The Physical Educator Vol. 74 • pp. 1–18 • 2017
https://doi.org/10.18666/TPE-2017-V74-I1-6834

HEALTH

Recruiting Youth for After-School Health Intervention Programming: Parent and Student Perceptions

Elizabeth Wanless, Lawrence W. Judge, Shannon T. Dieringer, James E. Johnson

Abstract

In an effort to increase physical activity (PA) in children, some schools are utilizing after-school PA programs. For after-school PA programs to attract children and their parents more effectively, it is important to understand participant perceptions. With input from parents and children, after-school PA programs will be better equipped to attract children to the PA program, resulting in greater participation, enjoyment, and increased PA. Thus, the purpose of this study was to gain insight into parents' and children's thoughts and decisions relating to joining an after-school PA program. A cross-sectional qualitative design was employed. Children were interviewed and parents were surveyed prior to youth involvement in Step Up for Health, an after-school PA program geared toward youth of a Midwest elementary school. Responses to the surveys and interviews were coded into categories. Thirty of 39 youth students reported participating to increase their physical fitness levels. Thirty-seven of 39 youth participants identified their physical education teacher as being influential in their decision to

Elizabeth A. Wanless is an assistant professor and coordinator of Sport Administration, School of Kinesiology, Ball State University. Lawrence W. Judge is a professor and associate chair, School of Kinesiology, Ball State University. Shannon T. Dieringer is an assistant professor, College of Education, Ball State University. James E. Johnson is an associate professor and coordinator of the graduate program in Sport Administration, School of Kinesiology, Ball State University. Please send author correspondence to eawanless@bsu.edu

participate. Thirty-nine of 39 parents/legal guardians stated the main benefit of the program was that it provided a PA outlet for their child. Every adult participant identified their own child as an influential figure in the decision-making process to allow their child to participate. Perceptions held by parents and children provided insight into the recruitment process for PA programs. The theory of reasoned action can serve as a guide to understand why participants and their parents support such a program.

The U.S. Department of Health and Human Services (USDHHS, 2008) and the Centers for Disease Control and Prevention (CDC, 2011) recommend that children participate in at least 60 min of moderate to vigorous exercise daily. Many studies support after-school physical activity (PA) programs that include moderate to vigorous exercise as an effective way to improve children's BMI, body fat percentage, and other aspects of health (Colchico, Zybert, & Basch, 2000; Fernandes & Sturm, 2011; Matvienko & Ahrabi-Fard, 2010; Yin et al., 2005). As such, in a 4-week intervention with kindergarteners and first graders, Matvienko and Ahrabi-Fard (2010) found significant increases in children's motor skills and fitness levels. The intervention consisted of a daily morning walk, an after-school lesson that focused on PA and nutrition, and nonstructured active play. Fernandes and Sturm (2011) found that meeting exercise recommendations was generally effective at maintaining children's BMI. Furthermore, Colchico et al. (2000) found that a 12-week after-school PA program geared toward low-income African-American and Hispanic girls was effective at decreasing BMI and body fat percentage and at increasing positive self-perception. These programs demonstrate that after-school opportunities for PA can improve children's health.

The documented effects of after-school PA programs on childhood obesity and levels of PA support a need for improved and increased after-school PA programs. For after-school PA programs to maximize their effectiveness, they must reach the target audience: children. Yin et al. (2005) found a positive linear relationship between attendance to an after-school PA program and predicted health outcomes. Because after-school programming is not part of the school day and is voluntary, recruiting youth participants in an effective way is critical. Thus, it is important to consider the perceptions of parents and children regarding these programs. The percep-

tions held by parents are important because no child is able to make his or her own decision regarding participation in a program. A child may express interest, but ultimately the parent makes the final decision to permit participation. Understanding how to attract parents is a key strategy in children's involvement. Similarly, perceptions from children can provide insight into the aspects of the program that will maintain the child's interest and increase PA. With input from parents and children, after-school PA programs will be more equipped to attract children to the PA program, resulting in greater participation, greater enjoyment, and increased PA in children. The following section presents literature related to the following topics: 1) the youth obesity epidemic, 2) PA recommendations, 3) physical inactivity in schools, and 5) after-school program viability.

Literature Review

Youth Obesity Epidemic and Link to Physical Activity

The youth obesity rate in the United States has increased to epidemic proportions (5% to 18% in adolescents 12–19 years, 6% to 19% in children 6–11 years; CDC, 2013). With current trajectories suggesting the possibility of further increases in youth populations, projected financial outlays for health-related illness are likely to become overwhelming as unhealthy youth transition to adults. Often linked to disease and disability, obesity is having an effect on the development of type 2 diabetes that is so profound that the onset of this disease is now befalling childhood. At the other end of the life span, obesity and lack of PA have been linked to numerous medical complications (e.g., hypertension, stroke, certain types of cancer, and coronary heart disease) and impaired brain activity (Mirowsky, 2011). Recent research, however, has demonstrated promising acute and chronic benefits of PA on health outcomes, including cognitive performance (Best, 2010). The need for enhancing appropriate PA levels for youth to reverse increasing trends of obesity and the prevalence of other health-related diseases associated to physical inactivity is at an all-time high (CDC, 2013; Kahn et al., 2002; Let's Move, 2014; Warburton, Nicol, & Bredin, 2006).

Research studies have also linked the amount of childhood PA to PA levels during adolescence and adulthood (Sallis et al., 1997). Additionally, youth participating in PA interventions and mo-

tor instructions are more likely to engage in habitual PA and sport (Malina, 2012). Research has indicated that youth engaging in the recommended *dose* of PA are at lower risk of obesity, cardiovascular diseases, and diabetes and have increased muscle and bone strength, cognitive and brain functioning, and psychosocial and mental health (Andersen, 2006; Hillman, Erickson, & Kramer, 2008; Riddell & Iscoe, 2006; Sothern, Loftin, Suskind, Udall, & Blecker, 1999; Strong et al., 2005; USDHHS, 2008). These benefits support the need for youth to engage in frequent PA.

Physical Activity Recommendations

The CDC via the USDHHS has outlined PA guidelines for American youth. In these guidelines, the CDC recommends that youth (aged 6–17) engage in 60 min or more of PA daily (USDHHS, 2008; CDC, 2011). The CDC also suggests that the PA be aerobic and focus around muscle- and bone-strengthening activities (American College of Sports Medicine, 2011; CDC, 2011; USDHHS, 2008). For children and adolescents aged 6–17, the current guidelines consist of 60 min or more of PA every day with the majority of that being moderate or vigorous intensity. Also stated in the guidelines are 3 days/week devoted to vigorous-intensity PA and at least 3 days/week of muscle- and bone-strengthening PA (CDC, 2011).

Lack of Physical Activity in Schools

The notion that habits formed during youth are sustained into adulthood is not a new concept. Stodden et al. (2008) suggested there is a relationship between youth's exposure to fundamental motor skills and their engagement in PA later in life. This relationship is particularly important because of the need for early childhood interventions to affect overall health. However, despite this realization, previous research has indicated that most American youth do not meet CDC guidelines (CDC, 2013; Pate & O'Neill, 2008). Thus, it is likely that healthy habits and knowledge are not formed during youth, therefore making it less likely that these youth will be engaged in PA during adulthood.

With the pressures on schools to demonstrate academic success, some educators recommend that nonacademic subjects (e.g., physical education) be removed from the curriculum so that students may concentrate wholly on academic subjects. However, research

has suggested that educators who seek to maximize academic focus during the school day through reducing or eliminating PA may not reap the desired reward of improved student academic performance (Best, 2010; Sallis et al., 1997; Satcher, 2005). Providing increased time for PA can lead to better concentration; reduced disruptive behaviors; and higher test scores in reading, math, and writing. It has also been found that when students are involved in a PA program, there is an "improved rate of academic learning per unit of class time" (Taras, 2005, p. 216) and that increased time spent in physical education does not negatively affect student scores. Despite the wealth of knowledge concerning the benefits of physical education and PA, only 8% of elementary schools, 6.4% of middle schools, and 5.8% of high schools provide daily physical education to all of its students (School Health Policies and Programs Study, 2001). In addition, 20% of all elementary schools in the United States have abolished recess in favor of increased classroom time under pressure to improve student achievement (Satcher, 2005). Viable solutions during the school day are limited as school administrators are charged with the responsibility of complying with legislative mandates and demonstrating adequate academic achievement. In an effort to identify effective strategies to optimize student achievement, many school leaders are seeking to provide alternative programs to engage students, provide social/emotional outlets, and increase PA as a means to improve the overall student performance. Given that time is one significant barrier, many school leaders may seek to use after-school hours as a means to engage students, promote social/emotional health, improve academic performance, and decrease/prevent childhood obesity through increasing regular PA in their students.

After-School Physical Activity Programming

After-school programming is popular for elementary school youth as there is a need for an environment with adult supervision after the school day has ended. Often, however, these programs are sedentary activities. This time has potential as an opportunity to increase PA through engaging and fun PA programming (Nye, 2008). Limited research, however, has been conducted on the effects of after-school programs geared toward increasing PA (Pate & O'Neill, 2008). In a review of literature conducted by Pate and O'Neill (2008),

12 after-school programs were evaluated. The authors concluded the findings were mixed in regard to increasing PA levels of children in each program. Carrel et al. (2011) investigated a 9-month after-school PA program for its effects on elementary school children's body composition and cardiovascular fitness. Both physical measures improved significantly for obese and nonobese participants. Although there is a need for further investigation and understanding of after-school programs, the preliminary evidence suggests these programs have the potential to increase PA levels and aerobic capacity of youth (Wanless et al., 2014). Yin et al. (2005) also echoed research conclusions from Wanless et al. (2014). Researchers found male and female third grade participants experienced increased positive changes in fat mass, body fat percentage, and cardiovascular fitness with increased attendance to an 8-month after-school fitness program.

The primary purpose of the current study was to assess child participants and their parents regarding impressions of and motivations to attend a youth after-school running program. A secondary purpose was to determine how these perceptions could be used to inform future marketing efforts of the program.

The research questions were as follows:

1. What are the perceptions of the youth participants regarding their participation in an after-school running program?
2. What are the perceptions of adults regarding their child/family member's participation in an after-school running program?
3. How can the perceptions of youth and adults be used to guide future marketing efforts?

Method

This project was approved by the authors' institutional review board (IRB) as an amendment to a prior IRB approval investigating a youth running program at a rural Midwest elementary school the year prior. The following section outlines the procedures for the study.

Population/Sample

Recruitment. One hundred percent of running program youth and affiliated parent/legal guardian representatives were recruited to

participate in the study. Youth were recruited via verbal presentation at the first day of the running program (February 5, 2014). Parents were recruited via survey attached to the informed consent form. The parents who completed the informed consent form subsequently filled out the survey. One hundred percent of youth in the program participated in the study. One parent/legal guardian per youth participant was included in the study.

Youth participants. Youth participants were grouped into two research groups. Two groups were used to increase participation among youth and to ensure data collection accuracy. Group 1 contained six girls and 13 boys. In Group 1, boys ranged in age from 7–10 and girls ranged in age from 8–10. Group 2 contained eight girls and 12 boys. Girls and boys in Group 2 ranged in age from 7–10. All participants attended the same Midwest elementary school in Grades 2–4.

Adult participants. Adult participants ranged in age from 29–42; of the 39 parents who completed the survey, 25 were female and 13 were male.

Theoretical Framework and Research Design

This exploratory qualitative study was designed to ascertain the perspectives of after-school running program youth and their parents. To make meaning of the qualitative data, constructivist grounded theory was used (Charmaz, 2006). Constructivist grounded theory is an inductive methodology that seeks to form a theory from individual perceptions. Essentially, the study was designed to form a theory from youth participants' own perceptions concerning why they participated and parent participant perceptions regarding why they chose to allow their child to participate. These data were then analyzed to form a recruitment strategy (or theory) for future programming.

The Program

In this study, the researchers investigated participant perceptions of a 12-week after-school running program designed for elementary students. The overall program design was based upon a series of progressive walking/jogging workouts and fitness-centered large-sided games and activities (moderate to vigorous exercise). Program activities were designed to engage activity and progressively increase

step count. The students met twice a week for 1 hr/session at the school location. In addition, home workouts were used to encourage students to engage in PA and promote exercise as a family activity. Pedometer use during each (in-school) session enabled students to keep track of the number of steps per session. Personal journals were provided for students to record step totals and briefly evaluate their feelings about the activity session. The pedometer step counts and journals were used for PA goal setting, but were not included as data for the study.

Data Collection

Data were collected in two ways to accommodate the two populations (youth and parents).

Youth data collection. On February 5, 2014, at the after-school running program session, 39 youth participants were equally separated at random for a group interview. All children signed a child assent form prior to the interview. The principal investigator led both sessions. To encourage participation among all of the children in the group, the principal investigator solicited feedback from each student for each question. Because the school did not allow recording devices, a research assistant recorded the responses from the participants. The interview was set up in a semistructured interview protocol (see Table 1; Spradley, 1979). Both group interviews lasted approximately 30 min.

Table 1
Youth Participant Interview Protocol

- What are the reasons why you came to our program today?
- What do you think will be fun about the program?
- What do you think won't be fun about the program?
- Did someone you know ask you to be here? If so, who? Would you have come if this person had not asked you to be here?
- Who told you about the program?
- What would you tell a friend about why they should come to the program?

Parent/guardian data collection. On January 13, 2014, researchers distributed the informed consent form to parent participants

through the on-site physical education teacher who was associated with the project. The structured survey (Spradley, 1979; see Table 2) was stapled to the informed consent form. The parent who signed the informed consent form for each student participant provided responses in the space provided and returned the consent forms and the survey to researchers prior to February 5, 2014.

Table 2
Parent Interview Protocol

- What are the reasons why you chose to allow your child to participate in the Step Up for Health after-school running program?
- Did school officials affect your decision to participate? If so, who? How important were these officials in your decision to allow your child to participate?
- Who is directing the after-school running program? Did the individuals directing the program affect your decision to allow your child to participate? How important were the directors of the program in your decision to allow your child to participate?
- Did your child ask you to let them participate in the program?
- What do you think would attract more participants to the after-school running program?
- Is there anything else you think I should know about your feelings toward the topic?

Data Analysis

Qualitative data analysis was used to identify themes within the transcripts (Bogdan & Biklen, 2007). The researcher adopted an abbreviated grounded theory approach to construct themes. The grounded theory analysis process was used, whereby a comparative coding process occured. First, initial open codes were developed; from those open codes, axial codes were developed; and finally, themes were developed as they emerge as categories from the axial codes (Glaser & Strauss, 1967).

Results

The following sections depicting parent and youth responses outline the themes that emerged from the interviews. To ensure par-

ticipants were represented, each of the quotes belongs to a different participant. Both sets of participants organized their responses in the same way: They chose to participate in the after-school running program based on appealing program attributes and as a result of influential figures who promoted the program.

Parental Themes

One parent suggested the following: "Children do not get enough exercise during the school day. Programs like these are important for children without physical education in the school day." Another parent acknowledged, "It has been so cold out this winter. Our son really needed an outlet!" And yet another parent wrote, "I am glad we have this as a replacement for traditional after-school programming. I don't think our child exercised during that program."

Parental questionnaires revealed encouragement for their child's PA and involvement in exercise programming. All parents referenced the utility of the program as an outlet to encourage increased PA. Parents provided a range of responses regarding why PA for their child was important.

Similarly, all parents identified their own child as an influential figure in allowing their child to participate in the program. "He just begged us to participate, so we let him", one parent wrote. "I allowed my child to participate because she wanted to participate. She told us about the program," another parent wrote. Even though a local university sponsored the after-school running program, the school was never referenced as an influential draw. In fact, 38 of the 39 parents were not even sure who was sponsoring the program. "Was it the school or the physical education teacher? I am not sure who ran the program," wrote one parent. In addition, although parents did not reference another figure as influencing them to allow their child to participate, parents did express a trust in the physical education teacher they identified as promoting the program to their students. "We think [physical education teacher] is running the program. We trust her and know how dedicated she is to student health through staying active."

Youth Themes

Example responses included "I want to be healthy," "Exercise is important," and "I want to improve my fitness." Youth participants

also referenced "fun" in their responses. When the interviewer probed about their definition of "fun," students referred to several definitions of fun. Examples included "fun games like dodge ball" and "having fun with friends." Youth responses revealed two predominant themes: fitness and fun. Thirty of 39 youth students reported participating to increase their physical fitness levels. Just as parents identified the influential figure in the decision-making process as their child, youth participants overwhelmingly identified the influential figure as the physical education teacher contact who promoted the program. A majority of the children shouted the physical education teacher's name when asked if someone had an influence on their participation in the program. Children did not name the sponsoring group (local university) or their parents.

Rewards Systems/Games

One parent said, "I think children find rewards exciting. Maybe the program could include some type of reward for attendance or reward for improving fitness. Something like that." Both a majority of parents and youth participants acknowledged the need for rewards systems or games as a draw for others to participate. On the other hand, about 15 youth participants said that prizes would entice more participants.

Discussion

This section discusses the results in the following themes extrapolated from the study data: (1) the theory of reasoned action, (2) health as an intrinsic motivator, (3) the perception of fun for youth participants and its importance, and (4) the position of influential figures in the decision-making process. The section also includes practical guidelines for developing a recruitment strategy for future programs based on the results of this study.

The Theory: A Decision-Making Theory Already in Existence

When constructivist grounded theory approach, the research design for this particular study, is used as method, researchers form a theory based on study participant perceptions (Charmaz, 2006). In many cases, researchers produce a new theory. For this particular study, the theory formed from participant perceptions reflects a theory already in existence. Participants were asked in several ways

why they chose to participate in the after-school running program. Two themes resulted for both sets of participants (youth and parents): participants used their own perceptions about the program and others' perceptions of the program to make their decision to enroll in the program or to allow their child to enroll in the program. The results reflect a behavior prediction theory proposed by Ajzen and Fishbein (1980) known as the theory of reasoned action. This theory proposes that an individual's behavioral intent will have a direct correlation with a person's attitude about the behavior and what Ajzen and Fishbein call *subjective norms.* Subjective norms indicate that people important to an individual making a decision will affect the decision made. In this study, youth participants and parents considered their own feelings and attitudes toward a health and fitness program and that of influential figures.

Health as an Intrinsic Motivator

The youth obesity epidemic is widely acknowledged and accepted (CDC, 2013). Health effects from youth inactivity and unhealthy habits are well documented (Best, 2010; Mirowsky, 2011). Unfortunately, PA programming within the school day in the midst of this epidemic continues to decline at elementary and high schools (Satcher, 2005; School Health Policies and Programs Study, 2001). It seems, however, that youth and parents affiliated with this Midwest elementary school are aware of the importance of PA. Every parent and a majority of youth participants in this study cited increased health benefits as one reason to allow participation. The obesity epidemic has sparked a national campaign sponsored by First Lady Michelle Obama (Let's Move, 2014). The results of this study may be a sign that the campaign and continued emphasis for PA have reached the minds of parents and youth participants, at least in the studied community. Further research, however, needs to be conducted to understand perceptions of youth and family who did not participate, to assess how youth and parents see the importance of battling the youth obesity epidemic with regular PA.

Games Are Fun

Although a majority of the youth participants cited health, it was important to them to be engaging in something fun. The theme that emerged is that children need to be stimulated with healthy activi-

ties other than jogging that promote fun and interaction with their peers. Many of the children cited games, namely, dodge ball or mat ball, as the most exciting part of the program. The children also indicated that hanging out with friends was part of the fun as well. The results echo results of another study (Nye, 2008) in which the program was entitled Fun Club to attract students. The Fun Club took place before school and included peer involvement and large-sided games. Researchers studied why participants persisted throughout the duration of the program. Nye (2008) claimed that peer involvement and engaging participants in scheduled large-sided game activities were essential to retaining participants. As noted previously, youth members of the current study shared the same sentiments.

Influential Figures: Youth Participants and a Physical Education Teacher

The current study supports the theory of reasoned action (Ajzen & Fishbein, 1980) as a predictor of behavior intent. The theory accounts for the influence that important figures may have in the decision-making process. Influential figures clearly had a hand in the participation rates of the program. Of note within the context of parental results, youth participants were the influential figures. A dominating theme of the study included parents allowing children to participate because children were excited to, expressed an interest, and in some cases begged to participate. Although parental trust in the physical education teacher to coordinate the program was acknowledged, the strongest factor in parents allowing their child to participate was the child's desire to participate. Children, on the other hand, cited an influential physical education teacher as their most influential figure. The physical education teacher took steps to promote the program to children, and children in turn promoted the program to their parents. Because programs like these have the potential to be effective, after-school PA programs must reach the targeted audience through considering the perceptions of parents and children, to increase participation and positive outcomes.

Practical Applications: The Recruitment Strategy

The following section describes a recruitment strategy based on the results of the current study.

1. In this study, the current attitudes for both parents and youth participants reflected a need for PA to increase health benefits. Youth participants also wanted to participate because it seemed fun. After-school programming promoters should first seek to assess the current attitudes toward this type of programming before recruiting.
2. In this study, youth participants drove their participation with parents. A committed physical education teacher drove interest in the program among youth participants. After-school programming promoters should find the influential figures.
3. Upon finding the current attitudes and influential figures, after-school program promoters should target the youth participants with a program promotion strategy that fits the attitude and culture. Recruiting for this group would encourage youth participants to participate in a program that is not only healthy, but fun too. Promoters should use the influential figure(s) to promote this message within the school.
4. Upon targeting the youth participants, promoters should target the parents with a program promotion strategy that fits the attitude and culture. The influential figure(s) can be used to promote this message to parents.

Limitations

The parent questionnaire and youth interviews provide valuable insight to after-school PA programs, but they are not without limitations. Children may have misunderstood the interview questions, which may have resulted in unusual responses. The cross-sectional design did not allow analyses between a control and experimental group, and the convenience sample limits generalizability of findings. Additionally, the data obtained did not allow for identified relationships between gender and preferred activities. Still, these findings are unique in that this report is one of few to examine the rationale and perceptions of engaging in after-school PA programs and thus adds to the empirical literature base. Additionally, because of restrictions from the school, we were not able to record the voices of students on a recording device. Finally, parents completed the survey while a researcher was not present and were unable to ask

questions. Critics of the theory of reasoned action have challenged the theory's simplicity. Sheppard, Hartwich, and Warshaw (2002) agreed that the theory of reasoned action can describe and predict consumer behavior very well. However, the theory does not take into account the variety of choices. In this particular study, parents and children lacked another health and fitness after-school program that included PA. Would they have chosen to participate if another program, or if the option to participate in a sport, had been present? If another program had been present, would parents and youth have made the decision in the same way?

Conclusion

Although the obesity epidemic is on the rise and the inclusion of PA in elementary schools is on the decline, after-school programming can be a viable option to increase PA among students. Stakeholders must first be aware of how best to garner participation. This study supported the theory of reasoned action as a guide to understand why participants and their parents support such a program. Program leaders must understand the culture and individual attitudes toward fitness and programming and attract influential figures as allies in program promotion.

References

American College of Sports Medicine. (2011). ACSM new recommendations on quantity and quality of exercise. Retrieved from http://www.acsm.org/about-acsm/media-room/news-releases/2011/08/01/acsm-issues-new-recommendations-on-quantity-and-quality-of-exercise

Andersen, L. B. (2006). Physical activity and clustered cardiovascular risk in children: A cross-sectional study: The European Youth Heart Study. *Lancet, 368*(9532), 299–304. https://doi.org/10.1016/S0140-6736(06)69075-2

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice Hall.

Best, J. R. (2010). Effects of physical activity on children's executive function: Contributions of experimental research on aerobic exercise. *Developmental Review, 30,* 331–351. https://doi.org/10.1016/j.dr.2010.08.001

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods.* New York, NY: Pearson.

Carrel, A. L., Logue, J., Deininger, H., Clark, R. R., Curtis, V., Montague, P., & Baldwin, S. (2011). An after-school exercise program improves fitness, and body composition in elementary school children. *Journal of Physical Education and Sports Management, 2*(3), 32–36.

Centers for Disease Control and Prevention. (2011). How much physical activity do children need? Retrieved from http://www.cdc.gov/physicalactivity/everyone/guidelines/children.html

Centers for Disease Control and Prevention. (2013). Childhood obesity facts: Adolescent and school health. Retrieved from http://www.csc.gov/healthyyouth/obesity/facts.htm

Charmaz, K. (2006). *Constructivist grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Colchico, K., Zybert, P., & Basch, C. E. (2000). Effects of after-school physical activity on fitness, fatness, and cognitive self-perceptions: A pilot study among urban, minority adolescent girls. *American Journal of Public Health, 90,* 977–978.

Fernandes, M. M., & Sturm, R. (2011). The role of school physical activity programs in child body mass trajectory. *Journal of Physical Activity and Health, 8,* 174–181.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine.

Hillman, C. H., Erickson, K. I., & Kramer, A. F. (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Nature Reviews Neuroscience, 9,* 58–65.

Kahn, E. B., Ramsey, L. T., Brownson, R. C., Heath, G. W., Howze, E. H., Powell, K. E., . . . Corso, P. (2002). The effectiveness of interventions to increase physical activity: A systematic review. *American Journal of Prevention Medicine, 22*(4), 73–107.

Let's Move. (2014). America's move to raise a healthier generation of kids. Retrieved from http://www.letsmove.gov/

Malina, R. M. (2012). Movement proficiency in childhood: Implications for physical activity and youth sport. *Kinesiologia Slovenica, 18*(3), 19–34.

Matvienko, O., & Ahrabi-Fard, I. (2010). The effects of a 4-week after-school program on motor skills and fitness of kindergarten and first-grade students. *American Journal of Health Promotion, 24,* 299–303. https://doi.org/10.4278/ajhp.08050146

Mirowsky, J. (2011). Cognitive decline and the default American lifestyle. *Journal of Gerontology Series B Psychological Sciences, Social Sciences, 66*(s1), i50–i58. https://doi.org/10.1093/geronb/gbq070

Nye, S. B. (2008). Fun club: A physical activity program for elementary schools. *Journal of Physical Education, Recreation, and Dance, 79*(1), 36–38.

Pate, R. R., & O'Neill, J. R. (2008). After-school interventions to increase physical activity among youth. *British Journal of Sports Medicine, 43,* 14–18. https://doi.org/10.1136/bjsm.2008.055517

Riddell, M. C., & Iscoe, K. E. (2006). Physical activity, sport, and pediatric diabetes. *Pediatric Diabetes, 7,* 60–70.

Sallis, J. F., McKenzie, T. L., Alcaraz, J. E., Kolody, B., Faucette, N., & Hovell, M. F. (1997). The effects of a 2-year physical education program (SPARK) on physical activity and fitness in elementary school students. *American Journal of Public Health, 87,* 1328–1334.

Satcher, D. (2005). Healthy and ready to learn: Research shows that nutrition and physical activity affect student academic achievement. *Educational Leadership, 63,* 26–30.

School Health Policies and Programs Study. (2001). Fact sheet physical education and activity: From CDC's school health policies and programs study (SHPPS) 2000. *Journal of School Health, 71*(7), 1–2.

Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (2002). The theory of reasoned action: A meta-analysis of past research with recommendations and modifications for future research. *Journal of Consumer Research, 15,* 325–343. https://doi.org/10.1086/209170

Sothern, M. S., Loftin, M., Suskind, R. M., Udall, J. N., & Blecker, U. (1999). The health benefits of physical activity in children and adolescents: Implications for chronic disease prevention. *European Journal of Pediatrics, 158,* 271–274. https://doi.org/10.1007/s004310051070

Spradley, J. P. (1979). *The ethnographic interview.* New York, NY: Holt, Rinehart, and Winston.

Stodden, D. F., Goodway, J. D., Langendorfer, S. J., Roberton, M. A., Rudisill, M. E., Garcia, C., & Garcia, L. E. (2008). A developmental perspective on the role of motor skill competence in physical activity: An emergent relationship. *Quest, 60,* 290–306.

Strong, W. B., Malina, R. M., Blimke, C. J., Daniels, S. R., Dishman, R. K., Gutin, B., . . . Trudeau, F. (2005). Evidence-based physical activity for school-age youth. *Journal of Pediatrics, 146,* 732–737. http://dx.doi.org/10.1016/j.jpeds.2005.01.055

Taras, H. (2005). Physical activity and student performance at school. *Journal of School Health, 75*(6), 214–218.

U.S. Department of Health and Human Services. (2008). *Physical activity guidlines for Americans.* Retrieved, from http://www.health.gov/PAGuidelines/guidelines/chapter3.aspx

Wanless, E. A., Judge, L. W., Dieringer, S. T., Bellar, D., Johnson, J., & Plummer, S. (2014). Pedometers and aerobic capacity: Evaluating an afterschool running program. *Scientific World, 2014.* https://doi.org/10.1155/2014/370759

Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174,* 801–809. https://doi.org/10.1503/cmaj.051351

Yin, Z., Moore, J., Johnson, M., Barbeau, P., Cavnar, M., Thornburg, J., & Gutin, B. (2005). The Medical College of Georgia FitKid Project: The relations between program attendance and changes in outcomes in year 1. *International Journal of Obesity, 29,* S40–S45. https://doi.org/10.1038/sj.ijo.0803061