While it is our responsibility as adults to protect our children from hazards that would inflict injury, it is also our responsibility to provide children with a safe play environment providing challenging opportunities to explore, practice, and reach personal levels of competence. Children learn their own play abilities and limitations through the trial and error of daily play encounters. Once personal competence and a sense of security are gained, children attempt higher levels of play involvement. Inventing new ways to play on boring equipment can lead to risk-taking that increases the chance of injury. Adults should be aware of children's understanding of play challenge. Toddlers have little understanding of potentially dangerous situations and must be closely monitored. Preschoolers should be given opportunities for play that lead to enhanced competence. By age 7, children are unlikely to exceed their ability and take unnecessary risk unless pressured by children or adults. However, some children are inherently more likely than others to be risk-takers at an early age. A constructive approach to risk-taking is to differentiate between developmental challenge and unnecessary risk or hazard. Most playground injuries are caused by hazards rather than poor judgment in risk-taking. The initial step in playground design or maintenance is to identify potential hazards. Completely safe playgrounds may be acceptable to adults but children are likely to reject them and seek challenge and risk in potentially dangerous environments. The quality of children's play within adult contrived play spaces is questionable. We must balance safety regulations and the challenge and risk-taking needs of children.
Each year playground designers battle with their creative energies to develop products and play environments that not only initially attract players but keep them coming back. Generally speaking, the more diverse the playground challenges to meet play and developmental needs the more likely children will retain interest, thus presenting good justification for cost and installation efforts. It appears, though, that the onslaught of lawsuits and subsequent litigation involving playground injuries has driven the stake of anxiety into the hearts of designers, subsequently reducing imaginative and creative design. With approximately 788,000 licensed lawyers in the USA jockeying to represent the 200,000 or so children injured seriously enough on our playground sites to warrant medical attention each year, designer anxiety and imaginative design limitations is predictable reaction. This reaction has been carried to the tables of consumer regulatory committees who continue to revise and refine national playground safety guidelines, but, in essence, are also regulating the level of creativity and imagination a designer can aspire to and the ensuing degree of play value offered children.

What is right and fair for children and their playgrounds is an interesting and controversial point. While it is our responsibility as adults to protect our children from hazards that would inflict injury, it is also our responsibility to provide them with environments that enhance their total development. Thus, the child's right to play in an environment that provides maximum development value and optimal injury protection is a major concern.
Risk-taking, Challenge and Safety

In the present age of lawsuits and litigation references to “risk-taking” and “challenge” in children’s play gets one’s attention, particularly within the outdoor environment. While these terms have been a time honored action vocabulary and natural reaction in play for children, they often elicit a variety of emotions and responses from adults. Parents and other monitoring adults generally consider “challenge” a positive characteristic of play - skill development, competency attainment, etc.. “Risk”, on the other hand, usually carries negative connotations - accident, injury, liability, etc. How does one separate the two, though? Or, are they, in reality, a blended necessity for normal growth, development and learning? The following is intended to put these two terms in perspective with regard to children’s developmental needs and the adult’s need for injury control.

An important element of play for all children is seeking excitement. This includes risk-taking behavior, which can be observed in children’s play throughout the world. It is hard to imagine trying to define play without including risk-taking behavior as part of the process. Learning to handle risk is part of a child’s natural growth and development; it is part of growing up; it pervades most of our activities throughout life. We must not deny the children of today the natural risk-taking and consequential learning opportunities that have been common to the childhoods of past generations. As Danish play advocate and conference colleague Mogens Tom Jensen once mentioned, “the environment of my childhood remains the landscape of my soul … a beautiful reminder of the fact that childhood is about shaping and forming the platform from which we will explore life.”

During childhood the play environment becomes a testing ground for the development of decision-making skills and the social implications and values of making decisions based on risk factors. Within this socio-physical environment children need to take risks in order to explore their physical selves in the context of peers to find out what they can and cannot do. To meet this end, children need to be provided with challenging opportunities and circumstances to explore, practice and reach personal levels of competence. This goes for all children. Children with disabilities, for instance, have the same needs as any other child. Several decades ago internationally acclaimed British play specialist Lady Allen of Hurtswood articulated this quite clearly:
All children need a place to play. They need space, informality, freedom to run around and make noise, to express themselves, to experiment and investigate. Mentally and physically handicapped children and young people need this freedom even more than others. In surroundings which stimulate their imagination and challenge them to face and overcome risks, they will be helped to build their self-confidence and independence......and take their place in the wider community. (HAPA, 1978, p.1)

Again, an important element of play for all children is seeking excitement. It doesn't take long to spot children involved in adventurous, risky and too often frightening situations at local schools or public park playgrounds. This behavior is often the result of non-stimulating equipment that promotes the user to reassess its play value and find new adventurous ways to use it. Unfortunately inventing new play possibilities on boring equipment can lead to risk-taking feats that increase the probability of injury. The good news is that few children are without a strong sense of self-preservation; few attempt what they cannot achieve .

Knowing one's own play abilities and limitations plays a big part in developing a sense of self-preservation. This knowledge is constructed through the experiences of daily play encounters. Through trial and error during these play encounters children become aware of their ability level and subsequent level of interaction. As children rely on old skills to maintain play activity they practice new skills that challenge them to take on the next level of participation. As astute observers children watch other children as they interact with playmates and the play environment and make decisions on entry points for participation. Children enter the action of play as a social agent to be caught up in the interaction of peer play action, and to test their limitations within the framework of play opportunities. Once personal competence and sense of security is gained higher levels of play involvement are strived for. This is a reoccurring pattern. When play competency and security are obtained children seek out and move on to the next level of challenge with its new confrontations, new uncertainty, and new contemplations for risk-taking.

But, all this comes with a word of caution. While elementary school age children and older fit this mold, preschool and many primary school age children do not. Children who are egocentric in their thinking, who can not take the perspective of situation outcome,
are unable to predict the consequences of their intended actions and, therefore, are unable to evaluate the situation for undo risk-taking. Thus, adults who allow young children to challenge themselves within playground settings that cater to older children must be aware of the young child’s level of understanding play challenge outcomes and monitor and explain undo risk, and supervise well.

Generally speaking toddlers have little, if any, understanding of potentially dangerous situations and must be closely monitored. Preschoolers also need supervision, but should be given the opportunity to indulge in developmentally appropriate play actions and activities that lead to enhanced competency, an understanding of self, and progressions to higher levels of involvement. Primary age children become increasingly less dependent on adults for guidance, and by age seven can independently evaluate risks involved in most play actions and activities, and are unlikely to exceed their ability and take undo risk unless pressured by playmates or adults. Although adults, with common sense and past experience on their side, should know better, children quite often make gross assumptions that what was an easy play action for them will also be an easy play task for playmates (Kostelnik, et al, 1988). In this case a child with more advanced physical skills and leadership capabilities may march playmates, like little lemmings, off to potential danger. Adults, observing this situation, should provide the child who is the leader with guidance to help him/her recognize the difference between being supportive to peers and challenging them to potentially dangerous actions.

It should also be noted here that biology produces strong risk-takers at early ages (Buchsbaum and Haier, 1983 and Donahue, 1986). It could be said that some of us are born to take risks. This genetic culprit is an enzyme called monoamine oxidase (MAO). It is a brain chemical connected with risky behavior, and everyone has it - some more, some less. Those with high MAO levels are characteristically more sedate, don’t like a lot of activity, are more shy, and avoid being participants in stimulating activities or actions. Those with low MAO levels, on the other hand, have a need for brain stimulation. They are risk takers with a chemical predisposition to need thrilling experiences; sensation seekers who take physical and psychological risks. Children who have lower MAO, then, will seek out stronger challenges and risk-taking behavior throughout their years as a normal course of behavior. Thus, adults who observe these youngsters will find them engaging in acts
that may seem developmentally advanced and somewhat dangerous. In reality these children have been perfecting skills just like their age peers, only at a more rapid pace because of their need to stimulate their brain and satisfy their need for thrill and sensation.

We know that individuals select among available risk alternatives in such a way as to maximize expected outcome. But, do children understand the outcomes associated with their risk-taking behavior and press for new levels of challenge? According to Canadian Satya Brink (1983) there are two kinds of risk: one where the outcome is certain and known, and the other where the outcome is uncertain and unknown. “Generally one makes an assessment of the risk involved, the reward for achievement, and the seriousness of the outcome for failure. These factors are learned, and our judgments improve with experience. This is what our children should learn.” (p.5)

But, can this be achieved within a standardized safe play environment? If one is to cater to children’s cognitive, social and physical needs the design of an optimal outdoor play environment will ultimately draw children to it. This is indeed the purpose of the setting, to provide an exciting place for children to congregate, play, and have motivation to return. While this is the ultimate goal of designers and communities investing in play spaces, it is obvious that as more children play in any one given setting over greater periods of time the greater the likelihood that an “accident” will occur. It fits the law of probability. To construct the ultimate “accident proof” play environment is probably impossible, and to try to do so may actually be a disservice to children’s needs. The line may be fine between what is safe and what isn’t; between what is undo risk-taking and what is developmentally challenging; between what is exciting and stimulating and what is boring and stagnant.

As mentioned earlier, risk-taking has negative overtones for adults when associated with children’s play and play environments. Instincts to protect our young inevitably direct us to want to provide “safe” play environments. Although we can set guidelines & standards to enhance safety it is impossible to legislate positive risk or acceptable increments of challenge. Can we set standards for skills and abilities that develop throughout childhood? To date we have no tool of measurement for either challenge or risk. We can, of course, get statistics for playground injury from hospital injury surveillance data at The Center for Disease Control and speculate that these children took, or were presented with, too much risk or challenge and failed. Then again, these injuries may have
been brought about by circumstances that have nothing to do with risk-taking and challenge, such as being hit by a swing or stumbling, falling on a hard surface or being pinched in a moving equipment part.

But again, the nagging question: “How can we have our challenges and risk-taking, and safety too?” A more constructive effort would be to differentiate between what is developmentally challenging and what is unnecessary risk. This brings into play the term “hazard”. Conference colleague, Fran Wallach conveys a clear distinction between risk and hazard on the playground:

A hazardous situation on the playground is one in which the user cannot see or evaluate the accident-causing problem. The potential for injury is thus hidden. Risk, on the other hand, allows the user to identify the challenge, evaluate the level of challenge and determine how to deal with it. Whether or not to cross a suspension bridge is a determination of risk, a bridge that falls because a rusted connector snapped when the child crossed the bridge is a hazard. (1992, p.54)

She notes that the difference between the two terms is based on the player’s opportunity to use judgment. Although injuries do occur because of poor judgment in risk-taking most are caused by hazards.

Identifying hazard potential during the design process or during a maintenance audit appears to be the initial step in helping children and parents deal with the fears of injury. Thus, the number of injuries and the severity of injuries can be vastly reduced by systematic inspection and record keeping, proper equipment and ground cover installation, and adequate supervision and safety awareness instruction by responsible adults. This in turn would increase the likelihood that challenging play environments with controlled risk-taking behavior could be instituted.

**Concluding Remarks**

There are no easy solutions for putting challenge and risk into children’s play while striving for maximum injury control. Ultra safe playgrounds may provide peace of mind for adults, but children are likely to reject it and seek challenge and risk somewhere else; often in undesirable places that expose them to potentially serious consequences. If we are to serve our children by providing optimal play environments we must strike a balance
between safety regulations and the challenge and risk-taking needs of children. Providing children with challenge and risk-taking elements, void of hazards, is nothing new. In countries throughout the world, play environment designers have long promoted children's playgrounds that meet the total needs of the children who come to use it. But, in these countries, like ours, increased liability concern has prompted close attention on regulatory standards or guidelines. As these regulatory systems (e.g. USA's CPSC and ASTM) strive to make playgrounds accident proof, manufacturers and independent designers conform to minimize lawsuit possibility should an injury occur.

We have technically done a fine job setting national guidelines to make children's playgrounds safer. But, in the process we have factored out the play value, especially with regard to challenge needs. To protect the child's play rights, new guidelines factoring in children's developmental needs and play value may be necessary. Maybe we can "strike a happy medium - where risk and challenge aid a child's development, and failure results, at worst in a case that can be characterized as 'first aid - and return to play'. We are aiming at 'controlled risk' or 'contained risk' which are at present possible in theory, but not in practice."(Brink, 1983, p.21).

Lastly, it may be that, as well meaning adults, we have overextended our welcome as creative outdoor play designers and play directors in our schools and communities. As commercial playgrounds increase, the quality of children's play within our adult contrived environments may be hitting rock bottom. British play specialist and conference colleague Peter Haseltine sums it up nicely, indicating that studies have started to question the quality of experiences offered our children within these settings, and that...

...perhaps we should ask whether this is play at all or rather a form of directed activity masquerading as play. The research continues to show the importance of complexity and manipulability in the provisions of children's playgrounds and the development of creativity in children, yet practical observation suggests we have failed to learn and profit from this. It continues to be startling how often the research and the children's own choice stresses the importance of the natural environment - and how often its importance is ignored in practice. (1994, p.ii)
References


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