Elementary Girls’ Perspectives of Physical Activity in an After School Program

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Abstract

Regardless of age, sex, race, ethnicity, socioeconomic status (SES), education level, or geographic region, obesity rates have increased considerably and one key factor is the lack of daily physical activity (PA) for children. Therefore, it is necessary for schools to implement PA options outside of the regular physical education (PE) curriculum, such as after-school programs focusing on health and wellness. After-school programs were originally designed to increase overall health and PA and/or reduce weight in student populations (Wilson et al., 2008). Now, it is more common to focus on healthy eating and lifelong PA. The purpose of this study was to examine elementary girls’ perspectives of an after-school health and PA program. Data were collected at four program sites during one school year, including interviews and observations with 16 female elementary participants. Three themes emerged: 1) supportive environment, 2) student practice, and 3) more choice in activities. Although this after-school program did not provide an autonomous environment, it is suggested autonomy would enhance participation if participants had choice, freedom, and ownership over curriculum and activity ideas. However, developing positive social environments were an important factor in students’ engagement in these programs.

Introduction

The Centers for Disease Control and Prevention (CDC, 2018), state that childhood obesity has more than tripled in youth ages 6-19 since the 1970s. Over a ten-year period, results from the National Health and Nutrition Examination Survey (NHANES) indicate African American (AA) adolescent females had a larger increase in obesity (8.5%) compared to non-Hispanic white females (5.8%) and Mexican-American females (5.2%) (Fryar, Carroll, & Ogden, 2012). According to the National Physical Activity Plan ([NPAP], 2016), as stated in the United States Report Card on PA for children and youth, only 21.6% meet the recommended 60 minutes per day of PA and the biggest decline in PA is noted among girls and those living in higher crime neighborhoods. Regardless of age, sex, race, ethnicity, socioeconomic status (SES), education level, or geographic region, obesity rates have increased considerably and one key factor is the lack of physical activity (PA) children engage in daily. Participation in school-based activities such as sports, PA clubs, and general “play” is most prevalent during childhood, but tends to decrease as children become adolescents. Therefore, schools should implement PA as much as possible throughout the school day as well as

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before and after-school.

Physical activity continues to decrease and obesity rates continue to rise, therefore researchers and other organizations have recommended schools to be ideal venues to help increase overall childhood PA (Institute of Medicine [IOM], 2013; Pate, et al., 2006). According to the IOM (2013), “…because children and adolescents spend so many hours at school, school-related physical activity must be a large contributor to overall physical activity among youth” (p. 1). Ideally, providing quality health and physical education (PE) classes is the preferred solution. However, health and PE are not offered consistently across the US, at the state level, or even within an individual school district. Only six states require PE in grades k-12 and 28 states allow exemptions and waivers from participation in PE due to other credit requirements (NASPE, 2016). Therefore, in addition to providing quality health and PE classes, other options include implementing PA breaks in the classroom, hosting before, during, and after-school programs to inform students about healthy living and PA, promoting active transport to and from school, and including PA and healthy eating tips in morning announcements and assemblies.

Originally, the main focus of after-school programs was to increase overall health and PA and/or reduce weight in student populations (Wilson et al., 2008). The Girls Health Enrichment Multi-Site Studies (GEMS) program was a culturally-appropriate obesity prevention program designed for African American (AA) girls, ages 8-10, that provided culturally relevant physical activity options, a healthy snack with bottled water, and family activities (Robinson et al., 2003). Activities included dancing, jump rope, double-dutch, tag games, and step aerobics. The participants prepared snacks and the bottled water came with messages from the leaders about the importance of water versus soda pop as a healthy option. Families received weekly packets with nutrition and healthy eating goals to complete together (Robinson et al., 2003).

One evolving idea to increase healthy living and PA in youth is to implement Comprehensive School Physical Activity Programs (CSPAP). CSPAP is a multi-component approach in schools to focus on PA before, during, and after-school and to build the necessary skills to be physically active for life (CDC, 2015). CSPAP encourages PA throughout the school day using five distinct components including quality PE, PA during school, PA before and after school, staff involvement, and family and community engagement (NPAP, 2016).

The Whole School, Whole Community, Whole Child model (WSCC) seeks to improve each child’s cognitive, physical, social, and emotional development. The WSCC model has 10 components that includes PA, nutrition, social and emotional health, psychological health, community and family engagement, and employee wellness (CDC, 2018). There are many commonalities among the programs and WSCC model and all these components lead to a quality health and physical education program that seeks to improve the overall health of a child. However, in examining past and present health and PA programs, the questions are raised as to what attracts students to attend these programs and what can these programs do to meet the students’ interests while improving their health and increasing PA?

According to Ryan and Deci (2000 & 2002), the Self-Determination Theory (SDT) emphasizes three psychological needs should be met to maximize growth, social development, and well-being. These three needs are autonomy (i.e., the need to self-direct one’s behavior), competence (i.e., the need to engage effectively in one’s environment), and relatedness (i.e., the need to feel a sense of connectedness to other people (Deci & Ryan, 2000 & 2002). One of the main conclusions from a systematic review of the literature on PA and SDT explained that results of past studies show consistent support for a positive relationship between more autonomous forms of motivation and PA (Teixeira, Carraca, Markland, Silva, & Ryan, 2012). Research suggests social environments be filled with autonomy as it is
positively related to overall increased motivation toward PA. For example, if after-school club leaders offer the freedom to choose, explore, and be creative, students will more likely be motivated to engage. If there is a set program (i.e., teacher-centered) with no room for exploration, implementing only the ideas of the teacher, not allowing students to create ownership, the children might be less interested.

When one has higher perceived competence in PA type skills, they receive more enjoyment out of PA overall (Deci & Ryan, 2000). Teixeira et al. (2012) also reported that competence, satisfaction, and more intrinsic motives positively predict PA across a range of samples and settings. By creating a mastery-learning environment, students can focus on skill improvement to improve competence. In after-school programs, it is important coaches or leaders offer a variety of activities so each individual might discover they are competent in different movement activities offered at the club. According to Deci and Ryan (2000), when provided positive feedback versus no feedback, intrinsic motivation increases and individuals receive a sense of satisfaction. Furthermore, providing appropriate instruction with practice time and positive feedback could enhance motivation even more.

Other studies have found that people who continuously participate in PA are more likely to set health-related goals and have a higher level of self-efficacy (Doerken, Umstattd, & McAuley, 2009; Lowry, Galuska, Fulton, Wechsler, Kann, & Collins, 2000; Petosa, Suminski, & Hortz, 2003). When students are participating in supportive environments (such as friend or family support, support from teachers or coaches), students feel the confidence and motivation to be active with others (Deci & Ryan, 2000). Likewise, their friends will often want to be active with them. When adult leaders demonstrate genuine, global care for their students’ well-being through communication, enthusiasm for the content in class, and attentiveness, students feel a more welcoming environment so they are more interested in participating in activities (Shen, Li, Sun, & Rukavina, 2010). According to Flory and McCaughtry (2011), global care is “a sense of concern expressed for students’ general well-being, happiness, and physical and emotional safety” (p. 53). Knowing challenges students face and the level of crime and violence in their community could inform adult leaders what needs to provide students while attending the after-school program.

This specific, girls-only, after-school physical activity program, Girls at Play, was designed to enhance overall health and well-being for female students and the purpose of this study was to examine elementary girls’ perspectives of an after-school PA program.

**Methods**

Participant-observation methodology was used to examine the perspectives of elementary girls in an after-school PA program (Schensul & LeCompte, 2013). Four sites located in lower SES neighborhoods of a large city in Midwestern United States were used to implement the after-school programs. Girls at Play was only available to those students who identified as female in grades 3-5. This program promoted sport and fitness, implemented nutrition and health education, and included leadership development by doing group activities that focused on conflict resolution, sportspersonship, and self-esteem. Girls at Play met once per week for 60-90 minutes per session and averaged 15-20 participants. Data collection occurred from the commencement of the club in September 2016 and continued through the spring, ending in May 2017. Prior to collecting data, permission was granted from the university Institutional Review Board (IRB) and obtained informed consent from parents. During registration, parents were informed of the study and agreed to sign consent forms to ensure their daughter(s) were included in the observations and interviews. All female students were invited to participate in the study. The researchers then asked for volunteers (n=50), created a list of names, and used random sampling from that list to interview 16 participants. Participants were
instructed to use pseudonyms to protect the anonymity of the after-school program sites and names of participants.

**Participants and Data Collection**

Data were collected at four after-school program sites via observations and interviews with 16 female elementary participants over one school year. Random sampling was used to recruit participants from a list of volunteers who agreed to participate in two open-ended, semi-structured interviews; one at the start of the program in the fall and one at the end of the program in the spring (n=32). Each interview was audio-recorded and lasted approximately 30-45 minutes. Examples of interview questions included prompts such as, (a) Why did you join Girls at Play, (b) What choices do your coaches offer while at the club, (c) How do your coaches interact with you, and (d) How do you feel when you participate in sport or fitness activities and what makes you feel that way?

Observations were also used to help inform interview responses (Patton, 2002). Each site was visited approximately one time per month until all four sites were visited five times (n=20). Observations helped enhance and further the researchers’ understanding of girls’ perceptions of their experiences in each club (Patton, 2002). Researchers recorded behaviors, interactions, conversations, and events as they happened (LeCompte & Schensul, 2010). The observation guide included sections such as date, time, site location, and activities for the day. The researchers’ observations were also guided by the three tenets of SDT (autonomy, competence, and relatedness) and made note of when the coaches implemented or ignored any of them.

**Data Analysis**

Following each observation, field notes and interviews were compiled, transcribed, analyzed, and coded for themes. No computer-assisted technology was used to transcribe the data. The researchers transcribed and coded data and overarching themes were combined, narrowed, and adjusted to determine final themes. Using constant comparison and inductive analysis, researchers identified themes and relationships from the observation and interview data (LeCompte & Schensul, 2010). Triangulation, with all three researchers independently analyzing the data and comparing findings (Patton, 2002), was used to improve trustworthiness (credibility and reliability) of this study as all researchers were involved in the coding process and development of themes (Merriam, 2009). Common themes expressed by the majority of participants were generated to represent the results.

**Results**

Three themes emerged that define the girls’ perspectives of Girls at Play: 1) supportive environment, 2) student practice (practice is key), and 3) more choice in activities.

**Supportive Environment**

According to Niemiec and Ryan (2009), relatedness is developed when students feel connected to others in a supportive environment. Participants explained they joined Girls at Play to have fun, be active, learn new things, be part of something, and meet new friends. Participants explained, because of the coaches, Girls at Play was considered a supportive environment. During observations, the researchers watched the coaches build positive rapport with the girls by truly demonstrating global care and caring about their overall health and well-being (Flory & McCaughtry, 2011). Coaches inquired about their school day, weekend plans, personal hygiene, safety, and families. Mia, who was in fifth grade, described the coaches, “They say ‘good job, you did it.’ They show support. If you do it wrong, they tell you to try again and say, ‘you can.’”

Positive feedback and constant encouragement from coaches to keep the girls excited to participate was often observed during visits. During one lesson on personal hygiene, the coaches explained they were going to do a relay race on how to properly brush your teeth. Coach Mary showed a picture of teeth and the gum
lines, where to properly place the toothbrush, and explained the importance of brushing your teeth. Coaches asked the girls to point to those areas on the poster and discuss the importance with a friend. During the relay race, the coaches gave the girls positive group feedback and high fives. To conclude, everyone sat in a circle and the girls were asked to perform a ‘star jump’ if they did the following things to take care of their hygiene: brushed their teeth, flossed their teeth, used mouthwash, or went to a dentist.

Coaches built relationships among the girls by conducting activities that promoted teamwork and allowed time for participants to talk with their friends at each session. Gabriella explained, “What I like about Girls at Play is everybody works as a team...we always high five each other.” Coaches often encouraged participants to cheer one another on during games, high five as they moved on and off the playing area, and provide positive comments to their peers. Following activities, coaches asked the girls to provide examples of how sportspersonship was used during the activity or game. They explained how they used high fives and “unfroze” their peers quickly during tag games so they did not feel lonely and could re-join the game sooner.

Finally, the girls really enjoyed the free time they had to socialize with their friends. Encouraging participants to socialize during the after-school program allowed them to feel support from their friends during activities. When the researchers asked Renee what she liked about this extracurricular program compared to her other experiences, she said, “It’s different because we have lots of time to talk (with friends)!” Gabriella agreed with her but explained they were encouraged to listen during instructions.

Overall, the environment felt very warm, welcoming, and supportive. The coaches genuinely talked to all the girls, got to know them on a personal level, and provided support in a variety of ways. They allowed the girls to communicate together and feel connected to friends while playing.

### Practice is Key

The girls felt practice was key to being successful and feeling more competent while participating in activities at the club. Mattie said, “I’m average, but I get better each time because of practice.” During observations, the researchers saw many physical demonstrations such as proper technique of volleying or Yoga poses, verbal instructions to complement demonstrations, and checks for understanding to ensure comprehension. Mary Jo exclaimed she felt good when playing sports during the club and stated, “They (skills) are easy to learn because the coaches teach them and they show examples and yes, real good instructions.” During skill practice, coaches walked around the gymnasium and provided physical corrections, invited students to demonstrate for those who needed extra help, and encouraged working with a partner if preferred.

Coaches also increased competence in students’ skills through positive reinforcement and constructive feedback. Adrienne described the coaches during practice and said, “They say ‘good job,’ or if we are standing wrong, or if we did good but we could do better, they help us.” The coaches were energetic and motivated participants to engage in activities through constant encouragement and kind words. Gabriella explained, “…they cheer on somebody and then never have any negative thoughts about any of the girls.” The coaches motivated the participants by clapping during practice attempts, cheering them on while playing games, and giving high fives throughout sessions.

### More Choice

Although skill competence was encouraged through practice and feedback and students felt connected to one another and their coaches through teamwork and building relationships, autonomy was lacking in the clubs. Participants said they would have liked more choice. Participants were asked if they got to pick any activities and one girl stated, “No, they just make us participate. The only time they do (allow us to choose) is when it’s our last day.” Upon arrival
at the clubs for data collection, the researchers noticed the coaches reviewing a binder or notes full of curricula. They often discussed who was leading each activity and how long the activity would take. The club was pre-planned, not allowing the girls to choose activities of interest.

There were times the coaches had ideas of games to play and would ask the girls for their opinion. Mia explained, “Sometimes she gives us choices between games or if we want to do it one more time (play the same game). Sometimes we can say what we want to do.” When asked if she would like to have choices, Samantha stated, “Mm-hmm because you could freely choose what you like to do instead of them instructing you like at home when parents instruct you to do something.” The organization of each session was teacher-centered, leaving no room for creativity or expression. Anna explained she would like to create her own games and stated, “I would want to share my ideas with other classmates.”

During each observation, direct instruction was used to tell the participants what and when to do the pre-planned activities. On the rare occasion coaches gave the girls autonomy, they were allowed to choose their own partners to practice skills, sometimes choose between games the coaches initially intended to play, or explore different ways to use equipment provided (i.e. jump rope) by the coaches.

Discussion

The purpose of this study was to examine elementary girls’ perspectives of an after-school PA program. The SDT emphasizes three psychological needs (relatedness, competence, and autonomy) should be met to maximize growth, social development, and well-being (Deci & Ryan, 2000, 2002). The three tenets of SDT should be implemented in after-school programs to encourage girls’ engagement in PA. Girls at Play provided a safe and supportive environment allowing participants to develop relatedness with coaches and amongst other participants. In addition, participants’ competence increased due to coaches providing detailed verbal instructions, physical demonstrations of skills, and positive and constructive feedback during practice. However, Girls at Play did not provide an autonomous environment for participants.

Relatedness is the need to feel a sense of connectedness to other people. The first theme, Supportive Environment, demonstrated the connectedness that was formed between participants and coaches, and among participants themselves. When adult leaders demonstrate genuine, global care for their students’ well-being through communication, enthusiasm for content in class, and attentiveness, students feel a more welcoming, supportive environment so they are more interested in participating in activities (Shen, Li, Sun, & Rukavina, 2010). Adult leaders/coaches in this study demonstrated these characteristics in a variety of ways such as asking about personal hygiene, safety, weekend plans, and families. Coaches encouraged activities that promoted teamwork and participants expressed their enjoyment being close to and cared for by the coaches and other girls in the club when participating in activities. These behaviors enhanced relationships and provided social support, which increased girls’ PA and motivation to participate in activities.

Social support is not always required to participate in activities however, having a social base, or security, enables an individual to feel motivated (Deci & Ryan, 2000). Club leaders in this after-school program demonstrated sincerity to participants and cared about them individually. They recognized the importance of socialization among participants and allowed them to socialize with one another at appropriate times. Allowing time to work with peers builds social competency which can help form connections and a sense of relatedness in the gymnasium (Oliveira, 2008). According to Shen, McCaughtry, Martin, Fahlman, and Garn (2012), “…nurturing quality relationships between and among both teachers and peers may hold promise for enhancing learning” (p. 231). Based on the findings of this and previous research, it is important for leaders of after-school programs to foster this
type of environment to maximize learning and engagement and lead to increased relatedness between the student and adult as well as among students.

Previous research explains reasons for increased participation in PA is due to the way content is delivered such as through the use of detailed instructions, physical demonstrations, and positive and constructive feedback which all increase overall skill competence (Deci & Ryan, 2000; Shen et al., 2010). During Girls at Play, coaches provided positive and constructive feedback to enhance performance, leading to increased levels of competence. Providing practice time and individual feedback eventually leads to an increased sense of competence (Amado et al., 2014). This study also confirms the necessity of positive feedback and ample practice time to increase competence levels in students to feel successful as they did while attending Girls at Play.

According to Deci and Ryan (2000), “…events such as positive feedback that foster perceived competence tend to enhance intrinsic motivation, although people must feel responsible for the competent performance in order for perceived competence to have positive effects on intrinsic motivation” (p. 235). Competence is the need to engage effectively in one’s environment, or in this study, engage in activities, with peers, during the after-school program. When provided positive feedback versus no feedback, intrinsic motivation increases and students feel satisfied with the outcome and ready to learn more (Deci & Ryan, 2000). Conversely, when negative feedback is provided versus no feedback at all, intrinsic motivation often decreases and prevents students from wanting to participate. It is necessary for students to feel this sense of competence in order to engage effectively. The coaches at this after-school program provided praise, constructive feedback, and helped individuals when needed. While teaching, it is important to always remember to take the time to encourage students, offer extra help and practice time, and commend participants on a job well done.

Standage, Duda, and Ntoumanis (2005) explained an autonomous environment which provides choice and opportunity as well as greater positive feedback from teachers can enhance students’ feelings of autonomy, fulfilling one satisfaction need of the SDT, thus resulting in positive motivational behaviors. However, participants felt the after-school program lacked autonomy, allowing minimal choice and no opportunities for creativity and ownership with activities. According to Sun and Chen (2010), less motivated behaviors are exhibited when students do not feel a strong sense of choice or decision-making. Additionally, one study suggested ways to increase motivation in PE is through physical expression by students and teachers (Amado et al., 2014). According to Quested and Duda (2010), when one adopts an authoritarian style of teaching and implements specific daily agendas, as the coaches did in this study, students feel less motivation and no support for autonomy.

Girls at Play coaches attended an annual training prior to the start of the clubs in September. They received a binder that included the curriculum for the entire season. It was full of activities, games, healthy living lessons, and team-building skills. Prior to each session, coaches selected several activities from the designated curriculum and introduced them to participants. They taught lessons using teaching strategies that were teacher-centered but did not seem to engage students in decision-making about activities or provide choices to further engage them in the lessons.

It is necessary for students to have opportunities to self-direct their behavior. Intrinsic motivation and feelings of autonomy can be enhanced by activities that are novel, challenging, and have aesthetic values (Ryan & Deci, 2000). However, teachers, coaches, and after-school leaders have to be aware of what they consider an autonomous environment and what students perceive as autonomy (Sun & Chen, 2010). The researchers discussed the overall school environment and the Girls at Play curriculum being controlled primarily...
by educators, coaches, and leaders and often students do not feel a strong sense of choice or decision-making which may lead to less motivated behaviors to participate. Following these guidelines, the after-school programs could increase autonomy and enhance motivation to engage in activity. A simple step that could have been taken was to allow the participants of Girls at Play an opportunity to voice their opinion on all the activities in the Girls at Play binders that were given to the coaches.

**Limitations**

This study relied on self-reported opinions of each participants’ PA motivation related to the girls only after-school PA program curricula. It was assumed that all participants answered each question accurately and honestly. Furthermore, 16 participants were interviewed in the first round of interviews, but several students dropped out of the study throughout the school year. The second interview only contained 11 of those 16 original participants’ perspectives.

**Conclusion**

While after-school health and PA program leaders continue to create programs to enhance children’s overall health developing positive social environments were an important factor in the students’ engagement in these programs (Garn et al. (2014). The positive social interactions among club leaders and students, as well as between students, truly engaged students in PA. Health educators, physical educators, coaches, and leaders all teach in different environments, but no matter where teaching is taking place it is important to create a safe space where all people feel supported and this support can increase the motivation to learn. This study provided examples on how to increase relatedness, and some recommendations to include into future curricula are adding teamwork activities, allowing participants a chance to talk and bond with one another, and asking participants how they are doing or how their weekend was spent with family, friends, or other.

Furthermore, building competence through practice and feedback will help ensure participation in PA. Researchers found that participants in this study enjoyed the supportive environment of this after-school program and understood that practice makes each of them more competent at completing the physical activities they enjoy. The benefits of practice time and positive feedback are well reported, but it can be forgotten how important these traits are, especially when trying to fit in the curriculum into a brief period of time for instruction. It is important for program leaders to always provide practice time and give specific positive feedback to increase the motivation of all students. Finally, although this after-school program did not provide an autonomous environment, it is recommended to do so in order for students to explore, create, and express themselves through a variety of activities and hopefully, lead to lifelong PA. As noted, autonomy can be as simple as giving students a chance to examine the activities that are included in the curriculum and give their opinion. Based on participants’ opinions, the curriculum could be modified.

**References**


