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To cite this article: Nevin J. Harper (2017): Outdoor risky play and healthy child development in the shadow of the “risk society”: A forest and nature school perspective, *Child & Youth Services*, DOI: [10.1080/0145935X.2017.1412825](https://doi.org/10.1080/0145935X.2017.1412825)

To link to this article: <https://doi.org/10.1080/0145935X.2017.1412825>



Accepted author version posted online: 13 Dec 2017.
Published online: 18 Jan 2018.



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Outdoor risky play and healthy child development in the shadow of the “risk society”: A forest and nature school perspective

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ABSTRACT

This article addresses the effects of a risk-averse Western society on healthy childhood development. Forest and nature schools are specifically identified for their inclusion of outdoor risky play. Forest and nature schools are presented as idealized venues to investigate and understand the necessary balance of risk-taking and safety in child development. Forest and nature school is an environment in which risk of injury is inherent yet minimal. Although teachers/practitioners allow risk-taking, it may not be well understood outside of the context of the forest and nature school. Beck’s risk-society is introduced and argued to hold steady influence—a shadow—over societal beliefs and practices, inducing fear of litigation in the minds of practitioners. Through recognizing and addressing unreasonable societal perception and acceptance of actual childhood risks, one can better estimate the value of the minimal risks forest and nature schools pose to children. The author proposes a reconceptualization of risk in child development and advocates for reform of policy and practices which prevent children from full exploration of their capacity and curiosity through outdoor risky play.

KEYWORDS

outdoor risky play; forest school; risk society; child development; nature school

Introduction

Risk is the potential for loss or harm, yet risk can also present opportunities for gain. One only has to think of purchasing a lottery ticket to consider the two sides of the risk equation. In risk, the ends are unknown, creating uncertainty, and a reduced ability to predict outcomes. Our evolutionary development as humans has included significant individual and collective risk-taking, and adaptive responses (Gluckman, Hanson, & Spencer, 2005). Children do not learn to walk and run without first navigating the perils of tripping, falling, and experiencing failure, yet the challenges, the individual and social learning, and eventual victories are worth the effort (Plumert & Schwebel, 1997). Parents and others involved in a child’s life, recognizing risk is ever present, try their best to provide growth opportunities and prevent major mishaps along the way.

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Universally, risks and hazards are defined contextually and managed in innumerable ways. A child growing up in a downtown city apartment will have vastly different experiences with sharp tools and food harvesting compared to a child growing up in a rural community with traditional hunting practices. This article addresses an issue primarily identified as a modern, western and urban issue—that children may be too safe for their own good (Ungar, 2009). This may not be relevant cross-culturally or in contexts of social or cultural inequality. Many have worked hard to reduce risks associated with childhood in North America through practices such as child protection (Pimentel, 2015) and child injury prevention (Brussoni et al., 2014; Yanchar, Warda, & Fuselli, 2012). Both fields aim to improve the lives of children through risk mitigation and adjustments of safety standards and practices. Over time, the perception and management of risk has been influenced by societal norms, media, parental perspectives, and increasing government accountability. Although these factors have influence on each other, they are not suggested as independent from each other (Anglin, 2002). It is argued here that some efforts to “protect” children may in fact be in conflict with necessary elements of child development such as certain risk-taking during outdoor play (Tremblay et al., 2015). Perceptions and interpretations of risk, for better or worse, have influenced societal beliefs and behaviors regarding childhood safety and development. One example to illustrate this reality is found in children’s outdoor play spaces where equipment such as swing sets and slides have been reduced considerably in height, with softer landing surfaces, and certain “dangerous” equipment—consider steel merry-go-rounds and teeter-totters—removed for not meeting current safety standards (Herrington, Lesmeister, Nicholls, & Stefiuk, 2012). A debate is building over the right balance to ensure child safety and allowing for “play in physically and emotionally stimulating and challenging environments” (Sandseter, 2007, p. 237) such as natural settings.

Over the last half century, we have become a society accustomed to ever-present and growing perceptions of risk, primarily through increased global communication (Beck, 1992; Giddens, 1999; Jenkins, 2006). This increased perception of risk has produced significant restrictions on the outdoor play experiences of childhood compared to previous generations (Gastor, 1995; Knight, 2011; Sandseter & Sando, 2016; Waite, 2010). For the purposes of this article, risk is defined as the exposure to danger which may result in harm, loss, or gain, and risky play is defined as “a set of motivated behaviors that both provide the child with an exhilarating positive emotion and expose the child to the stimuli” which the child may have previously been fearful of, avoided, or been prevented from trying (Sandseter, & Kennair, 2011, p. 257). Forest and nature schools (FS) are a more recent and increasingly common alternative for parents and presented as a location for child development through forms of outdoor play. FSs provide ample opportunities for children to experiment and learn through outdoor play, with its inherent risks, can address developmental needs associated with fears, phobias and their capacity for environmental adaptability (Allen & Rapee, 2005; Waters & Begley, 2007). The central argument presented in this article is that modern Western society has become overprotective—here suggested as the shadow of the risk-society—relative to healthy child development,

yet absurdly accepts higher levels of risk in everyday life. FS provide a model to explore risk in child development, yet I argue that real risks to child safety and health in FSs are minimal compared to other aspects of modern life. Metaphors of a pendulum will be used relative to changing societal perceptions of risk, and I advocate we collectively address what can be seen as misguided societal influence on decision making, curriculum, and practice in FS as it relates to child development.

A forest and nature school primer

Reduced contact with nature has been identified as a significant societal trend (Lou, 2005), and connecting children with nature has become a movement in education, community development, urban planning, and health and therapeutic settings (Chawla, 2015). Forest and nature schools are one option for parents to reconnect children with nature, establish a sense of place, and allow for growth and development through outdoor learning experiences (Cumming & Nash, 2015; O'Brien, 2009). Inherent risks of outdoor play as experienced by children in FS programs are equally important to their experiences of creative play, and child-directed inquiry-based learning—all found in the design and delivery of FS programs (Connolly & Haughton, 2017; Little, Wyver, & Gibson, 2011). Engagement in FS programs has been shown to shift child and parents beliefs about risk toward increased engagement and away from the zero-risk child (Savery et al., 2016). This is promising as negotiating risks in outdoor play for their young children, mothers were found to make decisions based on external judgments about good or bad “mothering,” as well as needing to ameliorate their own fears of their children getting hurt (Allin, West, & Curry, 2014; Little, 2015).

FS are an increasingly available and attractive option for parents concerned about overly protective, increasingly sterile, and regulated educational environments for their children (Jenkins, 2006; O'Brien, 2009). FSs are a growing phenomenon in North America and are generally described as originating in Scandinavia (Knight, 2011; O'Brien, 2009) although we are reminded by Leather (2016) in his critique of FSs in the United Kingdom that FSs are socially and culturally constructed. While curricular materials, training plans, and pedagogy may be traced back to Denmark and Norway, one can identify historical connections to Froebel's conceptions of “Kindergarten,” as well as a universal reality of children growing up alongside their families, working, imitating, and playing outdoors, generations before formalized school systems were even envisioned. We need to remember that formal education—often accurately portrayed as institutionalized, seated in rows, indoors, didactic, and mandatory by law—is only a recent phenomenon in the course of human history (Illich, 1971). From a rural versus urban perspective, Wells and Evans (2003) found that children growing up nearby nature showed statistically significant lower levels of psychological stress and higher levels of global self-worth, developing a “buffer” (i.e., resiliency) to life stress over their city dwelling peers. This finding is relevant to

the current societal and global shift toward urbanized living (United Nations, 2014) and supports our increased need for time spent in nature.

Significant growth in FS programming and research has been undertaken in the United Kingdom, where standardization of curriculum came concurrently with increased interests in child development and learning outside the classroom (Harris, 2017). Influences on FS curriculum and practice can be traced as moving approximately from Scandinavia to the United Kingdom and more recently to North America, Australia, and elsewhere (Cumming & Nash, 2015; Harris, 2017). It has however taken on its own regional interpretations and relevance along the way. It is assumed that each nation using FS programming will adopt models and materials to be culturally relevant and take the time to develop philosophical underpinnings and common training regimes to ensure continuity, quality, and societal relevance. This has not always occurred, and the rapid development of schools offering FS programming has led to pedagogical and philosophical criticism, as well as considerations regarding professionalization and corporatization during such rapid development (Leather, 2016).

FS can be described simply as an educational approach or place, yet may manifest in a variety of formats. In Canada, children in FSs may attend a half-day or multiple full-days, be in woodlands and green spaces, or a number of natural playgrounds, farmland, coastal areas, near-urban parks, or other outdoor venues (MacEachren, 2013). FS programs pedagogically are described as being emergent, utilizing experiential learning through inquiry-based, play-based, and place-based pedagogy. FS activities are obviously seasonally and geographically determined. Ideally activities are student-centered in format, and constructed through play, and include nature-based games, explorations of place, and inquiry-based learning both facilitated and unstructured. From a child and youth development perspective, FSs are an ideal teaching context where ecological systems theory and approaches to human development can be taught through observing biological systems, participating in group development (Forest School Canada, 2014) and discovering nature as a reflective and restorative place.

Play, in the outdoors, is a central tenet of FS pedagogy (Leather, 2016; Ridgers, Knowles, & Sayers, 2012). A FS is not simply a classroom outdoors. Play is also what sets FSs apart from other forms of outdoor learning programs where intentional practice leads to predetermined outcomes, often by demand of funders, consumers, and regulatory bodies (MacEachren, 2013; O'Brien, 2009). However, questions remain of how curriculum is delivered, how educators are evaluated, and whether performance standards within schools are highly valued (Maynard, 2007; Waite, 2010). Each of these concerns reflect how differences between FSs and barriers to full expression of FS programs exist across school districts and communities. Pedagogically, FS disrupts the traditional role of teacher in school. Didactic lecture, controlled indoor spaces, teacher at the front and students in desks, ease of supervision, and progressional curricular delivery are often significantly disrupted. Play-based learning allows for exploration, fun, and may be self-, group- or teacher-directed. As FS educators gain more experience, they can eventually

reverse-engineer curriculum by “writing up” what the students accomplished that day through play. Children seek out exploratory and challenging physical play to develop independence, self-knowledge, and curiosity and to establish their range of abilities (Gurholt & Sanderud, 2016; Stephenson, 2003).

From an evolutionary perspective, psychologists believe that play, especially in its rougher and riskier forms, allows children to address developmental phobias and reduce inhibitions through repeated and increasingly challenging experiences (Sandseter & Kennair, 2011). International estimates of adolescent youth with diagnosable youth mental health disorders is approximately 22%, although it could be higher due to a lack of reporting and subthreshold conditions not being diagnosed (Belfer, 2008; Merikangas et al., 2010). Anxiety disorders, the most commonly reported mental health issues, are experienced at least once in the previous year by 5–18% of North Americans (Gravel & Béland, 2005; Kessler et al., 2003). Although lacking a solid evidence base to support mental health promotion, the evolutionary antiphobic mechanisms engaged by children during outdoor risky play deserve further exploration (Sandseter & Kennair, 2011).

Benefits of FS

Time spent in natural environments has been shown to produce significant health benefits (Berman, Jonides, & Kaplan, 2008; Maller, Townsend, Pryor, Brown, & St. Leger, 2006). In a review of the evidence supporting contact with nature for health promotion, Maller et al. (2006) identified physiological benefits; improved recovery time from mental fatigue, injury, and illness; improved positive outlook and life satisfaction; and the ability to cope with stress. Engaging children in vigorous play has been strongly encouraged in health promotion as a strategy to counter rising rates of hypokinetic disease (i.e., obesity and diabetes) and addressing issues of sedentary lifestyles associated with increasing screen time associated with electronics and entertainment (Chawla, 2015; Collado & Staats, 2016). What is not yet known is what type and amount of nature is needed. Stated in medical terms, what would be an adequate dose of nature (Shanahan, Fuller, Bush, Lin, & Gaston, 2015)?

Creativity has been shown to increase with time spent playing outdoors, along with decreased adult involvement or supervision (Robson & Rowe, 2012). Studies have also shown “green,” natural playgrounds to be more restorative (i.e., increased attention and reduced stress) than artificial or built playgrounds (Bagot, Allen, & Toukhsati, 2015) and access to natural environments positively influences one’s engagement in physical activity throughout their lives (Calogiuri & Chroni, 2014).

Wellbeing and resilience were found to improve for children identified as being from vulnerable backgrounds (e.g., from disadvantages neighborhoods, experiences of homelessness, abuse, substance use) after participating in a nurturing 10-week outdoor program (McArdle, Harrison, & Harrison, 2013). Further, in a study of green schoolyards, positive effects on stress, attention, competence, and supportive social relationships were found across age groups (Chawla, Keena, Pevec, & Stanley, 2014). Last, utilizing the outdoors as a “nature kindergarten” nurtures deep

connections with the natural world (Elliot, Ten Eycke, Chan, & Müller, 2014). This rapidly growing body of research portrays a narrative of FSs providing an array of positive outcomes; however, the increasing risk-aversion in the risk society exerts forces upon teachers who may experience tension between healthy risk-taking by children and protecting themselves against claims of negligence. Stephenson (2003) summarized this clearly at the conclusion of her research with 4 year olds and their early years' teachers:

...many are convinced that there is a connection between successful physical risk-taking and a willingness to undertake risks in other areas of learning. We need therefore to continue to reflect on the implications that increasingly rigorous safety standards in our playgrounds may be having for our children. (p. 42)

Outdoor learning and adventure education research, primarily with adolescents and young adult populations, has supported the developmental and health benefits of activity in nature and place-based experiential learning for quite some time (Hattie, Marsh, Neill, & Richards, 1997; Dillon et al., 2006). Recent FS literature, predominantly surfacing in early-years educational fields, has become a source of growing interest among outdoor and adventure education researchers and theorists (Leather, 2016; Waite, 2010). Significant opportunities are present for these two areas in program development, training, and research.

Outdoor risky play and FS

Through outdoor risky play, children can access evolutionary mechanisms to identify risk, adapt, and challenge themselves accordingly and arguably manage the risk in a manner that reduces phobias or limitations in later life (Sandseter & Kennair, 2011; Tremblay et al., 2015). This idealized approach runs headlong into the realities of modern urban lifestyles entrenched in social media, technology, entertainment, and hurried and overscheduled lives in which a growing detachment from nature and sedentary existence for children is closer to the norm. The Healthy Kids Canada Report (cited in Tremblay et al., 2015) reported Canadian children spending 7.5–9.0 hours in front of screens, contributing to Canada receiving an overall grade of D-minus for not meeting minimum requirements for physical activity.

Outdoor risky play fits as a subcategory of *physical play* described as active, exciting, and having elements of risk (Sandseter, 2009; Sandseter & Kennair, 2011). Sandseter and colleagues take a positive developmental approach to risk and have distinguished *hazards* (potentially harmful) from *risks* (potentially beneficial). For example, a child playing alongside a swollen creek during spring runoff is exposed to a hazard with little potential for a positive experience if they come in contact with it. Conversely, a child climbing a tree to a height where she begins to experience fear has been exposed to a risk. This challenge may be close to her threshold for risk, yet she can develop judgment, risk-assessment, and test her physical capacity with this, and repeated exposure to this risk. It is the emotional place between fear and excitement that children have identified as desirable in their risky play,

an experience described by children as a “tickle in my tummy” or “scarryfunny” (Sandseter, 2009; 2010a; 2010b). This research has occurred in environments of safety and care, such as the preschool context, yet outdoors where supervision may or may not be 100% present. It is also in the diversity and complexity of natural spaces that children are afforded immeasurable opportunities to practice (or play with) risk-seeking and risk-avoidance behaviors (Sandseter, 2010).

Risky play has been envisioned in six distinct forms, each providing a differing experience of risk and opportunities for child development (Sandseter, 2009). The categories of risky play included great heights (climbing, swing or jumping from height), high speed (swinging, sliding, running at speed), dangerous tools (e.g., knives, axe, ropes), dangerous elements (moving water, edges, fire), rough and tumble (wrestling, play fighting, swordplay), and disappear/get lost (hiding, playing alone outdoors, exploring new areas). Sandseter (2010) described children experimenting with the ambiguous middle ground between feelings of fear and excitement during outdoor risky play; demonstrating a form of self-monitoring through engagement and avoidance of risk which produces intense arousal and pleasure. The affordances of the natural outdoor play spaces are closely tied to the intensity of the activities, along with the allowance of risk in the pedagogy of FS practitioners.

Sandseter and others (e.g., Brussoni, Olsen, Pike, & Sleet, 2012; Fjørtoft, 2004) have argued for the developmental benefits of the less predictable and dynamic outdoor play spaces for children over the artificially colored and designed for safety playspaces. For example, Fjørtoft (2004) compared child play in conventional schoolyard playgrounds versus natural landscapes and found statistically significant increases in motor fitness and significant gains in balance and co-ordination in favor of the natural setting. The most basic argument is that artificial government approved playground is not as dynamic or diverse as a natural setting and has drastically reduced hazards or risks by design (Herrington et al., 2012). This leaves much less opportunity to challenge a child’s judgment, abilities, and curiosity. Trees, for example, afford children ample opportunity for branch choices, height, time off the ground, and a host of play opportunities. A set of monkey bars, on the other hand, as safe as they have been designed, clearly limit a child in what he or she can do (equal-distance spacing, stable height, start and finish places identified), and pales in comparison to tree climbing from a self-directed, creative or exploratory perspective.

Sandseter and Sando (2016) have identified further restrictions to outdoor risky play in Norway, a country held up by North American FS practitioners as progressive leaders in this area of risk and child development. The authors describe increasing limitations to outdoor risky play in early childcare centers where previously more permissive approaches to outdoor play were the norm. The authors identified a growing culture of fear of liability and a philosophical shift toward safety over developmental opportunities, increasing levels of adult supervision, and constraints imposed on children’s outdoor play. In interviewing managers of childcare centers, Sandseter and Sando (2016) found the constraints placed on children’s outdoor play

and activities, such as climbing, being primarily driven by fear of political and legal fallout from injuries such as children falling from trees or fences.

A second constraint on children's play in Norway was related to actual physical outdoor play spaces and primarily due to ground surfaces not meeting newly adopted safety standards. In some cases, physical features have simply been removed to avoid injury potential (i.e., trees and nonapproved structures or objects). Also identified were limitations to field trips near water or where supervision may be increasingly difficult such as in forests, in inclement weather, or when children are highly physically active and there are concerns about injury. Sandseter and colleagues have called for research in risk assessment and injury evaluation to support what they have already found—that “despite a low injury rate, activities that were normal a few years ago ... are now restricted or even prohibited” in some settings (Sandseter & Sando, 2016, p. 196). Norway, a nation known broadly for supporting outdoor risky play, and providing the model for FSs in the United Kingdom and North America, seems to have fallen under the risk society influence seen more prevalently in North America. The risk-aversion shift has occurred rapidly and provides a clear example of a dominant societal force influencing practice. Efforts to bolster FS program administrators and increase understanding and mitigation of risk in outdoor play are essential to counter this dominance.

The risk society: addressing the dominance of perceptions

Beck (1992) established a conceptual frame for what he called the “risk society.” Beck claimed today's Western institutions and their subsequent philosophical belief systems were established during postindustrial society and marked a turning away from the guidance of nature and tradition. His thesis espoused a new risk society which values technology and science over more culturally established belief systems, fate, seasonal realities, common sense, and those “will-of-god” events. The risk society is concerned with control and systems of prediction to assess and manage “a diversity of possible futures” in society (Giddens, 1999, p. 3). Science, technology, and the mechanistic worldview of Cartesian-Newtonian logic have played central roles in this transformation (Adam, Beck, & Van Loon, 2000). The proliferation of focused areas of research and knowledge acquisition, along with media and technological influence on our lives, has led to an overabundance of materials from which we predict our futures (Cottle, 1998). Giddens (1999) reminds us to separate risk from hazard or danger. Risk, he suggests, is a modern social construction based on the notion of control, the practice of predicting and controlling future events. Premodern societies coped with hazards in the moment; they did not use today's notion of risk, nor did they predict the likelihood of future events assumingly accurate enough to “insure” individuals against those hazards. Added to the modern perception of predicting risk, today's incessant and pervasive hypermedia overexpose negative events, for example, the use of statistics and trends to model and allow experts to predict future economic crises or earthquakes (McElwee, 2007). The extent of change from a society of nature and tradition to one of scientific and predictive insurance of future

risk, including actuary tables, is hardly understood, but examples of misperceptions within the risk society are easy to find. These provide support for the metaphorical shadow of the risk society in that our perceptions of what is or is not safe are often veiled.

My intention is to provide examples of misunderstood (i.e., including underestimated) risk in the risk society. These misconceptions are used to suggest the minimal—yet real—risks associated with child development opportunities in FS programs are minimal, worth allowing, if not promoting. Risks associated with FS programs often include scratches and bruises from ground falls and playing in undulating and dynamic terrain, small cuts from tools, and occasional burns from exposure to fire. Parents of FS students generally state support for positive outcome of risk-related activities (Little, 2015) and recognize FSs as a supportive environment to develop risk-taking behaviors (Waters & Begley, 2007). I also intend to stimulate dialog on the nature and benefit of risk in child development, providing a starting point for future research and knowledge mobilization. Examples demonstrate how society may be underestimating, yet accepting of, certain risks which, when fully illuminated, may be seen as unacceptable.

While not conflating the examples of daily risk below with risk in FS programs, I suggest the risk society has produced a significant and inappropriate imbalance in how we perceive and accept risk in our daily lives. Examples include the likelihood of child abduction, a child's freedom to walk to school versus being driven in a car, injury rates in sport, and even the risk of visiting your local hospital.

An exposition of real and significant risks faced by children today

The fear of abduction by a stranger is a commonly expressed rationale for parents not allowing their children to roam, play unsupervised or even walk to school alone (Hope, Austin, Dismore, Hammond, & Whyte, 2007). Research has shown a slowly closing perimeter around family homes, over generations, within which children have been allowed to explore on their own (Gaster, 1995; Hart, 1979). This “ranging” diminishes while the actual likelihood of child abduction in the United States is approximately 1 in 1.4 million (Gardner, 2009). In Canada, Dalley and Ruscoe (2003) reported only five cases of stranger abduction in 2000–2001. By definition, the abductors were not family, although four of the five were in fact known by the children abducted, hence, not strangers. The stranger-danger phenomenon has accelerated under the influence of modern media and entertainment, which increases one's connection and familiarity with negative events through news reports without any direct lived experience; this “availability heuristic” describes a person's ability to recall even a rare event with ease, such as a child abduction (Thomas, Stanford, & Sarnecka, 2016), thereby increasing parental fears.

Parents in the risk society are led to believe it is safer to drive their child to school than to allow them to walk due to stranger-danger, yet close to 300 children and youth die in automobile accidents in Canada each year (Transport Canada, 2010). With that number more than doubled in the United States (National Highway

Traffic Safety Administration, 2014), even the American Academy of Pediatrics (2017) advocates for school bus use, cycling, and walking over driving kids to school. With the likelihood of abduction effectively eliminated, a parent then has to consider the risks of driving their children to school or letting them walk where they could potentially be harmed by other vehicles.

While walking to school may actually be safe, parents have been criticized within their communities, as well as threatened by authorities, for lack of supervision of their children at all times, be it walking to school or being left alone in a vehicle or home (Thomas, Stanford, & Sarnecka, 2016; Vota, 2017). Parents who make decisions based on their belief in challenge and risk as necessary for growth and development may face harsh criticism and potential legal action (Thomas, Stanford, & Sarnecka, 2016). It is the perception of risk, again linked to stranger-danger, and a hypermorality about parenting skills within media and communities, that seems to create paranoia about children being alone, even suggesting parents may be neglectful. This becomes a negatively reinforcing system where child development related to risk is further compromised. In reviewing law literature on parenting related to child supervision, Vota (2017) calls for immunity for parents who are intentionally allowing their children to develop agency and self-responsibility. She argues that “helicopter parenting,” in which parents overprotect, has been shown to have negative effects on young adults’ internalized levels of self-efficacy (Reed, Duncan, Lucier-Greer, Fixelle, & Ferraro, 2016).

Using the risk society paradigm to frame his argument, Anglin (2002) challenged the growing norms of child protection workers pressured to act upon prescribed assessments and fear of reprisal for making wrong decisions. His analysis of the socio-political changes in child welfare included an increased reliance on probability calculated through analytic tools and their policing, reduced trust in human judgment and expert opinion, and an increased desire for accountability and to ascribe blame when mistakes were made. Anglin (2002) also articulated how efforts to protect children, in effect, implies that children are helpless. While FS programming is not the realm of child protection work, the risk society reinforces “...dominant beliefs that children are dependent, innocent, incomplete, incompetent and vulnerable” (p. 249).

Pimental (2015) suggests laws designed to protect children need to be rewritten to “accommodate the risk-management decisions parents routinely make or to respect parental discretion” and reduce the overprotective and intimidating norms established in law (p. 236). The risk society has elevated criticism of the judgment of parents, educators, and human service workers to precipitous levels, compromising decision making regarding children’s healthy development (Jenkins, 2006; Thomas, Stanford, & Sarnecka, 2016; Vota, 2017). Reconceptualizing risk through a developmental lens could allow teachers and other human service workers to explore and develop higher risk tolerance in their work.

We are highly vehicle dependent and accept the risks of driving our children knowing that automobile accidents occur every day. Children regularly participate in sport and society supports its developmental benefits for children and youth.

Social interaction, developing perseverance, team work, and resilience are gained, yet injuries occur consistently across contact and vigorous sport for boys and girls, often resulting in significant lifetime physical issues, impairment, paralysis, and even death (Caine, Maffulli, & Caine, 2008). As a final example of the imbalance of risk-perception today, the risk society has placed significant faith and trust in the medical care system, a system entrenched in technology, evidence, and probability. A published estimate of fatalities and serious injury to patients by human error in hospitals provided shocking results: up to 400,000 patients in U.S. hospitals prematurely died and potentially 10- to 20-fold more suffered “serious harm” in a single year (James, 2013). More recently, John Hopkins University’s School of Medicine researchers Makary and Daniel (2016) boldly titled their study in the *British Medical Journal* “Medical error—the third leading cause of death in the US.” While rates of medical errors in children are less often the object of study, Slonim, LaFleur, Ahmed, and Joseph (2003) estimated an occurrence of 2–3% were actually reported by hospitals, but likely higher due to lack of reporting. What do we consider risky, and what risks are acceptable? These examples are simply used to juxtapose real everyday risks with those minimal risks a child is exposed to in FSs. If we have a rational objective sense of real risks children face, we should not fall prey to media or have overreactions to isolated incidences. With informed consent and quality care, parents should not be concerned with the type and level of risk FS presents.

Conclusions: Reconceptualizing outdoor risky play

Recently published research reviews have supported outdoor play as a developmental need, including the associated and valued risks (Brussoni, Olsen, Pike, & Sleet, 2012; Brussoni et al., 2015; Gray et al., 2015; Tremblay et al., 2015). Two systematic reviews and a collective *position statement* identified empirical support for time spent outdoors, physical activity, and risky play associated with the first two factors as necessary for healthy child development (Tremblay et al., 2015). Is the level of risk and potential negative harms associated with FS program activities less acceptable than the potential loss of development? Until answered with some assurances, is it realistic or fair for FS practitioners and administrators to carry the burden of possible litigation for allowing reasonable risk through outdoor play while children are in their care?

While this article serves to address the shadow of the risk society as it relates to healthy child development in FS programs, it also aims to be a catalyst for dialogue across education and human service sectors. With supportive evidence growing in favor of outdoor risky play, critically challenging the influence of the risk society—and its policies and practices which may in fact overprotect children—exposes potential impediments to child development. A deeper understanding of the practice, values, and intentions of FS practitioners may assist in finding middle ground between those who promote efforts to prevent child injury and those who believe that child development (e.g., developing resilience, tolerating anxiety, making judgments, reducing phobias, taking calculated risks) generally includes risk. A

balanced approach will view risk as serving an important purpose in growing up, allowing for development of confidence, competence, and risk management skills that could ultimately reduce the potential for harm in the child's future.

Let us imagine a metaphor of a pendulum representing the seeming polarity between the practices of overprotecting children and the healthy child development through outdoor risky play. This paper suggests the pendulum has swung too far in recent decades toward child protection and resulted in lost developmental potential. This does not suggest polarity in idealized or common values of protecting children from harm, nor does it suggest preventing them from growing and developing into healthy adults. The research included in this article suggests the pendulum of risk-averse practices, while driven by good intention, may now limit child development. This is in no way an indictment of or an attempt to undermine the efforts of systematic child protection or child safety efforts. As a pendulum is a metaphor of motion, and easily interpreted as divisive when the direction of swing changes, I suggest a new metaphor. The metaphor of a balance scale seems more appropriate for this discussion—a balance of risk and safety in healthy child development. Tremblay et al. (2015) suggest “the optimal balance between health promotion through active outdoor and risky play, and injury prevention and safety concerns, has been lost for children today” (p. 6,493).

This article proposes a restructuring of the risk conversation toward development and slowly returning to a societal acceptance of reasonable and meaningful risk-taking by children. The conversation could lead to shifts in perception and policy change, allowing FS practitioners, teachers, and other child and youth care practitioners to allow for outdoor risky play in their programs without fear of litigation. It seems a child development risk-benefit analysis is sorely needed to re-establish the acceptance of risk in the child development equation (Ball, 2004). Research to support FS programming is now in demand, as seen in a recent move in Washington state through the development of legislation to license outdoor preschools and increase access to students (US News, 2017).

Evaluation is needed to identify and articulate how risks associated with outdoor play are being defined, rationalized, and articulated within FS programs. A basis could be established for further investigations of outdoor risky play in, and its relationship to, developmental outcomes. Among other positive developmental outcomes, suggestions of improved resiliency and adaptability may be likely from outdoor risky play in childhood (Brussoni et al., 2015; Sandseter & Kennair, 2011; Wells & Evans, 2003), although this has yet to stand the test of rigorous investigation. Rates of mental health issues currently experienced in adolescent populations may be investigated relative to levels of risky play opportunities adolescents were afforded in early years. Within the child and youth work literature, Brendtro and Strother (2007) called for a “return to the basics” of outdoor activities and learning to “foster the development of courage, resilience, and responsibility” through adventure (p. 2). Interestingly, a history of camps, therapeutic camping, outdoor adventure, and recreation are found throughout the history of child and youth care, early years education, and developmental practice (Beker, 2001; Durkin, 2000), yet no specific

references are made in formal professional documents such as the *Competencies for Professional Child and Youth Work Practitioners* (A.C.Y.C.P., 2010) to prepare child care and youth work practitioners. Education and human service work with children would both benefit from engaging in the conversation of the value and need for outdoor risky play, whether in the FS context or elsewhere.

Explicitly stated from a position of advocacy and as a call for further research, this article is an appeal for more professional dialog to increase our collective understanding of risk, specifically in the context of outdoor play and FS programs, and its relationship to healthy child development. Forest and nature schools have been presented as ideal places for person-environment explorations and offering varying levels of risk and challenges for children. Finding the appropriate balance of risk and safety in child development will not be easily achieved or formulaic, but certainly worthy of pursuit. If we do not allow for development through an acceptance of risk, we may find, as the evolutionary psychology literature suggests, “an increased neuroticism and psychopathology in society if children are hindered from partaking in age adequate risky play” (Sandseter & Kennair, 2011, p. 257).

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