



Transcript for the video:

The Effects of Outdoor Play on On-Task Behavior in Preschool

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Narrator: Preschool children need time to play outside every day. Outdoor play gives children the opportunity to develop gross motor skills, engage in unstructured social play with their peers, and manage their emotions. But how important is outdoor play for children's academic learning? New research from the Center for Early Childhood Education suggests that outdoor play affects children's on-task behavior, which has significant implications for their learning.

The Effects of Outdoor Play on On-Task Behavior in Preschool (0:29)

Dr. Jeffrey Trawick-Smith, Play Researcher and Study Mentor: On-task behavior, at least for older children, has been found to be associated with academic achievement, self-regulation, attention, working memory, things that are really important to learning. There's one brain study that finds that a single dose of activity for older children has an impact on their brain. Children, immediately after a single bout of exercise, were more on task in their interactions in a group time setting. But these studies have been done primarily with elementary school-aged children. What's kind of missing are studies on preschool-aged children.

Allison Lundy, Principal Investigator: My name is Allison Lundy. I'm a psychology and early childhood education double major, and for my thesis I looked at the effect of outdoor play on children's on-task behavior during group time.

Research Question #1 (1:29)

Are preschoolers more likely to stay on task during group time after they play outside?

Allison Lundy: We had a baseline and a treatment. So for the baseline, they had group time prior to going outside. So children were coded as either on-task or off-task. So on-task would be maintaining eye contact, answering questions, listening to their peers, not shouting out. Whereas off-task would be fiddling, like, with their shoe or their shirt, just not paying attention, having their head down. And then we took those scores and compared them to the scores for on-task behavior following outdoor play. So children participated in about an hour-

long outdoor play session, and then following that they came into the classroom for group time, and again I coded their behavior as on-task or off-task.

Child: We could use a plane.

Teacher: A plane!

Allison Lundy: Boys were more attentive during group time instruction after going outdoors and engaging in physical activity. So males benefited from going outside before sitting at group time.

Dr. Trawick-Smith: Children in poverty also benefited greatly from outdoor play just before group time.

Finding:

Outdoor play before group time was associated with more on-task behavior for boys and for children in poverty.

Research Question #2 (2:47)

Does a child's level of activity on the playground affect their ability to stay on task during group time?

Allison Lundy: For the second part of the study, I looked at the effect of the level of physical activity on their on-task behavior. So that was measured 1 to 3, 1 being low physical activity—so that was just like limb movements, so their body wasn't really moving. Examples of that would be like sitting on a swing, but not actually pumping their legs, or just standing around not doing anything. And then 2 was moderate activities, so that could be something like climbing or walking. And then a 3 would be high physical activity, so that would be like running, playing tag, and just biking really fast.

Allison Lundy: So we found that the more active children were, the more on-task they were during group time. They were better able to control their impulses and self-regulate.

Dr. Trawick-Smith: There are children who were sedentary, and in this particular study, they were then less likely to be on task after an outdoor play experience than were their peers who really moved and ran and chased and climbed and were active.

Finding:

Higher levels of activity during outdoor play were associated with higher levels of on-task behavior during group time.

Implications for Classroom Time and Outdoor Play (4:07)

Allison Lundy: There's a lot of research that talks about the boy crisis and how boys are really at risk for a number of reasons, but one of them is self-regulation. They tend to develop self-regulation more slowly than girls. They just have a harder time paying attention and kind of

controlling themselves when listening to a teacher. So I think this study kind of shows that you have to be mindful of that in your teaching and kind of realize that children learn in different ways and kind of account for that in the classroom. Having them sit and listen for a prolonged period of time isn't necessarily beneficial. So providing movement breaks to help children get their energy out and stay on task. Cutting how long recess is, is kind of counterproductive in a way, because children need to go outside and kind of recharge and just get moving. And I think by cutting that, it just makes the inattention greater.

Dr. Trawick-Smith: Teachers should really think about when they schedule outdoor play. I think that strategically placing active, outdoor play before important learning experiences really makes sense. Outdoor play just before group time makes sense. But I also even think that strategically placing active, outdoor play with learning centers where you want children to really focus and learn as they're playing is also very important.

Dr. Jeffrey Trawick-Smith: I think the second thing that makes sense is for teachers to play a role in getting children moving outdoors, because there was a clear correlation between the amount of activity and the on-task behavior of children.

Allison Lundy: Teachers should encourage their children to move, so if they see a group of children just standing around, kind of encouraging them to engage in play, either with their peers or even themselves getting involved, to kind of get them up and moving.

Dr. Trawick-Smith: The study suggests a kind of a strategy for supporting some children who may have more difficulty focusing on learning experiences.

Implications for Teaching

1. Plan outdoor or active play before activities that require a great deal of focus and self-regulation.
2. Pay attention to children's behaviors during group time to decide when it's time for a break.
3. Plan movement breaks throughout the day.
4. Encourage children to be active during their outdoor play.