

## PEDAGOGY

# Perceptions of the Effect of Recess on Kindergartners

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### Abstract

*Time spent in the outdoors has been proven to benefit individuals of all ages mentally and physically. For example, exposure to nature reduces stress levels, induces relaxation, and provides Vitamin D. Prior research has linked free play outdoors to helping elementary children focus better in the classroom, reducing symptoms of attention deficit hyperactivity disorder, reducing the risk of nearsightedness, and producing happier, healthier children. As result of various legislative acts, school districts have felt more pressure to increase academic performance, oftentimes reducing or eliminating recess. This study extends prior research by focusing on parent, college student, and teacher perspectives on how important play, such as recess, is to them as a parent, student, and/or educator. The findings indicate that all of the focus groups perceive recess to be highly important for the many health, social, and behavioral benefits.*

Children are experiencing more rigorous academic requirements beginning as early as kindergarten. Standardized tests have become a mainstream focus for K–12 institutions, and the entry-level requirements for a 5-year-old starting kindergarten have become a three-page exam. With these testing requirements to keep up with, schools have felt pressure to meet testing mandates handed down

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by the state, at all costs. This pressure often leads to schools omitting activities not perceived to enhance students' testing abilities, including a decrease in the time for active play and recess. There are many benefits beyond physical health that recess and free outdoor play offer for children (American Academy of Pediatrics, 2013). For educators and parents, this is a topic for conversation and should not be disregarded (Samuels, 2015).

To gain insight on the perceptions of recess, the investigators conducted a series of interviews and surveys. The questions asked were selected to determine how being in the outdoors affects personal and perceived behavior, as well as to determine the perceived importance that spending time outdoors holds within each group involved in the study. The investigators interviewed three groups of subjects: parents of kindergartners, preschool and elementary school teachers, and college students and young professionals who participated in recess in kindergarten. This study suggests recess offers many benefits for kindergartners, including improved physical health.

## **Literature Review**

Over the past few decades, childhood has transitioned into the majority of time spent indoors. Many small children are restricted to their outdoor playtime and possibilities because of traffic-heavy neighborhoods. The National Wildlife Federation (NWF) reported "that the average child gets as little as 30 minutes of unstructured outdoor play, but spends seven hours using screens" (Anderson, n.d., para. 3). Obesity statistics, numbers of attention deficit hyperactivity disorder (ADHD) diagnostics, and depression have all hit at alarming rates in children (Delate, Gelenberg, Simmons, & Motheral, 2004). "The United States has become the largest consumer of ADHD medications in the world; and pediatric prescriptions for antidepressants have risen precipitously" (National Wildlife Federation, 2010, para. 1).

In the United States, 1 in 3 children are obese (Centers for Disease Control and Prevention [CDC], n.d.). Outdoor play builds healthy bodies and increases fitness abilities. Time spent outdoors increases levels of Vitamin D, which helps protect from bone problems, heart disease, diabetes, and other health risks (National Wildlife Federation, 2010). A study conducted in China linked extra playtime outside to reduced rates of myopia (nearsightedness) in chil-

dren (Wu et al., 2013). “Children who play outside are happier and healthier” (Anderson, n.d., para. 4). Natural settings have effectively been shown to reduce ADHD symptoms, and “schools with environmental education programs score higher on standardized tests in math, reading, writing and listening” (National Wildlife Federation, 2010, Mind section, Bullet Point 2).

The increasing academic demands for early elementary grades, specifically kindergarten, have motivated some administrators and teachers to instill and continue with the traditional play for children that “many classrooms around the country are phasing out elements that look most like play—for example, puppet theaters and water tables—in favor of a focus on whole-group work and literacy” (Samuels, 2015, para. 5). Bassok, Latham, and Rorem (2016) reported that 30% of educators believed children need to learn how to read in kindergarten. In 2010, 80% of educators believed that children should learn how to read in kindergarten. An increase also occurred in educators over the same period who believed that parents need to teach the alphabet to their children before their children enter kindergarten. Bassok asked teachers if they had specific activity places in the classroom. The chances of having a

water- or sand-table area fell from 49% to 25%. The presence of “dramatic play” areas fell from 87% to 57%. The likelihood of having a science or nature area fell from 64% to 42%. And the likelihood of having an art area dropped from 92% to 70%. (Samuels, 2015, Rising Demands section, para. 4)

Bassok did not state, however, that all of these changes in the kindergarten classroom are necessarily negative. She indicated that the academic work simply needs to be captivating to the children (Samuels, 2015).

A qualitative study was conducted in Denmark regarding the importance of recess for school-age children (C. Pawlowski, Andersen, Tjørnhøj-Thomsen, Troelsen, & Schipperijn, 2016). The analysis was guided by the lifeworld “existentials” lived space, lived body, lived time, and lived relations. These essentials were used throughout the analysis for consistency purposes. The youth who were physically active wanted their recess time to be in the classroom and were opposed to being physically active outdoors. Because

the least physically active students were overweight, they chose to do less physical activity and instead focused their physical activities on reading, painting, and listening to music, which involve no physical movement. Their time of recess or free time was described as hanging with friends and building relationships (C. Pawlowski et al., 2016).

Datar and Sturm (2004) found that offering 1 hr of physical education in first grade significantly lowered the body mass index of female children. The children were observed engaged in walking, sport games, outdoor physical activities, dancing, home physical activity, fitness, games with physical activity, and swimming. The youth were observed during structured physical activity time and during recess for 3 to 7 days. Results showed that the children burned more calories during recess time than during their physical education class. The decline in physical activity on the weekends was linked to less family physical activity. Datar and Sturm noted that an increase in activity levels during the weekday is associated with teacher-led physical education classes.

A. Pawlowski (2016) discussed the benefits that Eagle Mountain Elementary in Fort Worth, Texas, is seeing from adding additional recess time to the school day. Before this year, the school day only consisted of one 15-min recess for kindergarten and first grade for the day. As an experiment, school administrators added three additional recess times throughout the day. The school now offers two 15-min recess breaks in the morning and an additional two in the afternoon, for a total of four throughout the school day. A professor from Texas Christian University who helped to implement this experiment at Eagle Mountain Elementary hypothesized that by participating in these four “reboot” times throughout the day, the students will perform better in the classroom (Rethinking Recess section, para. 2).

After five months, the teachers and parents indicated they were starting to see the benefits of the additional recess time. At first, teachers were hesitant to give up additional instructional time throughout the day. However, with the benefits they were seeing in their students, including improved attention in class, improvements in following directions, and reductions in disciplinary issues, they began to feel more positive about the experiment. In addition, par-

ents witnessed benefits extending beyond the classroom. Because of these benefits, school administrators plan to expand four recess periods to more grade levels (A. Pawlowski, 2016).

After the passing of the No Child Left Behind Act of 2001, many schools began to experience pressure to perform, and one way for schools to find more instructional time was to eliminate recess time in the school day. More recently, momentum has swung back in favor of recess as part of the school day because of the link between physical activity and learning (Adams, 2011). Recess is a local school decision, with increased state and district mandates requiring a minimum number of minutes of recess per day in schools. Siedentop (1999) argued that although the attitude of young people toward physical activity can be modified, this requires a three-pronged strategy that coordinates efforts with the school, family, and community. This strategy encourages children to become physically active (Siedentop, 1999).

## Method

The investigators used convenience sampling to select participants and employed surveys to establish a baseline. A Survey Monkey link was sent via e-mail to the participants, and the investigators viewed the data online through a Survey Monkey log-in. Participants consisted of kindergarten teachers in Kentucky and Tennessee; parents of preschoolers and kindergartners in Texas, Kentucky, and Tennessee; and college students from two postsecondary institutions in Kentucky. The investigators created these questions to obtain data revealing the participants' perceptions about the benefits of recess. Each survey participant answered three questions:

- How does active time outside benefit an individual's mood and performance?
- What positive effects on behavior do you see in students after recess?
- How important is outdoor play/recess for children during their school day?

Following the three main questions, the survey allowed participants to give open-ended responses to expand on their responses. Following the survey phase, the investigators conducted in-depth interviews with nine of the 16 participants who completed the sur-

vey. In the interviews, conducted by phone or in person based on location, the investigators asked subjects to expand on their survey responses.

College students, teachers, and parents discussed the benefits of recess affecting mental, physical, social, and academic performances. Participants from each group stated that recess was either important or very important by answering the question, how important is outdoor play/recess for children during their school day? Subjects emphasized the importance of recess for kindergarten students. Out of 16 survey participants, 13 ranked recess as highest importance, whereas three participants ranked it as important. None of the participants chose neutral or not important.

### **College Student Trends**

Surveys and interviews were completed by college students who were sophomores and juniors and had participated in recess as kindergartners. The college students agreed that recess played an important role in ensuring that they excelled in the classroom at their fullest potential. The students collectively agreed that recess alleviated stress and excess energy, which could have hindered students' focus in the classroom.

The students perceived a positive effect of recess on children. As a whole, the children behaved more calmly, focused more in class, interacted with one another and continued in detailed imaginative play rather than sitting alone or being unproductive, were reenergized, were in a better mood, and were less irritable. With these characteristics, students were more focused in the classroom and less disruptive. The participants reported that when they did not engage in recess, they were hyperactive and talkative. After recess, they were more relaxed and ready to continue the rest of the school day. The college students perceived that recess benefited them in kindergarten and should be granted to students today.

### **Teacher Trends**

For the surveys and interviews that were completed with teachers from preschool, kindergarten, and first grade, the overall agreement was that recess beyond 15 min/day resulted in many positive effects that could be observed in their classrooms. All of the teachers who were interviewed shared the same opinion that it is difficult for

students to sit in a classroom for 7 hr each day and maintain their focus without some sort of energy release through movement.

The specific trends that were noticed among the teachers about the benefits included an overall better mood and the ability to focus more easily in the classroom. The interviewed teachers had very young students, and all of them stated that younger students have a harder time staying focused in class than older students. Therefore, these students need more opportunities to get out of their seats and participate in some physical activity to maintain their focus throughout the school day. All of the teachers also stated that the students have a more positive attitude throughout the school day when they have outside physical activity. More than one teacher admitted that they dread rainy days and the winter months when they know the class will not be able to go outside, because it negatively affects the students' overall moods.

Some of the specific positive effects for the students after recess that were trends among the teachers included calmer, more relaxed students experiencing an easier time staying seated. Several teachers also mentioned the social skill building that happens during recess for young students. Recess gives the students time to learn conflict resolution, sharing, and problem-solving skills that are necessary for student success.

## **Parent Trends**

After surveying and interviewing parents, the investigators found an overall general consensus that parents want more recess and find it vitally important in their children's lives. Common words and ideas that parents used throughout the survey and interview process were *happier*, *more focused*, *alert*, and *refreshed*. One parent stated, "Free and creative play is crucial for development and social skills."

When parents were asked about how time spent outside benefits mood and performance, they responded that the outdoors positively affects attitude and makes individuals happier. One parent stated, "Time away from the classroom can foster creative thinking when returning to problems to solve in a classroom. Also, sunshine and the great outdoors can lift anyone's spirit." Others focused on the need for Vitamin D, fresh air, and cardiovascular health benefits from physical play. They discussed the importance of having social

time for children to be able to problem solve on their own and interact with their peers. One parent discussed how “regular exercise and being outdoors enhances productivity by allowing students and teachers to take ‘brain breaks’ and recharge.”

When asked about positive effects their children had after having time to play in the outdoors, parents frequently responded that their children were happier, were refreshed, were “better able to follow directions and self-regulate their behaviors and emotions,” and had a “renewed ability to focus.” There were statements focusing on the time spent outside helping children to learn more effectively and in a more positive mind-set after their brain had a break time to refuel. One parent stated, “Play provides a wonderful opportunity for students to engage with their friends in free play. On the playground real problem solving happens!” Another parent said, “Students learn social skills as they interact with kids and problem solve, they get exercise in order to develop a healthy lifestyle, and research has proven that brain breaks enhances the brain’s ability to focus better and learn more!”

## **Discussion**

This research is limited by the number of participants the results are based upon. The majority of participants lived in the state of Kentucky. Participants were primarily female. Further research could consist of a larger survey pool to obtain a wider array of responses. There might also be a difference in opinion based on rural or urban living, and inquiries could be made to parents and teachers of older children in high school or college.

All three groups interviewed indicated they perceive play, specifically recess, to benefit kindergarten students, and the literature agrees. Unrestricted outdoor play helps improve children’s performance in the classroom and helps them focus more easily (American Academy of Pediatrics, 2013). Time spent outdoors also has physical benefits affecting a child’s health and muscle development (CDC, 2010). It has been shown that outdoor play helps children’s eyesight, reducing their chances of myopia (Wu et al., 2013). Many participants in this study also emphasized the importance of recess in a child’s social and cognitive development. Recess is a time when children can live out what they are learning, such as problem-solving

skills. It is a time when children can freely interact with one another, strengthen relationships, and work together.

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