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Outdoor play spaces in Canada: The safety dance of standards as policy

Abstract

Over the past decade the outdoor play spaces designed for children in Canada have been largely shaped by fear and profit, rather than by what we know about children's play and development. Since the early 1980s the Canadian Standards Association (CSA) has played an increasingly important role in this transformation as their technical standards for children's outdoor play spaces have been gradually adapted as policy by local and regional agencies. While the CSA has historically regulated industrial and commercial projects that enable international trade and harmonization with countries such as the United States, their extension of influence to early childhood is problematic; particularly when applied to childcare centres. The following describes some of the issues that arise from the use of safety standards as policy, and the problems these standards cause when applied to childcare centres.

Key words: children, open space, playgrounds, policy, standards

Background

Along with mechanical refrigeration and gas equipment standards, the technical standards for the physical features of children's outdoor play spaces are provided by the Canadian Standards Association (CSA). These standards, called 'Children's Playspaces and Equipment' (CSA, 1990, 1998, 2003) specify the material selection, installation, and maintenance of playgrounds. The idea to expand the CSA's area of expertise from subjects like natural gas production to children's outdoor play spaces was hatched in 1979 when the Canadian Institute of Child Health (CICH) and the Canadian Council of Social Develop-

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ment conducted an informal investigation of playground injuries entitled *Danger – Children at Play* (Mender, 1979). In 1981 a special task force of CSA and CICH members, engineers, playground manufacturers, and consumer advocates was formed to address outdoor play spaces designed for children (CICH, 1981).

Unfortunately, when this task force lobbied for the establishment of standards addressing outdoor play spaces they ignored Canadian studies that found injury levels on playgrounds were not significantly high.[1] Instead, they used injury numbers from the American Consumer Product Safety Commission. Given the population difference between the two countries, the American numbers would have appeared high by comparison. The use of US injury numbers may have fulfilled one of the CSA's first objectives to 'foster and promote voluntary standardization as a means of advancing the national economy' (CSA, 2003: introduction) and 'facilitate domestic and international trade' (CSA, 2003: preface) by standardizing equipment to cater to a US market. Unfortunately, the use of these numbers inflated the amount of risk in a Canadian context, helping to incite fear about outdoor play spaces. Sociologist Frank Furedi notes that Western society is cultivating a culture of fear where risk avoidance dominates. What Furedi calls the precautionary principle is the idea that there are perceived risks to taking risks that are greater than not taking risks. While the precautionary principle may make sense for the gas and elevator equipment industry, it's an inadequate principle for children's outdoor play spaces. According to Furedi the precautionary 'principle has caused an institutionalization of caution. It offers security in exchange for lowering expectation, limiting growth and preventing experimentation and change' (Furedi, 2002: 9). Restricting growth and hindering experimentation and change is precisely what should not happen in a play space for young children.

None the less, fear prevailed and by 1998 the standards were published for public use and can now be purchased online at the CSA website. Almost a third of the Technical Committee on the Standards for 'Children's Playspaces and Equipment' (CSA, 2003) own or work for play equipment and/or rubber surfacing companies. Not only are there ethical concerns regarding this committee profile, but absent from these standards are references to child development and related play concepts, a continuing weakness and oversight of the standards to this day. By focusing on inflated injury rates and shifting the idea of 'play space' to the purchase of mass produced play equipment, the

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CSA standards have maximized the market for play equipment and risk management industries, while minimizing the importance of play in the creation of children's outdoor play spaces. The gravity of this shift from play to precaution is felt increasingly as the CSA standards have been used as policy. The following describes this shift and its repercussions.

Standards as policy

Since their inception, the CSA standards have been used as a litigation tool in court to assess due diligence. Yet, during the past five years the standards have been adopted by local and national governmental agencies as policy; profoundly reshaping the spaces we provide for children in Canada. For example, the Canada Safety Council recommends that the standards should serve as 'a guide to the proper design and maintenance of public play spaces and equipment' (Canada Safety Council, 2005: 1). The CSA is also directing the removal and redevelopment of playgrounds at a city-wide scale in Canada. In 2000 the City of Toronto paid $90,000 for CSA trained inspectors to conduct safety inspections of outdoor play spaces at schools and childcare centres to determine if these spaces met CSA standards. On the basis of these inspections, and at a cost of $6.3 million, the city then removed and replaced playground equipment at 172 sites without public warning and no community consultation. One-third of the schools received no new equipment at all, leaving play spaces with only fenced off holes and flat grass. It can be anticipated that these spaces will witness increased aggression among children, thereby increasing injuries. 'A playground with nothing to climb on certainly keeps children from long distance falls, but on a bare playground, children tend to challenge one another, sometimes with injuries resulting' (Rivkin, 1995: 50). Yet, the schools with new CSA approved equipment are not contributing to safety either. Ironically, a recent comparative study between Toronto schools that kept their old equipment and schools that received new CSA approved equipment noted that injuries on the new equipment were slightly higher than on the old equipment (Howard et al., 2005: 1445).

Since 2000, the Province of Ontario has continued to eradicate play spaces. A community protest group called Playground Lobby for Active Youth has launched a website that challenges conformance to

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CSA. The website identifies the imaginative playgrounds removed by the city, as well as recently installed, CSA approved, play equipment that lacks challenge and imagination. Aptly put by Alfred Holden, an editor of the *Toronto Star*, 'It was this challenge that was playgrounds' essential ingredient, their draw, and their method of teaching – and it was this edge that such events as the 2000 Toronto playground tear down sought to remove' (Holden, 2000). Children need to take risks in order to develop. If children are prevented from learning that they need to modify their behaviours in different environments, thus learning in and through an environment, when will they learn? According to the Public Health Agency of Canada, this is just too difficult. In rationalizing the Agency's strategy to control injuries, they state:

> . . . instead of focusing primarily on changing individual behaviors, legislative solutions tend to be directed toward consumer product and environmental risk factors. This is significant, particularly for young children, because promoting safer environments is believed to be easier than changing behavior and therefore will likely be more effective in further reducing the incidence of injuries. (Public Health Agency of Canada, 1996)

What escapes experts in safety and injury control is that children, particularly young children, learn by doing, and they develop physically, mentally, socially, and cognitively with age. An observational study of children playing on playgrounds in Winnipeg, Canada concluded that children who lack upper body strength should be prohibited from using climbing equipment (Briggs and Warda, 2002: 455). When will the children be given the opportunity to develop this upper body strength if they are prevented from testing it on playground equipment?

The problem with the CSA's growing breadth of influence in policy development for children's play spaces stems from the fact that the standards focus on technical information concerning structural integrity, performance requirements, and maintenance of materials and play structures, leaving behind the needs and desires of children. In the classic sense, policy is a course of action or plan, and guidelines put policy into practice in specific social contexts. When safety standards for play spaces are used as guidelines, a range of important aspects are ignored, limiting the very purpose of a playground as a

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place for play. The following cites problems where CSA standards have been applied at childcare centres. These finding are based on a study of eighteen play spaces at licensed childcare centres in the city of Vancouver, Canada.[2]

Standards at childcare centres

The CSA's 'Children's Playspaces and Equipment' standards are pervasive and apply 'to public-use play spaces and public equipment found in schools, parks, child-care facilities, institutions, multi-family dwellings, private resorts and recreational developments, restaurants, and other areas of public use' (CSA, 2003: 1). Yet, it is the CSA's influence on policy development concerning the outdoor play spaces at childcare centres which poses the greatest concern. The CSA's blanket coverage of centres as simply another 'public use space' for children ignores three important facts about most childcare centres. These centres 1) are not used by the general public, 2) they are planned with very limited spatial parameters, and 3) they are used on a daily basis by children and staff.

Childcare centre environments are remarkably different from play spaces at schools and parks that are used casually by the public. In contradistinction, the childcare centres in Vancouver, and in many parts of North America, are not accessible by the public, even if subsidized by public funding. In fact, centres in neighbourhoods with high crime rates and drug use often create outdoor play spaces that are purposefully concealed both physically and visually from the public. Only enrolled children accompanied by early childhood educators are allowed to use the outdoor play spaces at most childcare centres. When centres are located in schools, the children sharing the school playground are under the supervision of trained early childhood educators.

Connected to this difference between childcare centres and public use environments is the way they are spatially planned. In determining the scale of park or school environments designers must take into account a wide range of ages and uses to determine the project's size. However, in determining the size of outdoor play areas at childcare centres, a precise child per space ratio is used. Unfortunately, while this ratio has stayed the same since the 1980s, the CSA's space requirements for play equipment have increased. The CSA standard's space

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requirements for equipment refer to the protective surfacing and no-encroachment zones where play activities are limited only to the apparatus. When the space requirements for equipment use only increase this limits the amount of space to be used for non-equipment based activities.

Swings are a good case in point. Swings are valued for the unique experience they offer children and their contribution to physical development as children learn to pump their legs and swing on their own. However, from an injury perspective swings are the sites for approximately 19 per cent of all accidents occurring on Canadian playgrounds (CHIRPP, 1998: 1). In response to this, the amount of space designated for swing-only use in play spaces has increased in the CSA standards (Figure 1). In our study of eighteen childcare centres in Vancouver, only two centres had room for swings, both built before CSA standards were put into practice. As one early educator noted 'if you put in the swing for two kids there isn't enough room for other types of play'.

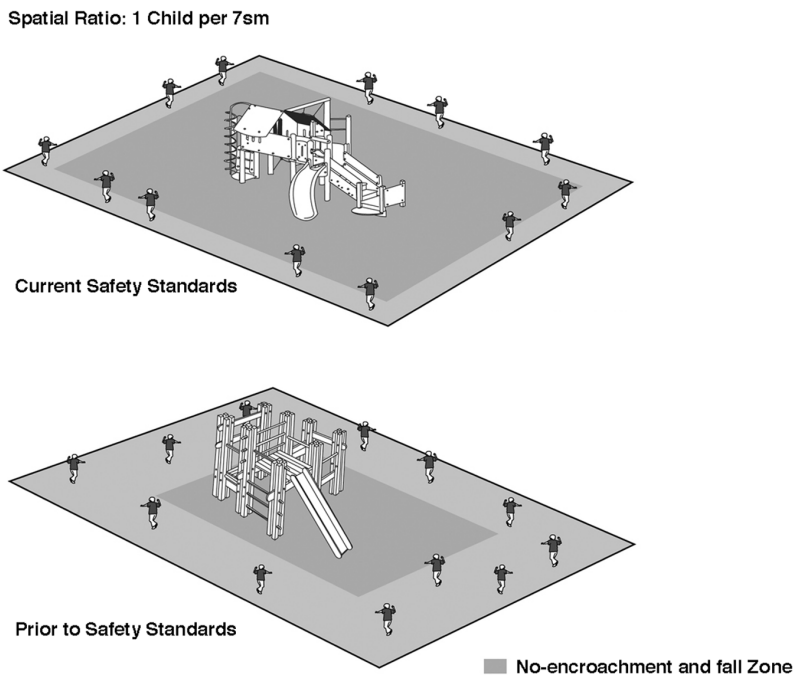

Figure 1 A comparison of areas restricted to play equipment use only. (Diagram by Kate Stefiuk.)

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Lastly, childcare centres are used more often and more intensely than many other public use spaces. Children enrolled in full-time childcare can log in between 40 and 50 hours per week, an unprecedented amount of time in a non-home environment. The outdoor play spaces at centres are treated much like backyards in home environments. Ideally, they are an extension of the interior of the centre, and are used every day, all year long, by children and their early childhood educators. During a centre-wide workshop among early childhood educators in Vancouver, educators called for outdoor play spaces that allow for constant change, flexibility, and manipulation by children and staff. This will be difficult to achieve in outdoor play spaces determined through CSA specifications, which ignore the special conditions of childcare centres and the young children who are the primary users of these spaces.

Young children

The CSA's definition of a play space is 'an area containing equipment, a play structure or structures, protective surfacing etc., that is intended for the use of children between the ages of 18 months and twelve years' (CSA, 2003: 4). This is a narrow description of an outdoor play space, but more problematic is the CSA's blanket treatment of children; particularly given the diverse needs of an infant versus a pre-teen. Ages 18 months to 12 years cover a long developmental span, with different challenges and opportunities at each phase. According to the Canadian Hospitals Injury Reporting and Prevention Program, the majority of injury reports filed on play equipment in Canada involved children aged five to nine years old (CHIRPP, 1997); yet, the same safety standards for schoolyards are applied to childcare centres where the majority of the children are three to five years old. Although CSA's 'Children's Playspaces and Equipment' states that 'the Standards take into account the physical size, special characteristics, and developmental needs of children so that appropriate and challenging play experiences are provided' (CSA, 2003: 6), there is only one standard adjusted for small children.

Compared with school-aged children, very young children spend a majority of their waking hours engrossed with their physical environment (Chase, 1992). Thus, it is very important that young children

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have sand, mud, clay, and other malleable material that they can shape. According to Anita Rui Olds, 'environments are potent purveyors of stimulation, information, and affect, and infants and toddlers in particular are sensitive to all the qualitative aspects of a setting; its movements, sounds, volumes, textures, visual and kinesthetic vibrations, forms, colors, rhythms' (Olds, 1987: 117). A telling example that indexes the problem with applying the CSA standards to play spaces at childcare centres is its specification for ground surfaces. For young children, the ground is where play takes place. From gross motor activities to fine motor actions, it is where they learn to crawl, walk, explore, dig, mould, shape, and create. When the CSA defines the ground as either protective surfacing or a non-encroachment zone this signals to those designing the playground that the ground is a fall 'surface' to be protected *from*, not challenged or inspired *by*.

The CSA points out that sand and other loose material like pea gravel are used for a wide range of applications; however, rubber matting can be purchased that is exclusively tested, designed, and marketed for children's play spaces.[3] A critical problem with rubber matting is that it cannot be manipulated by children, but this gets lost in the litany of testing protocols and performance requirements. Rubber matting is one of the most expensive surfaces centres can install, and when it comes into contact with sand, the sand acts as an abrasive to the rubber, accelerating its decay. Thus, children playing in rubber surfaced play environments were often discouraged from moving sand to parts of the play space, a type of play which enhances the imagination and exploration of children. Additionally, staff working in these spaces noted that it made their job very stressful when they were under instruction to keep sand away from this expensive surfacing; changing their roles from early childhood educators to sand police.

Conclusion

Policy is a 'course of action or principle adopted or proposed by a government, party or individuals' (OED, 1993: 2274). When policy that could potentially advocate for the play and development of children is substituted with technical safety standards that are produced to promote trade and industry, the needs of children are lost.

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While this 'loss' may be difficult to pinpoint, the childcare centre playground offers a setting where it can be clearly witnessed. If playground designs are based on the policy that all perceived risks should be omitted from the play experience, we wonder if children will look elsewhere for play. This is a critical issue for children from poor urban families who do not have access to leisure and recreation like their more affluent peers do (State of London, 2004). Most playgrounds are free for children, but they should be fun and challenge children's physical abilities. The intentions of the original nineteenth century playgrounds in both Europe and North America sought to entice children off the street to places that were specifically designed for their play. It would be a sad commentary if we no longer valued this aim.

Notes

1. CICH's first report on play space safety noted that Haffey (1973, 1974, both cited in Mender, 1979) determined that playground injuries represented 1.5% or less of children's injuries, Bongers (1975, cited in Mender, 1979) found that the majority of accidents were not from equipment failure – but operator misuse, and Wilkinson (cited in CICH, 1981) determined that there were no discernible differences among injury rates in adventure playgrounds versus traditional playgrounds (Mender, 1979).
2. The goal of this study is to determine the outdoor physical factors that contribute to early childhood development and quality play at childcare centres, and to what degree do these factors currently exist at the centres under study. The authors thank their partners from the Consortium for Health, Intervention, Learning Project; the staff, directors, and children of the participating childcare centres; the authors' co-researchers Chandra Lesmeister, Alison Maddaugh, and Kate Sefiuk; and the Social Science and Humanities Research Council of Canada for their support.
3. While the appendix to the CSA notes the advantages and disadvantages of the different protective surfaces, the *play* disadvantages and advantages of these elements, for example sand versus rubber matting, are never noted.

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