




PEDAGOGY

CSPAP Implementation During Student Teaching: Lessons Learned From the Field

*Christopher Barton Merica, Cate A. Egan,
Karie Lee Orendorff, Hayley B. McKown*

Abstract

In the United States, less than half of adolescents meet national recommendations for daily physical activity (PA). Schools are an integral intervention point for achievement of national PA youth guidelines. To help schools achieve PA guidelines, multicomponent Comprehensive School Physical Activity Programs (CSPAP) were developed. Each CSPAP component works synergistically to help students achieve 60 min of PA per school day. Physical educators are expected to implement CSPAP components in their schools, but little is known about the preservice physical education teacher (PPET) perception of CSPAP training experiences in teacher education. The purpose of this research study was to understand PPET perceptions of implementing a component of CSPAP at the elementary and secondary level during a student teaching course. Undergraduate ($n = 5$) and graduate ($n = 4$) physical education majors enrolled in a semester of student teaching were recruited. Data collection encompassed individual semistructured interviews at three distinct phases ($N = 25$): (a) pre-student teaching, (b) between student teaching school placements, and (c) post-student teaching. Data coding first revealed codes, then categories, and eventually four themes emerged,

Christopher Barton Merica , School of Health and Applied Human Sciences, University of North Carolina Wilmington. Cate A. Egan , Department of Movement Sciences, University of Idaho. Karie Lee Orendorff , Department of Food Systems, Nutrition, and Kinesiology, Montana State University. Hayley B. McKown, Department of Movement Sciences, University of Idaho. Please send author correspondence to mericac@uncw.edu

each with its own subthemes: (a) preparedness, (b) perceived challenges, (c) implementation, and (d) moving forward. Findings indicate PPETs developed confidence, achieved personal growth and self-actualization, perceived career benefit, and gained a desire for implementing CSPAP in the future. Additionally, implementing CSPAP components during student teaching can increase confidence and desire to implement CSPAP in the future. Further research needs to explore if CSPAP experiences during preservice training influence in-service teachers' CSPAP involvement.

Engagement in physical activity (PA) provides numerous health benefits, such as the reduction of chronic disease (e.g., obesity, heart disease, type 2 diabetes) related to sedentary behavior (National Physical Activity Plan Alliance [NPAPA], 2018). Nationally, the drop in PA levels is alarming (NPAPA, 2018). Fortunately, due to a school's existing infrastructure (i.e., access to mentors, facilities, equipment) and access to school-aged children, K–12 schools are an ideal intervention site to implement health-enhancing PA programs (Centers for Disease Control [CDC], 2013; Institute of Medicine [IOM], 2013).

Of the courses in a K–12 school curriculum, physical education is the most advantageous for school-aged children to accumulate levels of PA (IOM, 2013; Society of Health and Physical Educators [SHAPE America], 2018). SHAPE America (2018) recommends school-aged children receive weekly allotments of physical education instruction per week: 150 min for elementary schools and 225 min for secondary schools. Although national organizations establish guidelines for PA and physical education instruction per week (IOM, 2013; SHAPE America, 2018), the majority of K–12 schools do not meet the recommendations (NPAPA, 2018) and alternative avenues for PA accumulation are needed.

For students to achieve the academic outcomes of physical education and the recommended allotment of daily PA, the CDC partnered with SHAPE America to develop the Comprehensive School Physical Activity Program (CSPAP; CDC, 2013; Society of Health and Physical Educators, [SHAPE America], 2020). A CSPAP is a “whole-of-school” model with five components that provide opportunities for school-aged children to achieve recommended

levels of PA, while supporting physical education as the cornerstone (SHAPE America, 2020). The development of an effective CSPAP requires a school PA leader (PAL; Beighle et al., 2009; Carson, 2012). Among members of a school faculty, physical educators are poised to be PALs and leaders of CSPAP due to their ability to plan developmentally appropriate PA and organize among school stakeholders (Carson, 2012). Even though physical educators are ideal school PALs and CSPAP leaders, most preservice and in-service physical educators do not receive prerequisite training (Dauenhauer et al., 2018).

To be effective PALs of CSPAP, physical educators need training experience in organizing and implementing expanded PA programs (Stoepker et al., 2020), and physical education teacher education (PETE) programs are poised to train PPETs for such training with CSPAP implementation (Beighle et al., 2009; Dauenhauer et al., 2018). Competent CSPAP implementation requires PPETs to understand the essential steps toward program development and be provided hands-on experiences implementing components in a school setting (Stoepker et al., 2020; Webster et al., 2016).

As PETE programs add CSPAP-related experiences and content knowledge within coursework requirements (Castelli et al., 2017), research findings indicate positive outcomes for PPETs (Drewson & Lackman, 2020; Goh et al., 2020, 2019; Kwon et al., 2018; McMullen et al., 2014; Webster et al., 2017). Specifically, incorporating a CSPAP component implementation during practicum coursework increases levels of PPET confidence, competency, and value to lead future CSPAPs in K–12 schools effectively (Drewson & Lackman, 2020; Goh et al., 2020, 2019; Webster et al., 2017). However, there is limited research investigating PPETs perspectives of implementing components of a CSPAP during a student teaching internship experience (McMullen et al., 2014). Thus, the research question is, “what are PPET experiences of implementing CSPAP during student teaching?” Therefore, the purpose of this research study is to understand PPET perceptions of implementing CSPAP components at the elementary and secondary (i.e., middle school or high school) levels during a student teaching internship experience.

Method

Design

University institutional review board approval was attained prior to conduct of this research study, and informed consent letters were signed by participants prior to gathering of data. A single case study was employed. This provided multiple points of converging evidence for investigation of the real-world context of PPET experiences implementing CSPAP (Yin, 2014).

Setting and Participants

Participants were recruited via a convenience sample of PPETs ($N = 9$; $n = 5$ undergraduate students, $n = 4$ graduate students) from a university PETE program in the Pacific Northwest. Participants were recruited over three consecutive academic semesters (i.e., 2019 spring and fall semester, 2020 spring semester). Data collection concluded once we determined data saturation had occurred (Glense, 2016). We assigned pseudonyms throughout this article to protect participants' anonymity.

The PPETs ($N = 9$; $n = 3$ females) with self-identified ethnicities ($N = 9$; $n = 7$ White, $n = 1$ Pacific Islander, $n = 1$ Hispanic) were enrolled in a semester-long student teaching internship course. The PPETs were placed in rural and urban demographic areas within the Western United States. All PPETs had previous experiences teaching at the elementary and secondary levels during teaching methods courses and took preliminary coursework that included CSPAP-related content knowledge and mini-CSPAP program implementations (e.g., bike safety, staff wellness, before school PA promotion).

Student Teaching Course Structure

Each PPET enrolled in a 16-week internship course that included an 8-week elementary placement (i.e., K–5) and an 8-week secondary level placement (i.e., some combination of 6–8). During both placements, each PPET followed a three-step process: (a) observation of their mentor teacher, (b) co-teach with their mentor teacher,

and (c) transition into a lead instructor role. Additionally, the PPETs attend a twice-weekly pull-back class with a university instructor, who also served as a blinded researcher and one of the authors of this study. The pull-back class included discussion of student teaching requirements, teaching performance assessments, and signature student teaching assignments (e.g., technology integration and CSPAP implementation). The student teaching course instructor had no knowledge of which PPETs were participating in this research study until course grades were entered.

For the pull-back class, students completed a CSPAP project implementation at each placement. The CSPAP project required PPETs to implement a CSPAP component other than quality physical education at each student teaching placement. The CSPAP project included a six-step process: (1) establish a team or committee, (2) conduct a needs assessment, (3) set project goals, (3) identify outcomes or changes that will occur from the implementation, (4) develop a comprehensive plan for component implementation, (5) implement the CSPAP project, and (6) evaluate the implementation via outcome data. For the course, the projects were evaluated on a 5-point scale (i.e., *missing/unacceptable* to *excellent/advanced*) that assessed five major components, each with its own indicators. Example components and indicators include (a) establish a team or committee, designate a PAL, conduct an assessment of existing PA opportunities, and generate a vision statement, goals, and objectives for the CSPAP (indicators: conduct an assessment of strengths, gaps, and priorities for the CSPAP; write objectives to achieve CSPAP goals; etc.); (b) identify and plan the activities for your CSPAP (indicators: identify implementation resources, PA offered, times and facility space secured, etc.); and (c) evaluate your CSPAP (indicators: identify a plan for evaluation including engaging stakeholders, align program goals with evaluation, explain how outcome data will be used, etc.). The CSPAP projects that PPETs implemented included school jog-a-thons, staff wellness initiatives, professional development clinics, pedometer step challenges, and before- and after-school PA opportunities for students. Table 1 provides examples of PPETs' CSPAP implementations with project descriptions.

Table 1
Example CSPAP Projects

CSPAP project title	CSPAP component	Program description
Recess Running Club	During-school PA	Program implementation designed to increase PA during school. The fourth-grade students at an elementary school recorded their laps on the playground as part of a promotion for cardiovascular health. Incentives and awards were included.
Classroom Brain Breaks	Staff involvement during-school PA	The PPET trained classroom teachers on the importance of PA and how to include PA in the classrooms (e.g., brain breaks). The PPET then provided resources and modeled several different strategies for integrating PA during class time to classroom teachers.
Technology Training for Assessment and Activity	Quality physical education	The PPET led a series of professional development clinics for school district physical education teachers. The professional development included teaching other physical education teachers to use technology for assessments and PA tracking (e.g., QR codes, Google Forms, Plickers/Plagnets, pedometers).
Staff Wellness Promotion	Staff involvement	Program implementation targeted middle school faculty/staff. The CSPAP included informational nights and “workout nights” in the school weight room to promote staff access to school facilities and teach faculty/staff how to use exercise equipment properly.
Before-School Yoga	Before-school PA	The CSPAP program targeted high school students and included before-school yoga in the gymnasium led by the PPET.

Table 1(cont.)

CSPAP project title	CSPAP component	Program description
Parent–Child Fun Run	After-school PA Staff involvement Community engagement	A parent–child fun run event led at the elementary level for all grades. The CSPAP event included community vendors, prizes/contests; parents participating as volunteers and participants; and staff involvement to organize, plan, and run the event. The fun run also served as a fundraiser for equipment and has become a yearly event.
Staff Pedometer Challenge	Staff Involvement	High school faculty/staff participated in a month-long pedometer challenge. The weekly step-leaders were entered into a prize drawing at the end of the month.
Active Travel to School	Before-school PA After-school PA Staff involvement	Active travel to school promotional events at the middle school and high school levels. The CSPAP included an event that provided maps for safe walking and biking routes to school. The PPET established meeting points for students to participate in active travel to school together. This was a 1-day event but was continuously promoted throughout the remainder of the school year.
Learn-to-Swim Event	Community engagement	The PPET expanded a school district-wide “Learn to Swim” program for fourth-grade students. This CSPAP included a weeklong swim lesson curriculum for all fourth graders in the school district. Swim-lesson volunteers included community members and school district staff.

Note. CSPAP = Comprehensive School Physical Activity Program; PA = physical activity; PPET = preservice physical education teacher.

Data Collection

Interviews ($N = 25$; $n = 2$ interviews cancelled because of COVID-19) were collected at three time points per semester: (1) before the first CSPAP implementation, (2) between student teaching school placements, and (3) after the second CSPAP implementation. Interview questions were asked in a semistructured format. This format resembled guided conversations (Yin, 2014) and allowed for in-depth responses from participants. Table 2 provides example interview questions and follow-up questions used. Table 3 provides quotes that represent the themes and subthemes. In addition, a written final project from each PPET was collected for data analysis with the interview data. The written project included information about the six-step process of the CSPAP project.

Data Analysis

Interviews were audio recorded and transcribed verbatim, and pseudonyms were assigned to participants. After each interview phase during the first semester (i.e., spring 2019) of data collection, interviews were transcribed and coded for the development of subsequent rounds of interview questions. During the second and third semesters (i.e., fall 2019 and spring 2020) of participant interviews, the same interview protocols developed for the first semester (i.e., spring 2019) were used. At the completion of data collection, constant comparison (Yin, 2014) was used in recoding the first semester interviews alongside the second and third semester interviews. Additionally, each PPET's written final project was analyzed for the PPET experience with completing CSPAP objectives, goals, implementation, and program evaluation. The coding of interview and written project data first revealed codes, then categories; eventually, four themes with individual subthemes emerged (Glense, 2016). Table 3 provides examples of PPETs' responses to interview questions that resulted in the identification of themes and subthemes.

Data Trustworthiness

Trustworthiness of data was increased through multiple strategies. First, two forms of researcher reflection were used: (a) prospective reflection of the research design during planning and methodology development (i.e., appropriate types of questions,

Table 2*Date Sources and Example Questions*

Data source	Example question	Follow-up question
Interview 1: Pre-Student Teaching <i>N</i> = 9; <i>r</i> = 24:20–33:02, <i>M</i> = 28:46	Please describe your experiences with implementing CSPAP prior to your student teaching course.	<i>How have those experiences prepared you for your CSPAP implementation?</i>
	To what extent do you feel it is important as a physical education teacher to promote PA outside of physical education?	<i>Do you view this as part of your job moving forward?</i>
	What barriers or challenges do you see with implementing CSPAP programs in schools?	<i>Are there different barriers or challenges at the elementary level versus the secondary level?</i>
Interview 2: Between School Placements <i>N</i> = 9; <i>r</i> = 20:56–41:33, <i>M</i> = 30:58	What success did you experience in implementing your CSPAP?	<i>How did this success make you feel?</i>
	Do you think you will implement a program like this in the future? Why or why not?	<i>If not this program, what about another program or CSPAP component? Why or why not?</i>
	What benefits did you get out of a CSPAP implementation during your internship?	<i>What benefits did your school receive from the CSPAP implementation?</i>
Interview 3: Post-Student Teaching <i>N</i> = 7; <i>r</i> = 20:42–55:57, <i>M</i> = 40:14	Describe how your CSPAP implementations has prepared you to be a PAL.	<i>Explain how you identify yourself as a PAL after your CSPAP implementations.</i>
	What are your major take-home messages from implementing CSPAPs at both levels?	<i>Describe your future involvement with these types of CSPAP implementations in the future.</i>
	What value, if any, do you see in physical education teachers implementing CSPAP.	<i>What value, if any, do you see for you implementing CSPAP in the future?</i>

Note. CSPAP = Comprehensive School Physical Activity Program; PA = physical activity.

Table 3
Themes and Subthemes

Theme	Subtheme	Quote
Preparedness	CSPAP components	“I feel more confident doing physical activities with students during school, after school, or before school. Our whole major is based around PA, teaching motor skills, knowledge, and getting people confident in those skills and knowledge” (Marty, Interview 1).
	Previous coursework experiences	“This program provided practicums and real teaching experiences throughout the last two years, which gave me confidence. I was able to bring that confidence of my teaching ability into my CSPAP” (Elizabeth, Interview 3).
Perceived challenges	Secondary level	“It’s difficult at the high school level, because there’s dance team, there’s debate clubs, there’s rugby, water polo, swimming...all these different things going on” (Doug, Interview 1).
	Elementary level	“One of the barriers at the elementary level...if you have a before- or after-school kind of CSPAP implementation, you’re relying on parents to be able to get them to and from, which can be tough with parent availability” (Emmett, Interview 1).
	Facilities and resources	“If you don’t have the materials, it makes it hard to run a successful CSPAP” (Marty, Interview 1).
	Support	“Getting your staff involved or the very first person you need to talk to about it would probably be your administration, getting support from those individuals is important” (George, Interview 1).

Table 3 (cont.)

Theme	Subtheme	Quote
Implementation	Successes	“Community members came out, connected, and got excited for a PA-based school event” (Mary, Interview 3).
	Challenges and barriers experienced	“Getting students to participate in extracurricular activities, because a lot of them are like, ‘Oh, I already practice. I already have football practice. I already have soccer practice. I already have gymnastics, so I don’t want to do more activities” (Doug, Interview 2).
	Impact (school, staff, students, family, community)	“I think the CSPAP definitely showed the faculty and staff that [physical education teachers] care about them and we want them to be physically active and be healthy as well” (Marty, Interview 3).
	Lessons learned from implementation	“My CSPAP experience made me appreciate and care about students’ PA and their physical education experiences” (Emmett, Interview 2).
Moving forward	Personal growth and self-actualization	“It really opened my eyes to how important it is to be able to provide opportunities for others to be physically active and the lack of knowledge adults have of being physically active and healthy” (Marty, Interview 2).
	Perceptions of CSPAP importance	I think implementing CSPAP is one of the most important parts of our job. Getting the students active, and then also advocating for PA in their lives, and promote living a healthy balanced life” (Mary, Interview 3).
	Career benefit	“I believe this prepared me to do this comfortably in the future, like I can just put something on like this anywhere I go, and I know what I need to do now” (Doug, Interview 3).
	Physical educator role	“This experience gave me a peek into what my role can be as a physical educator in the whole school, as a PAL, rather than being siloed in my gym or my classroom” (Emmett, Interview 2).

interview times) and (b) selective and retrospective reflection after each interview. This improved future research and limited researcher bias (Corbin & Strauss, 2008). Second, member checking at the transcript and themes level was employed. Third, investigator triangulation (Yin, 2014) was employed with multiple analysts coding data and challenging categories, codes, and themes presented until all conflicts were resolved (Glense, 2016). Finally, a clear audit trail of data collection and analysis, along with researcher debriefing, was conducted throughout the research process.

Findings

The findings illustrated PPETs' perspectives of implementing CSPAP throughout a student teaching internship experience. Four themes emerged, each with its own subthemes. Theme 1 was Preparedness, with two subthemes: (a) CSPAP Components and (b) Previous Coursework Experiences. Theme 2 was Perceived Challenges and Barriers of CSPAP, with four subthemes: (a) Secondary Level, (b) Elementary Level, (c) Facilities and Resources, and (d) Support. Theme 3 was Implementation, with four subthemes: (a) Successes, (b) Challenges and Barriers Experienced, (c) Impact (school, staff, students, family, community), and (d) Lessons Learned From Implementation. The fourth and final theme was Moving Forward, with four subthemes: (a) Personal Growth and Self-Actualization (b) Perceptions of CSPAP Importance, (c) Career Benefit, and (d) Physical Educator Role.

Preparedness

The first major theme was Preparedness. The PPETs expressed their perceived level of preparedness for CSPAP implementation on the basis of previous coursework experiences. The PPETs perceived level of preparedness was a major factor for which CSPAP component they felt comfortable implementing during student teaching and as a future in-service physical education teacher. The two major subthemes were (a) CSPAP Components and (b) Previous Coursework Experiences.

CSPAP Components

Of the five CSPAP components, implementing quality physical education and promoting PA with students was the component for

which the PPETs felt most prepared. The PPETs expressed confidence leading PA with students during school, after school, or before school. Mary stated, “Physical education and PA during school, and then after school too. I could see myself doing stuff with that. Not staff involvement yet, and not community involvement yet” (Interview 1). The feeling of unpreparedness and lack of confidence to implement staff involvement and family and community engagement components were a commonality among PPETs. George described, “Community involvement would be my least prepared part of a CSPAP. I think it would take a lot more time and research in finding who are stakeholders in the community and who you can get on your side” (Interview 1). Another reason PPETs felt unable to implement community and family components was their lack of experience engaging with parents and the community. Their previous PA programming experiences primarily focused on in-school initiatives, which limited PPET confidence for community and family engagement. However, some PPETs felt it was feasible, such as Biff, who said,

The most difficult component is involving community and building a relationship, but there are ways to tap into the community right away. For example, organizing a 5K race at your school. That’s a practical way to connect with the community. (Interview 2)

Because of their in-school programming experiences, it seemed the PPETs were highly motivated to implement CSPAP components that focused on student PA. However, a lack of experience communicating with parents and school staff was one possible reason for PPETs to feel unprepared to implement CSPAP components related to staff involvement and family and community engagement.

Previous Coursework Experiences

Prior to student teaching, PPETs participated in coursework experiences with CSPAPs and expanded PA programming in K–12 schools. The previous coursework experiences prepared the PPETs for their CSPAP implementation during student teaching. For example, Elisabeth stated, “This PETE program provided practicums and real teaching experiences throughout the last two years, which gave me confidence. I was able to bring that confidence of my teaching

ability into my CSPAP” (Interview 3). Biff also noted the importance of CSPAP content knowledge in previous coursework as a benefactor to prepare for implementation. He stated, “The didactic portion that I got from the PETE program, like the lecture, instruction, and the projects that I worked on, were helpful to understand and implement CSPAP” (Interview 2).

Even though PPETs felt their previous coursework and experiences helped in their preparation to be successful for CSPAP implementation, they also stated a desire for more CSPAP experiences in K–12 schools. Biff explained, “It would be nice to have implemented more components of CSPAP as part of the physical education program. I know that’s difficult with all the practicums and internships we already do, but maybe having some sort of CSPAP course” (Interview 2). The PPETs hands-on experiences implementing components of CSPAP within previous coursework were perceived as a contributor for CSPAP success during student teaching. The PPETs were able to draw on their previous coursework experiences and use those experiences to build on the larger CSPAP implementation during student teaching.

Perceived Challenges and Barriers

Prior to implementing CSPAP during student teaching, the PPETs indicated perceived challenges and barriers toward CSPAP implementation in K–12 schools. Based on the perceived challenges and barriers expressed, four individual subthemes emerged: (a) Secondary Level, (b) Elementary Level, (c) Facilities and Resources, and (d) Support.

Secondary Level

Prior to CSPAP implementation, the PPETs perceived that challenges and barriers for CSPAP implementation existed at middle school and high school settings. A major challenge perceived among PPETs was getting students in middle school or high school to “buy-in” and participate in a CSPAP. Harry expressed, “I think buy-in from high school students themselves is a barrier. Sometimes in high school they have their mind set on certain things. They have more of a free will, I guess” (Interview 2). In addition, the abundance of after-school sport programs or club activities was perceived as a barrier with secondary students having more independence to

choose how to spend their free time. The willingness to participate in after-school activities was accompanied by the belief that secondary students are generally less motivated to be physically active. For example, George said, “I think as students get towards the secondary level, they tend to shy away from being physically active for whatever reason, it starts around that time” (Interview 2). Furthermore, PPETs felt the school faculty at the secondary level would not be open to support and promote schoolwide CSPAP initiatives. Biff described, “At secondary levels, during-school PA breaks would be difficult to implement schoolwide. A lot of teachers aren’t receptive to the idea, and they like to run their classrooms a certain way” (Interview 2). The PPETs overwhelmingly perceived secondary students and staff to be less likely to participate in CSPAP due to a lack of interest and motivation for expanded PA opportunities.

Elementary Level

The need for support from parents was perceived as a major barrier and challenge to CSPAP implementation at the elementary level. The PPETs perceived elementary student reliance on parent and guardian transportation as a major challenge for CSPAP implementation. Emmett commented on the issues of transportation for before- and after-school CSPAP initiatives: “Elementary students have to rely on their parents to bring them to school. If students ride the bus, the bus may not get to school early enough for students to participate” (Interview 1). Moreover, PPETs felt if parents of elementary students do not value CSPAP activities or have time constraints between work, family, and extracurricular activities, it ultimately affects the ability for that student to participate in before- or after-school CSPAP opportunities.

Another perceived barrier at the elementary level was available time for physical education teachers to initiate a CSPAP. The PPETs perceived elementary physical educators to be constrained during school hours due to a lack of prep periods, instances of teaching at two different schools, or limited instructional time during the week with elementary students. Harry noted, “I know there could be a time conflict at the elementary level of being able coordinate with staff or even teach fellow teachers PA breaks . . . It seems elementary physical education teachers are limited with available free time” (Interview 1).

Facilities and Resources

The PPETs perceived facility space and resource availability to be a major barrier to implementing quality CSPAP programs. Specifically, PPETs noted many elementary school gymnasiums are smaller and often double as the school cafeteria, which is a potential risk for student safety. Elisabeth emphasized, “Elementary schools don’t have huge facilities for during-school or before- and after-school PA opportunities . . . it is hazardous to have students in there with equipment” (Interview 1). In addition, there was a possible limitation to opportunities for PA before or after school at the secondary level due to facility usage by athletics (Doug, Interview 2). Furthermore, resources were identified as a barrier. Emmett explained, “I think a big challenge is resources. Schools have to get creative with what they’re going to do, because they usually don’t have the technology, money, equipment, or the staff available to put something on” (Interview 1). The perceived facility and resource challenges for implementing a CSPAP were the size and availability of school PA facilities and availability of financial resources.

Support

The PPETs perceived CSPAP implementation success was dependent upon the support from school stakeholders (i.e., administrators, faculty, family, community). Biff noted, “Teachers have their own objectives as well. They have their own things that they want to accomplish in the classroom, so convincing them that they should do your brain break or whatever it is, could be difficult” (Interview 1). Because of the nature of CSPAP being comprehensive and “whole-of-school,” the value for developing a support system was deemed of high importance. The PPETs believed CSPAP implementation could not be successful without a unified support system of school stakeholders:

If your staff does not want to get involved, it is hard to implement a CSPAP by yourself as a physical education teacher without a support system. I think that one of the big challenges of implementing a quality CSPAP program is developing that support system, so you are not alone to implement all the components. (George, Interview 1)

Furthermore, PPETs perceived the local community's belief and support of PA, education, and health as potentially impeding challenges to overcome. Harry elaborated, "If the community doesn't necessarily appreciate education as much, that could be a barrier" (Interview 2). The role of a school staff and administrator support system was believed to be a contributing factor for multicomponent CSPAP implementation sustainability. Conclusively, PPETs perceived a lack of support from school and community stakeholders as a major barrier for CSPAP implementation.

Implementation

The third theme was Implementation. Through their CSPAP implementation experiences, PPETs learned important facets of expanded PA programming while facing successes and challenges along the way. The four subthemes were (a) Successes, (b) Challenges and Barriers Experienced, (c) Impact, and (d) Lessons Learned From Implementation.

Successes

After implementing CSPAP components, the PPETs reflected on their experience and indicated various forms of success. Mary explained the success collaborating with her mentor teacher during the planning process: "The success we had during planning was our organization, we set deadlines" (Interview 2). In addition to the success of stakeholder collaboration, PPETs indicated positive student experiences from their participation in the CSPAP, for example,

Students enjoyed it and got into a bit of a competition... They all wanted to run and get the most laps on the track and have the highest step count on their pedometers. Plus, everyone participated, and no one quit. (Biff, Interview 3)

Moreover, PPETs felt success from accomplishing CSPAP objectives and goals established from conducting a PA needs assessment for their school. Doug explained, "What I thought was successful was our goals and objectives we accomplished. One of those goals was to at least have 60% of the school attend. And we did hit that target" (Interview 2).

The PPETs expressed feelings of success on the basis of feedback from school faculty, students, and participation from individuals in

the community. Doug expressed his success on the basis of feedback received after organizing a high school staff pedometer challenge: “All this positive feedback from the staff members afterwards and saying that this is possibly something that they’ll pick up on and carry on throughout the rest of the time here” (Interview 3). Marty noted similar praise from his building administrator: “I actually felt really confident afterwards. I walked out and the principal pulled me aside, and said, ‘You did an awesome job. If you need me to sign anything . . . because that was a great professional development’” (Interview 3). The PPETs experienced success in many forms from their CSPAP implementation.

Challenges and Barriers Experienced

Prior to CSPAP implementation, the PPETs expressed their perceived challenges and barriers for the elementary and secondary levels. After completing the CSPAP implementation during student teaching, PPETs reflected on the challenges and barriers they encountered. These obstacles included recruiting students to participate, being organized, using effective communication, and gathering support from school faculty. Lorraine noted recruitment challenges with high school students to participate in before-school PA: “Nobody came the first two days. I had to repeat myself to multiple classes about coming. It felt annoying, but it helped . . . Next time I will do the activity in class and promote it as a before-school activity” (Interview 2).

Prior to the CSPAP implementation, PPETs perceived a lack of school faculty support as a potential barrier for effective implementation. The PPETs’ perceptions became a reality while they promoted and recruited faculty to participate in their CSPAP event. George explained, “The staff wasn’t interested. They thought it would be a hassle. I brought it up at one of our staff meetings and I didn’t get a lot of positive feedback” (Interview 2). The PPETs also indicated the challenges of being organized and communicating throughout the implementation process. Collaborating with individuals from all areas of the school required clear communication. Marty noted the importance of personal communication: “Communication was a barrier. . . My strategy was putting a face to an email, essentially, and making sure the principal realized that this was something that I really wanted to do, and it wasn’t just words on a paper” (Interview 3).

The challenges and barriers PPETs experienced included gaining interest from students, school faculty, and staff. In addition, PPETs noted the challenges of communicating between various entities across school campuses for successful collaboration and CSPAP implementation.

Impact

The PPETs reflected on the CSPAP impact for the community, school, staff members, and student population. Doug noted the community was positively impacted from participating: “I saw a lot of community involvement . . . a lot of close friends and family. I saw a lot of parents walking with their kids. That was awesome” (Interview 2). In addition, the PPETs noted implementing a CSPAP impacted other school faculty and staff’s viewpoint of the physical educator role in school. Marty explained, “It helped show other staff members that I am a professional, take pride in what I do . . . I think the CSPAP implementation was kind of eye-opening to certain faculty and staff” (Interview 3).

In addition, the PPETs indicated that students who participated in the CSPAP were positively impacted. Biff expressed positive student impact from training classroom teachers brain breaks: “The students were very receptive to it. The teachers seemed to like it a lot . . . The students seemed to appreciate it and I received a lot of positive student responses” (Interview 2). In addition, PPETs believed CSPAP participation enhanced student motor skill competency. George noted the student impact of participating in an elementary swim meet: “Learning new skills, getting to go to a pool and participate. Some of our students had never been in the water before and some were terrified of the water. It made a big impact for those individuals” (Interview 2). The PPETs believed members of the general community, school faculty, and students were positively impacted from participation in their CSPAP.

Lessons Learned From Implementation

Implementing CSPAP during student teaching enabled PPETs to learn the importance of establishing relationships and collaborations among school stakeholders. Specifically, PPETs expressed that gaining support from administrators, faculty, and students helped them to be effective at implementing CSPAP. George noted, “The biggest

thing I'm going to take away is the process. [CSPAP] takes time. Building relationships with staff, students, or community, and pushing for things in the PA realm that you want to do . . . They're not going to happen overnight" (Interview 3). Additionally, the PPETs learned to consider student CSPAP interests, for example, "You have to know your targets and change your approach. Elementary students are excited when you give them red tickets [rewards], but that will not work at the middle school and high school. You must know your audience" (Mary, Interview 2).

Prior to CSPAP implementation, PPETs felt unprepared for family and community engagement implementation. However, their experiences enabled them to grow in this area. Doug noted, "If I plan on having events like this, I'm going to get to know the parents, going to get to know the community" (Interview 2). Mary also noted similar lessons learned: "I learned I can be part of something bigger than just my physical PE classes" (Interview 3). Furthermore, the PPETs learned the importance of effort and determination. Biff explained, "I think that the biggest thing I learned is that a CSPAP is possible at any school; it just requires some effort" (Interview 2). George also elaborated on this point: "I have the drive to implement these things and do what's necessary, even when things may not go my way or get hard" (Interview 3). The PPETs also expressed implementing a CSPAP is not as daunting as they initially perceived. Lorraine explained, "CSPAP seems big and scary, but really it's not. There are so many little ways that even I am starting to do here . . . I feel a lot more comfortable, and I know I can do it in the future" (Interview 3).

Moving Forward

The fourth and final theme was moving forward. PPETs expressed they had achieved personal growth and approached self-actualization from their CSPAP implementation experiences. The four subthemes were (a) Personal Growth and Self-Actualization, (b) Perceptions of CSPAP Importance, (c) Career Benefit, and (d) Physical Educator Role.

Personal Growth and Self-Actualization

The PPETs indicated areas of personal growth and self-actualization after their CSPAP implementation experience. Marty noted, "Implementing a CSPAP gave me the opportunity to grow as a leader

and show that physical education teachers are not just someone back in the corner giving the teachers prep time” (Interview 3). On the basis of the experience of organizing and leading a CSPAP, PPETs expressed self-actualization in their leadership abilities, for example, “It made me realize I am a teacher. I warmed up 900 students, I told all the parent volunteers what to do . . . I learned that confidence from doing these CSPAPs” (Mary, Interview 3). In addition, PPETs expressed similar feelings of personal growth in planning, communicating with faculty, and being a leader. For example, Doug had “a lot of self-realizations about myself. I got out of the habit of procrastinating, and took on a leadership positions, like creating spreadsheets, making flyers” (Interview 3). Additionally, Lorraine noted, “Even regardless of what level it is at, I feel prepared. Even if it is at a high school level, I think I can find ways to implement different CSPAP components” (Interview 3). Other PPETs echoed similar feelings of self-actualization from the experience, for example, “It showed me you can do it . . . I didn’t feel stressed doing it at all, and it wouldn’t be much harder to implement in the future wherever I get hired” (Elisabeth, Interview 2). Finally, implementation experiences helped them develop a passion for the teaching profession:

I learned that I truly care about the students outside of the time that they are in my class. I think I always felt that, but working through the implementation made me realize how important it is to truly put in the extra effort for the students outside of the physical education setting. (Emmett, Interview 2)

Perceptions of CSPAP Importance

On the basis of the CSPAP implementation experience, PPETs perceived CSPAP to be important for promoting PA to K–12 students through the discovery of new activities and PA opportunities. Emmett explained, “Just helping [students] realize the opportunities and resources that they do have available, even in a small town like this, to live a healthy, active lifestyle. I think it was a big benefit for the community” (Interview 2). Additionally, Harry expressed, “Even if it’s a minor CSPAP, it’s one step in the right direction. I think there’s a lot of great value that can come out of implementing a CSPAP program” (Interview 3). The PPETs expressed CSPAP as an important

tool for physical educators to advocate for healthy active lifestyles and promote physical education programs:

CSPAP is a great way to advocate for your program. I think this is a great way to show the community, staff, and students that you actually care about what you do. Not only that you want to do a great job in your classroom, but also outside your classroom and create a better community as a whole. (Marty, Interview 3)

Career Benefit

The PPETs believed their CSPAP experience benefited their future teaching careers, specifically during interview process, for example, “I think it makes you look a little bit better. It shows that you have experience and are willing to work outside of just your gym” (Emmett, Interview 2). In addition, PPETs benefited from the professional relationships developed among school faculty and community partners. The PPETs believed the connections built among school and community stakeholders would not have been possible without their CSPAP implementation, and these relationships came with benefits (e.g., professional references). Furthermore, the PPETs believed their CSPAP experience prepared them for the nuances of being a physical educator in K–12 schools, for example, “I’m just feeling more prepared for whenever I get a job, and wherever I get a job” (Lorraine, Interview 3).

Physical Educator Role

The PPETs believed implementing a CSPAP created an opportunity to become a PAL and altered their view of the physical educator role in schools. Biff noted, “[CSPAP] makes you more than just a physical education teacher. It really makes you the PAL at the school” (Interview 3). As a PAL in the school, the PPETs believed the physical educator role included organizing and leading CSPAP. For example, Lorraine said, “I think that it is extremely valuable for physical education teachers to be the number one advocate for PA by organizing and leading CSPAP in a school” (Interview 3). Furthermore, PPETs identified physical educators as PA role models and school-wide advocates for PA behaviors inside and outside the classroom setting. Emmitt explained,

For me, the appreciation of a physical educator's role in our school is not just teaching physical education in a gym. It is about connecting the whole school and trying to promote a healthy, active lifestyle for both the students and the staff. (Interview 2)

On the basis of the CSPAP implementation experience, PPETs believed their role within the school as physical educator aligned with the characteristics of PAL discussed in Carson (2012).

Discussion

This qualitative case study furthers understanding of PPETs' perception of implementing a component of CSPAP at elementary and secondary levels during a student teaching course. Further, it highlights the PPETs' CSPAP pre- and post-implementation experience. The findings point to PPETs learning the nuances of implementing a CSPAP in K-12 schools and collaborating among school stakeholders (i.e., faculty, administrators, family, community members). In addition, the participants' comments show that implementing CSPAP components during student teaching improves PPETs' confidence in leading future CSPAPs and that there is value in CSPAP in K-12 schools.

The first major finding is PPETs' perceived level of preparedness to implement CSPAP components. From this study, research findings indicate PPETs feel most confident leading CSPAP components related to previous coursework involvement (i.e., components related to PA with students) and less confident leading components of family and community engagement. The literature about PPET preparedness for CSPAP component implementation is largely unexplored, but our research findings underscore similar outcomes from PPET literature examining preservice CSPAP preparation (Kwon et al., 2018; McMullen et al., 2014). For example, some preservice teachers from PETE programs with CSPAP training feel insufficiently prepared to promote and implement PA beyond physical education (Kwon et al., 2018). PETE programs should provide novel experiences with CSPAP components related to family and community engagement to better prepare PPETs to be PALs.

The second major finding is that PPETs perceive specific barriers for implementing CSPAP at the elementary and secondary

levels (e.g., limited facilities) and that CSPAP implementation is not sustainable without administrative support. These findings are indicative of literature regarding challenges and barriers for expanded PA programming and CSPAP implementation success (Hunt & Metzler, 2017; Michael et al., 2019; Webster et al., 2015). Content knowledge and experiences related to the aforementioned barriers should be included within PETE preparation of PPETs for CSPAP adoption and sustainability. For example, PETE programs should create opportunities for PPETs to establish collaborative partnerships with school faculty and administrators as part of the planning process for CSPAP implementation experiences in the field.

Another finding is PPETs' belief of it being easier to implement CSPAP at the elementary level than the secondary level. This finding echoes McMullen et al.'s (2014) of PPETs in a student teaching internship struggling to recruit, motivate, and communicate effectively with high school-aged students in a before-school PA program. The rates of CSPAP adoption at the high school level is comparably low to adoption at the elementary level (Brenner et al., 2017). Thus, the CSPAP preparation of PPETs in PETE programs should include developing strategies for PPETs to recruit and motivate secondary students, given the indicated barriers associated with this level.

An increase in levels of confidence, personal growth, and self-actualization from CSPAP involvement throughout the student teaching internship course experience is another finding in this study. In addition, CSPAPs bring about successes, challenges, and barriers for PPETs as well as a positive impact on the school, staff, students, family, and general community. These findings reinforce the findings of research regarding CSPAP-related experiences of PPETs implementing expanded PA programs in K–12 schools (Goh et al., 2020, 2019; Webster et al., 2017). The limited research on implementing CSPAP in PETE practicum coursework indicates these experiences bring about feelings of competency and autonomy in PPETs (Goh et al., 2020). Thus, PETE programs should include field-based CSPAP experiences at both the secondary level and the elementary level to provide PPETs the requisite skills to fulfill the role of a PAL and leader of CSPAP (Beighle et al., 2009; Stoepker et al., 2020).

Implementing components of CSPAP broadens the lens through which PPETs view the role of a physical education teacher within a school. In addition, PPETs perceive CSPAP as an important advocacy tool for physical educators and believe a physical education teacher should be a PAL who advocates and promotes healthy, active lifestyle behaviors. CSPAP experiences can help PPETs to develop the requisite skillset to become successful PALs (Carson, 2012; Stoepker et al., 2020) and the confidence, ability, and desire to implement CSPAP as future in-service teachers.

Limitations

We acknowledge the limitation of the participant sample size and demographics of participants (i.e., $N = 9$), the geographic area of student teaching placement (i.e., Western states), and the limitation of only three interviews during one semester of student teaching. We also acknowledge our inherent bias within the research process, due to our relationship with the participants as instructors in preliminary coursework. However, despite present limitations, the results of interview data are valuable.

Conclusion

The findings contribute to the minimal body of literature on PPETs' perspectives and experiences implementing CSPAP components in PETE (Drewson & Lackman, 2020; Goh et al., 2020, 2019; Kwon et al., 2018; McMullen et al., 2014; Webster et al., 2017). The implications from our research provide evidence for PETE programs to include practical experiences with CSPAP during student teaching. Further research needs to explore if CSPAP implementation experiences in PETE influence CSPAP involvement of in-service teachers.

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