

# 4 Outdoor risky play

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Playing outdoors offers rich play opportunities and has unique characteristics less apparent in indoor play, including taking physical risks. Risky play occurs when children intentionally seek exhilarating and scary physical play situations that allow them to gain mastery over their fears. Opportunities for outdoor risky play have been severely curtailed in recent generations. As research mounts on the importance of risky play for children's health, development and well-being, there is increasing recognition regarding the need for action to create supportive environments for play. This chapter reviews the literature on the importance of risky play. It then presents the three key ingredients for outdoor risky play supportive environments – time, space and freedom – and suggests practice and policy necessary to implement sustained and meaningful change.

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## Background

Play is a dominant activity of children’s lives in all cultures (Hyun, 1998<sup>[1]</sup>; Pellegrini, 2009<sup>[2]</sup>), and children’s right to play is enshrined in Article 31 of the United Nations Convention on the Rights of the Child (UNCRC) (Office of the United Nations High Commissioner for Human Rights, 1989<sup>[3]</sup>). When given the choice, children across the world commonly report that they prefer playing outside (Raymund, 1995<sup>[4]</sup>; Inter IKEA Systems, 2015<sup>[5]</sup>). Similarly, adults’ favoured childhood play memories typically occur outdoors, particularly in natural settings (Brunelle et al., 2016<sup>[6]</sup>; Raymund, 1995<sup>[4]</sup>; Singer et al., 2008<sup>[7]</sup>). When reflecting on favourite play experiences, children and adults highlight a sense of joy and fun, freedom to move their bodies as they choose, opportunities to be creative, hang out with friends, challenge themselves and connect with nature – aspects that tend to be more readily available outside than in (Brunelle et al., 2016<sup>[6]</sup>; Caro et al., 2016<sup>[8]</sup>; Greenfield, 2004<sup>[9]</sup>). Growing research documents key differences between play occurring outdoors compared to indoors, and how outdoor play can uniquely contribute to children’s health, development and well-being (Brussoni, 2019<sup>[10]</sup>).

Outdoor play is unstructured, freely chosen and child-directed outdoor activity (Outdoor Play Canada, 2019<sup>[11]</sup>). It can include jumping in a pile of leaves, observing bugs, an impromptu game of street hockey, or any activity shaped by the imagination of children and the freedom they have to act on their surroundings. Risk taking, such as climbing, running, exploring, is a natural and necessary aspect of outdoor play. Over the last 30 years, children’s engagement in outdoor play, and particularly risky play, has diminished as their freedom to go outside and engage in risks has decreased (Shaw et al., 2015<sup>[12]</sup>; Wyver et al., 2009<sup>[13]</sup>). Parent and caregiver concerns over children’s safety, a shift to prioritising academic outcomes over play, and increased screen time are among the forces that are shaping children’s access to regular high quality outdoor play opportunities (Holt et al., 2016<sup>[14]</sup>; Mullan, 2019<sup>[15]</sup>; Watchman and Spencer-Cavaliere, 2017<sup>[16]</sup>).

This chapter will provide a brief overview of the characteristics and importance of outdoor risky play for children’s development, health and well-being. It will examine the key ingredients of supportive play environments to guide practice and policy in supporting 21st century children.

## Outdoor risky play

Risky play is defined as “thrilling and exciting forms of physical play that involve uncertainty and a risk of physical injury” (Sandseter, 2010, p. 22<sup>[17]</sup>). Children intentionally seek out situations that can be simultaneously exhilarating and fearful and offer the opportunity to experience the joy of mastery while pushing themselves to a potentially dangerous edge. While children are fully aware of the potential for inducing fear or experiencing injury, the inherent uncertainty in the outcome enhances the thrill (Sandseter, 2009<sup>[18]</sup>; Sandseter, 2009<sup>[19]</sup>).

Risky play primarily occurs outdoors and the research literature outlines eight types of risky play that are typically observed (Kleppe, Melhuish and Sandseter, 2017<sup>[20]</sup>; Sandseter, 2009<sup>[18]</sup>):

- play at heights, such as climbing, jumping, hanging and balancing
- play at high speed, such as running, sliding and cycling
- play with dangerous tools, such as ropes, hammers and knives
- play near dangerous elements, such as playing near water, fire or cliffs
- play with a chance of getting lost, such as hiding or exploring without an adult
- rough-and-tumble play, such as wrestling
- play with impact, such as repeatedly crashing into objects or the ground for fun

- vicarious risk, can be a precursor to children’s personal risk taking offering them opportunities to learn about risk-taking and experience thrill while watching others.

Risky play can involve aspects of play types that have been used to categorise play in previous literature. For example, imaginative play, locomotor or functional play (where the child’s body provides the primary play tool, such as when climbing or running), constructive play (where the child is building something), and exploratory play (where the child receives information through engagement with an object) (Cox, Loebach and Little, 2018<sup>[21]</sup>). However, a defining and distinguishing characteristic of risky play is intentional physical risk taking.

### ***Importance of outdoor risky play***

All children are naturally drawn and evolutionarily adapted to take risks through play. Driven by curiosity and excitement seeking, they learn about their environment, what it affords, how far they can push it and their own body, and how to manage the risks they encounter (Sandseter, 2009<sup>[18]</sup>; Sandseter and Kennair, 2011<sup>[22]</sup>). Risky play can have wide-reaching benefits for children’s health, development, mental health and well-being. With respect to physical health, children’s physical activity comes primarily from play, not formal exercise. Extensive research documents that children are more physically active and less sedentary when playing outside than when indoors (Gray et al., 2015<sup>[23]</sup>). In particular, children are more physically active when unsupervised by adults and with their peers, such as when they are exploring their neighbourhood or playing in a park with friends (Brussoni et al., 2015<sup>[24]</sup>).

Sandseter and Kennair (2011<sup>[22]</sup>) theorise regarding the mental health effects of risky play. They argue that children are evolutionarily predisposed to taking risks in play and that this helps them become accustomed to coping with stimuli that could otherwise elicit anxiety or fear (e.g. separation from caregivers, heights), thus extinguishing these fears. Risky play gives children opportunities to experience positive emotions while gaining mastery over situations or stimuli that are a source of fear, and develop the skills to conquer these fears. Depriving them of these opportunities would result in the persistence of the fears, increasing the likelihood of phobias, anxiety disorders and other maladaptive behaviours. Sandseter and Kennair (2011<sup>[22]</sup>) provide extensive evidence to support their theory. Likewise, Gray (2011<sup>[25]</sup>) suggests a causal link between the decline of play and the rising rates of psychopathology, indicating that play deprivation negatively influences children’s socio-emotional learning and self-efficacy, and is associated with social isolation and depressive symptoms. Furthermore, research has linked overprotective parenting with lower self-efficacy, maladaptive behaviours, anxiety and depression in childhood and into adulthood (Bradley-Geist and Olson-Buchanan, 2014<sup>[26]</sup>; LeMoyné and Buchanan, 2011<sup>[27]</sup>; Schiffrin et al., 2013<sup>[28]</sup>; Thirlwall and Creswell, 2010<sup>[29]</sup>), even suggesting structural changes in the brain’s threat-related function resulting in greater reactivity to interpersonal threat (Farber et al., 2019<sup>[30]</sup>).

Research indicates the importance of risky play for developing risk perception and risk management skills (Brussoni et al., 2012<sup>[31]</sup>; Lavrysen et al., 2015<sup>[32]</sup>). A recent pilot study found a positive association between parents’ tolerance for risk in play and children’s performance in a virtual pedestrian street crossing task (VanSkiver, 2019<sup>[33]</sup>). This would suggest that while adults’ and caregivers’ fears of injury have limited children’s opportunities for outdoor risky play, these limitations may paradoxically place children at greater risk of injury as they lack opportunities to develop the crucial risk management skills that they can use to keep themselves safe (Brussoni et al., 2012<sup>[31]</sup>).

The importance of play and risk taking has been seen as critical to preparing children for the changing workforce. The World Economic Forum (WEF) (World Economic Forum, 2016<sup>[34]</sup>) anticipates jobs requiring a greater focus on cognitive abilities, complex problem solving and social skills. At the 2018 WEF meeting, the Real Play Coalition, which includes Lego, IKEA, National Geographic and Unilever, described play as the “engine of optimal child development” and declared a “silent play emergency,” arguing that abundant time for play for today’s children would prepare them to be leaders who can resolve conflict, problem solve,

build social connections and provide inspiration to others (Goodwin et al., 2018<sup>[35]</sup>; Real Play Coalition, 2018<sup>[36]</sup>).

While there are no available international statistics on how often children engage in outdoor risky play, statistics on outdoor play across 49 countries paint a concerning picture (Aubert et al., 2018<sup>[37]</sup>). A letter grade of D+ was assigned to global performance on an indicator of active play, indicating that less than 40% of children met the benchmark minimum of two hours spent playing outdoors daily. Notably, in many cases countries with the highest human development index performed worse than those with the lowest index. The daily necessity for active transport and walking to school for children living in many lower index countries may provide opportunities for play that are less available to children in high index countries where being driven to school and participating in multiple organised activities tends to be the norm.

### ***Injuries: Statistics and risk aversion***

Risky play can result in injury, and in extreme cases even death. Parent and caregiver fears of adverse events have resulted in increasingly diminishing freedom and opportunities to engage in risky play in many Western nations (Brussoni et al., 2012<sup>[31]</sup>; Wyver et al., 2009<sup>[13]</sup>). However, injury statistics indicate that the fear of an adverse outcome may not be commensurate with the likelihood of such an event and may result in excessive limitation of children's risky play opportunities to the detriment of their health, development, learning and well-being. Furthermore, this risk averse approach fails to consider that limiting children's risky play may increase the likelihood of injury because of children's underdeveloped risk management skills.

For risky play that occurs without adult supervision, such as play with a chance of getting lost (e.g. independent mobility), common parental worries relate to their child being abducted by a stranger or struck by a car (Jelleyman et al., 2019<sup>[38]</sup>). Abductions by strangers are exceedingly rare, with Canadian statistics indicating a rate of approximately 1 in 14 million (Dalley and Rucoe, 2003<sup>[39]</sup>). While injuries are a leading cause of child death worldwide (Peden et al., 2008<sup>[40]</sup>) statistics in many nations indicate record low injury rates, largely due to improvements in motor vehicle passenger safety (Richmond et al., 2016<sup>[41]</sup>; Sethi et al., 2008<sup>[42]</sup>). Motor vehicle crashes and suicides remain the leading cause of death for children in many countries, but it is critical to distinguish that this statistic relates to children as passengers, not pedestrians. Ironically, in a bid to protect their children from injury, many parents drive children from activity to activity, creating the "backseat generation" (Karsten, 2005<sup>[43]</sup>), unknowingly exposing them to the most likely cause of mortality. Likewise, with respect to suicides, overprotected children are more likely to experience anxiety and depression into early adulthood, thus putting them at greater risk of self-harming behaviours (LeMoyne and Buchanan, 2011<sup>[27]</sup>; Schiffrin et al., 2013<sup>[28]</sup>).

Statistics on mortality and morbidity related to play are not readily available due to limitations in coding and data collection. However, the available statistics indicate that serious injuries and deaths resulting from play are exceedingly rare. For example, Canadian mortality statistics for children aged 1-14 years indicate zero deaths due to falls from trees between 2000-2017, and two deaths due to falls from play equipment between 2007-2017, a rate of 1 in 35 million (Statistics Canada, 2017<sup>[44]</sup>). With respect to morbidity, a systematic review of medically treated injury incidence for physical activity behaviours (sports, active commuting, play) in children aged 6-12 years indicated that when controlling for exposure time, sports had the highest (0.20-0.67 injuries per 1 000 hours) and play had the lowest (0.15-0.17 injuries per 1 000 hours) injury incidence.

The effects of risk aversion have been wide reaching influencing how children are supervised (increased supervision, stifling limitations and reduced agency in play) and the design of children's play environments (focused around standardised boring fixed play equipment) that has resulted in a claustrophobic vision of play with profound negative impacts on children and their future.

## Creating supportive outdoor risky play environments

As part of a commitment to create rich outdoor play environments, in 2014 the Welsh government became the first country in the world to establish a duty requiring Local Authorities to conduct Play Sufficiency Assessments to evaluate and ensure sufficient rich outdoor play opportunities for local children, considering the needs of children of different ages, cultures and abilities (Welsh Government, 2014<sup>[45]</sup>). As a signatory of the UNCRC, the Welsh Government recognised the critical importance of outdoor play for children and the role that play can have in mitigating the effects of poverty and inequities on children (Welsh Government, 2014<sup>[45]</sup>). The Welsh Play Sufficiency Assessment aims for Wales “to be a country where children are increasingly seen outside enjoying the benefits of play” (Welsh Government and Play Wales, 2015, p. 3<sup>[46]</sup>), with action encouraged around the three key ingredients necessary for supporting rich play environments: time, space and freedom (Welsh Government and Play Wales, 2015<sup>[46]</sup>). The Play Sufficiency requirements offer helpful and practical guidance in planning for and creating supportive outdoor risky play environments. Further details on the requirements are outlined in the corresponding sections below.

### *Time*

The stark decrease of time spent in play, particularly outdoor play, across generations has been unequivocally established. This time has been superseded by organised activities, academics and screen time. US data document a 37% decline in outdoor activities for 6-12 year-old children between 1997 and 2003 (Hofferth, 2009<sup>[47]</sup>). UK data for children aged 8-16 years in 1975, 2000 and 2015 elucidate several important trends: greater commitment of time to academics (particularly for girls), screen-based activities (particularly for boys and older children) and structured activities, associated with stark decreases in outdoor play (for all ages but particularly for younger children) (Mullan, 2019<sup>[15]</sup>). Mullan (2019<sup>[15]</sup>) concludes that a coalescence of safety concerns and technological change has resulted in a shift to home-based sedentary activities. Canadian research further documents the clear displacement of time outdoors and in nature with screen time (Michaelson et al., 2020<sup>[48]</sup>) and the adverse association between screen time and internalised mental health symptoms (Piccininni et al., 2018<sup>[49]</sup>).

Free outdoor playtime has come under increasing threat in schools in many countries with the view that time is better spent in academics rather than on recess. This state of affairs has resulted in the release of numerous position statements calling for preserving recess (Global Recess Alliance, 2020<sup>[50]</sup>; US Play Coalition, 2019<sup>[51]</sup>) and the American Academy of Pediatrics to state that “Recess is a necessary break in the day for optimising a child’s social, emotional, physical, and cognitive development. In essence, recess should be considered a child’s personal time, and it should not be withheld for academic or punitive reasons” (Council on school health, 2012, p. 186<sup>[52]</sup>).

Prioritising time for outdoor play requires an understanding of currently available provision, a combined effort to educate parents, childcare environments, schools, the community on its importance and hold local policy makers accountable. This approach is reflected in the Welsh Play Sufficiency Assessment, which requires Local Authorities to assess available play time in communities and school environments (Welsh Government and Play Wales, 2015<sup>[46]</sup>). This includes the efforts to publicise information that contributes to positive community attitudes to play, signposting to promote play, information to support parents in encouraging children’s play, and ensuring that schools provide play opportunities during school and access to rich play environments during and after school.

### *Space*

Exacerbating the social and technological factors that have led to children’s retreat indoors has been an approach to urban planning dominated by cars (Arup, 2017<sup>[53]</sup>; Bishop and Corkery, 2017<sup>[54]</sup>; Hart, 2002<sup>[55]</sup>). Furthermore, planning for areas not dedicated to cars has been guided by adult priorities, relegating

children to defined play areas away from the harms of traffic and potentially harmful people (Brussoni et al., 2018<sup>[56]</sup>; Hart, 2002<sup>[55]</sup>). This approach to planning fails to recognise the importance of the built environment in shaping children’s development and future lives and that vibrant and sustainable cities are necessarily inclusive and play friendly, supporting play throughout the community, not just in designated play spaces (Arup, 2017<sup>[53]</sup>; Bishop and Corkery, 2017<sup>[54]</sup>; UNICEF, 2018<sup>[57]</sup>).

Arup (2017, p. 7<sup>[53]</sup>) proposes that the “amount of time children spend playing outdoors, their ability to get around independently, and their level of contact with nature are strong indicators of how a city is performing, and not just for children but for all city dwellers”. Achieving this vision requires attention to not only the design of stimulating play environments to meet the needs of local children, but also ensuring safe and independent access (without an adult) to these environments and their neighbourhood. This requires an understanding of the diverse needs of the local children, with particular attention to ensuring equitable access and play provision.

### *Play space design*

The Seven Cs criteria for outdoor play space design (character, context, connectivity, clarity, change, chance and challenge) indicate that the highest quality play environments are scaled to the child, sensitive to climate, and that they include living materials and elements that children can manipulate (e.g. loose parts such as water, sand, bricks) (Herrington, Brunelle and Brussoni, 2017<sup>[58]</sup>; Herrington et al., 2007<sup>[59]</sup>). The criteria provide guidance for the design of environments in ways that privilege children’s experiences and needs. Developed in the context of early childhood education environments, the universality of these criteria has led to their application for children of different ages and in diverse international settings (Larcombe, 2010<sup>[60]</sup>; Mountain, 2014<sup>[61]</sup>; Sajadi and Khoshnevis, 2016<sup>[62]</sup>).

The theory of affordances is helpful in considering the elements that are included in a play environment, particularly elements that children can manipulate (Gibson, 1979<sup>[63]</sup>). Affordances available in an environment depend on the features of the environments and the characteristics of the users. For example, a tree may afford climbing for children with the physical ability and interest to do so, but not for others, such as those with mobility impairments. The richest play environments maximise the affordances and versatility of those environments so that they support play opportunities for children with diverse needs and interests (Herrington, 1997<sup>[64]</sup>; Woolley and Lowe, 2013<sup>[65]</sup>).

Loose parts, in being manipulatable by children in infinite configurations, are ideal additions to play environments to maximise affordances (Nicholson, 1972<sup>[66]</sup>). In recent years, research on the benefits of play with loose parts has expanded with evidence indicating increases in the types of play, creativity and exploration, resilience and physical activity (Gibson, Cornell and Gill, 2017<sup>[67]</sup>; Houser et al., 2019<sup>[68]</sup>). The affordances available through loose parts and their ease of procurement have helped increase their popularity as an affordable option for enhancing the play opportunities in children’s play spaces. A number of practical toolkits and guidelines for loose parts play have been developed in recent years to support their use in schools and childcare centres. Among the most comprehensive and user friendly is Scotland’s Loose Parts Play Toolkit (Casey and Robertson, 2019<sup>[69]</sup>).

Adventure Playgrounds are child-centred, child-directed staffed play spaces that provide children with abundant loose parts, raw materials, such as building supplies, tools, fire pits, water features, and other areas where children have the freedom to pursue their own interests, be creative, fail and succeed (Chilton, 2018<sup>[70]</sup>). The staff are play workers, trained in supporting and facilitating the play process, removing the barriers to play and helping children realise their vision for play (Staempfli, 2009<sup>[71]</sup>). Adventure Playgrounds can be permanent or temporary sites. The permanent sites can be an important opportunity for community building, particularly in underprivileged areas. The play workers offer ongoing relationships, creating a sense of continuity, the ability to shape the playground offers a sense of ownership and belonging; for many children these places represent a home away from home (Staempfli, 2009<sup>[71]</sup>). Pop-Up Adventure Playgrounds are temporary installations, also staffed by play workers. They can exist for a few

hours or several weeks and can be provide an opportunity to engage the local community, test out processes, and mobilise public will for a more permanent site. Resources and toolkits are available via Pop-up Adventure Play (Law and Leichter-Saxby, 2020<sup>[72]</sup>).

### *Safe access*

High quality play space provision does not end with the space itself, but rather must consider how children of diverse ages and needs will access that space. Children must feel safe in getting to and playing in the space and caregivers must feel confident in letting children access those spaces.

According to the US National Association of City Transport Officials (NACTO), streets for children should be designed for improved mobility, support independent mobility (children’s movement independent of adults) and provide places to pause, sit and play (National Association of City Transport Officials, 2020<sup>[73]</sup>). NACTO outlines design principles focused on making streets safe and healthy (e.g. speed limits, pedestrian infrastructure, illumination), comfortable and convenient (e.g. trees for shade, solitary and social seating, access to nature, rubbish bins), and inspirational and educational (e.g. artwork, varied texture in surfaces, possibilities for playful encounters).

Recognising these various priorities as key ingredients for “Space”, the Welsh Play Sufficiency Assessment (Welsh Government and Play Wales, 2015, p. 21<sup>[46]</sup>) requires making spaces available for play, provision of “rich play environments”, staffed play provision by qualified play workers, and ensuring free access. It further requires Local Authorities to assess the extent to which children’s needs are inherent to public transport planning, the speed limits and pedestrian and cycling infrastructure available in the area, and that the play spaces are clear from hazards. The assessment further requires implementing the play streets initiative where streets are regularly closed to traffic to allow for children to play outside their homes (Bridges et al., 2019<sup>[74]</sup>). Furthermore, Local Authorities are tasked with community engagement and ensuring cues in the community that support rather than discourage play (e.g. “Play Priority” versus “No Ball Games”) (Welsh Government and Play Wales, 2015<sup>[46]</sup>).

### **Freedom**

As children’s freedom to engage in the play of their choosing decreases, so does the quality of play provision. As outlined above, heightened safety fears have curtailed children’s freedom to play outside, as well as the behaviours they are allowed to engage in while playing outside. The limitations result from increasingly restrictive supervision, as well as playground safety standards imposing engineering approaches to risk management on children’s play (Ball et al., 2019<sup>[75]</sup>; Brussoni et al., 2012<sup>[31]</sup>; Wyver et al., 2009<sup>[13]</sup>).

A societal shift in support for children’s outdoor risky play requires an integrated approach that addresses the policy and structural barriers, but also shifting the attitudes of parents and caregivers, community members, educators and policy makers. As an example, the Welsh Play Sufficiency Assessment requires examining policies for their role in curtailing children’s freedom. In particular, there is a requirement that the “Health and Safety policies explicitly recognise the value of children being able to experience risk and challenge” (Welsh Government and Play Wales, 2015, p. 47<sup>[46]</sup>). Because these policies guide the approach to health and safety in the community, educational and work environments, they represent a powerful lever for change in Wales. Furthermore, the Assessment requires a community strategy that recognises the right to play and outlines how this provision will be accomplished. Understanding the need to address all levels and sectors of society, broad partnerships, and educational and informational initiatives that work with the media are encouraged (Welsh Government, 2014<sup>[45]</sup>; Welsh Government and Play Wales, 2015<sup>[46]</sup>).

### *Shifting attitudes towards risky play*

A national survey of New Zealand parents of children 5-12 years old indicated that while most parents (78.6%) recognised the benefits of opportunities for risk and challenge, children had limited opportunities for risky play, particularly play where there is a chance of getting lost (e.g. walking to school alone or with a friend), with only 14.5% of children allowed to engage in this kind of play (Jelleyman et al., 2019<sup>[38]</sup>). The results suggested a need to address parents' perceived barriers and fears to influence their support of risky play. While this survey reflects the attitudes of New Zealand parents, research in other nations also points to the parents' gatekeeper role in children's access to risky play and the importance of addressing their concerns to improve children's play opportunities (Marzi, Demetriou and Reimers, 2018<sup>[76]</sup>).

Recognising the importance of widespread awareness of outdoor play and knowledge on how best to support it, the Welsh Play Sufficiency Assessment (Welsh Government and Play Wales, 2015<sup>[46]</sup>) requires provision of training for volunteers, parents and professionals who work with children and decision makers whose work impacts children's opportunities to play. An important component of training is reframing of attitudes towards risk such that there is a recognition of the importance of risky play and how to support it.

Interventions to shift attitudes towards risky play have been developed and tested as in-person workshops and web-based activities. In the context of a loose parts intervention study in schools, Bundy and colleagues developed a risk reframing workshop for parents and teachers. The workshop takes participants through a series of reflection points designed to change their attitudes and behaviours (Bundy et al., 2011<sup>[77]</sup>; Niehues et al., 2016<sup>[78]</sup>; Niehues et al., 2013<sup>[79]</sup>). Building on this work, Brussoni and colleagues (2018<sup>[80]</sup>) designed an online risk reframing tool, [www.outsideplay.ca](http://www.outsideplay.ca), that uses behaviour change techniques to take users through a three-part process of guided reflection, decision support and planning for change. Its effectiveness at supporting parents' attitude and behaviour change was confirmed through a randomised controlled trial.

### *Playground safety standards*

Playground safety standards are overarching guidelines that are specifically designed to harmonise approaches to playground design and play. Standards focus on risk elimination through engineering-style controls (Ball et al., 2019<sup>[75]</sup>). The assumption that compliance with standards equates with no injuries or grants immunity from prosecution (Jost, Yost and Mikus, 2016<sup>[81]</sup>) has resulted in the ubiquitous application of standards. This blanket approach combined with an engineering mind-set to play has resulted in problematic play space provision (Ball et al., 2019<sup>[75]</sup>; Herrington and Nicholls, 2007<sup>[82]</sup>) with play equipment designed "like for the babies" (10-year-old boy in (Brussoni et al., 2020, p. 6<sup>[83]</sup>)). Children's play behaviours and needs are not standard but influenced by local circumstances and the children using the play space. Furthermore, playground standards cannot cope with alternate forms of play and play spaces, such as play with loose parts or in natural settings. Trees do not come in standard shapes and loose parts do not stay in one place. The suggested approach is to employ standards for technical aspects of play equipment (e.g. structural integrity, foundations, mechanical parts), but use a risk benefit assessment (RBA) approach for value-based judgments (e.g. surfacing, height, affordances, challenge) (Ball, Gill and Spiegel, 2012<sup>[84]</sup>). Furthermore, while assessing standards should remain in the hands of playground inspectors with proper training, the RBA is best handled by the play providers (e.g. educators, recreation providers) who are most familiar with the local culture and the children's potential and actual play behaviour (Ball et al., 2019<sup>[75]</sup>).

### *Risk benefit assessment*

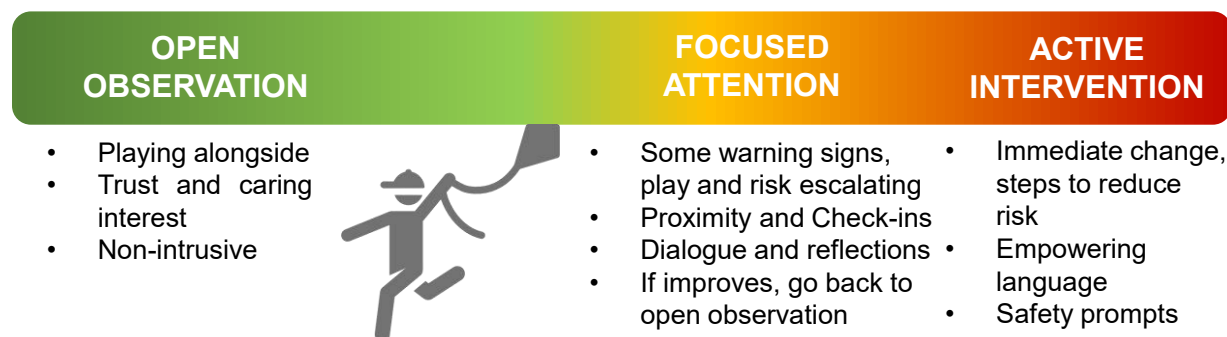
RBA frameworks have been developed in the United Kingdom (Ball, Gill and Spiegel, 2012<sup>[84]</sup>), Canada (Gill, Power and Brussoni, 2019<sup>[85]</sup>) and incorporated into the most recent Australian playground safety standard (Standards Australia., 2017<sup>[86]</sup>). The Canadian RBA framework provides guidance on how to conduct RBAs and includes sample tools, such as an informed consent form, standard of care checklist,



an RBA form, site risk assessment form and an incident report form (Gill, Power and Brussoni, 2019<sup>[85]</sup>). In addition, it describes a dynamic RBA process for responding to the in-the-moment risk-taking characteristic of children’s play. The goal of dynamic RBA is to support children playing freely, learning from their efforts and mistakes, and learning how to keep themselves and their peers safe. Central to this process is building relationships with the children. When working with new groups of children, the play provider is encouraged to spend time in more familiar areas and activities and establish predictable routines. As a sense of each child and their needs is developed, these can be incorporated into the dynamic RBA process and a gradual-release model can increase children’s freedom to take risks.

For adult caregivers supporting children’s play, there are three levels of attention described in the dynamic RBA process (Gill, Power and Brussoni, 2019<sup>[85]</sup>) (see Figure 4.1). The first, open observation, is the resting state. The caregiver is playing alongside the children in a non-intrusive, supportive, trusting and caring manner. If there are signs that risk is escalating, the play provider moves to focused attention, where they may get physically closer to the child and engage in dialogue that supports the child’s reflection on risk management (e.g. “Do you feel safe there?” “What is your next move?”). If the situation is managed, then the caregiver returns to open observation. If the risk escalates to unacceptable levels, then immediate steps are taken to reduce risk, with safety prompts that use empowering language (e.g. “Sticks need space. Do you have enough space to swing that big stick?”).

**Figure 4.1. Dynamic risk benefit assessment**



Source: (Gill, Power and Brussoni, 2019<sup>[85]</sup>)

The Welsh Play Sufficiency Assessment recognises the importance of an approach to health and safety in all spheres related to children’s play be underpinned by RBA, requiring that the “Health and Safety policies and procedures incorporate the risk benefit approach to health and safety assessments as recommended by the Health and Safety Executive” (Welsh Government and Play Wales, 2015, p. 47<sup>[46]</sup>). Needless to say, implicit in this are mechanisms for training in RBA for local play providers. This requires integration into the post-secondary training environment for educators, in addition to professional learning opportunities for those already in service.

## In sum

The evidence suggests the importance of regular and repeated exposure to high quality outdoor play opportunities, including the opportunity to engage with risk for fostering creativity, resilience, socio-emotional learning, cognitive development, mental health, physical health and risk negotiation skills. Scholars, public officials, educators and others have raised concerns that excessive risk aversion has resulted in unwarranted limitation of children’s risky play opportunities to the detriment of their health,

development and well-being (Council of Chief Medical Officers of Health, 2018<sup>[87]</sup>; International School Ground Alliance, 2018<sup>[88]</sup>; Play Safety Forum, 2008<sup>[89]</sup>; Tremblay et al., 2015<sup>[90]</sup>). The Welsh government was the first to enshrine the need for risk and a risk benefit approach within its health and safety policy in its declared duty for Local Authorities and provides a model for work in other jurisdictions. Many other countries are also undertaking ground-breaking work that helps outline a path forward, such as Scotland's push to making outdoor play the norm in early childhood education (Mathias, 2018<sup>[91]</sup>) and Canada's Council of Chief Medical Officers of Health release of the Active Outdoor Play Statement supporting outdoor play, with its risks, in all settings (Council of Chief Medical Officers of Health, 2018<sup>[87]</sup>). Furthermore, the International School Ground Alliance, a global network of organisations and professionals with a focus on improving school grounds to support children's learning and play, released the Risk in Play and Learning Declaration reinforcing the importance of risk taking for children's well-being and as a call to action for taking the benefits of risk into account on school grounds. It is available in multiple languages and has obtained broad international endorsement (International School Ground Alliance, 2018<sup>[88]</sup>). Supporting the children of the 21st century, our future leaders, demands that children's right to play underpin all aspects of our society.

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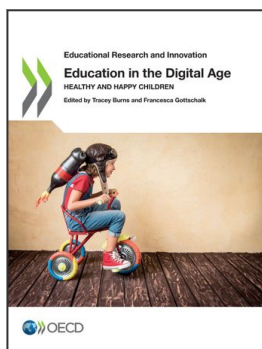
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