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Comprehensive School Physical Activity Programs:
Characteristics of Trained Teachers

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Abstract

As public health concerns about physical inactivity and childhood obesity continue to rise, researchers are calling for interventions that comprehensively lead to an increased number of opportunities to participate in physical activity (PA). The purpose of this study was to examine the characteristics and attitudes of trained physical education teachers during the implementation of a Comprehensive School Physical Activity Program at the elementary level. Using a collective case study design, interviews, observations, field notes, open-ended survey questions, and an online forum monitoring guided the interpretation of teacher perceptions and development of emergent themes. Qualitative data analysis was conducted for each individual teacher and then across the ten teachers which produced four major themes: (a) Leading the Charge: Ready, Set, Go!, (b) Adoption versus Adaptation: Implementation Varies, (c) Social Media's Place in the Professional Development (PD) Community, and (d) Keys to Successful Implementation. It can be concluded that, based on these findings, elementary physical education teachers are ready and willing to implement CSPAP. Key factors that may influence this implementation are discussed.

Keywords: Whole-of-school approach, professional development, physical education, physical activity

From a public health perspective, schools have been identified as an ideal place for health interventions because of the accessibility of children and a growing body of evidence suggesting that health is related to academic success (Basch, 2011). Since more time is spent on academic subjects and less in physical education (PE), approaching health issues with preventive and comprehensive solutions is currently endorsed (Pate et al., 2006). Physical inactivity (Lee et al., 2012) can be rectified through quality PE (Van Sluijs, McMinn, & Griffin, 2007) and targeted coordinated approaches within the school environment (CATCH, McKenzie et al., 1996; SPARK, Sallis et al., 1997). Recently the Institute of Medicine (2013) has advocated for a whole-of-school approach for physical activity (PA) interventions. One example of a whole-of-school approach is the Comprehensive School Physical Activity Program (CSPAP), which is designed to provide expanded opportunities for PA during PE, within before and after school programs, and across the school day, as well as through the engagement and involvement of other teachers, families, and community members.

Currently, most schools do not have an identified person to lead the implementation of a CSPAP. It has been suggested that the PE teacher is the person who possesses the expertise to carry out this task since their knowledge of children's PA and movement is extensive (Castelli & Beighle, 2007). On the contrary, empirical evidence suggests that PE teachers face an abundance of workplace issues such as burnout and high teacher workloads (Carson, Baumgartner, Matthews, & Tsouloupas, 2010; Evans & Williams, 1989; Lawson, 1993; Stroot, Collier, O'Sullivan, & England, 1994; Templin, 1989). These issues could negatively impact teacher attitudes toward leading the implementation of CSPAP in the school setting. As such, understanding teacher attitudes toward becoming

implementers of the CSPAP is timely and justified.

Given the mounting support for children's PA in and around the school environment (Erwin, Abel, Beighle, & Beets, 2009; Erwin, Beighle, Carson, & Castelli, 2013; Erwin, Beighle, Morgan, & Noland, 2011, also see Chapter one of this monograph), in 2011, NASPE¹ launched a professional development (PD) series designed to inform teachers about the known best practices associated with the provision of PA within and beyond PE. This PD included a six-hour, experiential workshop, in which the teachers were introduced to strategies focused on the implementation of PA programs (for details see Carson, 2012; 2013 and review Chapter 1 of this monograph). In this present study, the teachers received guidance about how to implement CSPAP by targeting specific points of intervention, as each of these points has distinct strategies, physical resources, and human capital associated with its implementation. Online support and booster educational opportunities were provided for teachers as they attempted to implement an action plan focused on the beginning stages of CSPAP implementation.

In accordance with Desimone's (2009, 2011) structure for PD, the PD provided for the PE teachers in this study was focused on five key elements: (1) content focus, (2) active learning, (3) coherence, (4) duration, and (5) collective participation. Previous studies (Armour & Yelling, 2004; Guskey, 1986 & 2002) suggest that increased teacher knowledge and skills will in turn lead to changes in attitudes and teaching practices, ultimately changing instruction and improving student learning. Recently, Castelli, Centeio, & Nicksic (2013) expanded this idea to suggest that pedagogical skills be refined by focusing PD on knowledge that is transferable and applicable to the school context. To accomplish this, PD should be collective and collaborative, where all teachers

contribute to the mission of providing PA opportunities for children. Further, continual, long duration PD that is supportive and offers *knowledge boosters* (e.g., short frequent reminders and follow-ups throughout the school year) may also increase the likelihood for effective implementation of a new framework or program, such as CSPAP.

Once employed, there are limited opportunities for PE teachers to participate in content specific PD (Deglau, Ward, Sullivan, & Bush, 2006; Doutis & Ward, 1999; Stroot, Collier, O'Sullivan, & England, 1994), despite PD being required for recertification in many states. Often times, PE teachers are required to attend PD that is designed for general classroom teachers. Yet, for PD to be effective it should be practical, relevant and applicable, provide specific examples, be delivered by an effective presenter, be challenging and thought provoking, allow time for reflection, and offer some form of collaboration (Armour & Yelling, 2004). Following teacher PD through the PEP grant mechanism, O'Sullivan and Deglau (2006) determined that PD should also have specific student and teacher outcomes established and that those outcomes should be a balance of the teacher's vision and the program's needs. Moreover, the providers of PD should anticipate and be receptive to emotional responses that teachers may have in regards to change in pedagogical practice and teaching workloads (McCaughtry, Martin, Hodges-Kulinna, & Cothran, 2006).

Given the need for content specific and relevant PD in the field of PE, coupled with the recommendations to increase the amount of PA students receive before, during, and after school, the purpose of this study was to examine the characteristics and attitudes of PE teachers during the early stages of CSPAP implementation at the elementary level. The paucity of research centered on supporting teachers' transition into the role of PA leaders

and implementers of the CSPAP makes the examination of the adaptive and responsive attitudes and behaviors of PE teachers timely and justified.

Method

Once IRB approval was obtained, a collective case study design (Stake, 1995) was conducted and teacher perceptions toward implementing the CSPAP throughout the one-year NASPE Director of Physical Activity (DPA) certification process were examined. Obtaining DPA certification required development of an action plan to implement the CSPAP at a school, submission of artifacts that evidenced successful implementation and a measure of fidelity to treatment. A DPA trainer supported the teachers over one academic year as they implemented the CSPAP model (additional details can be obtained in Carson, 2012; Table 1). Ten elementary PE teachers (Female = 7), with one to twenty-eight years of teaching experience, volunteered to participate in this study (Table 2). Pseudonyms were used throughout the paper to identify teacher participants. Forty additional educators participated in the initial DPA training but did not continue with DPA certification and were not included in the current study. All of the teachers were located in a state that already had a high level of PA opportunities offered within the school environment due to local and state mandates. Furthermore, all of the teachers were well respected by their district coordinators in the field of physical education, but none were recipients of state or national awards for physical education. It is important to note that the term DPA was used in the current research project; however, the term currently being used by the field is Physical Activity Leader (PAL) and thus the term PAL is used throughout this manuscript.

Data Sources

The collective case study design allowed the researchers to investigate the phenomena surrounding the PAL PD and implementation of the CSPAP more broadly by interpreting an array of data sources on an individual and comparative basis. Multiple data sources were used for this study including a) four semi-structured interviews, b) artifacts from certification process, c) open-ended surveys, d) at least two site visits per school for collection of observational data and field notes, and e) online forum monitoring.

Semi-structured interviews. In order to gain an in-depth understanding of the role of a PAL during the implementation of CSPAP, the researchers conducted four semi-structured interviews (20-90 min each) with each teacher, over a twelve-month period of time (totaling 43 interviews; Glesne, 2006). The initial and final interviews were more comprehensive, while the interim interviews were coupled with site visits and observations. The interview protocol allowed teachers to convey their perceptions of the PD experience, their practice and perceptions of implementing CSPAP opportunities, as well as their insights regarding engaging with other PAL teachers. One example of an interview question is, “How did the PD assist you in making PA changes within your school environment?” All interviews were digitally recorded, transcribed verbatim, and returned to the interviewee for member checking for authentication. To provide ground truthing of these data, the act of confirming self-reported data through site visits and direct observations (Bitsch, 2005), multiple site visits and informal follow up interviews were also conducted.

Observations and field notes. The researchers conducted at least two site visits at each school that lasted an entire school day (totaling over 20 site visits; Glesne, 2006).

During these observational visits the researcher observed teachers within their PE lessons as well as during other PA opportunities throughout the school day. Observational notes were taken during these site visits and recorded in the researcher's field note log. Immediately following the visits, the researcher typed up the detailed observational notes and expanded upon the details in the field log by revisiting previous entries. The expansion of the notes allowed the researcher to reflect on the observations, provoking a rich, thick, description of events to be outlined in future analyses.

Artifacts. Throughout the certification process teachers were asked to submit artifacts (e.g., lesson plans, teaching materials, student expectation documents, supplemental learning materials, deidentified student PA data, etc.) evidencing implementation of each step of their action plan (Glesne, 2006). Artifacts, in this sense, were defined as electronic files (e.g., images, testimonials, meeting minutes, presentation slides, etc.) that served a dual purpose of confirming fidelity to treatment and progression of the implementation of CSPAP. Although selection of the artifact was initially at the teachers' discretion, their choices had to be approved by their workshop trainer. For example, if a teacher provided station signs as an artifact for a field-day the trainer may have requested the submission of additional artifacts such as pictures, parent volunteer sign in sheets, or advertisements as a means of authentication. Artifacts were submitted online to a common website or in person during site visits.

Survey. Using a repeated measures approach, the teachers completed the CSPAP Index, which was a blending of the valid and reliable instruments, the S-PAPA (Lounsbery, McKenzie, Morrow, Holt, & Budnar, 2013) and Teachers Efficacy Toward Providing PD in PE (Martin & Hodges-Kulinna, 2003). Only the open-ended responses were included in

the data analysis for this present study, the closed ended responses are reported elsewhere. For example, responses to the question “What role should physical educators play in the provision of after/before school programs?” were first categorized into common answers, then coded, and finally analyzed with the other data sources to contribute to the formation of themes.

Online forum monitoring. Over the academic year, data were also collected from online community forums, which acted as a host for discussion to occur among the PAL participants. There were two types of community forums for overcoming barriers that the teachers may encounter: (a) a “formal” discussion board where the teachers could post questions for the trainers of the PAL certification as well as their other PAL teachers, and (b) a private Facebook site. Teachers were encouraged by the trainer to use the sites both during the PD and through follow up emails as a means to connect with other PAL participants. These websites were monitored on a weekly basis and website hit counts and discourse were included in the data analysis.

Data Analysis and Trustworthiness

Data were analyzed using constant comparison and inductive analysis (Corbin & Strauss, 2008; LeCompte & Schensual, 1999) to identify relationships and themes from the data. Open, axial, and selective coding were used with the intent of forming concepts, hypotheses, and theories, through the organization of themes (Willis, 2007). Specifically, researchers read through each data source, chunked data, and used participant words. Axial coding was then used to identify relationships between the open codes and to determine key themes that emerged. Finally, selective coding was conducted by revisiting the data and selectively coding anything that related to the themes that emerged.

During the prolonged and persistent engagement, the researchers used six verifications of trustworthiness (Creswell, 1998): (a) triangulation, (b) peer review and debriefing, (c) negative case analysis, (d) clarifying researcher bias, (e) member checking and (f) using a rich, thick, description. The overall approach of ground truthing connected the elements of trustworthiness by discussing the findings as a research team and then going into the field to verify its existence and the degree of authenticity. For example, purposeful peer debriefing that involved contrasting the findings across multiple data sources was followed by member checking and observation when the researchers conducted site visits or teacher interviews. Once the trustworthiness of the data were confirmed, coding of patterns led to the emergence of themes among individuals and across teachers. The emergent themes are presented and supported in the following sections.

Results

Through the process of data analysis, four themes emerged: (a) Leading the Charge: Ready, Set, Go!, (b) Adoption versus Adaptation: Implementation Varies, (c) Social Media's Place in the PD Community, and (d) Keys to Successful Implementation. **Theme One: Leading the Charge: Ready, Set, Go!**

The first theme centered on the roles and responsibilities of today's PE teachers. It became evident that all teachers in this research study believed offering additional opportunities for children to be physically active was an important part of their "normal responsibilities" as a physical educator (Field notes, 2011).

All teachers believed integrating CSPAP into their current curriculum is already part of the job description, Laura stated:

I think it goes hand and hand [PE and CSPAP] ... I think a lot of us have been doing these activities and we just consider it part of being a PE teacher ... and so each year we try to add more and more to get our students to see how important it is to be “FIT” (Laura, interview, 2011).

Similarly, Lexi believed it was a role that she had already deeply embraced. When asked about reshaping the role of the physical educator, she stated:

Well honestly, I feel like that is already a role that we are taking on with being leaders of CATCH committee’s on most of the campuses in our district, or wellness committees. Those are just responsibilities that we are already assigned and are looked at to handle within our school to get them [the school] involved in health and wellness. So I feel like it is something that is already there and we just – the PAL – will help establish and make everybody more alert (Lexi, interview, 2011).

Yet, the evolution of these responsibilities is unclear, as there were discrepancies about the level of involvement and the responsibilities that the physical educator should play in providing these opportunities. Two teachers believed that “the PE teacher is the person who should be facilitating or arranging for the physical activities, not necessarily leading,” (Winnie, survey, 2012). Although they believed the PE teacher should be involved with implementing PA opportunities in the school environment, the teachers felt it should not be a required responsibility of the PE teacher. Eight teachers, however, felt that the job of the PE teacher went beyond just facilitating and thought that they were responsible for initiating and supporting all physical activities affiliated with the school. Cassidy stated,

Their role should be to initiate the implementation of PA ideas and concepts into all time slots of the school day. They should be the driving force behind educating the administration, teachers, students, and parents about increasing daily PA in creative ways (Cassidy, survey, 2012).

Nathan agreed with the hands on approach of Cassidy stating, “the PE teacher is certainly in the best position to provide and support PA during the school day” (Nathan, interview, 2012).

The PAL workshop provided affirmation for those teachers who were already taking on these responsibilities. Lila stated,

It [the PAL training] was just a wealth of information that was presented. [. . .] I gave myself some kudos because – I do that. I pull that in [. . .] I kinda sat there and I was like, oh yeah, I’m doing that – ok – I can grow this area [. . .] you know there is always room for growth (Lila, interview, 2011).

Lila also continued highlighting why the evolution in responsibilities was necessary:

I think it is essential. I mean with budget cuts and them cutting the way that we as teachers are cut . . . the constraints of 135 minutes a week of PA it is essential that everyone jump on board. Especially with the students, with the obesity epidemic and overweight kids now are not active enough you know – the technology has come in so strong that they don’t get to play outside, so they are missing that outside activity whether it be at a school or out in the community and I think we forget about that as adults with all of our busy lives. We need to be reminded of this and make sure that we stress it in the lives of our children (Lila, interview, 2011).

The evidence from interviews and documents suggested: (a) integrating additional PA opportunities for students is important and necessary, and (b) the PE teacher is the most qualified person to employ some strategies such as recruiting classroom teachers to offer PA breaks. Despite this emerging evidence, the extent of one's involvement and commitment to this new role is still undefined.

Theme Two: Adoption Versus Adaptation: Implementation Varies

Within the CSPAP framework, participants identified possible points of intervention related to their context. Since each school context was different, even within the same district, the CSPAP framework was designed to be adaptable to meet the needs of a particular school. As anticipated, there was an abundance of evidence suggesting that teachers adapted the CSPAP to their individual school context. Specifically, extensive consideration and contemplation went into the selection of which component of the CSPAP would be the first step of implementation (Field notes, 2012).

Lila decided that she only wanted to implement brain breaks (Lila, artifact, August 2011) after a discussion with her principal, who permitted her to provide training for her colleagues at a back to school workshop (Field notes, 2011). Because Lila felt that brain breaks were the best option to implement in her school this year because “movement and academics go hand in hand”, she personally provided support and resources to the teachers who wanted to try “brain breaks” (Lila, interview, 2011).

Unlike the others, Laura immediately knew what her school needed based on the situational context and her own self-efficacy.

I wanted to do something that gave them [the students] an activity to do before school. A lot of the kids here do not have a program like that and none of our kids

take buses [...] so our school is actually a really good school to use to do something like that because the parents bring the kids a little bit early and they are just sitting in the lunchroom doing nothing (Laura, interview, 2012).

She decided that she was going to start a before school running program and with the help of some other staff members at her school, she was able to host over fifty students every morning.

Although different areas of the CSPAP were chosen to be implemented by the teachers and reported on the teachers' action plans, many similarities were found among other PA opportunities that were also being offered at these particular schools, many of which were established before the PAL training. All teachers ended up implementing various forms of CSPAP throughout the year, adding an additional two to five opportunities per individual school building for students to be physically active (Survey data, 2012).

For example, John chose not only to implement his organized recess plan, but also to create a technology rich PE class, as a means of obtaining the maximum amount of PA as possible (Observation, 2012). This was confirmed in the researcher's field notes when she observed:

When I walked into the gymnasium there were carts in the middle of the gym and a big white screen hanging down. The children entered the gym and went straight to their spots where they began to follow along to the technology displayed on the wall. Leaders took over and led a routine, followed by all of the students participating in games led on the Wii. I can tell that this is a practiced routine as the students are all participating watching the screen and switch controllers swiftly as to not waste any time of activity (Field notes, 2012).

At her school, Lila provided a motor lab for individual classes to attend on a weekly basis. The motor lab allowed teachers to schedule an indoor PA break for their students to help them “get some wiggles out” and begin focusing on their next task (Observations and field notes, 2011). She also integrated a before school running program, which allowed students to come to school early and complete as many laps as possible in the time allotted (Observations and field notes, 2011). In addition to these two programs and as a result of the PAL training, Lila began to offer structured recess activities, and highly active PE classes. Although Lila and her school offered many additional opportunities for students to become physically active, most of her opportunities focused on two main components: before/after school and during the school day (Field notes, 2011). After integrating a program within a single CSPAP component, creating additional opportunities under other components came much easier.

Winnie also exhibited many forms of CSPAP implementation by offering multiple opportunities for students to be physically active within her school setting. Her action plan focused on her family fitness night, however she had previously established four other opportunities for students to be physically active during the school day. These additional opportunities included: (1) a staff wellness activity labeled “the biggest loser”, (2) a healthy body field day, (3) junk the junk (a week worth of not eating junk food), and (4) an afternoon runners club (Field notes & artifacts, 2012).

Teachers adapted many of the ideas from the PD for the most contextually relevant components of the model. Although all of these teachers already facilitated at least one PA opportunity in addition to PE, the PAL PD encouraged them to provide additional PA opportunities for more students.

Theme Three: Social Media's Place in the PD Community

Within this research study, different forms of communication and networking were set in place by the researchers to help initialize online PD for the teachers. Communication with the teacher was continual for a 12-month period, through in-person encounters, websites, social media, email, and phone contact. When first told about the social media sites, eight teachers were excited and said that they wanted to join and become a part of the learning community (Field notes, 2012). However, contrary to the hypothesis of the researcher, and even though the tools for an online PD were available, teachers refrained from participating in the online forums. Of the ten teachers who participated in the study, only one teacher joined the private Facebook group, while no teachers participated in the *Moodle* discussion board (e-learning websites, 2012). The teacher who joined the Facebook group did not communicate to any other PAL members or introduce herself on the PAL page (e-learning websites, 2012). Even after teachers were prompted mid-year by the PD team there was no additional action on the social networking sites (E-learning, 2012).

The researchers believed there were two main reasons teachers reported choosing not to communicate using Facebook or *Moodle*, (a) keeping work and personal life separate, and (b) teachers did not use or know how to use, social media networking sites.

Personal life. Five teachers expressed concern of social media in relation to their personal lives. When asked the reason they chose not to participate in the social networking provided, they stated to keep separation in their life. Nathan stated, "I like to keep my personal and professional life separate" (Nathan, interview, 2012). When reassured that it was a private page, he reiterated "he does not socialize with people in his school building and district, so there would be no need to add them on the social networking site" (Nathan,

interview, 2012). William also felt that it was necessary to keep a barrier between his personal and social life, “I’m not a big social media fan – I don’t use it that often – but if I did I wouldn’t use it for school purposes, only for personal” (William, interview, 2012).

Other teachers stated that they were unable to use social media at school because of time restraints and firewall security restrictions in the school district. Furthermore, they were unwilling to take personal time to log on for PAL purposes. Laura stated,

I have a Facebook account, but I normally don’t have time to use it. There is a lot on Facebook that I don’t do because as a teacher I have been told to not do it. I don’t really take the time to log on at home unless it is to see pictures of my grandchildren. If I could get on at school I would, but I can’t access it (Laura, interview, 2012).

Similarly Winnie stated,

I didn’t use the social media networks mainly because of time. I might use them now that the summer is coming. I was really planning on utilizing time during the school day to focus on PAL stuff, but you know your 45 minute planning period just isn’t enough with everything else that is going on that you have to do. It’s just not enough – then I work afterschool for my other job, so I can’t do it then either (Winnie, interview, 2012).

Lack of knowledge. Other teachers (four teachers) suggested that their technology skills did not encompass the use of such platforms. Similar to technology struggles that were mentioned previously, teachers struggled to understand how to use the social media sites and therefore did not use them for networking purposes. Sheralyn stated this clearly

in the following statement, “I guess I am just not a social media network kind of person. The technology and the... its just not me... I just don’t” (Sheralyn, interview, 2012).

John claimed that he tried to get into the PAL Facebook cite, but could not figure out why he was unable to get it to work.

I tried to get in but I don’t know what happened – because I do have Facebook – so I tried to get in – went into it – and for whatever reason I could never get it to pull up. Then I got frustrated and just said forget it! I chose just to communicate with the trainers by email and that was that (John, interview, 2012).

Among the teachers participating in the PAL certification program, there was a disconnect when attempting to participate in continued PD through the realm of social media sites either because of a personal preference or lack of technology skills. However, even with a disconnect present, teachers expressed interest in networking with others and gathering new information and ideas by utilizing traditional forms of communication.

Theme Four: Three Keys to Successful Implementation

Throughout the empirical data analyses three key facilitators were acknowledged by teachers when discussing successful implementation: (a) action plan, (b) supportive administration, and (c) passion and dedication for the health of students.

Action plan. Eight teachers agreed that the action plan and artifacts really helped them get organized and carry out their new PA opportunity as planned, stating that these items allowed them to systematize their thoughts on paper and forced them to plan ahead. Winnie believed that if she did not make a plan she might not have committed to implementing her wellness night. When asked what was the key to making her intervention work she stated, “Well, I think you have to make a plan. I am the kind of person that if I

make a plan I do it - so - I guess just making the plan holds you more accountable” (Winnie, interview, 2012). Similar in nature, Nathan talked about how he would not have been able to carry out his action plan if he had not planned ahead. He stated,

You need to catch them [administration] early and there was a potential to have wait too long and miss the window for planning things and getting them on the calendar - because everyone gets busy and it is not their primary focus. (Nathan, interview, 2012).

Sheralyn’s action plan called for a wellness night at the school, which incorporated both the art and music department. Sheralyn was in charge of the event and thought that her action plan helped her keep on track with everything that needed to get done. She even took her action plan a step further and used it to help keep the art and music teachers on track as well.

It [the artifacts] helped me get the intervention done. I mean in just you know, the action plan - I would have done something like that anyway, but you know the other teacher was behind a step and I had already put my action plan together so I knew what I was supposed to be doing - I was telling her - you had to be contacting these people - and kinda keeping them on track because I had myself on track because of the action plan. The artifacts – step-by-step thing was pretty important I think, in helping get the thing [wellness night] done. I’m not sure how I could do something like this without those little step by steps (Sheralyn, interview, 2012).

The planning that the teachers did had an effect on the PA opportunities that they offered. Those teachers who had extensive action plans exhibited success during their chosen activity. These are the teachers who had record numbers of attendees show up to

their wellness night and made decisions to turn away students from their running clubs (Field notes, 2012; Observations, 2012).

Supportive administration. In addition to the action plans playing a pivotal role in the teachers' interventions, supportive administration also emerged as being a fundamental player in the success of the PA opportunities offered. Having a supportive administration gave teachers the efficacy and backing they needed to carry out implementation and provide more opportunities for students to be physically active. When asked about key facilitators, over 90% reported administration as playing a pivotal role. Molly talks about how supportive her administration has been in the following excerpt,

I'm really lucky to have a principal who thinks PE, PA, afterschool events are really important for the kids and the community. She has really helped with getting money donated for our outdoor facilities and she has helped get kids involved in the running club. She has even come out to run with the kids a couple of times. She also did a 5k with the students and the school - so it is things like that - she is really involved - she believes that it is something that we should have, so it has been really good and really easy - I have been really lucky (Molly, interview, 2012).

Although Molly's experience was unique in the sense that her administrator was supportive of the idea as well as an advocate to make the running program happen, other teachers discussed how an administrators who "just said yes" and allowed new things to happen should still be considered as a supportive administration.

My administration was very supportive; they even pushed for my event. They wanted it. My principal, anything you go to him with and you want to do it, he

doesn't care. But of course you have to do it yourself and you have to find the money to do it (William, interview, 2012).

Similar to William, Nathan had a principal that did not say "No" to his ideas. He stated, Really my administration has just given approval. I don't ask them to do to awful much as far as planning or showing up, or participating. I am prepared to do everything myself and on my own. Really they just want to be kept abreast of what you are going to do and make sure that all of the ifs are covered. [...] If they were to say "No", I don't know if I would have been able to carry my action plan out. (Nathan, interview, 2012).

If administration is unwilling to allow a teacher to try new things, such as implementing additional PA opportunities, it could lead to teacher frustration. However, if administrators allow PE teachers to be creative and implement new ideas, teachers feel supported, have more efficacy, and are excited about implementing the new activities.

Passion. The third key facilitator that emerged from the data included passion and dedication to children's health. Teachers were quick to talk about how important they thought implementing additional opportunities of PA was to the overall picture of student health. Nine of the teachers believed that students do not get enough time to be physically active or have access to facilities that allow them to do so and took it upon themselves to make this happen.

Laura verifies this when she talks about the importance of the CSPAP and the keys to making her intervention work,

To me the CSPAP is important because a lot of our parents don't give the kids what they need at home... so me, I like to do everything that I can to help the kids [...] I

think that it is me that really makes my intervention work, isn't that horrible. My enthusiasm, excitement, my desire for them to be fit, my encouragement, you know. I do a lot of different encouraging to get them to want to do it and to be excited about it. I guess it is me and my whole program is because of me. I don't go out.. I don't do it because I want to be recognized but it is because I consider those kids my babies... I want to make them strong and healthy (Laura, interview, 2012).

Although other teachers did not come out and state that success was because of the passion they had for making it happen, it was evident in observations that all of the teachers participating in the research project were passionate about making a difference in children's lives.

When I walked into the gym you could just feel the excitement and passion in the air. The culture was amazing - there was stuff everywhere. Posters, interactive bulletin boards, award walls, encouraging phrases are plastered all over the wall. The PE teacher has such a passion for PA, but also for her students. She believes they are her own and that it is her job to help them obtain the tools needed in life, with PA being one of them (Researcher field notes, 2012).

Another observational log exhibited similar characteristics:

This school was very intimidating walking into. Everything is under lock and key. The school is surrounded by a big metal fence, similar to a prison, and the only way in or out is through the front door. As I walked into the front of the building I am just not sure what to expect [. . .] Much to my surprise, the atmosphere in the gym was amazing. There were posters and motivational statements hanging everywhere for the children to see. There were even reminders about how to be physically active

everywhere. It is nice to see that even in such a tough school atmosphere, the gymnasium can be a welcoming place where teachers are passionate about students being physically active (Researchers field notes, 2012).

Overall, the results indicated that although barriers may have existed in implementing additional PA opportunities, the teachers elected to focus more on the facilitators and overcoming any potential barriers through action plans, support, and passion.

Discussion

Given the current health status of children in the United States, it is necessary that young people be presented with more opportunities to be physically active throughout the school day in order to meet the recommended minutes of PA and ensure health benefits (IOM report, 2013). Findings from this study revealed that most teachers who participated in the PAL certification process were already redefining their role as a PE teacher by moving beyond the traditional stereotyped roles and responsibilities such as only offering team sport game play, and introducing teachers and students to more opportunities to be physically active, within and beyond the school day. Previous research has suggested that teachers already have a high workload and may not be able or willing to handle additional responsibilities because they already have so much that they are responsible for doing within the school environment (Ballet & Kelchtermans, 2009). Additional responsibilities such as developing a new recess program or organizing a community-based wellness event, could lead to teacher burnout (Koustelios & Tsigilis, 2005). A substantial finding in this study was that teachers within the field of PE were already exhibiting signs of CSPAP implementation in their school environments, thus corroborating previous pilot studies

(Centeio, 2011). Specifically, without any prompting from PD, some PE teachers reported that they already provided additional PA opportunities for their students to enjoy as part of their PE employment.

The results provided in this research study are important to the field of PE for several reasons, such as the timeliness of the research, the need for empirical evidence of best practice, and the demand for continued education and PD centered on CSPAP. Although many scholars have suggested and deemed additional roles of the PE teacher as necessary to the realm of children's public health (Castelli & Beighle, 2007; Ennis, 2006; McKenzie, 2007; Rink, 2012), it is not until now that we begin to understand the feasibility and potential of PE teachers' attitudes toward implementing a CSPAP at the elementary level (also see the feasibility chapter in this monograph). Given the current public health concerns and needs of today's students, it is apparent that these ten PE teachers have reshaped their roles to involve tasks that they were not initially and formally trained to deliver. In this present study, the PAL PD helped PE teachers to modify their approach and assert their role in addressing public health issues related to the sedentary behaviors of children, by increasing their awareness of CSPAP that provided them with implementation strategies and "ideas" for overcoming barriers. It is important for PE teachers around the United States to participate in PD that specifically focuses on implementing CSPAP into the school setting. In addition to participating in CSPAP PD, teachers need support systems to help ensure successful implementation of CSPAP. If teachers are given content specific PD and support to help implement they are more likely to be able to impact the PA levels of youth.

Physical Educator's Role

Despite the positive attitudes and willingness among the teachers in this sample, the responsibilities of a PAL remains flexible, as the context of a given school determines what tasks a teacher will have to carry out. It is important that physical educators be cautioned against taking on all the responsibilities for providing PA opportunities for students, staff, and community members in their school due to burnout (Koustelios & Tsigilis, 2005). CSPAPs are intended to be team efforts; thus, one person may organize or develop programs for activity, but assistance should be provided from others for the opportunities to come to fruition.

PE teachers are seen by school personnel as the best leaders/facilitators for PA promotion (Deslatte & Carson, in press). However, in order to successfully implement CSPAP the support of a local administrator is a necessity. Without support from a school administrator teachers may encounter barriers that prevent successful implementation. PE teachers should be prepared to advocate to administration and share the importance of CSPAP implementation, in order to gain their support. Creating a “stairwell speech” and providing key information to administration will help ensure success.

Customizing CSPAPs to Fit the School

It was apparent that each teacher participant in this study adapted CSPAP to fit his/her school needs or selected components that were feasible given the constraints evident at that location (for more constraints see the feasibility study in this monograph). Oftentimes, the notion of a CSPAP can be overwhelming for a PE teacher or individual leading the efforts because it seems that the expectation is for *all* five components to be “met.” The spirit of a CSPAP is for the PAL to practice quality PE first and then begin

selecting programs from other areas that offer more PA. The context would drive the degree of implementation or the number of points of intervention (e.g., before/after school) that are addressed at a single school. For example, if there are no sidewalks leading up to the school, then it would be inappropriate to focus on a walk or bike to school initiative. The Centers for Disease Control and Prevention created the *CSPAP: Guide for Schools* that is designed to help PAL's customize CSPAPs to Fit their individual school needs (CDC, 2013). In addition to focusing on individual components of the CSPAP, teachers should use the CSPAP guide to help brainstorm, set goals, and strategically plan CSPAP implementation and evaluation. The customization of the CSPAP to the school context improves the potential for successful implementation when there is an action plan, administrative support, and teacher passion for PA.

Technology as a Barrier

Although the notion of utilizing technology to provide forums and chat rooms for teachers to share ideas and communicate how their action plans were being implemented seemed like a good idea, their success was quite limited. Teachers indicated that using social media such as Facebook was not an option for them due to keeping their personal and professional lives separate. Despite the researchers' attempts to assure confidentiality, the teachers were still hesitant to utilize these modes of communication offered. In addition to the privacy issues, teachers indicated that these technology were too cumbersome, took too much time, seemed to add more to their plate, and required them to step out of their comfort zone. These barriers led to virtually no use of technology to communicate, with the exception of email correspondence.

Limitations

There were several limitations to this research. First, state mandates may have contributed to the teachers' perceptions. The teachers who participated in this study were located in a state that already had a high level of PA opportunities offered within the school environment, due to state mandates such as the required implementation of Coordinated School Health, 135 minutes of PA per week, and a School Health Advisory Committee. If this limitation is true, then examination of the upstream effects (i.e. policy) of interventions such as the one described in this study, are important. The second limitation was the lack of random sampling of teachers. Teachers attended the training volunteered or were recommended and identified by their district as being effective teachers, thus limiting the generalizability of the findings. Third, this study represents multiple cases in which the CSPAP had been successfully implemented. No schools, where teachers had withdrawn from the implementation process, after attending the initial PAL were studied. Finally, the lack of cultural diversity among the teacher participants is also a limitation. Although this sample of teachers was representative of this region of the country, the CSPAP framework needs to be applied and researched with diverse teacher and student populations (Refer to Chapter 8 of this monograph; Centeio, et al.)

Conclusions

Reversing trends in childhood obesity is at the forefront of the health industry. Schools have been identified as logical places to impact childhood obesity factors; however, for this to transpire PE teachers must continue to reshape and redefine their roles through PD and advocacy. As stated by Basch (2011), student and teacher health must be embedded in school reform efforts, because an unhealthy child is not ready to learn.

The present study explored the characteristics and attitudes of PE teachers during the early stages of implementation of a CSPAP at the elementary level. Findings indicated that these ten PE teachers, after participating in a year-long PD that centered around CSPAP implementation have begun to change their daily practice. Future research should focus on PE teachers prolonged engagement in CSPAP implementation as well as if this trend of implementation holds true for PE teachers across the nation who participate in such PD opportunities such as the Physical Activity Leader training, which is an extension of this initial PD and provided by the Society for Physical and Health Educators (SHAPE America).

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Table 1. Tasks completed by the teachers for certification

1. Complete the CSPAP Index
2. Participate in the one-day workshop
3. Submit action plan that was approved
4. Complete the E-learning modules <ul style="list-style-type: none"> • Public health • Advocacy • Sustainability
5. Implement the CSPAP and submit artifacts
6. Participate in the social networks and discussion forums (available for participants but not required)
7. Pass the certification exam
8. Complete the CSPAP Post – Index

Note: The format of the E-learning modules permits the teachers to access materials and resources at their own pace and convenience, therefore these tasks do not need to be completed in a linear, sequential manner.

Table 2. Teacher and school characteristics

Name	Gender	Ethnicity	Teaching Experience	School Size	Primary School Ethnicity	Percentage of Economically Disadvantaged Students
John	M	Caucasian	27	804	Hispanic (82.3%)	88.1%
Cassidy	F	Caucasian	24	626	Hispanic (94.7%)	91.1%
Sheralyn	F	Caucasian	19	788	Caucasian (45.4%)	46.3%
Molly	F	Caucasian	1	893	Hispanic (89.9%)	84.4%
Laura	F	Caucasian	28	823	Hispanic (96.5%)	91.3%
William	M	Caucasian	3	438	African American (75.8%)	89%
Nathan	M	Caucasian	4	786	Hispanic (86.3%)	87.7%
Winnie	F	Caucasian	22	263	Caucasian (58.2%)	81.4%
Lexi	F	Caucasian	7	657	Hispanic (49.8%)	69.4%
Lila	F	Caucasian	9	964	Caucasian (45.9%)	5.5%

¹Note: Until April 2013, the American Alliance for Health, PE, Recreation and Dance (AAHPERD) was composed of five national associations, including the National Association for Sport and Physical Education (NASPE). In 2013, AAHPERD members voted to dissolve the five national associations and unify under the AAHPERD name. Since then, AAHPERD has renamed itself SHAPE America – Society of Health and Physical Educators. The former organization called NASPE, in 2011, launched a PD to certify PE teachers as Directors of PD. Today, SHAPE and a coalition of supporting organizations (e.g., Nike, Partnership for a Healthier America, Alliance for a Healthier Generation, etc.) are partnering to provide this PD to produce PA leaders within schools.