

Recreation Facilitation Styles and Physical Activity Outcomes in Elementary School Children

What Was the Question?

The increasing number of single-parent families and families with two working parents has resulted in an increased reliance on after-school recreation offerings. While after-school programs are expected to provide many benefits to youths, research indicates that less than 40 percent of children's time in these programs is spent in moderate or vigorous physical activity. In an effort to increase youths' physical activity levels and combat rising levels of childhood obesity, researchers have begun to investigate strategies to increase children's physical activity during existing program times (physical education class, after-school programs, summer recreation settings). According to West and Shores (2008), systematic attention to the structure and design of recreation programs is an important first step toward identifying best practices in youth activity promotion during recreation times.

What Was Done?

Predominantly low-income children in first, third, fourth, and fifth grades ($n = 74$) participated in four days of structured recreation activities using basketball in a gym setting. Activity levels were compared across four facilitation techniques: (1) skills-and-drills, (2) scrimmage, (3) free play, and (4) modeled play. Physical activity outcomes were measured using Actigraph accelerometers. During the *skills-and-drills* facilitation, youths learned and practiced basketball skills following the directions of a facilitator. Basketball *scrimmages* consisted of assigning youths to one of four teams that then competed with minimal facilitator interruption. When participating in *free play*, each child was given a basketball and

instructions that included "today is for free play." No facilitators participated with the children during free play. *Modeled play* again allowed students to participate in "free play," but four college-age men and women participated with each class in order to model active behavior during the play session.

What Was Found?

The overall results indicated that the children were most active during modeled play in the presence of college-age role models. When participant age, gender, and body mass index were considered, age and gender were significantly related to facilitation style and activity outcomes, while body mass index was not related. Boys were more active than girls, and older children were more active than younger children. Specific to facilitation style, boys were more active during free play and modeled-play periods than during skills-and-drills or scrimmages, whereas girls had equal levels of activity in all facilitation settings. Although children of all ages were most active in free play and modeled-play settings, younger boys and girls were least active during scrimmage sessions.

What Does the Study Mean?

In light of increasing childhood obesity rates and families' reliance on after-school recreation programming, recreation leaders are in a position to make a positive difference in youths' lives by designing programs to increase their daily physical activity levels. As such, it is important to understand which methods are most effective for this purpose. Based on this study, recreation programmers are most likely to increase the physical activity of young participants by providing them with sports or fitness equipment and

allowing them to be active without the structure that constrains play during organized sports activities. Also, pairing younger children with play leaders and older role models may help to avoid the drop in activity levels that was observed in this sample after 15 to 20 minutes of free play. Although skills-and-drills and scrimmages may serve to teach sport-specific abilities, the findings suggest that neither of these provides an ideal mechanism for physical activity promotion among young children.

While the authors appreciate the value of sport-specific skill development, they stress the need to base programming decisions on desired benefits or outcomes. To maximize activity levels during a minimum number of essential skill sessions, they recommend (1) teaching only primary activities involving gross motor movements to young children, (2) providing equipment equal to the number of participants, and (3) giving directions in short, more frequent bouts. The overall intent of each of these

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Submission Requirements

- Abstracts must be of research articles published in refereed HPERD journals within the past year.
- Abstracts should follow the Research Works structure.
- Research results should be applicable to practitioners.
- Also send the full text of the source paper.
- Length should be no more than two double-spaced pages.

The guidelines established by an AAHPERD-led task force in 1979 are divided into two sections, one for the general physical educator and one for the adapted physical education specialist. The knowledge differences are quite extensive, and in no way can one three-credit course (or even two in my case) provide enough background to be considered competent in the area of APE. The American Association for Physical Activity and Recreation has recommended 12 hours of coursework focusing on students with disabilities, as well as nine hours specifically for adapted physical education.

Today, most people working directly with students with special needs (teacher assistants and aides) have absolutely no experience or training in physical education or in the specific needs of children with disabilities. It is a learn-as-you-go system and I cannot tell you how many aides have left my gym in tears because they felt inadequate. This subject is not just about physical educators, it is about a broken system. A system that makes decisions based on money rather than need. And while physical education continues to remain on the bottom of the priority list in most institutions, the system will continue to bump along and do the minimum necessary as long as they can get away with it.

With a growing number of students with disabilities entering our public schools, what we need are physical educators who are well trained to work with special-needs students, as was suggested three decades ago. Whether a person is hired as a teacher's assistant or a full-time physical educator, the answer is very clear: proper training and certification should be mandated, and one three-credit course is definitely not enough!

—*Laura Zavatto, elementary physical education teacher, Middle Country Schools, Selden, NY.*

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perspective on how the obesity epidemic started and has evolved, as modern conveniences continue to reduce the need and opportunities for physical activity. Some of the Amish participants were farmers who used horse-drawn plows, while others had more conventional jobs, such as factory work. The participants who were most physically active used about 900 more calories per day than those who were not physically active. This illustrates the huge differences that the changes in daily life have made in the amount of physical activity that people get each day. Although the FTO gene probably existed 150 years ago, it was not a risk factor for obesity because people were much more active back then. For this reason, it is important to make more opportunities for daily physical activity.

New Journal Launched

Sports Health, a collaborative publication from the American Orthopaedic Society for Sports Medicine, the American Medical Society for Sports Medicine, the National Athletic Trainers' Association, and the Sports Physical Therapy Section, launched its first issue in January 2009. The premier issue of this bimonthly publica-

tion features a wide variety of topics including injury prevention and management, concussion assessment, the role of automated external defibrillators (AEDs) in athletics, and the use of fish oil in professional football. To learn more about this journal, visit www.sportshealthjournal.org.

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suggestions is to minimize lengthy activity lags that undermine the benefits of children's increased heart rate. However, the efficacy of these recommendations and their impact on youth activity levels requires continued research.

Reference

West, S. T., & Shores, K. A. (2008). A comparison of four recreation facilitation styles and physical activity outcomes in elementary school children. *Journal of Park and Recreation Administration*, 126(2), 115-133.

—*Abstracted by Stephanie T. West, assistant professor in the Department of Health, Leisure, and Exercise Science at Appalachian State University, Boone, NC, and Kindal Shores, assistant professor in the Department of Recreation and Leisure Studies at East Carolina University, Greenville, NC.*

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