

Adapting a Preschool Physical Activity Training for K-2: Utilizing Stakeholder Feedback

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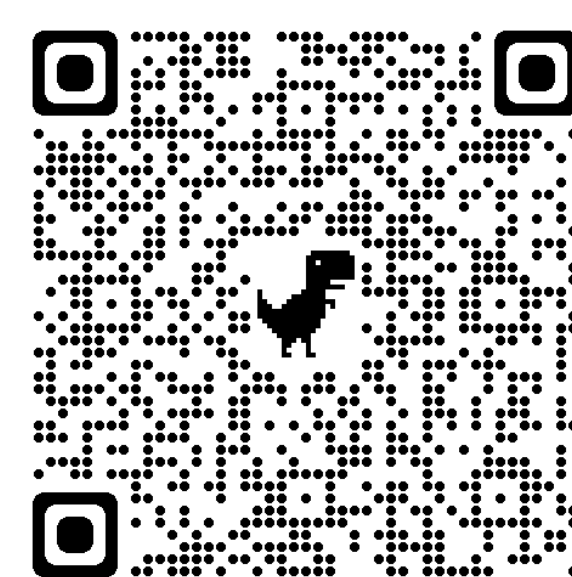
Background

Physical activity (PA) is important to children's socio-emotional and physical wellbeing, and it can improve their classroom performance. Many children in elementary school do not engage in the recommended 60 minutes of PA per day. This purpose of this study was to inform the adaptation of WE PLAY, a preschool teacher training on the topic of PA promotion, for use with older students in grades K-2. WE PLAY has promising evidence of increasing PA for typically developing children and children with autism spectrum disorder (ASD) in preschools.¹⁻³

Wellness Enhancing Physical Activity in Young Children (WE PLAY)

WE PLAY is a free, online training for preschool educators that is focused on promoting active play among preschoolers and including children with ASD in active play with their peers. WE PLAY includes:

- interactive online training
- a video library of active group games
- game sheets that accompany each game in the library
- a teacher self-assessment
- supervisor support
- resources designed to include children with ASD in active play.



Scan here to access WE PLAY

Research Questions

1. To what extent is WE PLAY appropriate for children in grades K-2?
2. How can WE PLAY be tailored to better match the elementary school context?
3. To what extent do participants believe they would be able to use WE PLAY materials to promote children's active play in elementary school settings?

Participants

- Participants (16 female; 1 male) from the northeastern United States
- Median age = 25 years (range: 22-68).
- Participants' roles in school and non-school settings for children in grades K-2 (ages 5-8 years):
 - assistant teacher/paraprofessional ($n = 6$)
 - non-school time staff (i.e., after-school program or summer camp counselor) ($n = 5$)
 - childcare worker ($n = 3$)
 - behavior therapist/analyst ($n = 2$)
 - substitute teacher ($n = 1$).
- Median 6 years (range: 1-35) experience working with children in this age group.

Procedures

Participants reviewed the WE PLAY online training and then completed a semi-structured interview with a member of the research team. This interview focused on: participant's relevant professional experiences, impressions of and feedback on WE PLAY for use in grades K-2, and potential inhabiting or facilitating factors to implementing WE PLAY based on their prior work experiences.

Materials

- Intake questionnaire
- WE PLAY training and related materials
- Semi-structured interview guide

Data Analysis

Interview transcripts were analyzed by three members of the research team using thematic analysis⁴. A deductive approach was used to ensure that the themes were applicable to the study's research questions. Researchers first coded the same three transcripts independent of each other to generate potential themes and coding methodologies based on the interview content. This analysis followed a semantic content analysis approach to identify major themes and subthemes. The team then conferred to reach consensus on initial themes and subthemes to guide the coding process. The remaining 14 transcripts were then divided evenly and coded by the three team members. The team reconvened twice during the coding process and after coding all the interviews to reach a consensus on the themes and subthemes identified in the transcripts (Table 1). Example quotes from several subthemes are presented in Figure 1.

Results

Table 1. Summary of Themes and Subthemes

Category	Theme	Subthemes
WE PLAY Training and Materials Feedback	Strengths	Overall quality of training and materials
		Potential connection to academic or classroom outcomes
		Strengths related to children with autism spectrum disorder
	Areas for improvement	Adaptation for students of different ages or ability levels
		Training additions regarding safety and behavior management
		Other specific additions or changes to the training materials or process
Influences on Training Implementation	Facilitators	Benefits of physical activity for children
		Perceived environmental supports for promoting children's physical activity
		Confidence in implementing training
	Barriers	Concerns regarding safety and behavioral management
		Perceived environmental barriers to promoting children's physical activity
		Preference for additional adult support to adequately engage children in physical activity

Discussion

Interviews yielded several consistent findings across participants.

1. Participants identified many WE PLAY strengths. This included (1) the high quality of the training and ease of use and (2) the ability to connect structured active games to classroom routines & academic outcomes. These findings were consistent with prior WE PLAY research¹⁻³ and on components of effective PA interventions in schools.⁵⁻⁶
2. Participants identified important areas for future tailoring to make the training more relevant to educators working with children in grades K-2. Suggestions were based on their experience of effective strategies and were generally aligned with evidence-based practices:
 - Providing additional methods for adaptation and differentiation based on children's abilities (e.g., varying the method of locomotion in games, changes to instruction delivery method, addition challenge via rule changes or incorporating academic elements); and
 - Increasing available resources on managing safety and behavior. Suggested practices emphasized were (a) high praise:correction ratio, (b) modeling safe behavior and review of expectations, (c) encouraging spatial awareness, and (c) ensuring sufficient activity space.
3. Participants described several factors that would help them promote active play with student that were aligned with prior implementation research.⁷⁻⁹ These included:
 - Understanding multiple benefits of PA for children (i.e., physical, socio-emotional, academic)
 - Confidence in their ability to lead structured play - particularly with WE PLAY game sheets
 - Environmental supports (i.e., access to resources, staffing, PA valued by supervisors)
4. Participants described barriers that would make it difficult to promote active play in their setting. These barriers were also aligned with prior research.
 - Safety and behavioral concerns - especially with 2nd graders and children with disabilities
 - Need for extra adult support to include children with disabilities effectively
 - Environmental factors: space, time, support from other teachers, competing responsibilities
5. Overall, participant's perceived facilitators and barriers aligned with the theory of planned behavior, an established framework for describing one's intentions to engage in health-related behaviors.¹⁰⁻¹²

Limitations include the small sample size, participants were volunteers who may have had more positive views related to PA promotion, and the inherent biases of the research team in favor of WE PLAY and PA promotion in schools.

Next Steps & Practice Implications

- Our team hopes to further tailor WE PLAY for older children by implementing practitioners' feedback and updating resources accordingly
- Results suggest that K-2 educators could be receptive to incorporating more PA activities in their classroom practices. Sharing information about WE PLAY and providing support around implementation is an avenue for practicing school psychologists to engage in consultation and other Tier 1 health promotion practices within an MTSS framework.

Figure 1. Example Quotes Across Subthemes

Yeah, I mean the kids are going to get that movement, you just have to decide whether you want to give it to them proactively and constructively or whether you want to do it reactively and have it be a problem behavior.

Participant 3: BCBA, 10yrs K-2 experience
Importance of PA

I thought anybody could really follow the [WE PLAY game sheets]. Even if you were taking over the class for someone and you really didn't have gym experience you know I think you could do that easily.

Participant 4: Assistant Teacher, 4yrs K-2 Experience
Confidence in Implementation

... I think [incorporating structured play into recess] would work fine there's always like three or four adults out there so I think you know if one adult was leading the game and then one of the other teachers out there was observing I think it would be fine...because honestly otherwise they're just standing there talking to each other so I think this would be way more functional.

Participant 1: OT Aide, School Psychology Intern, 11yrs K-2 Experience
Role of Work Environment

I love these game sheets. I thought they were all amazing. I wanted to print them out and give it to two of my roommates who are still working at a school.

Participant 15: Assistant Teacher, 1yr K-2 Experience
Quality of Materials

Just because the child has autism doesn't mean they can't participate in the game.

Participant 10: ABA Therapist, 8yrs K-2 Experience
Strengths Re: Children with ASD

...You could say I'm doing my science lesson, but it's gonna be with this game. Yeah. So, you know I think [administrators] would be for it... I think the teacher might be for it also. Like, oh I can fit this in my schedule because we're doing this today in math. I can do this active play for step one of the lessons.

Participant 2: ELL Teacher, 35yrs K-2 Experience
Connection to Academics

Participant 8: School Psychology Intern, 3yrs K-2 Experience
Safety and Behavior Concerns

I have a few kids who are a little bit more impulsive and quite a few that are having trouble understanding boundaries of like touch and things like that. So, I think in the instructions just like being really clear about that.

