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PHYSICAL ACTIVITY PROGRAMMING

Identifying the Common Characteristics of Comprehensive School Physical Activity Programs in Louisiana

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Abstract

The purpose of this project was to (a) determine the common characteristics of current comprehensive school physical activity programs (CSPAP) in Louisiana and (b) identify strategies for implementing a CSPAP. Four individuals (i.e., one physical education teacher, one principal, and two classroom teachers) were recruited from three public schools in Louisiana and asked to (a) complete the national CSPAP survey, (b) complete a follow-up self-designed e-mailed question set, and (c) participate in individual in-person interviews. The data were analyzed quantitatively and qualitatively. Survey results showed that participating schools implemented

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at least one other CSPAP component beyond physical education, and the CSPAP activities implemented within each component varied across schools. Two overall themes emerged across participant groups and schools: (a) an overarching network of individuals to facilitate CSPAP implementation is necessary and (b) the physical education teacher is integral to implementing a CSPAP. The conclusion of the study was that physical education teachers should strive to have at least their principal and a stakeholder, specifically a classroom teacher, supporting their CSPAP efforts to ensure successful CSPAP implementation.

Childhood obesity is a problem in the United States with 16.9% of children currently considered obese (Ogden, Carroll, Kit, & Flegal, 2012). Due to the diseases associated with obesity, the average American life span is expected to shorten by 2 to 5 years by 2050, which means the present generation of children could live a shorter life than their parents (Olshanksy et al., 2005; Rahman, Cushing, & Jackson, 2011). Children are the focus for reducing the prevalence of obesity because childhood choices to engage in physical activity (PA) may carry into adulthood (Castelli & Beighle, 2007). An environment, particularly schools, that provides support for developing healthy behaviors in children has been shown to have a positive impact on children's healthy lifestyle changes and choices (Madsen, Hicks, & Thompson, 2011). As a result, schools continue to be recognized as ideal settings to promote PA among youth (Lee, Burgeson, Fulton, & Spain, 2007; Pate et al., 2006; Sallis et al., 2012).

One strategy to impact the school environment currently being endorsed through the newest Let's Move Active Schools initiative by First Lady Michelle Obama's Let's Move program is called a Comprehensive School Physical Activity Program (CSPAP; http://www.letsmoveschools.org/). The CSPAP serves as a guideline to provide more PA opportunities within the school to assist youth in achieving the recommended 60 min of PA a day (American Alliance for Health, Physical Education, Recreation, and Dance [AAHPERD], 2012). The program is also in place to develop children's knowledge of health and ability to carry out physical activities with the goal of continuing this activity throughout a lifetime (Heidorn, Hall, & Carson, 2010). The five CSPAP components are focused on a quality physical education (PE) program, with opportunities for PA during school, PA before and after school, staff involvement, and family and community engagement (see Figure 1; AAHPERD, 2012). Suf-

ficient evidence exists for multicomponent school-based strategies for increasing PA among youth (U.S. Department of Health and Human Services, 2012).

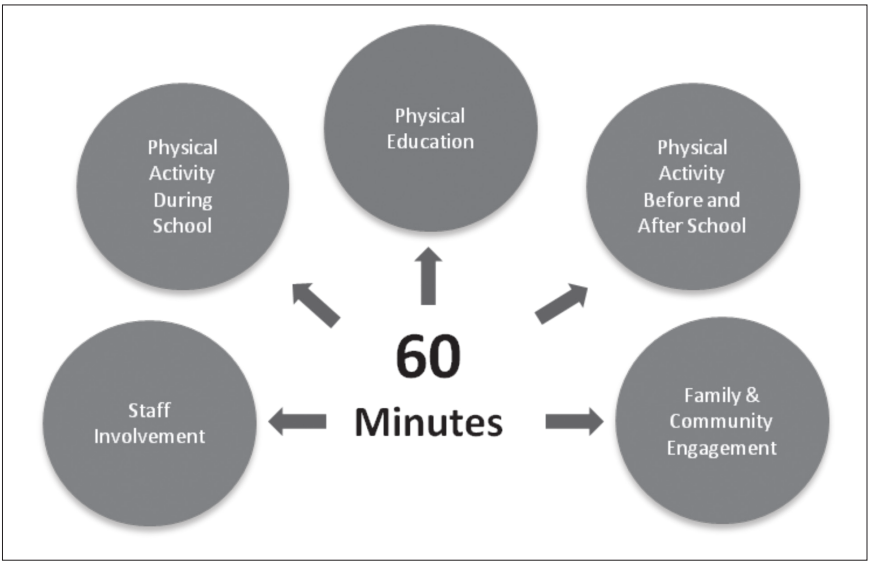

Figure 1. The five components of a CSPAP model. From AAHPERD (2012). Let's Move! Active Schools and the Centers for Disease Control and Prevention (CDC) are currently using this model as a framework in their training efforts.

CSPAP implementation usually occurs via a wellness team, led by a director of physical activity (DPA), whose purpose is to direct the activities within the program and recruit community stakeholders (Carson, 2012; National Association for Sport and Physical Education [NASPE], 2012). A physical educator is the most likely individual to become a certified DPA (C-DPA) through the NASPE's professional development certification program because they are the only individuals trained to administer PA opportunities during the school day (Carson, 2012; Rink, 2012). The wellness team also consists of individuals in the community, school administrators, and classroom teachers, who work together with the purpose of monitoring, implementing, and raising awareness for the CSPAP (Beighle, Castelli, Erwin, & Ernst, 2009; Carson, 2012).

Among the five CSPAP components, PE is the centerpiece because it is the academic subject in which PA is ensured and the

course where students may be taught how to live a physically active lifestyle (AAHPERD, 2012). PE teachers first must ensure they have a quality PE program, which ensures students are learning; use meaningful student assessments; and employ proper instruction tactics (NASPE, 2011). Most PA promotion strategies include making slight changes to current PE practices, such as pairing younger students with older students who model active lifestyles during activities, having sufficient access to equipment for students, and giving shorter and more frequent instruction (West & Shores, 2008).

Practical examples for providing PA opportunities using a CSPAP component beyond PE have also been documented. The PA during school component is typically focused on recess play, "drop-in" activities, and in-classroom activities (Castelli & Ward, 2012). More specifically, improvements may be made to recess periods by using markings to designate areas of activity options (Faber, Kulinna, & Darst, 2007). Integrating PA during the school day has been shown to impact students' concentration (Leviton, 2008). Implementing PA before and after school has also been shown to increase PA and enjoyment in students, for example through an after-school program, which included music and instant activities (Kahan, 2008). Staff involvement is beneficial for schools because general staff health programs have been shown to save money from a reduced number of work-related injuries, decrease the number of missed days, and lower general costs of health care (Eaton, Marx, & Bowie, 2007). Faculty may integrate activity into the day, such as by walking or biking to school and by taking PA breaks during the day. These efforts will allow the school staff to serve as healthy role models for children and possibly experience less burnout and continue their careers for a longer time (Carson, Baumgartner, Matthews, & Tsouloupas, 2010; Heidorn & Centeio, 2012).

Implementing these individual components within schools is a good start, but in a CSPAP, the importance of enacting more than one component to encourage the most PA possible is emphasized (AAHPERD, 2012). The empirical CSPAP literature has been reviewed elsewhere (Erwin, Beighle, Carson, & Castelli, 2013); however, some researchers have reported examples of practical approaches to implementing a multicomponent CSPAP, including a running program, a Smart Bodies program, and several Walking School Bus (WSB) programs. The running program involves classroom teachers and students participating in running activities on days where students did not have PE, which would fulfill PA during

school, PA before and after school, and staff involvement (Lee & Solmon, 2007). The Smart Bodies program fulfills the family and community engagement component by encouraging students to perform activities learned during a school-time Body Walk exhibit at home with parents. This program also includes PA during school with the Take 10 curriculum, which requires teachers to integrate 10-min PA breaks into the classrooms while discussing the reactions of the body to healthy lifestyle choices (ILSI Research Foundation, 2012; Lee & Solomon, 2007). The WSB program is the final multicomponent program discussed, which typically includes before- and after-school PA and family and community engagement by having parents or community members serve as facilitators to travel with students as they walk to and from school (Thomas, Sayers, Godon, & Reilly, 2009; West & Shores, 2008).

Across the components, comprehensive programs provide means to impact the PA levels of children. Unfortunately, CSPAPs are not consistently provided in schools in the United States, as evidenced by a national survey finding that only 16% of elementary schools, 13% of middle schools, and 6% of high schools are currently implementing the program (AAHPERD, 2011). Further information, therefore, needs to be gathered pertaining to qualities of current CSPAPs that may be used as guides for teachers attempting to implement similar programs. The purpose of this project was to (a) determine the common characteristics of CSPAPs in Louisiana and (b) identify strategies for implementing a CSPAP.

Methods

Participants

As outlined in Figure 2, 439 PE teachers were invited to participate in the study. Inclusion criteria involved PE teachers in Louisiana who were implementing at least one other CSPAP component besides PE. As a result, 12 PE teachers expressed interest in the study by replying to the initial e-mail invitation, of which five PE teachers completed the national CSPAP survey provided, of which only three reported implementing one CSPAP component beyond PE. These three PE teachers provided informed consent to participate in the study. Recruitment occurred for 8 months, beginning after the institutional review board granted approval in June 2011 and ending in February 2012. The study commenced immediately thereafter.

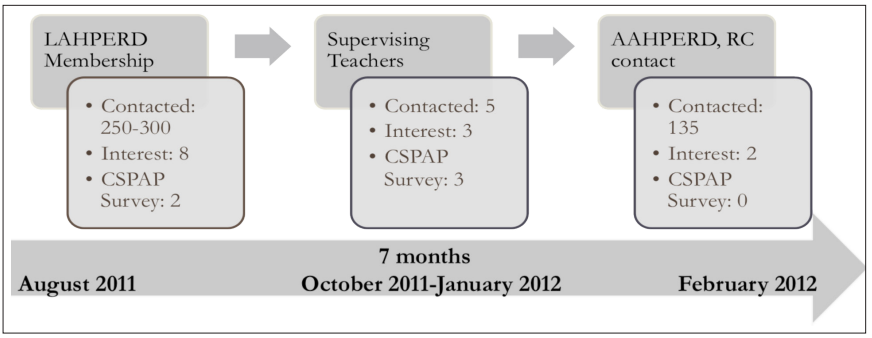

Figure 2. Timeline of recruitment. The recruitment process occurred over 7 months. Recruitment e-mails were first sent to membership of the Louisiana Association for Health, Physical Education, Recreation, and Dance (LAHPERD) through the executive director. Second, recruitment e-mails were sent to the supervising teachers of physical education methods class for a nearby university. Finally, the research consortium (RC) director for the American Association for Health, Physical Education, Recreation, and Dance (AAHPERD) e-mailed 135 Louisiana physical education teachers who had completed the national CSPAP survey. Contacted = number of individuals e-mailed or spoken with regarding the study; Interest = those who replied or requested a CSPAP survey; CSPAP Survey = the number of individuals who completed a survey and returned it to the primary researcher.

The PE teacher participants represented three public schools in Louisiana (two elementary schools [ES], one middle school [MS]). Within each school, three other staff members were invited to participate in the study: two classroom teachers and one school administrator, who were identified by the participating PE teacher as in support of implementing a CSPAP. Therefore, four individuals participated in the study from each school for a sample size of 12 participants. Further information pertaining to each school and participants, gathered from the school website and participants directly, is shown in Tables 1 and 2. Pseudonyms are used to maintain anonymity for the schools, teachers, and principals.

Table 1
Overview of School Settings

School setting characteristics	Bartram Trail ES	Douglas Anderson ES	Julington Creek MS
School description	Public, K–5	Public, magnet, K–12	Public, magnet, 6–8
Free lunch eligibility %	45	2	66
Student population	438	1374	705
Race/ethnicity %			
African American	53	11	87
Caucasian American	39	84	11
Hispanic	2	1	2
Asian/Pacific Islander	6	4	1
American Indian	0	.1	0

Table 2
Overview of Study Participants

Study participant characteristics	Bartram Trail ES		Douglas Anderson ES		Julington Creek MS	
Physical education teacher	Ms. Eldridge		Mrs. Weaver		Ms. O'Donnell	
Years teaching	22		20		27	
Teaching accolades	State, national		Local, state, national		Local, state, national	
Principal	Mr. Herring		Mrs. McCullough		Mr. Patton	
Years of experience	42		24		n/r	
Years in current position	10		12		n/r	
Classroom teachers	Mr. Johns	Ms. Lane	Mrs. Freder	Mrs. Welt	Mr. Marks	Mrs. George
Subject areas taught	Science, SS	All	All	All	English LA	English LA
Grades taught	3rd	K	K	2	8th	7th
Years of teaching experience	9	9	17	25	7	2

Note. Four participants from each school. Pseudonyms were used for all participants. n/r = not reported; SS = social studies; LA = language arts; K = kindergarten.

Data Collection

Data were collected in this study via a national survey, an e-mailed question set, individual interviews, and informal observations. The first three forms of data collection were used with the PE teachers, whereas the classroom teachers and administrators were only individually interviewed. Informal observations of CSPAP implementation were conducted during three school visits. Each form of data collection will now be presented in turn.

National CSPAP survey (PE teachers only, *n* = 3). The same electronic survey that AAHPERD developed in 2011 to assess degree of CSPAP implementation among its members was used in this study. The number of questions asked in this survey pertaining to the components were as follows: PE (*n* = 3, e.g., "Is all physical education in your school taught by state-certified physical education teachers?"); PA during school (*n* = 10, e.g., "How many classroom teachers at your school are integrating PA in their classrooms, other than recess?"); PA before and after school (*n* = 25, e.g., "What approximate percentage of your school's female student population participates in at least one PA club or intramural sport during the school year?"); staff involvement (*n* = 9, e.g., "What approximate percentage of your school's staff participates in the staff PA classes/programs offered by your district and/or school?"); and family and community engagement (*n* = 9, e.g., "Has your school conducted or is it planning to conduct any special events in which families are invited to engage in PA with students during this school year?"). Although the psychometric properties of the survey were not reported, the survey was completed by 1,225 AAHPERD members and results were conveyed in an executive summary (AAHPERD, 2011).

Self-designed e-mailed question set (physical education teachers only, *n* = 3). The PE teachers were e-mailed a question set to obtain more detailed information about their CSPAP program prior to being interviewed. Teachers were asked to provide self-reported responses to questions pertaining to the average amount of PA students received in a school day, CSPAP activities currently being implemented for each component, and the necessary strategies or barriers for implementing a CSPAP overall.

Individual in-person interviews (all participants, *n* = 12). A standardized open-ended interview was conducted with all participant groups in the study (Patton, 2002). The PE teachers were interviewed first using the same series of questions that pertained to the degree of CSPAP implementation, helpful strategies and

obstacles for implementing a CSPAP, ways to garner CSPAP support, perceived impact of implementing a CSPAP, and the initial CSPAP component they chose to address at their school. Following this interview, PE teachers were asked to identify two individuals within their school who assisted with implementing their CSPAP, all of whom identified two classroom teachers. These two classroom teachers and the school principal were then interviewed, in no specific order, using a slightly different series of questions that pertained to their degree of CSPAP involvement, helpful strategies for implementing a CSPAP, their opinion on the feasibility of the future CSPAP growth at their school, perceived impact of implementing a CSPAP, and implementation advice for other classroom teachers or principals. The question sets for the PE teachers and for the principals and classroom teachers were composed based on likely knowledge and general understanding of a CSPAP. Interviews were conducted at a convenient time and location at the school site, typically in classrooms or offices. The average length of interviews was 15 min but ranged from 3 to 40 min.

Informal CSPAP observations (three per school, $n = 9$). The primary researcher conducted informal CSPAP observations before, during, or after interview-related school visits. These observations mainly included an objective assessment of implementing a CSPAP for each component based on the CSPAP model and component descriptions (AAHPERD, 2012). Some observations were of the PE class, and others occurred during class or recess times, which allowed for several CSPAP areas to be analyzed. If there was uncertainty with this assessment, the researcher met and deliberated with a second researcher who had CSPAP expertise and experience until they reached an agreement.

Data Analysis

Quantitative data. Quantitative data sources stemmed from the CSPAP survey and e-mailed question set. Data from the national CSPAP survey were tabulated and reported by the number of CSPAP components implemented within each school, the number of aspects being implemented within each component, and the percentage of student population and staff population participating in PA offered within the school. In regard to the e-mailed question set, data tabulations were again used to determine the sum of implemented CSPAP activities by component and the average amount of PA students receive per day.

Qualitative data. The qualitative data sources were e-mailed question sets, individual interviews, and informal observations. Qualitative data were organized for analysis within participant groups, within schools, and across participant groups and schools. The within participant group analytic scheme was arranged for analysis within PE teachers, within principals, and within classroom teachers. The second analytic scheme was performed within schools with the similar questions that were asked across the groups within the same school. Two similar questions were asked across all three participant groups, and three similar questions were asked only to principals and classroom teachers (see Table 3). The third analytic scheme was performed for the previously identified similar questions asked across all participant groups and schools.

Table 3
Similar Questions Asked During Interviews

Similar questions	Physical education teachers	Principal	Classroom teachers
1. Interviewer lists components that have not yet been implemented into the school. “Do you think your school could realistically implement those components that have not yet been implemented?”		✓	✓
2. “Are there any components that seem completely unrealistic for implementation?”		✓	✓
3. “What were helpful strategies to implement these CSPAP components and activities at your school?”	✓	✓	✓
4. “Based on your observation, what kind of impact (positive or negative) did the CSPAP have on your school, culture, staff, students, parents, and community?”	✓	✓	✓
5. "Do you have any advice to a hesitant principal or classroom teacher on how to implement physical activity into the school?"		✓	✓

For each analytic scheme, data were analyzed inductively through open, axial, and selective coding (Strauss & Corbin, 2008). The interview questions were initially organized into categories. The data were read and reread and then analyzed more closely and open coded. After another reading of the data, the axial coding process allowed for the previously coded data to be arranged according to common characteristics of answers (e.g., crucial components to implementing the CSPAP, obstacles to implementing, and ways to garner support). Finally, selective coding was performed to further organize the data into central themes.

Data triangulation, peer debriefing, and member checking was performed to ensure trustworthiness. Researcher triangulation was established through multiple data sources in developing the final themes. The peer debriefing occurred weekly in person or through the phone with the second researcher. The first and second researchers critically reviewed and deliberated on findings, updates on progress, and potential interpretations of data until they agreed upon final interpretations. Member checking involved all of the participants being sent e-mails, which included a list of quotes specific to the individual who was incorporated into the paper; however, one principal, Mr. Patton, was unable to be reached. After the participants had reviewed the data, only two participants requested rephrasing of their included quotations. Last, the primary researcher conducted all analyses to ensure minimal researcher bias.

Results

Quantitative

CSPAP survey results indicated that PE class accounted for a significant percentage of students' daily PA; however, this was only on days that PE was offered. This finding was consistent across all participating schools with 50% of activity at Douglas Anderson ES, 75% of activity at Julington Creek MS, and 100% of activity at Bartram Trail ES accumulated from PE class on days when the class was offered. Surveys also indicated that all schools implemented at least one other component beyond PE. Douglas Anderson ES implemented all five CSPAP components, Bartram Trail ES implemented four, and Julington Creek implemented two. PE and before- and after-school PA were the only two components implemented across all schools. The component that was least likely to be implemented was PA during school. As reported in Table 4, the activities implemented within each CSPAP component varied across schools. Fur-

Table 4
Implementation of CSPAP Components Reported by Physical Education Teachers as Compared to Researcher Assessment

CSPAP components	Bartram Trail ES	Douglas Anderson ES	Julington Creek MS
Average amount of physical activity acquired per day by students[a]	30 min or less	1 hr or less	2 hr or less
Physical education total	7	7	6
Students receive at least 60 minutes of physical education class per week	✓	✓	✓
Age-appropriate content	✓	✓	✓
Varied and appropriate content	✓	✓	✓
Maximal safe participation	✓	✓	✓
Regular assessments	✓	✓	✓
Required teacher certifications	✓	✓	
Moderate (e.g., brisk walk) to vigorous (e.g., running) physical activity for 50% of the class	✓	✓	✓
Researcher Assessment	✓	✓	✓
Physical activity during school total	2	3	3
Brain breaks (to refocus attention or reenergize the class)	✓		
Active classrooms		✓	✓
Elementary: Daily recess with free play	✓	✓	✓
Record steps via pedometers		✓	✓
Researcher Assessment		✓	

Table 4 (cont.)

CSPAP components	Bartram Trail ES	Douglas Anderson ES	Julington Creek MS
Physical activity before- and after-school activity total	1	4	2
Clubs/intramurals (e.g., walking and jogging club)		✓ (M: n/r; F: n/r)	✓ (M: 0–24%; F: 0–24%)
Interscholastic sports		✓ (M: 75–100%; F: 50–74%)	✓ (M: 0–24%; F: 0–24%)
After-school programs implement physical activity	✓		
Active transport to school (e.g., walking school bus, safe routes)		✓	
Fund-raisers for physical activity		✓	
Researcher Assessment	✓	✓	✓
Staff involvement total	2	3	1
Walking/jogging PA programs		✓	
Group aerobic activities		✓	
Administrator observation of > 10 min of physical education class per year	✓ (3 times)	✓ (5+ times)	
Other (Explain)	✓ (0–24% of faculty participate in strength training classes)		✓ (Student– teacher volleyball and basketball activity)
Researcher Assessment of Implementation	✓	✓	

Table 4 (cont.)

CSPAP components	Bartram Trail ES	Douglas Anderson ES	Julington Creek MS
Family and community engagement total	2	4	2
Jump Rope for Heart	✓	✓	✓
Field days	✓		
Family physical activity homework		✓	
Sharing facilities and resources with community organizations			✓
Local physical activity providers as class demonstrators or assembly presenters		✓	
Walk-to-school program with community acting as "bus drivers"		✓	
Researcher Assessment	✓	✓	

Note. ✓ = Implemented; M = Male population participating; F = Female population participating; n/r = not reported. Sample CSPAP activities assessed by survey are listed by component (a complete list of activities surveyed are available upon request). Researcher assessment was based on comparing the results of the CSPAP Survey to interview data and informal CSPAP observations.

[a]Five response options: 15 min or less, 30 min or less, 1 hr or less, 2 hr or less, 3 hr or more.

thermore, efforts were being made to implement every component within each school; however, within the PA during school, staff involvement, and family and community engagement components, a disconnect was found between what the PE teacher reported in the e-mailed question set and what the researcher discovered through on-site observations and individual interviews, which is shown as Researcher Assessment of Implementation and found at the bottom of each component section in Table 4.

Qualitative

From the qualitative data three themes emerged from the within participant group analytic scheme and two from the across participant groups and school analytic scheme. No significantly unique results were found from the within schools analytic scheme.

Within participant groups.

Physical education teachers. PE teachers garner CSPAP support by having a good PE program. All three PE teachers stated that the first component of the CSPAP they addressed was their PE program. Ms. Eldridge of Bartram Trail ES stated that "strong teaching [and] good lessons" were key to the success of the CSPAP. All three PE teachers also considered student, parent, and administrator support critical to the success of implementing a CSPAP and believed the key to receiving this support was having a great PE program. Support is necessary and easiest to gain when the PE teachers can "sell," or convince others, that they have a quality PE program (Ms. Eldridge, Bartram Trail ES, PE teacher). Student support is gained when students "can't wait to come back" to their PE class because of the fun, active, and safe environment (Ms. O'Donnell, Julington Creek MS, PE teacher). Excitement for the PE program also spreads to the parents through students' stories of PE class or parent–teacher orientation meetings, where parents are able to realize the programs in place are not like what they had "when they were in school" (Ms. O'Donnell, Julington Creek MS, PE teacher). "Parents demand" the activity and are more willing to support programs, such as before- and after-school activity programs, once they see the excitement of the students (Mrs. Weaver, Douglas Anderson ES, PE teacher). Administrator support is needed and garnered when the administrator is impressed by the quality of the PE program, such as the principal of Bartram Trail ES who stated that he "loves the way she teaches" when referring to the physical educator at the school, Ms. Eldridge.

Principals. The CSPAP starts with the PE teachers and will spread throughout the school. The principal of Julington Creek MS believed that "if you find a successful physical education department, you'll find successful schools." All three principals reported that PE teachers must have a "vision" for a quality program that extends beyond the gymnasium to create a successful CSPAP (Mr. Herring, Bartram Trail ES, principal). The positive impact of the PE program "permeates" the school by affecting everything including children's happiness, school budget because of fund-raising, and parent activity (Mrs. McCullough, Douglas Anderson ES, principal). Impacts of PE class are noticed in the classroom and even outside of school with students bringing activities home to involve parents. One example of how students being active may involve parents in activities was shared by Mrs. Freder, whose children participated in the rollerblading unit at Douglas Anderson ES: "[They] went out as a family and bought rollerblades so that [they] could rollerblade in the neighborhood" (Mrs. Freder, Douglas Anderson ES, classroom teacher).

Classroom teachers. PA may be implemented into the classroom in may ways, and students need this PA. Classroom teachers in this study implemented PA in their classrooms in several ways. The majority stated the reason for doing so was because children have difficulty sitting "long enough" in the class period (Mr. Johnson, Bartram Trail ES, classroom teacher), and integrating PA helps students "focus more" (Ms. Lane, Bartram Trail ES, classroom teacher) and be "ready to move on and learn the next thing" (Mrs. Freder, Douglas Anderson ES, classroom teacher). Julington Creek MS teachers reported students "dosing [*sic*] off," and they chose to use PA as an attention reset (Mrs. George, Julington Creek MS, classroom teacher). Douglas Anderson ES teachers also reported using activity for attention reset by having dance breaks and transitioning between topics by moving to different areas of the classroom. Curriculum integration of PA was used by teachers such as Mr. Johnson of Bartram Trail ES, who used PA for "concept association," whereas Mrs. Freder of Douglas Anderson ES was more specific, referencing a dice rolling activity that incorporated math through the repetitions of an exercise performed. The teachers who gave advice on how best to incorporate PA into the classroom alluded to the need for "ground rules," and one suggested to "go to your physical educator person" as a reference (Mr. Johnson, Bartram Trail ES, classroom teacher; Mrs. Welt, Douglas Anderson ES, classroom teacher).

Across participant groups and schools.

Theme 1. An overarching network of individuals to facilitate CSPAP implementation is necessary. A "meeting of minds," which would "get everybody involved" within the school, was seen as necessary to implement more PA into the school (Mr. Marks, Julington Creek MS, classroom teacher; Mrs. Freder, Douglas Anderson ES, classroom teacher). This network of individuals could also be necessary to reduce the lack of communication within the schools (e.g., staff wellness program was mentioned by the principal and classroom teacher, but not the PE teacher at Julington Creek MS). Not having this network established and led by a central person creates too much responsibility and pressure to implement a CSPAP for an already "overworked and underpaid" teacher (Mrs. George, Julington Creek MS, classroom teacher). Ms. O'Donnell, the PE teachers of Julington Creek MS, and Mrs. Weaver, PE teacher of Douglas Anderson ES, mentioned being unable to implement more before-school activities at their respective schools due to time constraints; however, this issue could be resolved by having a network of supportive individuals.

Theme 2. The PE teacher is integral to implementing a CSPAP. Every principal and five of the six classroom teachers interviewed noted the PE teacher was a necessary element to implementing the CSPAP at their respective schools. The classroom teacher who did not mention the PE teacher instead mentioned the structure of the PE department as being helpful in increasing the activity of the students. Another individual mentioned the personal habits of the PE teacher as being critical, such as her being "active herself" (Ms. Lane, Bartram Trail ES, classroom teacher). The content of the PE program, such as focusing on "self-improvement activities as opposed to competition" (Mr. Herring, Bartram Trail ES, principal), and the teaching style of the PE teacher, such as having "creativity" (Mrs. Freder, Douglas Anderson ES, classroom teacher), were also seen as significant to implementing a CSPAP.

Discussion

A CSPAP is a universal intervention strategy for building a healthier generation of children (Carson, 2012). The goal of the CSPAP is to increase students' PA levels to the recommended 60 min of PA per day and provide them with the knowledge and confidence to lead a physically active life (AAHPERD, 2012). The purpose of this project was to (a) determine the common characteristics of current CSPAPs in Louisiana and (b) identify strategies to implement a

CSPAP. Results from the collected quantitative and qualitative data will now be discussed.

CSPAP Activities

As evident by the small sample size of this study, it was difficult to find Louisiana schools that had implemented several aspects of the CSPAP, which is explicable when research shows that less than one sixth of schools in the United States are currently implementing a CSPAP (AAHPERD, 2011). Lack of knowledge of the CSPAP, PE teacher time constraints, a school-wide focus on academics due to standardized testing pressures, and a lack of centralization within the program were discovered during this study as obstacles to implementing CSPAPs.

The participants had implemented several aspects of a CSPAP in their schools, according to researcher assessment. Only PE and PA before and after school were implemented across all participating schools. One explanation for this finding is that these components appeared to be the easiest to implement and students and parents were accustomed to these types of PA engagement in school settings. Another explanation for not completely implementing a CSPAP is that a standard for successfully implementing a CSPAP by component has yet to be established. Since the CSPAP is a recent topic of study, distinguishing what constitutes successful CSPAP implementation overall and by component is an important avenue for the future inquiry. Researcher assessment was used to determine whether a component was fully implemented, but even if it was not, the physical educator was typically making efforts toward implementation. The instances where a disconnect in implementing a CSPAP was found between the researcher assessments and what the PE teachers reported (see Table 4) could be due to a lack of understanding of the CSPAP model and its standard for implementing it successfully or social desirability, in which case the teachers shared information that seemed desirable to the researcher.

Currently, although after-school scholastic and intramural sports are offered at Julington Creek MS, only 24% of the students participated in these extracurricular options. Findings such as these show the importance of quality PE programs where the majority of students are required to participate to acquire daily amounts of PA. However, a CSPAP is more than PE and after-school PA opportunities. There are five components of a CSPAP, all of which could provide even more opportunities for PA.

The economic makeup of students within the schools in this study varied and may explain the CSPAP components and CSPAP activities being implemented across the schools. Douglas Anderson ES, for instance, had significantly fewer students with free lunch eligibility (2%) versus Bartram Trail ES and Julington Creek MS, which had 45% and 66%, respectively (see Table 1). Evidence has been found to suggest that schools with a higher percentage of students eligible for free lunch offer fewer PA opportunities (Beaulieu, Butterfield, Mason, & Loovis, 2012). Aligned with this previous research, staff at Douglas Anderson ES implemented all five CSPAP components as opposed to four CSPAP components at Bartram Trail ES and three at Julington Creek MS. Furthermore, the CSPAP activities offered at and encouraged outside Douglas Anderson ES appeared to be dependent on the economic status of the students and their families, such as parents buying roller skates to extend a rollerblading PE unit to the home. Integrating rollerblading into a CSPAP may be less affordable to the students and families of Bartram Trail ES and Julington Creek MS due to their lower economic capabilities. Therefore, the PE teachers, principals, and teachers in this study may have implemented a multicomponent CSPAP that was pertinent to the economic status of their students.

Integral Role of the Physical Education Teacher

PE is the central component of the CSPAP model; therefore, the PE teacher has a major role in delivering a CSPAP. In accordance with past research and established standards, a quality PE program (AAHPERD, 2012) is where students receive the majority of their PA per day (Bassett et al., 2013; Leviton, 2008). Accordingly, the PE teachers in this study were perceived by others (i.e., administration, classroom teachers) to be significant to the success of a CSPAP. All three PE teachers had over 20 years of experience, which indicates that establishing oneself as a prominent facilitator of CSPAP implementation may take time. Plus, experienced PE teachers may feel more comfortable with implementing a CSPAP because of their likely PA-oriented connections within the school and local community (Rink, Hall, & Williams, 2010). Experienced or even beginning PE teachers may also consider seeking further training to bolster their role in advocating and spearheading school-wide PA promotion efforts (Carson, 2012; Castelli & Beighle, 2007). The recently established C-DPA training and certification gives PE teachers the strategies to effectively implement a CSPAP and recruit a wellness

committee, which should make implementing the CSPAP and the committee more likely (Carson, 2012; NASPE, 2012). The wellness committee would reduce the pressure on the C-DPA by monitoring, supporting, spreading awareness, and fostering CSPAP implementation (Carson, 2012).

Supportive Role of Administration and Classroom Teachers

The PE teacher alone cannot successfully implement a CSPAP. Findings indicate that further support is necessary to sustain and expand a CSPAP program (Carson, 2012; Castelli & Ward, 2012). The more support offered, whether it be amount or type (e.g., financial, time, equipment, space, personnel), will allow school staff to expand a CSPAP by providing more PA opportunities for students, which is the purpose of the CSPAP (AAHPERD, 2012). Administrative support particularly will allow the PE program to grow because appropriating funds is the duty of the principal, and an increase in funds will allow for more equipment and therefore more possibilities for PA (Carson, 2012). When principals make visits, which the quantitative data found to occur several times per year, these visits should be considered opportunities to impress and ensure them of the quality of the program by showing learning and movement occurring within the classroom.

Implementing a CSPAP, particularly relative to PA during school, also requires the support of classroom teachers. In this study, the researchers found that classroom teachers must see positive cognitive effects to show support, and parents must see their children's excitement about their PE class to pressure the school to continue the program. Although academic subjects may be prioritized over PA due to the pressures of high-stakes standardized testing (Castelli & Ward, 2012), the teachers in this study made incorporating PA a priority, a priority that did not lessen the importance of test scores and academic achievement, which is represented by the impressive test scores found in each participating school. According to the classroom teachers, using PA for concept association in the classroom may lead to students being more interested in the topics. In a growing number of studies, researchers have found that bouts of exercise have beneficial cognitive effects for students (Basch, 2010; Donnelly & Lambourne, 2011; Kamijo et al., 2011; Mahar et al., 2006). The combination of these study findings and past research may assist other researchers in recruiting administrators and classroom teachers to participate in future CSPAP interventions.

Conclusion

Due to the 12.5 million obese children and adolescents in the United States, the need for more physical opportunities in schools has created an opportunity to implement more CSPAPs (Carson, 2012; Ogden et al., 2012). The key to a successful CSPAP found in this study was quality PE programs led by highly involved PE teachers who were able to convince administrators and classroom teachers about the positive effects of increased PA on students and the school overall (AAHPERD, 2012). Furthermore, in a cyclical way, the positive impact noted on students and schools only seemed possible due to the support network of administrators and classroom teachers, which, in some instances, could be improved by creating a centralized and formal wellness team (Carson, 2012; Graber, Woods, & O'Connor, 2012; Rink et al., 2010). A CSPAP cannot be expanded or sustained if individuals within the school environment do not support the program, as lack of school-wide support has been shown to be the biggest obstacle for successfully integrating wellness programs in schools (Leviton, 2008). A CSPAP support network allows for easier communication within the school, which thereby reduces the pressure and responsibility on the PE teacher to lead CSPAP efforts on their own (Carson, 2012).

There are three areas for future research as a result of this study. First, what qualifies as a successfully implemented CSPAP must be defined. The national DPA certification program now available for PE teachers (NASPE, 2012) may help ease the process of categorizing a successful CSPAP due to more education on the details of a CSPAP and increase the number of CSPAPs in the United States, which would make locating schools with an implemented CSPAP easier (Rink, 2012). Second, future research regarding the maintenance of already established programs in hopes of gaining more knowledge on how to keep participation and motivation levels high within such a program would be useful. Third, an active research design in which a researcher would become the PE teacher at a school and implement a CSPAP while documenting improvement measures (i.e., fitness, affect, knowledge) on students, teachers, administrators, and families would provide valuable information. These avenues for future research will generate important knowledge for further implementing successful and sustainable CSPAPs nationwide.

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