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## An Investigation of the Status of Outdoor Play

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**ABSTRACT** This study discusses the extent to which children in the USA today participate in active, outdoor play, compared with the previous generation. Eight hundred and thirty mothers nationwide were surveyed regarding their active, outdoor play experiences as children, as well as their children's play experiences today. The mother's play experiences, compared with the child's, clearly indicate that children today spend considerably less time playing outdoors than their mothers did as children. The study reveals several fundamental reasons for this decline, including dependence on television and digital media, and concerns about crime and safety. The study also conveys findings related to the frequent use of electronic diversions and discusses several suggestions for early childhood professionals, classroom teachers, and parents for fostering the child's enjoyment for outdoor play.

### **Introduction**

Most parents and educators agree that outdoor play is a natural and critical part of a child's healthy development. Through freely chosen outdoor play activities children learn some of the skills necessary for adult life, including social competence, problem solving, creative thinking, and safety skills (Miller, 1989; Rivkin, 1995, 2000; Moore & Wong, 1997). When playing outdoors, children grow emotionally and academically by developing an appreciation for the environment, participating in imaginative play, developing initiative, and acquiring an understanding of basic academic concepts such as investigating the property of objects and of how to use simple tools to accomplish a task (Kosanke & Warner, 1990; Guddemi & Eriksen, 1992; Singer & Singer, 2000).

Outdoor play also offers children opportunities to explore their community; enjoy sensory experiences with dirt, water, sand, and mud; find or create their own places for play; collect objects and develop hobbies; and increase their liking for physical activity. In fact, research shows that between

the ages of three and 12 a child's body experiences its greatest physical growth, as demonstrated by the child's urge to run, climb, and jump in outdoor spaces (Noland et al, 1990; Kalish, 1995; Cooper et al, 1999; Janz et al, 2000). Such vigorous movements and play activities can not only enhance muscle growth, but also support the growth of the child's heart and lungs as well as all other vital organs essential for normal physical development. For example, active play stimulates the child's digestive system and helps improve appetite, ensuring continued strength and bodily growth (Clements, 1998; Pica, 2003). Vigorous outdoor play activities also increase the growth and development of the fundamental nervous centers in the brain for clearer thought and increased learning abilities (Hannaford, 1995; Clements, 1998; Gabbard, 1998; Jenson, 2000).

The importance of outdoor play was reinforced in a study performed by the Association of Teachers and Lecturers (ATL, 2001; [www.askatl.org.uk](http://www.askatl.org.uk)), a professional association and trade union representing over 160,000 teachers, lecturers, and education support staff in England, Wales, and Northern Ireland. The Association surveyed 550 members working with British children between the ages of three and five to determine the success of the newly implemented British government's early years education policy, identified as the 'foundation stage'. This foundation stage is based on 12 principles for effective early years education (Qualifications and Curriculum Authority, 2000, p. 1). Play is given major importance as a way in which children best learn for this age group. The Executive Committee of the ATL conducted the questionnaire online at their website and in their monthly newsletter. The results of the questionnaire indicated that five areas were of primary concern to the respondents. Of those five areas, which included staffing, assessment, continuity, and planning, 61 percent of the respondents identified the lack of outdoor play areas as their major concern. Additional findings reinforced the thought that children remain indoors when returning home from early childhood centers due to fears about safety, and are engaging in more solitary and sedentary pursuits.

The importance of outdoor play was also studied by the Canadian Childcare Federation, a national organization aimed at providing public and professional education to the Canadian childcare sector. The group instigated a project entitled 'Understanding and Promoting Quality Outdoor Play for Young Children' with funding from Health Canada. The project has provided resources and training to promote best practices in planning for quality outdoor play experiences in childcare settings. Pilot studies focusing on effective workshops have been conducted with practitioners in British Columbia as well as college faculty in Ontario and the Maritimes. A rationale for the project was based on the understanding that children in Canada spend on average less than 10 hours per week participating in outdoor experiences, versus 20-30 hours per week indoors engaged in non-vigorous activity (Dietze & Crossley, 2000).

In addition, the Benesse Educational Research Center in Tokyo (1999) conducted a survey to examine children's play behaviors. The sample included

fifth- and sixth-graders at six elementary schools located in metropolitan and rural areas of Japan. A total of 492 students were asked to respond to a series of 12 questions reflecting their play practices. When asked a question regarding their indoor play versus outdoor play frequency, 40 percent of the children in all six schools preferred playing indoors rather than outdoors. Seventy percent of the children identified watching television as their most popular pastime. Concerning their favorite outdoor activity following the school day, 63 percent preferred chatting with their friends. Additional activities included playing ball and bicycle riding.

Research has increased our understanding of the ways children develop through outdoor play and acquire play preferences (Frost, 1992; Hyung-Jeong, 1998; Barbour, 1999). It has become apparent even to the casual observer that, as our society and environment have been changing, it seems that fewer and fewer children are playing outdoors in community parks and backyards. Therefore, the research question for this study was to explore the extent to which children in the USA today are actually playing outdoors and are reaping the developmental benefits of outdoor play.

### **Design and Sample of the Study**

A decision was made to design an opinion survey for mothers with children between the ages of three and 12.

The survey was developed in a multi-tiered manner to accommodate multiple response variables that addressed the study's primary research question, which was to explore the extent to which children in the USA today are actually playing outdoors and are reaping the developmental benefits of outdoor play. The following information summarizes the content of the questions in the survey:

- gender and ages of each child between three and 12 years;
- where the mother lived as a young child and current residence;
- whether the mother had the opportunity to play outdoors as a child;
- frequency and length of time played outdoors for both mother as a child and oldest child;
- where the mother most often played as a child (and current play setting for oldest child);
- who the mother played with most often as a child (and oldest child's current playmates);
- favorite outdoor activity/activities for mother as a child (and oldest child);
- whether the mother played more outdoors or indoors as a child (and what were the circumstances for the oldest child);
- whether children play outdoors more or less than in the past and reasons why;
- how outdoor play impacts areas of child development;
- mother's role in child's outdoor play activities;
- thoughts about children and play;

- demographics.

Special attention was given to the order in which the questions were asked. Formatting considerations included: (a) asking the respondent a question about a specific childhood experience directly followed by a similar or the same question reflecting the oldest child's experience; (b) asking the respondent to answer a series of questions reflecting her childhood experiences and then addressing a section of similar questions regarding her oldest child; and (c) randomizing the order of the questions. Field-testing all three formats with 20 volunteer mothers proved that the randomized format was the most difficult and chaotic format to answer, since the respondents were continually switching their attention from one topic to another. Respondents also identified the need to place the demographically less interesting data at the end of the survey, and favored the format that asked them a series of questions about their own childhood play experiences first, since it decreased the likelihood of making comparisons between their childhood experiences and their oldest child's play experiences. The field tests also helped to simplify the basic instructions to each series of questions, so that the respondent could answer with relative ease. This was especially true for the open-ended questions, since all of the participants requested some guidance concerning the length of the expected answer.

Following an email invitation to participate in the study, the survey was conducted online using a total of 830 mothers in geographically representative cities, suburbs, small towns, and rural areas nationwide, who claimed to have children between the ages of three and 12 in their household. All participants were re-screened for this qualification during the survey. The online methods used a double opt-in procedure to ensure that the recipient did in fact agree to participate in the study, thereby increasing the accuracy of the data as well as eliminating concerns about spam. Respondents completed a total of 34 questions on a self-administered basis via the Internet to ascertain the frequency, duration, and type of outdoor play that each mother's oldest child experienced.

Surprisingly, the responses did not vary a great deal between mothers living in rural and urban areas. However, this finding coincides with research conducted in England and Wales by Smith & Barker (2001), who explored children's use of public space and local environments through interviews and observations of over 400 children. Their results negated the assumption that children living in rural areas would have access to greater public space for play and recreation. They found that farmlands, with their restricted use and lack of local supervision for children's activities, did not offer the rural child more opportunities for outdoor experiences.

The gender of the oldest child was evenly split between boys and girls (50 percent each). Eighty-seven percent of the mothers were between the ages of 25 and 44. The majority of the mothers (81 percent) were married and the average number of people per household was 4.3. Approximately half the

mothers were employed. The margin of error was +/- 3%. Five specific findings shed light on the main research question.

## Results

### *Finding 1: Children in the USA Today Spend Less Time Playing Outdoors than the Previous Generation*

When the respondents were asked if children today, who were the same age as their children, were playing outdoors more, less, or for the same amount of time as they did a few years ago, 85 percent of the mothers agreed that today's children play outdoors less often than children did a few years ago (see Figure 1.). In fact, 70 percent of the mothers reported playing outdoors every day when they were young, compared with only 31 percent of their children. Furthermore, when the mothers played outdoors, 56 percent remained outdoors for three hours at a time or longer, compared with only 22 percent of their children.

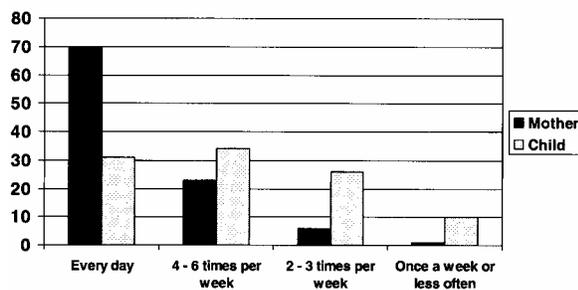


Figure 1. Frequency of playing outdoors.

These findings represent an important lifestyle shift for children today. Play is often considered by parents and educators to be the most natural part of childhood. The survey conclusions help to validate the perception that children today do not play as often as children did in the past. The study further reinforces the notion that today's children lead a more passive, inactive life indoors than the previous generation (Evans, 1995; Bodrova & Leong, 2003). It also coincides with other recent research findings that show an increasing trend in childhood obesity (Blair et al, 1989; Goran et al, 1998; Loewy, 1998; Dietz, 1999; Bar-Or, 2000; Gordon-Larsen et al, 2000; Ebbeling et al, 2002; Pica, 2003).

*Finding 2: Children Engage in Different Outdoor Activities from the Previous Generation*

The survey findings reveal that 93 percent of mothers reported regular participation in games involving chasing and fleeing (e.g. ‘tag’) when they were children, and 78 percent of them also reported regularly playing imaginative or made-up games with friends. Today’s children still participate frequently in active fleeing games (64 percent); however, the findings show that, from the parents’ viewpoint, only 57 percent play child-created or make-believe games regularly. The ongoing popularity of chase and flee activities is encouraging, because these are interactive and vigorous activities that require the child to cooperate with friends. However, the decrease in children playing imaginative or made-up games is of concern, because the benefits of imaginative play and creative pretend play influence social cognition, inventiveness, language development, the use of symbols, comprehension skills, and the number of opportunities for children to imitate and interpret adult behavior (Guddemi & Eriksen, 1992; Singer & Singer, 2000; Bergen, 2002; Perry, 2003).

The findings also indicate that the percentage of children who engage in jump rope, hopscotch, and a variety of street games using child-initiated rules has decreased from 85 percent of the surveyed mothers to only 33 percent of their children. In addition, when asked whom they most often played with outdoors, 30 percent of the mothers identified neighborhood children, while this was true for only 20 percent of their children. Furthermore, organized youth sports (such as soccer or baseball with a coach or adult present) were the only outdoor play activities in which the children took part more often than their mothers did as children (see Figure 2). The increase in the amount of time spent in adult-structured activities reflects the growing awareness that many of today’s children have scheduled play dates, music lessons, and after-school youth sports on most days of the week, leaving them with less time to initiate their own activity in school or at home (Clements & Jarrett, 2000; Rosenfeld et al, 2000; Elkind, 2001).

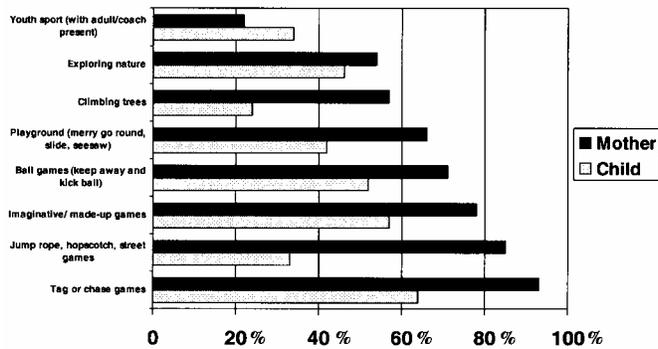


Figure 2. Comparison of outdoor play activities for mother and child.

*Finding 3: Children Take Part in More Indoor Play Activities than Outdoor Play Activities*

The respondents gave valuable information regarding their child's play life indoors. Overall, the number of regular play activities was higher for indoor activities than outdoor ones. The survey reveals that 96 percent of children watch television regularly; 81 percent play computer games; 74 percent participate in reading; 61 percent play video games; and 60 percent play board games indoors. These results coincide with other recent findings that also suggest that children who spend long hours in the classroom in their seats without physical activity breaks tend to be sedentary at home as well, and engage in television viewing for extended periods of time (Dale et al, 2000). Studies in the USA, England and Australia also clearly show that children spend more than four hours a day viewing television (Dietz & Gortmaker, 1985; Chen, 1994; Anderson et al, 1998).

*Finding 4: Obstacles to Playing Outdoors Focus on the Child's Increased Use of Television and Computers in the Home*

Not surprisingly, the survey results show a large dependency on the child's television viewing. In fact, 85 percent of the surveyed mothers identified their child's television viewing and computer game playing as the number one reason for the lack of outdoor play. In addition, 82 percent of the mothers identified crime and safety concerns as factors that prevent their children from playing outdoors. The results also show that 77 percent of today's parents do not have adequate time to spend outdoors with their children, and 61 percent identified a lack of adult supervision and a fear of physical harm to their child as reasons why children spend less time playing outdoors.

These identifiable barriers preventing modern children from playing outdoors are important for parents, teachers, and community developers to understand. Barriers such as safety concerns and the time parents have to play with their children are difficult to overcome. However, the main reason mothers say their children do not play outdoors – dependence on television and/or computers – substantiates the possibility that today's children are choosing not to play outdoors. Some children may actually prefer sitting and watching events unfold on television to playing outdoors and creatively thinking of ways to entertain themselves (Benesse Corporation, 1999).

*Finding 5: Mothers Recognize the Benefits of Outdoor Active Play*

Encouragingly, the survey results indicate that mothers are aware of the positive impact that active, outdoor play has on their child's development. Ninety-three percent indicated that outdoor play positively impacts children's physical and motor skills development. Seventy-five percent agreed that it affects their child's social skills, and 51 percent thought that it affects artistic and

creative skills. In addition, 45 percent of the mothers identified outdoor play as a positive stimulus for cognitive skills. The study also indicates that 97 percent of the mothers agreed that outdoor play offers children an outlet for reducing everyday stress, and 93 percent indicated that outdoor play gives children opportunities to be expressive and improve their communication skills. Ninety-two percent of the respondents indicated that outdoor play lets children be creative and use their imaginations. Eighty-two percent also saw outdoor play as a means to increase the child's feelings of self-worth, and 81 percent valued outdoor play as a means to foster informal learning experiences that can be transferred to the classroom. In addition, 67 percent of the mothers agreed that outdoor play provides for interaction with children from other cultures.

These results clearly demonstrate that this generation of mothers is keenly aware of the benefits that active, outdoor play can have on their children. A vast disconnection exists, however, between understanding these benefits and overcoming the identified obstacles that prevent children today from engaging in outdoor free play.

### **Implication**

The results from this study support the assumption that there is a decrease in the extent to which today's children in the USA are participating in active, outdoor play. This overall finding was not unforeseeable: it is logical that some of the respondents living in metropolitan areas experience a lack of play space for their children, because communities do not universally require city planners to provide such space. Furthermore, many traditional neighborhood play areas, such as community centers, have been usurped for commercial use. Automobiles and commercial transportation are other major reasons for the loss of outdoor play areas (Rivkin, 1995). Many municipal recreation areas now post 'Keep off the Grass' signs, as if parks are only to be looked at and admired instead of romped on and enjoyed (Clements, 2000). Therefore, one could predict that limited play space would naturally influence the extent to which some children have adequate spaces to play as freely as in previous generations (Sallis et al, 1997). However, when considering that most mothers indicated that they spent far more time playing outside than their children do now, it is clear that the opportunities for today's children to interact in a naturalized setting are greatly diminishing, and this change has implications for the child's normal healthy development.

Of equal concern is the profound effect of the increase in home technology products on the extent to which children play outdoors. The results in this survey's population reinforce the notion that many children today are overly passive in nature: they amuse themselves in front of television sets, push buttons on computer games, and use remote controls to move electronic toys, thus isolating themselves from peer groups. The development of the child's perceptual abilities may suffer when many of their pastimes are activities that only require two senses. Many computer games, for example, offer little

opportunity for decision making or embracing responsibility, and they tend to stifle creativity and self-expression (Armstrong & Casement, 2000; Levin & Rosenquest, 2001). Moreover, the children in this study are not developing an appreciation for the outdoor environment in the same way as previous generations. When confined to the indoors, children are more apt to be receivers of entertainment rather than creative, self-reliant, and independent individuals. In contrast, outdoor play activities tend to be more open-ended, allowing children to become more immersed in the activity and less dependent on their parents and other adults (Stephenson, 1998). In addition, children are freer to do 'messy' activities which would not be tolerated indoors (White & Stoecklin, 1998).

### **Discussion**

There is certainly a need for more extensive and controlled research in children's outdoor play behaviors, since the present investigation was limited in sample size. Further investigation is also warranted to determine ways in which parents can offer opportunities for outdoor play and become more involved with their child's outdoor play experiences. Until such research is conducted, there are three suggestions stemming from this study's responses that all parents, early childhood professionals, and elementary school teachers can consider when sparking children's interest in outdoor play.

First, as indicated in Finding 5 of this study, mothers recognize that the outdoors provides a variety of opportunities for children to become more physically fit. Local and community parks, playgrounds, and vacant ball fields offer the child settings to move vigorously and use large muscles freely. More vigorous outdoor play activities aimed at promoting agility, power, flexibility, and cardiovascular fitness require appropriate physical play objects to increase the child's desire to be active. Children aged three and four are fond of tricycles, lightweight hand paddles, targets, bowling sets, a variety of balls, and push-toys resembling adult tools such as lawn mowers, shopping carts, dolls' strollers, and vacuum cleaners. Five-year-old children should be given the opportunity to play with a jump rope, ride scooters and bicycles with training wheels, and utilize Velcro catching mitts. Seven- to twelve-year-old children are delighted to test their physical skills using junior-sized soccer balls, basketballs, bats and batting tees, mini footballs, tumbling mats, hand scoops, paddle racquets, snow sleds, and in-line skates. The adult can also use outdoor play activities as a way to observe the child's safety practices, since not all children have a realistic viewpoint concerning their physical abilities, and therefore increase the likelihood of injury to their bodies. Outdoor play experiences give the adult the perfect chance to watch for potentially dangerous behavior as well as the child's ability to interact with children of different physical abilities, age groups, and ethnic backgrounds.

Second, adults can suggest outdoor play as an outlet for the child's everyday stress. As all children frequently experience anxiety, disappointment,

and even anger, a vigorous outdoor play activity can help relieve the child's boredom or stress, and satisfy the child's natural urge for adventure when he or she is given the opportunity to wear play clothes with a group of peers, and to not have to worry if they become messy or dirty. Activities such as playing outside in snowdrifts, rain, or muddy areas give children a sense of adventure. Self-esteem is also increased when parents and teachers act as a positive audience for the child's imaginative outdoor play activities. The young child's initial attempts at dancing, singing, or creating a piece of child-art will often occur outside where the child feels free to demonstrate a newly found skill. Although these initial attempts are often considered silliness or showing off, it is critical that adults remain attentive and offer positive feedback.

Third, this study indicates that a major obstacle to outdoor play rests on the child's dependency on television viewing and computer games. The need exists to empower the child and stimulate the child's decision making by asking what outdoor play activity he or she would like to participate in before suggesting or telling the child what to do. The most successful outdoor play experiences usually involve the child's free choice, which is self-motivated, enjoyable, and process-oriented. Natural experiences such as collecting leaves, throwing stones in a pond, jumping over small brush or logs, building sandcastles, collecting sticks or nuts from the ground, or creating hiding spaces challenge the child's imagination and reasoning abilities. Individual children can also draw upon past experiences, perform things they have done or seen others do, and engage in creative play scenarios while having an opportunity to verbalize desires, likes, and dislikes without restrictions on noise or activity. Parents and teachers can even instill an appreciation for outdoor play by reading stories that take place in outdoor settings. Many fairy-tale adventures are based in favorite outdoor environments such as wooded forests, valleys, and mountains which instill a sense of wonder and curiosity.

Finally, all parents, early childhood professionals, and classroom teachers should seek to develop qualities reflecting eagerness, energy, curiosity, and playfulness. They should regard the issue of increased outdoor play as one of major importance, with significant repercussions for future generations.

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