Services, 2004) promotes children's vulnerability, devalues teachers' professional judgement and undermines the intent of the other documents.

There is some preliminary evidence from the USA to indicate that it is staff training rather than regulations relating to the physical environment that is most important in child safety. Findings from the National Institute of Child Health and Human Development Study of Early Child Care (Schwebel et al, 2006) reveal a reduced risk of unintentional injury for children who spend more time in non-parental child care (child care centres or family day care). Schwebel et al (2006) argue that their findings are unlikely to apply to the 'safer' regulated environments of non-parental child care because the injury rates were found to be lower across all contexts in which children participated. Additionally, family day care in the USA is not subject to the same regulatory requirements as child care centres. The authors argue that the finding is most likely attributable to teaching of safety awareness by staff in child care and family day care, but could not rule out competing explanations such as families of children with more injuries choosing to spend less time in non-parental care.

Robertson (November 2009, personal communication) argues that the regulatory environment of Australian child care keeps children hidden from the community. Staff in child care are fearful of taking children outside of the centre in case regulations are breached or an accident occurs. Even a walk of 100 metres to post a letter, view a bird's nest in a tree or buy bread at the corner store is seen as too risky. A common pattern is for children arrive at child care centres in

cars, enter the centre and remain within the walls/fence all day, then go home by car at the end of the day. These children are not visible in the community in which their centre is located, even though many children spend most of their waking hours at child care. The impact of surplus safety for many children is a loss of freedom to explore the world beyond their child care centre and disconnection from communities.

4. Assume that Restrictions on Play Freedom are Necessary in a Modern Western Environment

Although the state has an important role in child protection and should take an interest in child safety, it is important to consider whether restrictions on children's experiences relating to heights, surfaces and the generally unpredictable terrain of the outdoor environment is fundamental to the state's duty of care or whether it is an example of surplus safety. To explore this point, we contrast the Australian experience in child care (discussed in the previous section) with the experience of young children in Norway.

Norway is one of the countries considered to have a rather liberal approach to children's play safety, both within child care institutions and within their activities and family life in their spare time. Several authors argue that Norwegian parents and child care workers have fewer concerns about children's risk-taking than several other countries, and that this is based on Norwegians' close relationship to nature and outdoor life as well as the fact that the fear of strangers, child molesters and litigation suits are (still) rare in these countries (New et al, 2005; Guldberg, 2009; Sandseter, 2009a). In Norway and the other Scandinavian countries, the benefits of children learning how to master risks, various weather conditions and to explore the highly appreciated national landscape seem to be widely acknowledged (New et al, 2005). In this notion the comprehension of 'toughening' of children has also been strong. In the Norwegian culture encountering challenges and risks, particularly through spending time in nature, has been looked upon as an important part of growing up and becoming a sensible and well-functioning human being.

The Kindergarten Act (Norwegian Ministry of Education and Research [NMER], 2005) and the Norwegian Framework Plan for the Content and Tasks of Kindergartens (NMER, 2006) apply to all kindergarten settings in Norway and guide their pedagogical work with children. These curriculum documents strongly emphasise children's right to participate, take part in decision making and to be free to play and explore. Children's play in all forms is looked upon as the primary source of learning and healthy development, and there is little focus on schooling activities. As such, each child is considered individually in terms of needs, level of competence, personal meanings and preferences. The primary goal for the pedagogical work in Norwegian child care institutions is to give all children adequate challenges for development and learning, including the possibility to learn risk mastery. Both the Kindergarten Act (NMER, 2005) and the Framework plan (NMER, 2006) state that 'Kindergartens shall provide children with opportunities for play, selfexpression and meaningful experiences and activities in safe, yet challenging surroundings', and by this include a focus on the importance of a challenging play environment. An important part of the Framework plan is also the kindergarten staff's responsibility to let children encounter these challenges through play and activity, exemplified with the statement that kindergarten staff shall 'understand and provide encouragement for children's sensory motor and physical games, to inspire all children to seek out physical challenges and to try out their physical potential'.

Studies have shown that especially play with great heights, high speed, near dangerous elements such as cliffs, deep water, etc., and play with dangerous tools such as knives and axes are perceived as risky kinds of play by Norwegian kindergarten staff (Sandseter, 2007a). Still, despite the fact that they are considered risky, the staff acknowledge the value of these kinds of play, and let children encounter such experiences. Children handling knives and saws, climbing high up in trees and cliffs, and sledding at high speed down steep snowy hills are common in most Norwegian child care institutions. The Norwegian children also have a great amount of freedom to move around because most of the child care institutions arrange trips to nature areas at least once a week, and give children the opportunity to play freely in large areas with no fences. Some of the so-called nature and outdoor kindergartens, often situated close to large forest areas, do not even have a

fence around their buildings or playground at all. In accordance with this, research has shown that Norwegian children generally have good opportunities to engage in risky kinds of play in kindergarten and that Norwegian kindergarten staff are positive toward risky play and acknowledge the important part this kind of play has in children's overall development (Sandseter, 2007a, b, 2009a, b, c, d, 2010). In this way, Norwegian children have great freedom to explore challenges and risks in play, and to independently make risk-taking decisions without too many constraints from the kindergarten staff, and most important, these are regarded as an important part of the pedagogical work in kindergarten.

Even though Norwegian children's opportunity to engage in risky play probably is far greater than that of children in several other countries (e.g. Australia), the last two decades have brought about a play safety discussion also in Norway. The Norwegian playground safety regulations (Direktoratet for samfunnssikkerhet og beredskap [DSB], 1996) have resulted in a growing focus on children's overall safety, and some experience this as a development towards a situation of surplus safety. Still, most Norwegians participating in this debate express a concern for protecting and maintaining the Norwegian notion of the 'free child' and his/her right to play and meet natural challenges and risks.

The appreciation of the benefits of risky play in Norwegian culture is important in highlighting that surplus safety is neither a natural consequence of care for children nor a necessary outcome of modern Western society.

5. Assume Some Children are Injury Prone

In everyday discourse people often speak of particular children as being injury prone. The idea that certain children are more injury prone has received some support, although it has been noted that there are methodological inconsistencies in the research, making it difficult to draw firm conclusions. Ordoñana et al (2008) examined twin data from the British E-Risk Longitudinal study to identify genetic and environmental factors contributing to unintentional injury in children from birth to five years. Most of the injury variance was accounted for by environmental factors, particularly factors associated with socio-economic disadvantage. Support for the idea of injury proneness having a genetic basis was limited.

That said, research evidence does indicate that some children, particularly boys and children with high scores on measures of externalising behaviours, are more injury prone (e.g. Bijur et al, 1988). Does this mean that it is reasonable to curtail the activities of these children to ensure their safety? Ordoñana et al (2008) point to the problem of identifying who is at risk in advance based on characteristics such as gender. They note that the only reliable indicator for individuals is injury history. It is more important, they argue, to identify and attempt to address environmental hazards (e.g. children playing in homes with hazards or driveways of apartment blocks due to inadequate play space) rather than consider injury to be a problem to be addressed at the individual child level. Grossman (2000) also notes that blaming the victim (i.e. the child with an injury) shifts responsibility and allows concerns about environmental factors, which we argue are a collective responsibility, to be ignored. Perception of children as injury prone can lead to constraints being placed on their behaviour, particularly behaviours associated with free play.

6. Assume Long Periods of Walking Will Be Too Stressful for Toddlers

Best practice recommendations for physical activity in early childhood are available in several countries (McWilliams et al, 2009, Australian Government, Department of Health and Ageing, 2009). Recommendations for physical activity include walking as a means of 'active transport'. Active transport refers to travelling by foot, cycle, or other non-motorised means (Giles-Corti et al, 2009). Allowing children to walk instead of being pushed along in strollers is consistently encouraged and can add significantly to the total time of daily physical activity in early childhood. Prolonged periods of time spent by children in strollers, car seats, and other child restraints should be replaced by opportunities for movement, as often as possible. Movement opportunities increase the psycho-social, physical, and cognitive benefits available through physical activity from an early age.

Allowing young children to walk, pedal or push tricycles or scooters around neighbourhoods or rural areas takes time and requires risk management strategies. Parents and carers who allow the time for children to walk rather than always pushing them in strollers will observe progressive confidence, endurance, and skills in young children. Movement independence, regardless of skills, is empowering for children of all abilities. Walking as a mode of transport also helps children learn more about the environment.

Walking for active transport has a broader social context than parents and child care professionals. Child care settings and local governments can share in prioritising access and policies for safe pathways and road crossings. Confidence in the access helps reduce perceptions of risks by adults and is more likely to result in children's daily use of active transport (American Academy of Pediatrics, 2009). Living within 'walkable' distances of destinations, restricting speed zones and providing well-connected streets are added incentive for parents and carers to encourage children to use active transport (Giles-Corti et al, 2009). Urban planners can play a major role in local use of active transport by children from an early age.

Media can also accept a more socially responsible role in reducing parental fear about safety or crime in local areas that may ultimately be the basis of sedentary time in children. In a recent qualitative study of three Adelaide suburbs (South Australia) it was found that in two of the suburbs, already stigmatised as high crime areas, reporting of local crime escalated the reluctance of residents to engage with others in their neighbourhoods. Respondents in these neighbourhoods commented that children are rarely seen on the streets apart from when entering or exiting motor vehicles. Children did not use bikes for transport. In the third suburb which was considered safe and had many elderly residents, but also some families, there was still a fear of strangers as potential criminals. In this case, however, it was considered that the fear was largely associated with reduced social inclusion due to poor social planning. For example, housing designs were such that people entered the house from behind a garage door and had limited opportunities for incidental social interaction. In this suburb, children did use parks and walked around the area, possibly because the perception was that crime in the area was related to property (vandalism, theft). The media did not highlight crime in this area (Palmer et al, 2005).

Walking rather than use of a pushchair is a positive strategy in reducing sedentary time. Reduction in sedentary behaviour was linked with improvements in movement skills in a clustered randomised controlled trial conducted in child care settings (Reilly et al, 2006). Other strategies to reduce sedentary behaviour with young children include having environments with limited access to electronic screens (such as televisions and videos), lots of visual prompts for more active alternatives and avoiding the restriction of physical activity as a punishment (McWilliams et al, 2009).

7. Be Convinced by the Statistics that All Hazards in the Playground Must Be Avoided

As noted earlier, much is made about the hazards of playgrounds. In this article, our focus is on hazards related to unintentional injuries, but other fears exist, such as concerns about strangers who may pose a risk to children and rubbish such as syringes. As discussed below, falls are the most frequent and serious type of unintentional injury in playgrounds. While advice is frequently given to check for rubbish and damaged equipment, there are no reliable statistics available on their contribution to unintentional injuries in playgrounds. This is possibly due to such injuries occurring with low frequency. For example, a recent review of needle and syringe programs in Australia has found relatively low rates of disposal of syringes in public places (generally around 1% and including all public places) (Dolan et al, 2005). A proportion of syringes disposed of inappropriately are collected by local council workers and possibly other adults soon after being discarded.

Alerting people to dangers for children in playgrounds can be important in avoiding accidents, but can also lead to alarm. When viewed in the context of statistics on children's unintentional injuries, playgrounds are relatively safe places. In Australia, and the USA, unintentional injury that leads to child death is most likely to occur in the child's home or involve a motor vehicle (Australian Bureau of Statistics, 2006; Borse et al, 2008). Based on the available statistical data, it seems far more likely that a child will die from a motor vehicle accident when

travelling to the playground than when engaged in play. Falls did feature as a high-frequency cause of injury in children. The Australian Bureau of Statistics (2006) asked children about their most recent injury, which included minor injuries requiring minimal first aid through to injuries leading to hospitalisation. They found most children reported their most recent injury to be from a fall, but 93% of these falls were from low heights which are less likely to cause serious injury.

8. Assume Parental Guilt Leads to Good Outcomes for Children

Parents are often made to feel guilty for exposing their children to experiences that may be perceived as risky. Franklin & Cromby (2009) have argued that as Western societies become increasingly individualistic, pressure is placed on the parent alone, rather than the parent as part of a community, to raise children. Instead of turning to the community for support, parents consult experts, especially those from the media. Such experts have become increasingly plentiful and alarmist. Franklin & Cromby's study found parents to exaggerate the likelihood of statistically low frequency, but high media profile, events (e.g. abductions), when considering child safety. Part of their research involved parents of young adolescents in the East Midlands, United Kingdom. They found that parents confronted the constant dilemma of protecting their child in case a statistically rare but devastating event occurred, yet recognised the problems of overprotection, such as creating 'cotton wool kids' (p. 169). Similar dilemmas were expressed by parents of preschoolers in Little's (in press) study based in Sydney, Australia. Parents were aware that the strategies they were using to protect their children were also imposing limitations on freedom to play. They were aware that some of the resilience-building risks they had taken in their early years were unlikely to be available to their own children.

The surplus safety that stifles parent-child interactions and limits the opportunities for risktaking by children can be carried over or even escalate in contexts of non-parental care. Bundy, Tranter et al (2009) reported from their study of outdoor play in a Sydney primary school that teachers were aware that they restricted children's freedom to play, but were under pressure from fear of litigation should an injury occur while they had duty of care. One teacher had experienced a threat of legal action and teachers were aware that careers could be jeopardised if they used their understanding of child development rather than surplus safety to determine their actions. Teachers also indicated that they did not feel protected by policy or relevant authorities should a difficult situation arise. A Google search with the term 'playground injury law' reveals a range of services, mainly US based, often with a 'no win, no claim' offer, for parents whose children have had a playground injury. Emotive terms regarding the innocence of children and expectations that our children will be kept safe are used in online advertising. Only one of the services reviewed on the date of access (21 January 2010) explicitly stated that some cases might be due to activities in which the injury is not due to negligence. The promotion of such services, specifically targeting injuries that occur during play, are no doubt of concern to teachers and providers of playground facilities and contribute to surplus safety. The language used to promote the services targets parental guilt and creates barriers between teachers and parents by portraying teachers as negligent and untrustworthy. Staempfli (2009) argues that differences in the legal systems of Europe and North America have an impact on children's freedom to play. Unlike North America, European courts offer limited monetary compensation for injury and European society attributes greater responsibility to children.

The extent to which the personality of the parents and parenting style influence children's freedom to play is under-researched. An authoritarian parenting style, a style that is high in control and low in warmth, has been associated with higher rates of obesity in first-grade children. Rhee et al (2006) speculated on reasons for their finding, including the possibility that authoritarian parents encourage engagement in physical activity by selecting exercise that is perceived negatively by children whereas parents with higher levels of warmth help children to select activities that stimulate their child's interests and are likely to be maintained. Little (in press) classified preschoolers' risk-taking level based on observations of their play. Parents were also interviewed about their beliefs related to risk-taking. The sample was relatively small and biased towards boys, but the results indicated that parents whose preschoolers were found to be 'moderate risk-takers' had higher Attitude to Risk Taking scores than parents of children who were 'non-risk-takers'

Although more evidence is needed, it seems likely that some parenting styles or parent beliefs lead to greater restrictions being imposed on children's play whilst in parental care. Ideally, children would find some escape from excessive parental control in non-parental care environments. However, this seems unlikely when surplus safety pervades all aspects of children's lives.

9. Design Neighbourhoods without Considering Children's Right to Play

Children's access to spontaneous play opportunities in their own neighbourhoods has declined significantly over recent decades in Australia and in many other Western societies including the USA and the United Kingdom (Tranter & Sharpe, 2008). This is driven by numerous interrelated factors, including changes in the built environment, changes in attitudes towards children in public space, and changes in children's independent mobility (their freedom to move around their neighbourhoods independently, without an adult).

Changes in housing developments and housing styles in Australia have reduced children's access to space for outdoor play. Larger houses on smaller blocks, with smaller backyards, along with cultural changes have been associated with backyards becoming more like 'designer' spaces or entertainment space rather than the less structured, manipulable space that children prefer in their play (Tranter & Malone, 2004). Backyards are now more likely to be dominated by hard surfaces and 'architectural' plants. Thus, indoor and computer based activities are more likely to occupy children's time. Tandy's (1999) study of 5-12-year-olds in Newcastle (Australia) found many children expressed a preference for indoor activities because they were operating within an understanding of parental constraint of choices. When asked to draw or write a story about what they would like to do on a sunny day, most children chose outdoor activities that gave an option for free play. Tandy's study further revealed that although the child participants were more likely to own a bicycle than their parents, they were unlikely to have a 'licence' to ride it on the street, mainly due to increases in traffic and the associated dangers.

Design changes in housing developments have also reduced social exchanges between residents in houses and the street, effectively eliminating the passive surveillance of local streets. Many new streetscapes are now dominated by double or triple garage doors, with minimal front windows and few front porches (Palmer et al, 2005). Combined with a reduction in walking and cycling, this means that residential streets are now seen as deserted spaces, where monitoring of safety by adults and other children is unlikely to occur.

These trends have been associated with a change in attitudes towards children's use of public space. Children are seen as 'out of place' if wandering or playing in residential streets without adult supervision (Malone, 1999). This has been supported by parental fears for children's safety (particularly traffic danger and stranger danger) and by an individualistic response to these fears whereby children are removed from public spaces (including streets) and kept indoors in the private space of the home, in schools, or in commercialised play and sports centres.

Children's journeys to and from school can be a playful experience if children use active modes of transport and can experience the joy and wonder of interacting with neighbourhood spaces. Yet there have been substantial declines in children's independent mobility, so that children are now much more dependent on adults to get to school, to local parks, to the cinema, or even to their friends' houses. Data from Perth (Australia) show that there has been 'a 113 per cent increase in car trips to primary schools between 1986 and 1998, with a corresponding decline in children walking, cycling and using public transport' (Department of Transport, 1999, **P.?** 16, quoted in Tranter, 2006). These sharp declines in walking and cycling to school concur with findings from the USA and United Kingdom (Jacobsen et al, 2009). As well as the factors outlined above, another reason for this loss of independent mobility for children is the closure of local schools, shops and services, so that these are now less likely to be within walking or cycling distance. If children's play opportunities are to be enhanced, there will need to be a recognition of children's right to play by parents, urban planners, transport planners, education departments and policy makers.

10. Assume that You Can Help Children Get Ahead by Stimulating Them with Extra Activities

Children have many advantages today compared to those of their parents when they were children. They have parents who can drive them to school, to lessons or sport, to their friends' houses. They have access to the virtual world of the Internet. They have lots of 'canned' entertainment such as Play Stations, iPods and Xboxes, so they should never get bored. And their parents can organise a range of stimulating extra-curricular activities, every afternoon of the week, and each day of the weekend. These activities are thought to stimulate children's development and to give them a better chance of being successful adults in a consumerist world.

As noted in Tandy's (1999) research, however, children are possibly making choices for inhome entertainment because they are aware of their restricted options. Tandy's description of Newcastle is typical of many urban areas which have been carved up by roads that represent traffic hazards. Outdoor play areas are often isolated and impossible for children to reach without transportation organised by adults, yet adults are often busy organising activities for other siblings (as in Tandy's study) or involved in other activities. Pocock's (2001) review of long working hours in Australia found that children preferred parent time spent with them not to be rushed time, yet parents have difficulty providing this level of focus, often due to factors such as pressure of work. Indeed, there are many studies that indicate adults in Western societies feel rushed and time pressured (see, for example, Szollos, 2009). This represents a double bind for children who are increasingly dependent on adults to take them to locations for outdoor play yet at the same time adults are feeling more rushed. Increased in-home entertainment options may provide some solutions (although even then, children may be restricted to playing with siblings or friends who live in very close proximity). Changes to approaches in urban planning to reduce real and perceived dangers (and increase children's autonomy) coupled with a reconsideration of the demonstrable risks of increased sedentary time need to be considered. Discussion in urban design, for example, has recently examined 'slow cities' which facilitate incidental social encounters, shared experiences and increased sense of place (Knox, 2005; Mayer & Knox, 2006). Large-scale environmental changes may not always be required to increase available space for children. Farley et al (2007) observed safety concerns to be a major obstacle to young children's outdoor play in New Orleans (USA). Their solution was to extend the opening hours of the school playground in one school, so that the playground was open to children after school and on weekends. The playground was monitored to alleviate safety concerns and children were not required to be accompanied by an adult if parental permission was given (with the exception that younger children were required to be accompanied by a parent or older sibling). Amongst the findings were that this playground was popular and most frequently used on school days (when transport problems were reduced), and children who participated were more active and engaged in less sedentary behaviour such as watching DVDs. The researchers also collected data from a comparison school which did not have the open playground option. Such changes were not found for children at that school. Farley et al's study is a demonstration that there can be low-cost initiatives for children to engage in outdoor play that are successful. When given the choice, children appear to increase the amount of outdoor unstructured play they engage in and reduce sedentary indoor time (these children did not reduce the time spent on homework or reading books). What enabled the children in Farley et al's study to access the playground was a change in use of a physical space and a change in perception of safety.

Concluding Comments

Adults are motivated to invest considerable time, energy and resources into the protection of children. In no sense can adults be seen to be opting out of their responsibilities. However, in the examples given above, surplus safety assumptions made by adults generally increased their work, but provided little reward. Pressures placed on adults, whether they are parents, teachers, health professionals or policy makers, often lead to excessive safety measures, which in turn limit the freedom of children to play and to benefit from the play experiences. And while risk of injury may be minimised in some circumstances, risk of chronic illness is increased and some life options are decreased due to restrictions in physical activity. Bundy, Luckett et al (2009) argue that a multilevel approach is required to limit surplus safety that is currently restricting play opportunities for

children. Although many questions are now being raised about contemporary society's obsession with child safety, it is difficult for an individual parent or teacher to act in isolation without risking being seen as negligent in her or his duty of care.

Many of the issues around surplus safety relate to the dominance of an individualistic focus by parents for their children's safety, rather than to a focus that recognises the value of a whole-ofcommunity response to problems of children's well-being. Parents focus on the safety of their own children, and planners and educators are preoccupied with ensuring that they are not sued by parents if children are injured. Instead of this individualist focus, some societies see the benefits of a focus on 'all' children, the wider community and the whole city. Worldwide movements such as UNICEF's Child Friendly Cities initiative may help to challenge the dominance of this individualistic focus. While a key aspect of a child-friendly city involves protecting children (from exploitation, violence and abuse), there is also a focus on provision and participation rights. These include the provision of both basic services and the right to walk safely in the streets on their own. Perhaps more importantly, a child-friendly city aims to support the right of children to 'influence decisions about their city' and to 'participate in family, community and social life' (Riggio, 2002). When children's views are considered along with a city-wide perspective, it is likely that restrictions on children's freedoms to play will be replaced by restrictions on the abilities of adults to make spaces unfriendly for children. When children's views and the well-being of all children in the city are considered, it is less likely that surplus safety will dominate their lives.

References

- Adolph, K.E. (2008) Learning to Move, *Current Directions in Psychological Science*, 17(3), 213-218. http://dx.doi.org/10.1111/j.1467-8721.2008.00577.x
- American Academy of Pediatrics (2009) The Built Environment: designing communities to promote physical activity in children. Committee on Environmental Health (Position Statement), *Pediatrics*, 123, 1591-1598. http://dx.doi.org/10.1542/peds.2009-0750
- Australian Bureau of Statistics (2006) 2006 Year Book Australia. ABS Catalogue No. 1301.0. Canberra: Australian Bureau of Statistics.
- Australian Government, Department of Health and Ageing (2009) Get up and Grow: healthy eating and physical activity for early childhood. https://www.safetyandquality.gov.au/internet/main/publishing.nsf/Content/phd-early-childhood-nutrition-index
- Bergen, D. (2002) The Role of Pretend Play in Children's Cognitive Development, *Early Childhood Research & Practice*, 4(1). http://ecrp.uiuc.edu/v4n1/bergen.html
- Bijur, P., Golding, J., Haslum, M. & Kurzon, M.A. (1988) Behavioral Predictors of Injury in School-Age Children, *American Journal of Diseases of Children*, 142, 1307-1312.
- Borse, N.N., Gilchrist, J., Dellinger, A.M., Rudd, R.A., Ballesteros, M.F. & Sleet, D.A. (2008) *Patterns of Unintentional Injuries among 0-19 Year Olds in the United States, 2000-2006.* CDC Childhood Injury Report. Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Bown, K. & Sumsion, J. (2007) Voices from the Other Side of the Fence: early childhood teachers' experiences with mandatory regulatory requirements, *Contemporary Issues in Early Childhood*, 8(1), 30-49. http://dx.doi.org/10.2304/ciec.2007.8.1.30
- Boyer, T. (2006) The Development of Risk-Taking: a multi-perspective review, *Developmental Review*, 26, 291-345. http://dx.doi.org/10.1016/j.dr.2006.05.002
- Buchanan, C. (1999) Building Better Playgrounds: a project for parents? *UAB Magazine*, 19(3). http://main.uab.edu/show.asp?durki=25353
- Bundy, A.C., Luckett, T., Naughton, G.A., et al (2008) Playful Interaction: occupational therapy for all on the school playground, *American Journal of Occupational Therapy*, 62, 522-527.
- Bundy, A., Luckett, T., Tranter, P., et al (2009) The Risk is that There is 'No Risk': a simple, innovative intervention to increase children's activity levels, *International Journal of Early Years Education*, 17(1), 33-45. http://dx.doi.org/10.1080/09669760802699878
- Bundy, A., Tranter, P., Naughton, G., Wyver, S. & Luckett, T. (2009) Playfulness: interactions between play contexts and child development, in J. Bowes & R. Grace (Eds) *Children, Families and Communities: contexts and consequences*, 3rd edn, 76-87. Melbourne: Oxford University Press.

- Christensen, P. & Mikkelsen, M.R. (2008) Jumping off and Being Careful: children's strategies of risk management in everyday life, *Sociology of Health & Illness*, 30(1), 112-130. http://dx.doi.org/10.1111/j.1467-9566.2007.01046.x
- Community Services (2004) Children's Services Regulation 2004. http://www.community.nsw.gov.au/for_agencies_that_work_with_us/childrens_services.html (accessed 26 August 2010).
- Department of Education, Employment and Workplace Relations (DEEWR) (2009) Belonging, Being and Becoming: the early years learning framework for Australia. http://www.deewr.gov.au/EarlyChildhood/Policy_Agenda/Quality/Pages/EarlyYearsLearningFramework.aspx
- Dolan, K., MacDonald, M., Silins, E. & Topp, L. (2005) Needle and Syringe Programs: a review of the evidence. Canberra: Australian Government Department of Health and Ageing. http://www.health.gov.au/internet/main/publishing.nsf/Content/D5355A6C5D2029F9CA25764F00778E76/\$File/evid.pdf (accessed 15 June 2010).
- Direktoratet for samfunnssikkerhet og beredskap (DSB) (1996) FOR 1996-07-19 nr 703: Forskrift om sikkerhet ved lekeplassutstyr. Norwegian Directorate for Civil Protection and Emergency Planning. http://www.lovdata.no/cgi-wift/ldles?doc=/sf/sf/sf-19960719-0703.html
- Farley, T.A., Meriwether, R.A., Baker, E.T., Watkins, L.T., Johnson, C.C. & Webber, L.S. (2007) Safe Play Spaces to Promote Physical Activity in Inner-City Children: results from a pilot study of an environmental intervention, *American Journal of Public Health*, 97(9), 1625-1631. http://dx.doi.org/10.2105/AJPH.2006.092692
- Fenech, M. & Sumsion, J. (2007) Promoting High Quality Early Childhood Education and Care Services: beyond risk management, performative constructions of regulation, *Journal of Early Childhood Research*, 5(3), 263-283. http://dx.doi.org/10.1177/1476718X07080472
- Franklin, L. & Cromby, J. (2009) Everyday Fear: parenting and childhood in a culture of fear, in L. Franklin & R. Richardson (Eds) *The Many Forms of Fear, Horror and Terror*, 162-174. Oxford: Inter-Disciplinary Press.
- Giles-Corti, B., Kelty, S.F., Zubrick, S.R. & Villanueva, K.P. (2009) Encouraging Walking for Transport and Physical Activity in Children and Adolescents: how important is the built environment? *Sports Medicine*, 39, 995-1009. http://dx.doi.org/10.2165/11319620-000000000-00000
- Gill, T. (2007) No Fear: growing up in a risk averse society. London: Calouste Gulbenkian Foundation. http://www.gulbenkian.org.uk/media/item/1266/223/No-fear-19.12.07.pdf
- Golinkoff, R.M., Hirsh-Pasek, K. & Singer, D.G. (2006) Why Play=Learning: a challenge for parents and educators, in D.G. Singer, R.M. Golinkoff & K. Hirsh-Pasek (Eds) *Play=Learning: how play motivates and enhances children's cognitive and social-emotional growth*, 3-12. Oxford: Oxford University Press.
- Grieshaber, S. (2000) Regulating the Early Childhood Field, Australian Journal of Early Childhood, 25(2), 1-6.
- Grossman, D.C. (2000) The History of Injury Control and the Epidemiology of Child and Adolescent Injuries, *The Future of Children*, 10(1), 23-53.
- Guldberg, H. (2001) Child Safety Has Its Own Dangers. *Spiked Online*. http://www.spiked-online.com/Articles/000000005434.htm
- Guldberg, H. (2009) Reclaiming Childhood: freedom and play in an age of fear. Abingdon: Routledge.
- International Center for Technology Assessment (2000) In-Car Air Pollution. 2000. http://www.icta.org/projects/trans/incar.pdf (accessed 15 September 2004).
- Isenberg, J.P. (2002) Play: essential for all children, Childhood Education, 79, 3-39.
- Jacobsen, P.L., Racioppi, F. & Rutter, H. (2009) Who Owns the Road? How Motorised Traffic Discourages Walking and Bicycling, *Injury Prevention*, 15, 365-373. http://dx.doi.org/10.1136/ip.2009.022566
- Joh, A.S. & Adolph, K.E. (2006) Learning from Falling, Child Development, 77(1), 89-102. http://dx.doi.org/10.1111/j.1467-8624.2006.00858.x
- Knox, P.L. (2005) Creating Ordinary Places: slow cities in a fast world, *Journal of Urban Design*, 10(1), 1-11. http://dx.doi.org/10.1080/13574800500062221
- Little, H. (2006) Children's Risk-Taking Behaviour: implications for early childhood policy and practice, *International Journal of Early Years Education*, 14(2), 141-154. http://dx.doi.org/10.1080/09669760600661427
- Little, H. (2010) Risk, Challenge and Safety in Outdoor Play: pedagogical and regulatory tensions, *Asia-Pacific Journal of Research in Early Childhood Education*, 4(1), 3-24.
- Little, H. & Wyver, S. (2008) Outdoor Play: does avoiding the risks reduce the benefits? *Australian Journal of Early Childhood*, 33(2), 33-40.

- Little, H. (in press) Relationship between Parents' Beliefs and their Responses to Children's Risk-Taking Behaviour during Outdoor Play, *Journal of Early Childhood Research*.
- Malone, K. (1999) Growing up in Cities as a Model of Participatory Planning and 'Place-Making' with Young People, *Youth Studies Australia*, 18(2), 17-23.
- Mayer, H. & Knox, P.L. (2006) Slow Cities: sustainable places in a fast world, *Journal of Urban Affairs*, 28(4), 321-334. http://dx.doi.org/10.1111/j.1467-9906.2006.00298.x
- McWilliams, C., Ball, S.C., Benjamin, S.E., Hales, H., Vaughn, A. & Ward, D.S. (2009) Best-Practice Guidelines for Physical Activity at Child Care, *Pediatrics*, 124, 1650-1659. http://dx.doi.org/10.1542/peds.2009-0952
- National Childcare Accreditation Council (NCAC) (2001) Putting Children First: quality improvement and accreditation system sourcebook, 2nd edn. Sydney: National Childcare Accreditation Council.
- New, R.S., Mardell, B. & Robinson, D. (2005) Early Childhood Education as Risky Business: going beyond what's 'safe' to discovering what is possible, *Early Childhood Research & Practice*, 7(2). http://ecrp.uiuc.edu/v7n2/index.html
- Nixon, J.W., Acton, C.H.C., Wallis, B., Ballesteros, M.F. & Battistutta, D. (2003) Injury Frequency and Use of Playground Equipment in Public Schools and Parks in Brisbane, Australia, *Injury Prevention*, 9, 210-213. http://dx.doi.org/10.1136/ip.9.3.210
- Norton, C., Nixon, J. & Sibert, J. (2004) Playground Injuries to Children, *Archives of Diseases in Childhood*, 89(2), 103-108. http://dx.doi.org/10.1136/adc.2002.013045
- Norwegian Ministry of Education and Research (2005) Act no. 64 of June 2005 relating to Kindergartens (the Kindergarten Act). Oslo: Norwegian Ministry of Education and Research.
- Norwegian Ministry of Education and Research (2006) Framework Plan for the Content and Tasks of Kindergartens, issued 1 March. Oslo: Norwegian Ministry of Education and Research.
- O'Campo, P., Rao, R., Gielen, A.C., Royalty, W. & Wilson, M. (2000) Injury-Producing Events among Children in Low-Income Communities: the role of community characteristics, *Journal of Urban Health*, 77(1), 34-49. http://dx.doi.org/10.1007/BF02350961
- Ordoñana, J.R., Caspi, A. & Moffitt, T.E. (2008) Unintentional Injuries in a Twin Study of Preschool Children: environmental, not genetic, risk factors, *Journal of Pediatric Psychology*, 33(2), 185-194. http://dx.doi.org/10.1093/jpepsy/jsm041
- Palmer, C., Ziersch, A., Arthurson, K. & Baum, F. (2005) 'Danger Lurks around Every Corner': fear of crime and its impacts on opportunities for social interaction in stigmatised Australian suburbs, *Urban Policy and Research*, 23(4), 393-411. http://dx.doi.org/10.1080/08111470500354216
- Pellegrini, A.D. & Holmes, R.M. (2006) The Role of Recess in Primary School, in D.G. Singer, R.M. Golinkoff & K. Hirsh-Pasek (Eds) *Play=Learning: how play motivates and enhances children's cognitive and social-emotional growth*, 36-54. Oxford: Oxford University Press.
- Pocock, B. (2001) The Effect of Long Hours on Family and Community Life: a survey of existing literature. Report prepared for the Queensland Department of Industrial Relations. http://www.sapo.org.au/binary/binary1021/A.pdf (accessed 15 June 2010).
- Reilly, J.J., Kelly, L., Montgomery, C., et al (2006) Physical Activity to Prevent Obesity in Young Children: cluster randomised controlled trial, *British Medical Journal*, 333, 1041.
- Rhee, K.E., Lumeng, J.C., Appugliese, D.P., Kaciroti, N. & Bradley, R.H. (2006) Parenting Styles and Overweight Status in First Grade, *Pediatrics*, 117(6), 2047-2054. http://dx.doi.org/10.1542/peds.2005-2259
- Riggio, E. (2002) Child Friendly Cities: good governance in the best interests of the child, *Environment and Urbanization*, 14(2), 45-58. http://dx.doi.org/10.1177/095624780201400204
- RoSPA (n.d.) RoSPA Play Safety: Disability and Discrimination Act. http://www.rospa.com/playsafety/dda.htm
- Sandseter, E.B.H. (2007a) Categorizing Risky Play how can we identify risk-taking in children's play? European Early Childhood Education Research Journal, 15(2), 237-252. http://dx.doi.org/10.1080/13502930701321733
- Sandseter, E.B.H. (2007b) Risky Play among Four- and Five-Year-Old Children in Preschool, in S. O'Brien, P. Cassidy & H. Shonfeld (Eds) *Vision into Practice: making quality a reality in the lives of young children.*Conference Proceedings. Dublin: Centre for Early Childhood Development and Education.
- Sandseter, E.B.H. (2009a) Risky Play and Risk Management in Norwegian Preschools a qualitative observational study, *Safety Science Monitor*, 13(1).
- Sandseter, E.B.H. (2009b) Characteristics of Risky Play, *Journal of Adventure Education and Outdoor Learning*, 9(1), 3-21. http://dx.doi.org/10.1080/14729670802702762

- Sandseter, E.B.H. (2009c) Children's Expressions of Exhilaration and Fear in Risky Play, *Contemporary Issues in Early Childhood*, 10(2), 92-106. http://dx.doi.org/10.2304/ciec.2009.10.2.92
- Sandseter, E.B.H. (2009d) Affordances for Risky Play in Preschool the importance of features in the play environment, *Early Childhood Education Journal*, 36, 439-446. http://dx.doi.org/10.1007/s10643-009-0307-2
- Sandseter, E.B.H. (2010) 'It tickles in my tummy!' Understanding Children's Risk-Taking in Play through Reversal Theory, *Journal of Early Childhood Research*, 8(1), 67-88. http://dx.doi.org/10.1177/1476718X09345393
- Schwebel, D.C., Brezausek, C.M. & Belsky, J. (2006) Does Time Spent in Child Care Influence Risk for Unintentional Injury? *Journal of Pediatric Psychology*, 31(2), 184-193. http://dx.doi.org/10.1093/jpepsy/jsj007
- Staempfli, M.B. (2009) Reintroducing Adventure into Children's Outdoor Play Environments, *Environment and Behavior*, 41(2), 268-280. http://dx.doi.org/10.1177/0013916508315000
- Szollos, A. (2009) Toward a Psychology of Chronic Time Pressure: conceptual and methodological review, *Time & Society*, 18(2/3), 332-350. http://dx.doi.org/10.1177/0961463X09337847
- Tandy, C. (1999) Children's Diminishing Play Space: a study of inter-generational change in children's use of their neighbourhoods, *Australian Geographical Studies*, 37(2), 154-164. http://dx.doi.org/10.1111/1467-8470.00076
- Tranter, P. (2006) Overcoming Social Traps: a key to creating child friendly cities, in B. Gleeson & N. Sipe (Eds) *Creating Child Friendly Cities: reinstating kids in the city*, 121-135. New York: Routledge.
- Tranter, P.J. & Malone, K. (2004) Geographies of Environmental Learning: an exploration of children's use of school grounds, *Children's Geographies*, 2(1), 131-155. http://dx.doi.org/10.1080/1473328032000168813
- Tranter, P. & Sharpe, S. (2008) Escaping Monstropolis: child-friendly cities, peak oil and Monsters Inc., *Children's Geographies*, 6(3), 295-308. http://dx.doi.org/10.1080/14733280802184021

SHIRLEY WYVER is a senior lecturer in child development at the Institute of Early Childhood, Macquarie University. Her research interests are in early play and cognitive/social development. She also conducts research in the area of blindness/low vision and development. *Correspondence:* Dr Shirley Wyver, Institute of Early Childhood, Macquarie University, NSW 2019, Australia (shirley.wyver@mq.edu.au).

PAUL TRANTER is Associate Professor in Geography at UNSW@ADFA (the Australian Defence Force Academy), where his research and teaching interests are in social and transport geography. His research has made a pioneering contribution to the literature in areas of child-friendly environments, active transport, and healthy and sustainable cities. An important theme in his recent research is how child-friendly environments can make cities more resilient in the face of challenges such as energy stress. *Correspondence*: Associate Professor Paul Tranter, School of Physical, Environmental and Mathematical Sciences, University of New South Wales, Australian Defence Force Academy, Canberra, ACT 2600, Australia (paul.tranter@adfa.edu.au).

GERALDINE NAUGHTON is a Professor in Paediatric Exercise Science at the Australian Catholic University in Melbourne. She is the Director of the Centre of Physical Activity across the Lifespan, for the School of Exercise Science at the University. Her research on understanding health needs ranges from pre-school children to adolescents. Geraldine also works with a team of researchers based at the Royal Children's Hospital in Melbourne where she contributes to the development of evidence-based resources on physical activity and nutrition for health professionals working with children 0-12 years of age.

Correspondence: Professor Geraldine Naughton, Australian Catholic University, 115 Victoria Parade, Fitzroy, Victoria 3065, Australia (geraldine.naughton@acu.edu.au).

HELEN LITTLE is a lecturer at the Institute of Early Childhood, Macquarie University where she teaches on undergraduate and postgraduate units in child development. She is a trained early childhood teacher and previously taught in preschools and primary schools in Sydney. She has been investigating children's risk-taking over the past five years and her doctoral thesis examined the

influence of individual, social and environmental factors on children's engagement in risk-taking behaviour in outdoor play. *Correspondence:* Helen Little, Institute of Early Childhood, Macquarie University, Sydney, NSW 2109, Australia (helen.little@mq.edu.au).

ELLEN BEATE HANSEN SANDSETER is an associate professor in the Department of Physical Education at Queen Maud University College of Early Childhood Education (DMMH). Her primary research focus is on risky play among four- and five-year-old children in preschool, exploring what risky play is, why children engage in this kind of play and how preschools constitute an arena for risky play. *Correspondence:* Dr Ellen Beate Hansen Sandseter, Department of Physical Education, Queen Maud University College of Early Childhood Education, Department of Physical Education, Thoning Owesens Gate 18, N-7044 Trondheim, Norway (ebs@dmmh.no).

ANITA BUNDY is a professor of occupational therapy at the University of Sydney. She is known internationally for her work in occupational therapy assessment and intervention. She has published widely in these areas and given invited lectures and courses on five continents. She is best known for developing theory and research in play with children who have disabilities and in sensory integration. She has a strong interest in the everyday lives of children with disabilities. Currently she is the project leader for a large multi-school playground intervention known as the Sydney Playground Project.

Correspondence: Professor Anita Bundy, Faculty of Health Sciences, University of Sydney, 75 East Street, Lidcombe, NSW 2141, Australia (anita.bundy@sydney.edu.au).