Promoting Social-Emotional Learning Through Physical Activity

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Abstract

Physical activity (PA) has been found to be an appropriate medium through which to teach students more than just physical skills, including personal and social responsibility (Hellison, 2003; 2011). More recently, PA is being used to teach social-emotional learning (SEL) skills including: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2017). Effective teaching of SEL skills through PA is dependent upon deliberate and consistent integration into structured PA learning experiences. Structured PA should include a lesson focus, practice of skills, and assessment. The purpose of this paper is to provide practitioners with: 1) an overview of SEL, 2) guidance in teaching SEL within PA contexts, and 3) for implementing SEL and PA opportunities in after-school programs (ASPs).

Key words: social-emotional learning, physical activity, after-school programs

Social-emotional learning has become an increasingly prevalent topic in educational discourse as today's students are expected to balance and meet an exceeding amount of expectations. Students are expected to achieve academically, make responsible decisions, cooperate with others, and resist negative tendencies (Elias et al., 1997). The term 'social-emotional learning' (SEL) was first defined by the Collaborative for Academic, Social, and Emotional Learning (CASEL) as "the processes of developing social and emotional competencies in children" (2012, p. 9). These competencies are clustered into five categories: self-awareness, self-management, social awareness, relationship skills, and responsible decision making (CASEL, 2012). SEL was developed with the idea that it and academic achievement are connected and need to be *deliberately* taught in order to maximize student learning (Greenberg et al., 2003). Students who develop SEL skills may have a lower risk for negative behavior, such as dropping out of school and abusing drugs (CASEL, 2005, 2012). With this in mind, CASEL has developed guidelines for schools to implement district wide SEL programs. These competencies are being taught across classroom curriculums with more than 200 SEL programs established (Durlak et al., 2011).

SEL programs also take place in after-school programs (ASPs). ASPs have been offered since the 19th century; however, they have become more popular in the last two decades due to the *No Child Left Behind Act* of 2001 (Hurd & Deutsch, 2017; Roth, Malone, & Brooks-Gunn, 2010). This legislation increased funding for programs such as *21st Century Community Learning Centers*, that establish after-school programming for elementary and middle-school aged students across the country (Durlak & Weissberg, 2013). ASPs include a wide variety of activities such as homework help, music, arts and crafts, socialization, and physical activity (PA) (Shemoff & Vandell, 2007). Typically, ASPs align with the local academic calendar as students

need adult supervision after-school to allow parents to work without the extra worry of childcare. According to Durlak, Weissberg, and Pachan (2010), ASPs can lead to the improvement of students' self-perceptions, positive behavior in school, better grades, and increased achievement test scores. These personal achievements are similar to results found in students who are taught SEL skills (Durlak et al., 2011), which can be incorporated into structured PA settings.

PA in ASPs often consists of non-structured, free play type activity. However, if PA is structured with planned activities, developed social structures (such as routines), and academic language (i.e., SEL concepts), like what is found in quality physical education (PE), it can be an avenue for students to mature their SEL skills. PE involves not only PA but also lessons that integrate psychomotor, affective, and cognitive domains (Metzler, 2011). The affective domain includes students' feelings, emotions, and attitudes (Metzler, 2011), which are closely connected to SEL concepts.

PA interventions that intentionally incorporate SEL skill training increase students' SEL. A tutorial based on the results of an intervention conducted as part of an 21st CCLC after-school program (Schwanenflugel & Tomporowski, 2018; Olive et al., in review) was developed for ASP program leaders and staff. ==The tutorial provides a brief overview of SEL, how to teach SEL within PA contexts, and strategies and recommendations for implementing SEL and PA opportunities in ASPs.==

Social-Emotional Learning

 CASEL defined SEL at a meeting facilitated by the Fetzer Institute which sought to identify ways to positively develop children through school programming. Today, organizations, like CASEL, have developed school-wide SEL programs for pre-school through high-school aged children that focus on the following five core-competencies: self-awareness, self-

management, social awareness, relationship skills, and responsible decision-making (CASEL, 2005, 2012). By developing and mastering these skills, children can move from being influenced by external factors to applying the competencies to take responsibility for their actions, show care and concern for others, and manage their emotions (Bear & Watkins, 2006).

With the establishment of such programs, it has become important to assess how SEL is meeting the needs of developing students. When evaluating over 200 SEL programs, Durlak et al. (2011) found significant positive effects for targeted social-emotional competencies and attitudes about self, peers, and school across elementary, middle, and high school students and within urban, suburban, and rural areas. CASEL (2005) also developed the *Safe and Sound: Educational Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs* to assess the effectiveness, provide information, and describe practices of over 80 effective SEL programs. Many of the SEL programs included in the guide were organized and implemented by classroom teachers into regular routines without the assistance of outside personnel. In fact, SEL has been used in core classrooms throughout school systems, such as language arts and social studies (CASEL, 2005). However, it has only recently been introduced to PA settings.

Social-Emotional Learning through Physical Activity

PA has long been used as a medium to teach children about more than movement and gross motor skills. Within PE, curriculum models have been created and studied in order to provide practitioners with research-based practices for teaching *through* PA. For example, Hellison (2003, 2011) created the Teaching Personal Social Responsibility (TPSR) Model to use PA as an instructional medium to teach at-risk youth personal and social responsibility. Siedentop (1998) created the Sport Education Model (SEM) to teach students leadership, communication, and responsibility while concurrently learning all components of a respective

sport or physical activity. A large body of research exists demonstrating the effectiveness of PA contexts for providing youth opportunities to learn social, emotional, and responsible behaviors within sport settings (Holt, et al., 2017; Hemphill & Richards, 2016; Martinek & Lee, 2012). This research indicates that when PA is used intentionally (including structured activities with aligned assessments) it can be used to develop students' SEL skills (Richards et al., 2019)

To incorporate SEL into PA using TPSR = the following components must be present: (a) Relational Time, (b) Awareness Talks, (c) Physical Activity, (d) Group Meetings, and (e) Self-Reflection Time (Hellison, 2011). With TPSR, SEL skills can be introduced during the awareness talk, used during the PA, and then discussed during group meeting and self-reflection time. Relational time is time spent prior to the lesson starting where the teacher talks with students one on one to develop individual relationships. The awareness talks occur at the beginning of the lesson. This is where the teacher chooses a topic, such as self-management, to discuss with the students. Physical activity is the part of the lesson where students learn and practice skills, while also practice using the topic from the awareness talk. Group meetings occur at the conclusion of the physical activity. This is time for the teacher to lead a discussion about the topic, such as how it was used in the physical activity, how it felt when someone used it, etc. Self-Reflection time is at the very end of the lesson and allows time for students to reflect on what they did well, such as how did they demonstrate self-management in the lesson and what could they do better next time? SEL can also be taught through PA by following the national standards for physical education, specifically Standard 4, "responsible personal and social behaviors that respect self and others" and Standard 5, "value physical activity for health, enjoyment, challenge, self-expression and/or social interaction" (SHAPE, 2013). One way to

meet these standards is by using cooperative games that provide students opportunities to work in pairs or teams towards a common goal.

Taken together, there are several avenues through which PA can be used to teach children SEL skills. It is important to note that for students to develop SEL competencies through PA, it must be strategically and intentionally integrated into curriculum. Research in this area has provided a body of knowledge surrounding strategies for effective implementation of SEL within curriculum, including PA contexts and ASPs.

Strategies for Teaching SEL through PA within ASPs

Given that ASPs serve nearly 6.5 million children each year (Afterschool Alliance, 2004) and provide a safe environment, they are well-positioned to be used as a means for further engaging students in physical activity (PA) beyond what occurs during the school-day (Booth et al., 2001). PA in ASPs has also been used to support students' cognitive, social, academic, and physical skill development (Sibley & Etnier, 2003; Strong et al., 2005). Further, research has indicated that PA within ASPs can effectively develop students' SEL competencies (Olive et al., in review). Most importantly, this research indicates that explicitly teaching and embedding SEL language and conceptual frameworks within daily routines is critical in order for learning to occur (Durlak et al., 2010, 2011)

SEL Language

In order for students to develop SEL competencies, they must first learn SEL language and vocabulary following the five core competencies: self-awareness, self-management, social-awareness, relationship skills, and responsible decision-making (CASEL, 2005, 2012). Research indicates that when students understand and use these competencies, they are more likely to ask for help when needed, manage emotions, and solve complex problems (Romasz, Kantor, & Elias,

2004). When teaching SEL language, it is critical to determine students' ability to recognize, comprehend, and apply the skills in social situations.

Self-awareness is defined as the ability to recognize one's emotions, strengths and weaknesses, confidence, thoughts, and values (CASEL, 2017). Children can apply self-awareness in physical activity through tasks as simple as creating "open space." By teaching students how to be in "open space", they are prepared for appropriate positioning, which sets them up for success in other physical activities when they need to move into open space to evade a defender (Ciotto & Gagnon, 2018). This feeling of success can provide students self-confidence, which ultimately contributes to improved self-awareness (Ciotto & Gagnon, 2018).

The second competency is self-management, which is defined as the ability to manage emotions in different situations and to set and progress towards personal and academic goals (CASEL, 2017). To teach self-management, SEM could be used as research has indicated this curriculum model can provide students with individual roles, such as coach, manager, official, and statistician (Wallhead, Garn, & Vidoni, 2013; Siedentop, 1998). By providing students with a title and a team, students are required to use self-management, relationship skills, and responsible decision-making throughout the unit. However, students may not realize they are working on these skills. Thus, it is important to ask students self-reflecting questions in order for them to identify how they have applied these skills within a model like this.

Social awareness is the third competency and is described as, "the ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures" (CASEL, 2017, "Social Awareness"). To develop students' social-awareness, students could participate in a World Cup themed soccer unit. Students could be assigned a country (other than the United States) and be tasked with creating a report or presentation regarding that

country's history and culture. Students could design uniforms representing the colors of their assigned country. By being exposed to another culture, students are able to develop their social-awareness skills. This is due to students taking on the perspective of a different culture, which requires them to research and understand cultural differences. In turn, this may lead students to displaying more empathy towards others who are different from them.

The fourth competency is relationship skills. This refers to the ability to create and maintain healthy relationships by communicating clearly, listening, working with others, abstaining from peer pressure, resolving conflicts, and seeking to help when needed (CASEL, 2017). The cooperative learning model is one way for students to practice these skills as this model focuses on positive interdependence, individual accountability, face to face promotive interaction, interpersonal and small group skills, and group processing (Dyson, 2001).One strategy within this model (e.g. jigsaw) places students in diverse groups and then assigns each member of the group a task to learn; which they are then responsible for teaching to the home group. In this way, each student provides their "piece" to the jigsaw puzzle (Ayers & Sariscsany, 2011). For example, students could be placed in groups and each member of the group learns a specific dance move from the teacher or a station. Each group member then rejoins their group to teach their dance move to their peers. The group is then responsible for creating a dance using these dance moves. Using the jigsaw instructional strategy provides students opportunities to use relationship skills, such as communicating clearly, listening to others, and seeking help when needed to be successful.

The fifth and final competency is responsible decision-making, which is the ability to use one's ethical standards, safety concerns, and social norms to make positive choices with the awareness of consequences and concern for the well-being of self and others (CASEL, 2017).

SEM can be used to provide students with opportunities to practice responsible decision-making (Jacobs & Wright, 2014). Within assigned roles, students are empowered to make decisions about rules, drills to practice, strategies for gameplay, and rule enforcement (Siedentop, 1998; Wallhead, Garn, & Vidoni, 2013). As students are making these decisions, they are practicing responsible decision-making by applying ethical standards to enforce rules to uphold ethical standards, practicing drills with the concern of the well-being of others' skill abilities, and establishing rules to maintain the safety of others.

The process of learning the SEL competencies in PA may begin with the introduction of these five core competencies and their corresponding language and vocabulary (CASEL, 2012). Doing so may provide a foundation for the knowledge needed to begin using the SEL competencies both by speaking the language and applying the knowledge in PA. Most importantly, SEL cannot be used occasionally; it must be integrated into the framework of PA with ASPs and used daily in order for students to learn and transfer SEL into all aspects of their lives.

SEL in PA Framework for ASPs

Given that ASPs occur concurrently with school schedules, they provide frequent opportunities for students to practice valuable SEL skills and language on a daily or weekly basis; especially within PA contexts. One example of this is the *Physical Activity and Learning (PAL) Program* which was designed to enhance student learning in reading and mathematics, improve students' physical activity levels and healthy behaviors, and encourage family involvement for students' academic progress and healthy choices at home (Schwanenflugel & Tomporowski, 2018). The *PAL Program* served 60 second through fifth grade students each academic year at two elementary schools. The students received homework help, physical

activity, mathematics, and reading. The PA component of the *PAL Program* lasted 45 minutes each day as second through fifth graders were taught by graduate students specializing in physical education who held K-12 certification. These PA lessons included games utilizing elements found to stimulate cognitive engagement (Schwanenflugel & Tomporowski, 2018). For example, teaching students how to change their strategy within a game such as "Hoopla." The first round might be set up for students to be the first team with six items in their hoop (Schwanenflugel & Tomporowski, 2018). Prior to the second round, the instructor may ask teams questions about their strategy, and students may respond with, "*I ran to collect the item that was closest to me*." The instructor would share this idea with the entire class, leading students to engage in critical decision making, which may result in increasing how quickly teams were then able to collect their six items. For a more complete description of this and other *PAL Program* activities, see *Physical Activity and Learning After School* (Schwanenflugel & Tomporowski, 2018).

In the fifth year of the *PAL Program,* it became apparent to the staff and faculty that too much time was being spent managing student behavior, and this was compromising student learning. In an effort to address this, one staff member identified SEL skills as an area of deficiency preventing students from progressing in other skills. Following this recognition, a study was conducted to test students SEL self-perceptions using one of the program sites as a control group and the other as the treatment group. Both the control and treatment groups received two surveys, one to measure the students' current SEL knowledge, Social-Emotional Learning Scale (SELS) and another to measure their self-perceptions, Social-Emotional and Character Development Scale (SECDS), pre and post the four weeks. The control group continued operating normally, while the treatment group received an SEL intervention during the

PA component of the program for four-weeks. This SEL intervention used a hybrid version of the TPSR model, which included an awareness talk, physical activity, and a group meeting. The awareness talk included two to three SEL topics from the SECDS. The physical activity portion included one or two games that allowed the students opportunities to practice using the SEL topics mentioned in the awareness talk. The lesson would conclude with a group meeting which was led by the teacher, who would ask questions to stimulate the students' thoughts about how SEL was used during the class and how SEL could be used outside of the class. At the conclusion of the four weeks, there was not a significant change in the students' self-perceptions (Olive et al., in review).

Despite this, staff members did notice other unexpected changes in the students as they began to change the way they talked to each other and to staff by using language included in the surveys. For example, a second grader told a staff member that she was called a derogatory name by another student, but instead of responding with more name-calling (as was typical), the second grader informed the other student that it was okay if she did not like her, but she (second grader) would still be nice to the other student. This was one of the topics from the SECDS, which said, "I ignore other kids when they tease me or call me names," (Ji, DuBois, and Flay, 2013). Prior to this intervention, this second grader was often known for retaliating name-calling. This is just one of several examples of how an SEL intervention influenced the *PAL Program* students.

Findings from research conducted within the *PAL Program* underscore the importance of SEL being embedded within every PA lesson with the specific objective of students' use of at least one of the SEL competencies (see Olive et al. for additional description). Further, in order to ensure student use and understanding of these competencies, we recommend deliberate

question and answer techniques (either oral or written). Student learning of SEL skills can be further enhanced by using the competencies in everyday settings beyond the ASP including both structured and unstructured interaction with peers.

Conclusion

Taken together, we offer that SEL can benefit students by improving positive behavior, decision-making skills, emotional recognition, and academic performance (Durlak et al., 2011). Physical activity can be used as an avenue to teach students SEL competencies, if they are intentionally inserted into structured activities. After-school programs with PA are ideal for teaching SEL in PA due the ability to implement the competencies on a daily basis within ASP programming. This can be done by using any of the strategies suggested within this manuscript; however, there may be other approaches that were not included. Ultimately, SEL competencies teach students important skills not only for school, but for life, and PA is one area of opportunity that has not yet been utilized.

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