# PLAY DEPRIVATION: IS IT HAPPENING IN YOUR SCHOOL SETTING?

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## Abstract

High-stakes testing combined with the notion that indoor and outdoor spontaneous play are a "waste of time" have contributed to the condition known as "play deprivation". This paper defines the term play deprivation and explores its negative effects on children and adults. Negative effects resulting from play deprivation include an increase in violent crimes, decreases in brain and muscle fiber development, and reduction in communication, problem-solving, and social skills. Further evidence of play deprivation exists indicating children are at greater risk for aggressive behaviors and an increased risk of obesity. Play deprivation of other species also indicate the same negative effects. Other factors contributing to play deprivation include inadequate and unsafe outdoor spaces and equipment, organized sports, technology, prescribed routines, litigation, violent/abusive childhood, and play elimination in curriculum. A survey of 68 kindergartens was conducted using the Early Childhood Environment Rating Scale-Revised (ECERS-R) to determine the amount of "Free Play" children experienced in their daily routines. Results of this survey indicated almost half of the kindergartens surveyed scored 4 or below and are engaged in free play far less than recommended by the ECERS-R. Although the number of studies addressing play deprivation is limited, the results are significant. Further studies and recommendations for interventions and preventions are identified.

## Introduction

What is play? Is play really important? Does it have a place in human development? If play <u>is</u> important, what happens to human beings if they are deprived of play? These questions are now being answered by researchers, particularly in lieu of high-stakes testing and the notion that indoor and outdoor spontaneous play in school settings is a "waste of time". There are those who believe that by eliminating spontaneous play and recess additional time for academics will be made available, resulting in better outcomes for students. But does it?

## Definition of Play

So, what exactly is play? There is no clear definition of play. According to Schwartzman (1978), the definition of play is too complex to reduce its components to only its environs where it takes place and/or to prescribed observable behaviors . Triche (2009) states, "Nor can a theory of play be established because a theory must carry with it a set of practices that serves the purpose of demonstrating correctness or incorrectness (p. 195)." However, psychologists have identified five characteristics of play (Rubin, Fein, & Vandenberg, 1983; Gray, 2011): First, play is intrinsically motivated, self-chosen, self-directed, and, players are always free to quit; second, play must be freely chosen, is an activity in which means are more valued than ends; third, play must be pleasurable, guided by mental rules; fourth, play is nonliteral; and, fifth, play is actively engaged in by the player. Historically, through evolution, human species engaged in play activities resulting in civilization as we know it. Spontaneous and creative play is the freedom to choose when, what, where, and with or without whom to play. Play is truly the "work" of children. Unfortunately, as Dorothy Sluss, a professor of early childhood education at East Tennessee State University stated (2001, In *Time)*, "We don't value play in our society. It has become a four-letter word" (p.2).

**Value of Play**

Plato acknowledged the value of childhood play as the foundation on which later knowledge is built (c. 360 B.C.; 1975). He said, "You can discover more about a person in an hour of play than in a year of conversation." Young children naturally come to play with an innate youthful exuberance to discover and learn about their worlds. They are self-motivated. Singer, Golinkoff, and Hirsh-Pasek (2005) held a conference at Yale University entitled "Play=Learning", sponsored by the Fisher-Price toy company. They identified the benefits of play in all domains, including: The Emotional Benefits-enjoyment, fun, love of life, relaxation, release of energy, tension reduction, and self-expression ; Developmental Domains, including cognitive development-creativity, abstract thinking, imagination, problem-solving, social cognition, empathy, perspective-taking, mastering new concepts; affective development-self-confidence, self-esteem, anxiety reduction, and therapeutic effects; social development-cooperation, sharing, turn-taking, conflict resolution, leadership skill development (control of impulses and aggressive behavior); physical development-gross motor experiences, fine motor experiences, physical challenges, and self-help skills; attentional development-attention regulation, concentration, persistence; language development-communication skills, vocabulary, story telling, emergent literacy; educational benefits-providing a meaningful context for children to learn concepts and skills, making learning fun and enjoyable, encouraging children to explore and discover together and on their own, allowing children to extend what they are learning, encouraging children to experiment and take risks, providing opportunities for collaborative learning with adults and peers, and, allowing for the practice of skills.

Byres (1998) has stated that play is essential for brain development, particularly between the ages of 0 and 7, and, also suggests that the brain actually grows when playing. Therefore, if children do not play, their brains do not grow! Furthermore, he states play is the vehicle by which ALL human beings develop communication and social skills, creativity, problem-solving, and has been identified as being essential for human survival. Hughes (2003 a, b) theorized that play over time has become the preventative to human extinction. Play reduces stress in our lives and has been shown to increase children's abilities to pay attention through unstructured physical play. The National Association for the Education of Young Children (1998) identifies benefits for outdoor play: 1. Play is an active form of learning that unites the mind, body, and spirit. Until at least the age of nine, children's learning occurs best when the whole self is involved; 2. Play reduces the tension that often comes with having to achieve or needing to learn. In play, adults do not interfere and children relax; 3. Children express and work out emotional aspects of everyday experiences through unstructured play; 4. Children permitted to play freely with peers develop skills for seeing things through another person's point of view—cooperating, helping, sharing, and solving problems; 5. The development of children's perceptual abilities may suffer when so much of their experience is through television, computers, books, work-sheets, and media that require only two senses. The senses of smell, touch, and taste, and the sense of motion through space are powerful modes of learning; 6. Children who are less restricted in their access to the outdoors gain competence in moving through the larger world. Developmentally, they should gain the ability to navigate their immediate environs (in safety) and lay the foundation for the courage that will enable them eventually to lead their own lives. Researchers have declared that play is important to 'the development of empathy, social altruism and the possession of a repertoire of social behaviors that enable those who play to handle stress, particularly humiliation and powerlessness', and to be

able to 'roll with the punches associated with daily social interactions' (Damasio, 1994, Byres and Walker, 1995, Siviy, 1998, and Brown, 2009).

**Play Deprivation**

What happens to children who are deprived of spontaneous play experiences? Hughes (2003) states that play deprivation is the name given to the notion that not playing may deprive children of experiences that are regarded as developmentally essential and result in those affected being both biologically and socially disabled. The term "Play Deprivation" was coined by Stuart Brown (2001, in *Time*), a psychiatrist and founder of the Institute for Play in Carmel Valley, California. He believes that too little play experiences can lead to depression, feelings of hostility, aggression, and the loss of "the things that make us human beings "(p. 2)(2009). He (2009, in Kadlec) has discovered that adults who have forgotten how to play, will suffer adult play deprivation resulting in their being . .."rigid, narrow in their thinking, brittle in their response to stress, and much less open to handling the curve balls life throws us "(p. 6). The University of Michigan (1981) determined the average child of school-age spend 40% of the day engaging in free play. By 1997, the researchers found that number had dwindled down to a mere 25%.

Outdoor play and recess are also on the decline. Dr. Joe Frost (1995) has stated that the consequences of play deprivation are profound-a growing crisis that threatens children's health, fitness, and development. As free, outdoor play declines, fitness levels decline, waistlines expand, and a host of health problems follow, including obesity, heart disease, rickets, and a spiraling upturn in emotional and social disorders. The solutions are complex and require massive, coordinated action. The National Association of Early Childhood Specialists in State Departments of Education (2001) determined in their studies that recess is a necessary component of education for all children from preschool through the elementary grades. They found that children need regular periods of active, free play with peers, resulting in benefits in their social, emotional, physical, and cognitive development (2001) . According to Jarret (2003), no research has been conducted to support the elimination of recess. The National Association for Sport and Physical Education (NASPE May, 2006) recommends that all elementary children should engage in at least one daily period of recess for at least 20 minutes per period, and it not be used as a reward or punishment. According to the American Association for the Child's Right to Play (2001), 40% of elementary schools in the United States have reduced, deleted, or are considering deleting recess. Anthony Pellegrini (2005), a professor of educational psychology at the University of Minnesota found children are more academically successful after recess than before recess. He stated, "recess breaks maximize children's cognitive performance and adjustment to school," and, "one of the few times during the day when children have the opportunity to interact with peers and develop social skills free from adult intervention" (P. 12 in *The Chronicle of Higher Education*). According to Norvell, Ratcliff, and Hunt (2009-10), the Association for Childhood Education International (ACEI), the National Association for the Education of Young Children (NAEYC), the National Association of Early Childhood specialists in State Departments of Education (NAECS/SDE), and the National Association of Elementary School Principals (NAESP) are highly respected organizations who advocate for free play during recess breaks in the daily routine.

Children who have been deprived of quality play experiences throughout their lives can become highly violent and antisocial regardless of demography (Hughes, 2003, in Brown and Lomax, 1969, in Brown 1998). Children who are deprived of outdoor play experiences demonstrate aggressive behaviors, depression, antisocial skills, and are at risk for

becoming obese (Huttenmoser et al, 1995). Play deprivation leads to a loss of sensory stimulation resulting in withdrawal and loss of electrical brain activity (Tobin, 1997).Therefore, play is necessary for the brain to grow and develop naturally. Without quality play experiences, the brain's ability to develop is stymied (Byres, 1998). Baylor College of Medicine reported in 1977 that children who do not play develop brains 20-30% smaller than normal size (Hughes, 2003). Byres (1998) states, "A sensitive period in behavioral development refers to a window in development during which specific types of experience permanently alter the course of the brain or of other systems that support behavior. The experience dependent development is not possible at ages before or after the window. It is reasonable to postulate that play with its discrete age range of expression, may be another example of performance dependent development. Play must represent a sensitive period."

**What Groups are Vulnerable to Play Deprivation?**

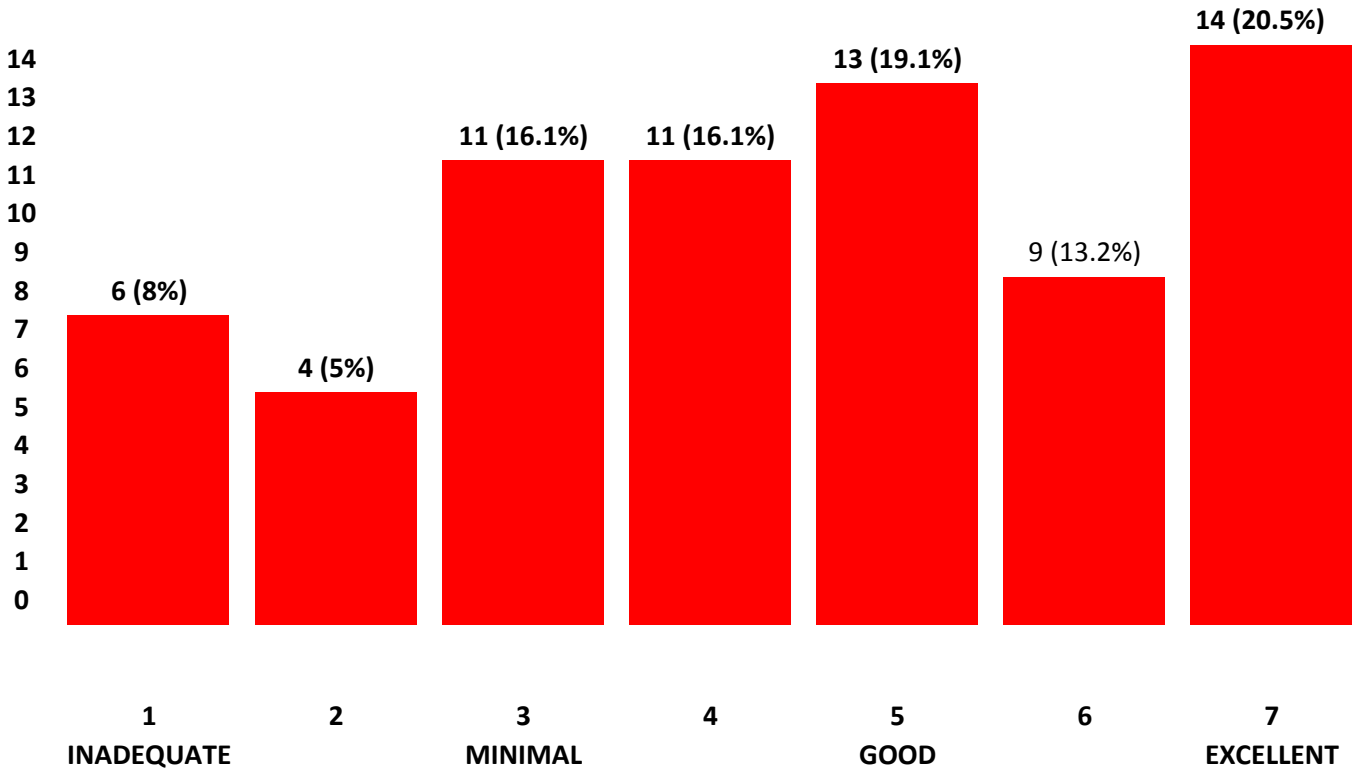
All socioeconomic groups of society are vulnerable to play deprivation. Liability, fear of predators at playgrounds, reduction of playground space, time restraints, technology, television, structured schedules of daily activities have reduced the opportunities for children to play. Because children's opportunities to play have become limited, the Alliance for Childhood (2004) interviewed kindergarten teachers in Atlanta, Georgia. These teachers reported that play was not part of the curriculum and that their students had "no idea" how to begin imaginative play and waited for the teachers to tell them what to do. The Alliance for Childhood's new report entitled, "Crisis in the Kindergarten: Why Children Need to Play in School", reports nine new studies indicating academic testing of children under the age of 8 is not a reliable indicator of future achievement in school (Shute, 2009).They state, "Nowadays young children spend less time playing with their peers and more time playing alone, graduating from educational toys to video and computer games. "

Studies show the links between play and many foundational skills and complex cognitive activities such as memory, self-regulation, distancing and decontextualization, oral language abilities, symbolic generalizations, successful school adjustment, and better social skills" (Bodrpva & Leong, 2003). Adrian Voce (2006), director of the Children's Play Council and Play England stated that "the extent of play deprivation experienced by many children today is at least as damaging as the prevalence of junk food." Gordon Burghardt has conducted animal research that suggests that playful behavior is present in lizards, turtles, birds, and fish. Sergio Pellis (2008) studied play deprivation in rats. He discovered that rats raised in a play-deprived environment produced more immature brain connections in the prefrontal lobe cortex of the brain. Bekoff (2011) studying animal play has stated, "I think of play as training for the unexpected."

**Kindergarten Study**

A survey of 68 kindergartens was conducted, using the Early Childhood Environment Rating Scale-Revised (ECERS-R; Harms, Clifford, & Cryer, 2005). Item 35, entitled "Free Play", requires children "…to select materials and companions, and as far as possible manage play independently. To give credit, children must be able to participate in free play for at least 1 hour daily in full-day programs of 8 hours or more" (p.64). The Likert scale for the item ranges from 1 (inadequate) to 7 (excellent). The results of the survey indicated 6 (8%) scored 1 (inadequate), 4 (5%) scored 2, 11(16.1%) scored 3 (minimal), 11(16.1%) scored 4, 13 (19.1%) scored 5 (good), 9(13.2%) scored 6, and, 14(20.5%) scored 7 (excellent). This study indicates that almost half of the kindergartens surveyed scored 4 or below and are engaged in free play far less than recommended by the ECERS-R.

# KINDERGARTEN STUDY
# N = 68




The results of this survey mirror the change in kindergarten practices over the last two decades. Miller and Almon (2009) state that the latest research shows kindergartens "…spend four to six times as much time in literacy and math instruction and taking or preparing for tests (about two to three hours per day) as in free play or 'choice time (30 minutes or less)" (pgs.42-43). They further state that these results have far-reaching effects into the future for these children, as business leaders recognize the benefits of play and creativity are the "future of the U.S. economy" (p.43).Standardized-testing, prescriptive curricula, administrative and state demands for accountability and standards (though not supported by research evidence) have contributed to the diminishing of the fine and performing arts, discovery, and the joy of learning that was so characteristic of early childhood education, and kindergarten in particular. According to the Alliance for Childhood Report, nine studies indicate that academic testing of children under the age of 8 is not a reliable indicator of future achievement in school (2009). Elkind (2007 ) suggests, "Play is not a luxury but rather a crucial dynamic of healthy physical, intellectual, and social-emotional development at all age levels" (p.4). Article 31 of the United Nations Convention on the Rights of the Child has recognized play as important to "optimal child development" (1959 in Ginsburg, 2007). Article 31 states, "That every child has the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts. That member governments shall respect and promote the right of the child to participate fully in cultural and artistic life

and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity" (p.1).According to Bekoff (2011), Somalia and the United States are the only two countries who have not ratified Article 31.

## Is There Hope for the Play Deprived?

There are studies to suggest that access to quality play experiences can actually eliminate the consequences of those who have become play deprived (Einon,1978; Thompson, 1996). The American Academy of Pediatrics (2007) has made recommendations for pediatricians to discuss with families the benefits of free play. Some of these include promoting free play as a healthy, essential part of childhood, recommending all children experience ample, unscheduled, child-driven, active activities using "true toys" that are independent, and, nonscreen time to be creative, to reflect, and to decompress to name a few.

## Conclusion

Play is of the utmost importance for human development and promotion of the species. Play is vital for normal brain development, particularly during the sensitive period ages 0-7 years. The consequences of play deprivation have been identified. Both physiological and psychological devastating effects have been demonstrated. "Chronic play deprivation may have the effect of gradually dehumanizing the children it affects, with a consequent loss of their ability to care, to emphasize and exercise compassion, or share the same reality as other children. The available evidence suggests that play deprived children become disturbed, aggressive and violent adults" (Hughes, 2003). During the past two decades interacting dynamics have contributed to the diminishing or complete elimination of free, spontaneous play. For optimal child development, play must reestablish its role in the human dynamic, along with the academic and social enrichment opportunities, in safe environments for all children. How to balance all of these for the betterment of our society in a changing world is a challenge for researchers.

"Our society has become increasingly complex, but there remains a need for every child to feel the sun and wind on his cheek and engage in self-paced play" (NAEYC, 1998). "Children learn from play what no one can teach them" (Unknown).

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