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PETE Faculty Beliefs Concerning the Preparation of Preservice Teachers for CSPAP Roles: An Exploratory Study

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Abstract

The purpose of this study was to examine the perceived effectiveness and attitudes of physical education teacher education (PETE) faculty concerning the preparation of preservice teachers for Comprehensive School Physical Activity Program (CSPAP) roles. Faculty (N = 175) responded to an electronic survey assessing perceived effectiveness and attitudes related to preparing undergraduate majors and nonmajors for CSPAP roles. Factor analysis of the survey items resulted in a four factor solution: (a) Effectiveness in Preparing Program Majors for Quality Physical Education, (b) Effectiveness in Preparing Program Majors for Other CSPAP Roles, (c) Effectiveness in Preparing Nonmajors for CSPAP Roles, and (d) Attitude Toward Preparing Program Majors for Other CSPAP Roles. Faculty agreed the most that their programs were

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effectively preparing majors for roles within quality physical education and agreed the least that their programs should be preparing majors for leadership roles with respect to school employee wellness and involvement in physical activity promotion. This study reveals a glimpse of current commitment in PETE programs to public health–related goals and informs CSPAP preparation in preservice education.

The Comprehensive School Physical Activity Program (CSPAP) was conceptualized as a coordinated, multicomponent approach for promoting physical activity (PA) in and around schools (Centers for Disease Control and Prevention [CDC], 2013; National Association for Sport and Physical Education [NASPE], 2008a). It encompasses numerous evidence-based strategies (Erwin, Beighle, Carson, & Castelli, 2013; Ward, 2011) for increasing PA through five key components: (a) quality physical education, (b) PA during school, (c) PA before and after school, (d) staff involvement, and (e) family and community engagement (CDC, 2013; NASPE, 2008a).

A quality physical education program is viewed as the cornerstone of a CSPAP. Its primary purpose is instructional in nature (Institute of Medicine [IOM], 2013), and it should be designed to align with content standards (SHAPE America & Human Kinetics, 2014) to help children and adolescents learn the knowledge, skills, and values for leading a physically active life. The other CSPAP components target behavioral, as opposed to instructional, outcomes (IOM, 2013). The purpose of these components is primarily to influence the daily behaviors of youth and others in the school community. PA during school includes opportunities at recess, during drop-in events (e.g., during lunch), and in the general education classroom (i.e., movement breaks and PA integrated with academic lessons). PA before and after school includes opportunities such as active commuting programs, PA clubs and intramurals, and interscholastic sports. Staff involvement is focused on staff wellness initiatives aimed at improving the health of school staff (e.g., teachers and administrators) and gaining support from school staff for PA promotion. Family and community involvement is focused on the roles of parents and community organizations in supporting school-based efforts to promote youth PA (e.g., family participation in evening and weekend special events, joint-use agreements between schools and community organizations; IOM, 2013; NASPE, 2008a).

The CSPAP is identified in the National Physical Activity Plan as one of seven strategies to promote PA in the education sector (National Physical Activity Plan Alliance, 2011). One recommended tactic for pursuing this strategy is to "require pre-service and continuing education for physical education and elementary classroom teachers to deliver high-quality physical education and physical activity programs" (National Physical Activity Plan Alliance, 2011, Tactics section, para. 3). This emphasis on physical education teachers (K–12) and elementary classroom teachers is reinforced in recommendations by physical education scholars (e.g., Beighle, Erwin, Castelli, & Ernst, 2009; Beighle & Moore, 2012; Carson, 2012; Castelli & Ward, 2012; Cipriani, Richardson, & Roberts, 2012; Hall, Little, & Heidorn, 2011; Heidorn & Centeio, 2012; Webster, 2011; Webster, Erwin, & Parks, 2013; Webster, Monsma, & Erwin, 2010).

Specific to preservice preparation, a number of authors have provided guidelines for teacher education programs to integrate learning experiences designed to provide teacher candidates with the skills, knowledge, and values deemed necessary to promote PA in school communities effectively (Webster, Webster, et al., 2015). The focus of most of these guidelines is on what physical education teacher education (PETE) programs can do to prepare preservice physical education teachers for PA promotion in schools (e.g., Beighle et al., 2009; Bulger & Housner, 2009; Bulger, Housner, & Lee, 2009; Corbin & McKenzie, 2008; McKenzie, 2007). For example, several authors have recommended PETE program curricula be restructured to provide learning experiences that build teaching candidates' PA promotion knowledge and skills (e.g., Beighle et al., 2009; Corbin & McKenzie, 2008; McKenzie, 2007). However, other authors have also focused on what PETE should do to prepare preservice classroom teachers for PA promotion (Hall et al., 2011; Webster, 2011; Webster et al., 2013; Webster et al., 2010), such as reconceptualizing coursework for classroom majors that has traditionally been focused on physical education teaching so that other learning experiences (e.g., developing strategies for increasing PA at recess and in the classroom) can be integrated.

Despite these recommendations, little is known about the extent to which PETE programs are effectively preparing preservice physical education or classroom teachers for CSPAP roles. Teacher socialization studies demonstrate that evoking desired changes in pre-

service teachers' teaching beliefs and practices may be challenging (Curtner-Smith, 1999; Lortie, 1975). However, faculty beliefs and attitudes may play an important role in facilitating adaptive changes in teacher candidates' beliefs (Kagan, 1992; Tatto, 1998). From this perspective, preservice preparation for CSPAP may benefit from an initial examination of PETE faculty beliefs because such beliefs may provide a meaningful metric of potential program effectiveness. Therefore, the purpose of this study was to explore the perceived effectiveness and attitudes of PETE faculty concerning the preparation of undergraduate preservice teachers (including physical education majors and elementary classroom majors) for CSPAP roles. The following research questions were addressed:

1. Do PETE faculty agree that their undergraduate programs are effectively preparing preservice physical education (K–12) teachers and preservice elementary classroom teachers for CSPAP roles?
2. Do PETE faculty agree that their undergraduate programs should prepare preservice physical education teachers for CSPAP roles beyond quality physical education?

Method

Participants

Participants in this study were PETE faculty members ($N = 175$) who responded to an electronic survey (see Procedures and Instrumentation section). We sent the survey to 567 faculty members representing 539 undergraduate PETE programs across the United States in spring 2013. The intent was to send the survey to undergraduate program directors; however, it was not always clear from program websites who currently held this position. Therefore, for several programs, we sent the survey to more than one PETE faculty member.

The overall response rate (31%) is similar to the mean reported response rate for other online surveys, according to the results of a meta-analysis (Cook, Heath, & Thompson, 2000). However, it is not as high as previous survey studies with PETE faculty. Metzler and Freedman (1985) reported a response rate of 46% using a mail-back survey, and Graber, Erwin, Woods, Rhoades, and Zhu (2011) reported a response rate of 48.4% using an online survey.

Some of the respondents did not complete all of the items on the survey; in most cases, incomplete items were from the demographic questionnaire included at the end of the survey. For demographic items, 146 respondents reported their age (M = 51.54, SD = 9.05), 157 reported their biological gender (about 43% male, 57% female), and 155 reported their college/university affiliation (each participant was from a different college/university). PETE programs from 43 states were represented among participants. Further descriptive information about the participants and their programs is presented in Table 1.

Procedure and Instrumentation

We obtained approval to conduct this study from the university institutional review board prior to data collection. We developed an electronic survey for the study using Survey Monkey. We wrote and organized items using the five-component CSPAP framework (CDC, 2013; NASPE, 2008a) and recommendations (e.g., Carson, 2012; Castelli & Ward, 2012; Cipriani et al., 2012; Hall et al., 2011; Heidorn & Centeio, 2012). We made minor changes to the framework to draw clearer distinctions between and within CSPAP components for participants. Specifically, we divided one of the components—staff involvement—into two components to distinguish better between staff wellness and staff promotion. In addition, we modified PA during school to give particular emphasis to the role of elementary classroom teachers in promoting PA at recess and in the general education classroom.

The survey consisted of eight sections, which were preceded by an informed consent form with the stated purpose of the study, and the directions with definitions of key terms. The definition provided for a *preservice physical education teacher* was "an undergraduate student majoring in physical education who aspires to work professionally as a school physical education teacher." The definition provided for a *preservice classroom teacher* was "an undergraduate student majoring in elementary or early childhood education who aspires to work professionally as a school generalist classroom teacher." The definition provided for *effectively* was "at a level commensurate with current professional standards and guidelines."

Table 1
Descriptive Information About Participants (N = 175) and Their Programs

Years of experience in PETE (*n* = 157) *M* (*SD*)	Academic rank (*n* = 157) %	Academic status (*n* = 157) %	Program Respon-sibilities (*n* = 157) %	Number of full-time program faculty (*n* = 157) *M* (*SD*)	Number of part-time/ adjunct program faculty (*n* = 157) *M* (*SD*)	Number of graduate teaching assistants (*n* = 156) *M* (*SD*)
18.34 (10.43)	Instructor = 5 Assistant Professor = 20 Associate Professor = 35 Full Professor = 36 Other = 8	Clinical/Nontenure Track = 10 Tenure Track = 22 Tenured = 62 Other = 6	A = 76 B = 51 C = 54 D = 64 E = 22 F = 49 G = 56 H = 27 I = 33 J = 24	3.94 (2.96)	3.04 (4.25)	.52 (1.55)

Note. There were 175 total respondents, but several respondents did not complete all items for the demographic questionnaire at the end of the survey. A = direct undergraduate PETE program; B = teach elementary methods class; C = teach secondary methods course; D = teach curriculum course; E = teach kinesiology course; F = teach content/skills course; G = supervise student teachers; H = direct student teaching; I = teach classroom teachers course; J = other.

The first five sections of the survey used the stem "My undergraduate PETE program prepares preservice physical education teachers to effectively . . ." For each section, this stem was followed by a set of items related to one of the CSPAP components. Section 1 consisted of seven items with a focus on quality physical education (e.g., "Align assessment with instruction in physical education"). Section 2 consisted of six items with a focus on before- and after-school PA (e.g., "Organize physical activity clubs for students"). Section 3 consisted of four items with a focus on staff wellness (e.g., "Organize wellness events for school employees"). Section 4 consisted of five items with a focus on staff involvement (e.g., "Help classroom teachers learn to increase students' physical activity in their classrooms"). Section 5 consisted of six items with a focus on family and community engagement (e.g., "Collaborate with community organizations to increase students' use of community facilities to be physically active outside of school").

Section 6 used the stem "My undergraduate PETE program prepares preservice classroom teachers to effectively . . ." which was followed by five items (e.g., "Integrate physical activity into academic lessons [e.g., math, science, language arts]"). In Section 7, participants were asked about their level of agreement with respect to preparing undergraduate physical education majors for CSPAP roles. This section used the stem "PETE programs should prepare physical education teachers for a leadership role at schools with respect to . . ." and was followed by seven items, one for each CSPAP component assessed on the survey (e.g., Quality physical education, before- and after-school PA programs).

Section 8 consisted of items pertaining to demographic/background information (e.g., gender, academic rank, professional responsibilities) and program information (i.e., number of full- and part-time faculty in the program, number of graduate student instructors in the program). For all sections of the survey, a 4-point Likert-type scale was used with the response options 1 = *strongly disagree,* 2 = *disagree,* 3 = *agree,* and 4 = *strongly agree.* Sections 1–6 also included a fifth option: *don't know.* A full copy of the survey can be obtained from the first author.

A preliminary version of the survey was reviewed for content validity by three noted experts in schoolwide PA promotion, all of

whom have published research and/or recommendations related to the CSPAP. Based on their feedback, several questions were added to reflect the CSPAP information and recommendations available from additional sources, such as the PELINKS4U website (e.g., Beets, n.d.; Erwin, n.d.), and the School Physical Activity Policy Assessment (S-PAPA) instrument (Lounsberry, McKenzie, Morrow, & Holt, 2011). Furthermore, response options were added for faculty responsibilities in Section 8 of the survey. The revised survey was then pilot tested with two PETE faculty members for clarity, readability, and feasibility of implementation. Based on their feedback, several questions were rewritten in a more straightforward manner, two sections were reordered to improve the logical flow of the items, and the directions at the beginning of the instrument were revised in accordance with the other changes.

A working list of undergraduate PETE programs in the United States was obtained from colleagues who were in the process of updating information from an outdated directory of programs (Ayers, Housner, & Kim, 2004). An Internet search was used to verify the identified programs, program directors, and contact information on the list. Programs identified in the search that were not on the original list were added and programs that could not be verified on the original list were deleted. The final list included 539 programs. Contacts on the list were e-mailed an invitation to participate in the study with a link to the survey and an opt-out link. The e-mail contained the purpose of the study and the reason the individual had received an invitation to participate (i.e., because they were identified as an undergraduate PETE program director or teacher educator). Additionally, e-mail recipients were asked to e-mail the principal investigator with e-mail contacts for anyone in their program they thought would be better suited to complete the survey and/or should also take the survey. The survey was sent again via three follow-up e-mails over 4 weeks to maximize participant response.

Data Analysis

Exploratory factor analysis with maximum likelihood extraction and direct oblimin rotation with Kaiser normalization was used to explore the latent factor structure of the observed items on the survey (Costello & Osborne, 2005). Coefficients with values below .4 were suppressed (Tabachnick & Fidell, 2001). Scree plots and

item loadings were examined to determine the best fitting solution among four to eight fixed factors. Cronbach's alpha was used to test the internal consistency of the items for each factor in the final solution. Response frequencies, means, and standard deviations were calculated for all items by factor. Statistical analyses were computed using SPSS (version 21.0).

Results

Survey: Perceived Effectiveness and Attitudes Related to CSPAP Preparation

A four-factor solution was selected based on the results of the factor analysis (see Table 2). The factors were labeled (a) Effectiveness in Preparing Program Majors for Quality Physical Education, (b) Effectiveness in Preparing Program Majors for Other CSPAP Roles, (c) Effectiveness in Preparing Nonmajors for CSPAP Roles, and (d) Attitude Toward Preparing Program Majors for Other CSPAP Roles. The first factor included Items 1–6 from Section 1 of the survey. The second factor included all 21 items from Sections 2–5 of the survey. The third factor included all five items from Section 6 of the survey. The fourth factor included Items 2–7 from Section 7 of the survey. In all, two items were removed because their loadings were below .4. These included Item 7 from Section 1 ("My Undergraduate PETE program prepares preservice physical education teachers to effectively teach simple games students can play to be active during recess/lunch/free periods") and Item 1 from Section 7 ("PETE programs should prepare preservice physical education teachers for a leadership role at schools with respect to quality physical education"). Internal consistencies for each factor in the final model were good to excellent (.87–.96).

Table 2
Final Factor Model and Descriptive Statistics

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
Effectiveness in Preparing Program Majors for Quality Physical Education						7.35	3.63 (.49)	.87
1. Teach toward all six national standards for K–12 physical education.	.853	175	3.74	.60	97.2			
2. Maximize students' practice time during physical education lessons.	.807	175	3.70	.63	97.1			
3. Draw on theory/research to promote students' physical activity.	.741	175	3.34	.69	93.7			
4. Provide personally meaningful learning experiences for students during physical education lessons.	.731	175	3.67	.66	97.1			
5. Align assessment with instruction in physical education.	.681	175	3.69	.58	97.7			
6. Maximize students' moderate-to-vigorous physical activity during physical education lessons.	.557	175	3.62	.59	96.6			

Table 2 (cont.)

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
Effectiveness in Preparing Program Majors for Other CSPAP Roles						31.55	2.58 (.56)	.94
1. Train before-/after-school program staff to provide children with developmentally appropriate physical activities.	.823	174	2.29	.88	38.5			
2. Organize intramural sports programs for students.	.810	174	2.44	.89	47.7			
3. Train before-/after-school program staff to maximize children's physical activity.	.794	174	2.29	.88	38.5			
4. Organize physical activity clubs for students.	.695	174	2.54	.82	55.2			
5. Tailor employee wellness initiatives to the health needs of individual participants.	.695	172	2.31	.83	36.0			
6. Increase the availability of transportation from school to community facilities where students can be physically active.	.674	169	1.98	.83	20.2			

Table 2 (cont.)

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
7. Motivate school employees to increase their physical activity.	.660	172	2.52	.82	51.8			
8. Gain school administrators' support for implementing employee wellness initiatives.	.653	172	2.49	.92	47.1			
9. Organize interscholastic sports programs for students.	.648	174	2.47	.91	46.0			
10. Organize wellness events for school employees.	.642	172	2.56	.79	53.5			
11. Increase family/community use of school facilities to be physically active.	.612	169	2.48	.83	49.1			
12. Increase the availability of school facilities for before-/after-school physical activity programs.	.561	174	2.58	.81	62.6			
13. Help school administrators learn to promote students' physical activity.	.561	172	2.83	.77	69.7			

Table 2 (cont.)

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
14. Organize physical activity events for students' families (e.g., family fitness night).	.556	169	2.76	.72	68.6			
15. Collaborate with community organizations to increase students' use of community facilities to be physically active outside of school.	.546	169	2.72	.91	63.3			
16. Motivate school employees to be physically active role models.	.545	172	2.60	.86	56.4			
17. Educate parents' about strategies to promote their children's physical activity outside of school.	.497	169	2.92	.69	79.9			
18. Use politicking skills with district/ government officials to advocate for policies to increase students' physical activity at school.	.462	169	2.38	.92	47.9			
19. Organize schoolwide efforts to increase students' physical activity.	.438	172	3.05	.64	83.1			

Table 2 (cont.)

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
20. Help classroom teachers learn to increase students' physical activity in their classrooms.	.435	172	3.06	.78	80.3			
21. Help classroom teachers learn to increase students' physical activity at recess.	.421	172	2.94	.83	73.8			
Effectiveness in Preparing Nonmajors for CSPAP Roles						8.58	2.78 (1.15)	.96
1. Teach students active games they can play at recess.	.997	168	2.80	1.22	73.2			
2. Increase students' physical activity at recess.	.959	168	2.76	1.24	70.8			
3. Lead physical activity breaks (e.g., "Energizers") between academic lessons.	.922	168	2.74	1.32	69.0			
4. Integrate physical activity into academic lessons (e.g., math, science, language arts).	.860	168	2.93	1.22	75.0			
5. Draw on policy/research to advocate for students' school-based physical activity.	.771	168	2.67	1.16	67.8			

Table 2 (cont.)

Factor/item	Loading	*n*	*M*	*SD*	Agree/ strongly agree %	Total variance explained %	Response across items *M* (*SD*)	α
Attitude Toward Preparing Program Majors for Other CSPAP Roles						5.72	3.15 (.56)	.90
1. The health and wellness of other school employees.	.817	168	2.89	.78	68.4			
2. The involvement of other school employees in physical activity promotion.	.804	168	2.99	.70	76.8			
3. Physical activity promotion in academic (i.e., non-physical education) classrooms.	.753	168	3.32	.70	88.6			
4. Family/community involvement in physical activity.	.685	168	3.23	.66	89.9			
5. Physical activity promotion during recess/ lunch/free periods.	.676	168	3.27	.64	91.1			
6. Before-/after-school physical activity programs.	.670	168	3.21	.67	87.5			

Note. Given the research questions, responses for *disagree* and *strongly disagree* were excluded from the analyses. Additionally, across all survey items, participants selected *don't know* as a response option less than 1% of the time. Therefore, responses for *don't know* were also excluded from the analyses.

Given the relatively large number of items loading on the second factor (Effectiveness in Preparing Program Majors for Other CSPAP Roles), we ran an additional item analysis in SPSS to examine the corrected item-total correlation, alpha if item deleted, and effects on scale mean/variance for the items just in this factor. The item-total correlations were high (.51–.74), indicating strong intercorrelations between the items in this factor. Additionally, the results indicated that the Cronbach's alpha would remain high (at least .936) if any of the items were deleted from the factor. Thus, statistically there were many items in this factor, but the items appeared to be functioning acceptably as a coherent set of items. We therefore turned our attention to the operational definition of the construct, which encompasses CSPAP roles in multiple contexts (e.g., before- and after-school programs, home and community settings). The construct is wider in definition and scope than the other constructs targeted in the survey, and broader constructs typically need more items to map the construct domain than do smaller, narrower constructs (Crocker & Algina, 1986). The items help to define the construct operationally, and as such, deleting any of the items would falsely narrow the conceptual band for the construct. Furthermore, each item provides a unique perspective related to specific CSPAP roles of interest in this study. Based on this expanded statistical and conceptual examination of the construct, we opted to retain all of the items.

Descriptive statistics on perceived effectiveness and attitudes are presented in Table 2. Participants reported higher perceived effectiveness in preparing preservice physical education teachers (program majors) for quality physical education (M = 3.63, SD = .49) than for other CSPAP roles (M = 2.58, SD = .56) or in preparing preservice classroom teachers (nonmajors) for CSPAP roles in the academic classroom and at recess (M = 2.78, SD = 1.15). For items assessing perceived effectiveness in CSPAP preparation beyond quality physical education, the highest mean scores were for preparing program majors to help classroom teachers learn to promote PA and preparing program majors to organize schoolwide PA promotion efforts. The lowest perceived effectiveness scores were for items that pertained to increasing the availability of transportation between school and other community sites where youth can be physically active and to training after-school program staff as PA promoters.

The mean response across all attitude items was 3.15 (*SD* = .56), reflecting a general consensus among participants that PETE programs should be preparing preservice physical education teachers for CSPAP roles beyond quality physical education. However, PETE faculty were more likely to disagree or strongly disagree that PETE programs should be preparing program majors for addressing the health and wellness of other school employees or increasing the promotion efforts of other school employees. About one third of participants disagreed or strongly disagreed that PETE should be preparing majors for leadership roles with respect to school employee wellness, and about one quarter of surveyed PETE faculty disagreed with the statement that PETE should be preparing majors for leadership roles with respect to school employee involvement in PA promotion.

Discussion

In this study, we examined the perceived effectiveness and attitudes of PETE faculty across the United States in relation to preparing preservice teachers for CSPAP roles, defined by numerous recommendations (e.g., CDC, 2013; NASPE, 2008a; Webster, Webster, et al., 2015). The majority (76%) of the survey respondents were undergraduate PETE program directors, which increases our confidence that, overall, the perspectives reflected in this study derive from faculty who should have a broad overview of program offerings.

Overall, responses leaned more toward agreement than disagreement on scale items assessing perceived effectiveness, but a substantial percentage of PETE faculty respondents shared doubt about whether, at the time of the study, programs were effectively preparing preservice teachers for a broad range of CSPAP roles. On one hand, respondents felt their programs were strongest in preparing program majors for quality physical education. Similarly, responses on the attitude factor indicated that faculty believed quality physical education was an important function of PETE. On the other hand, faculty reported relatively low perceived effectiveness scores and slightly more disparate attitudes related to preparing preservice teachers for roles beyond quality physical education. Several perceived effectiveness items with a focus on preparing program majors for roles related to staff wellness and staff involvement in PA promotion were particularly low. Moreover, based on the attitude data, there

was a relatively low level of agreement that PETE programs should be preparing majors for a leadership role with respect to staff wellness and staff involvement. Researchers could examine the beliefs underpinning faculty attitudes toward CSPAP preparation and the relationship between faculty attitudes and commitments related to CSPAP preparation. It could be that faculty believe that some CSPAP roles (e.g., staff wellness and involvement) are peripheral to or even beyond the purview of the professional responsibilities of physical education teachers. These beliefs may form the basis of unfavorable attitudes (Ajzen, 1991), which in turn may attenuate faculty commitments to preparing majors for these roles.

These results can be explained, at least in part, by the external accountability structure in place for CSPAP preparation in PETE. Currently, the knowledge and skills for leading a quality physical education program are the dominant focus of the national standards for initial teacher certification in physical education (NASPE, 2008b), which are widely used for program accreditation in PETE. These standards have historically had a major influence on the preparation of physical education teachers (Ayers & Housner, 2008). Incorporating a focus on knowledge and skills related to other CSPAP components into the standards as well may be a critical step that needs to be taken for the field to play a broader and potentially more effective role in the public health arena. In addition, the results of an informal national survey conducted by the American Alliance for Health, Physical Education, Recreation, and Dance (2011), now SHAPE America, indicated that 16% of elementary schools, 13% of middle schools, and 6% of high schools provided a CSPAP. Thus, the current employment profile for physical education teachers does not typically include CSPAP roles beyond physical education. Until CSPAPs are formally integrated with professional standards and expected responsibilities of physical education teachers, many PETE faculty may feel preparing majors for expanded PA promotion roles is unnecessary.

Enhancing the PA promotion efforts of other school staff members through wellness initiatives and professional development is beyond what some PETE professionals perceive as the responsibility of physical educators, but a key asset of successful approaches to garnering schoolwide support for PA promotion is a "champion"

within the school who can galvanize others in the school community to act as PA promoters (Doolittle & Rukavina, 2014; Jones et al., 2014; Langille & Rodgers, 2010). The IOM (2013) recommends that schools identify champions to lead PA promotion efforts in schools. With quality physical education as the foundation of a CSPAP (CDC, 2013; NASPE, 2008a), physical education scholars have called for physical education teachers to be champions for schoolwide PA promotion by serving as PA directors and leaders (e.g., Beighle et al., 2009; Bulger & Housner, 2009; Carson, 2012; Heidorn & Centeio, 2012). Physical education teachers who work to provide staff wellness programs and events and who organize and lead professional development opportunities for classroom teachers and other school staff may be taking crucial steps in championing the importance of PA and expanding PA promotion beyond the physical education classroom.

This study has several limitations. First, we gathered the perspectives of participants, and the data are therefore subjective. Observational data (e.g., sample lessons from courses, sample field experiences) would add an objective lens to this research, although obtaining such data from more than one or two programs would have required more resources than were available for this study. However, research in which CSPAP learning experiences in PETE programs are examined can also be strengthened by considering the perspectives of other program faculty and of students in these programs. In addition, obtaining program-related documents (e.g., course syllabi, programs of study) would help to confirm the veracity of participants' perspectives regarding the nature of these experiences. Second, despite our efforts to maximize participant responses to the electronic survey, the response rate was lower than in previous studies surveying PETE faculty (e.g., Graber et al., 2011; Metzler & Freedman, 1985). The low response rate limits the generalizability of the findings. Although the participants represented PETE programs from nearly all of the states, the majority of programs targeted for participation were not represented in this study. The results could have been different had the rate of survey responses been higher. Third, given the exploratory nature of this study, we did not subject the survey to rigorous psychometric testing. This should be an aim in future research within this line of inquiry. Finally, we did not con-

sider several other variables that could play a role in faculty perceptions and attitudes. Researchers could explore the possible influence of faculty characteristics (e.g., professional socialization), program characteristics (e.g., in which school/college the program is situated), and university characteristics (e.g., Carnegie classification) on the extent of CSPAP preparation offered in the program.

In conclusion, the results of this study provide an initial glimpse of PETE faculty as potential players in efforts to situate physical education more squarely at the vanguard of school- and community-based PA promotion. Most programs had integrated CSPAP learning experiences, but few PETE faculty appeared to believe that their programs were effectively preparing preservice teachers for roles in all CSPAP components. One reason for this may be that faculty place unequal value across CSPAP components. Based on the results, we suggest that faculty believe preparing majors to lead staff involvement and wellness initiatives is less important than other program functions to the mission of PETE and, by extension, physical education. If the future of the field is defined by a commitment to goals beyond that which can be achieved in the physical education classroom, it may become imperative for PETE faculty to prioritize learning experiences that help majors to capitalize on the support of other school professionals (Castelli, Centeio, & Nicksic, 2013). Ultimately, garnering schoolwide support for a CSPAP may be an important step toward establishing and nurturing sustainable partnerships, within and outside of the school setting, that can maximize the program impact (Webster, Beets, Weaver, Vazou, & Russ, 2015).

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179–211. http://dx.doi.org/10.1016/0749-5978(91)90020-T

American Alliance for Health, Physical Education, Recreation, and Dance. (2011). *Comprehensive School Physical Activity Program (CSPAP) survey report.* Reston, VA: Author.

Ayers, S. F., & Housner, L. D. (2008). A descriptive analysis of undergraduate PETE programs. *Journal of Teaching in Physical Education, 27,* 51–67.

Ayers, S. F., Housner, L. D., & Kim, H. Y. (2004). *Directory of physical education teacher education (PETE) programs.* Morgantown, WV: Fitness Information Technologies.

Beets, M. W. (n.d.). Considerations for developing effective afterschool programs. Retrieved from http://www.pelinks4u.org/articles/cspap0610.htm

Beighle, A., Erwin, H., Castelli, D., & Ernst, M. (2009). Preparing physical educators for the role of physical activity director. *Journal of Physical Education, Recreation, and Dance, 80,* 24–29. http://dx.doi.org/10.1080/07303084.2009.10598307

Beighle, A., & Moore, M. (2012). Physical activity before and after school. *Journal of Physical Education, Recreation, and Dance, 83*(6), 25–28. http://dx.doi.org/10.1080/07303084.2012.10598792

Bulger, S. M., & Housner, L. D. (2009). Relocating from easy street: Strategies for moving physical education forward. *Quest, 61,* 442–469. http://dx.doi.org/10.1080/00336297.2009.10483625

Bulger, S. M., Housner, L. D., & Lee, A. M. (2009). Curriculum alignment: A view from physical education teacher education. *Journal of Physical Education, Recreation, and Dance, 79*(7), 44–49. http://dx.doi.org/10.1080/07303084.2008.10598215

Carson, R. (2012). Certification and duties of a director of physical activity. *Journal of Physical Education, Recreation, and Dance, 83*(6), 16–20. http://dx.doi.org/10.1080/07303084.2012.10598790

Castelli, D. M., Centeio, E. E., & Nicksic, H. M. (2013). Preparing educators to promote and provide physical activity in schools. *American Journal of Lifestyle Medicine, 7,* 324–332. http://dx.doi.org/10.1177/1559827613490488

Castelli, D. M., & Ward, K. (2012). Physical activity during the school day. *Journal of Physical Education, Recreation, and Dance, 83*(6), 20–29. http://dx.doi.org/10.1080/07303084.2012.10598791

Centers for Disease Control and Prevention. (2013). *Comprehensive School Physical Activity Programs: A guide for schools.* Atlanta, GA: U.S. Department of Health and Human Services.

Cipriani, K., Richardson, C., & Roberts, G. (2012). Family and community involvement in the Comprehensive School Physical Activity Program. *Journal of Physical Education, Recreation, and Dance, 83*(7), 20–26. http://dx.doi.org/10.1080/07303084.2012.10598807

Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in Web- or Internet-based surveys. *Educational and Psychological Measurement, 60,* 821–836. http://dx.doi.org/10.1177/00131640021970934

Corbin, C. B., & McKenzie, T. L. (2008). Physical activity promotion: A responsibility for both K–12 physical education and kinesiology. *Journal of Physical Education, Recreation, and Dance, 79*(6), 47–56. http://dx.doi.org/10.1080/07303084.2008.10598200

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, & Evaluation, 10,* 1–9.

Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory.* New York, NY: Holt, Rinehart, & Winston.

Curtner-Smith, M. D. (1999). The more things change the more they stay the same: Factors influencing teachers' interpretations and delivery of National Curriculum Physical Education. *Sport, Education, and Society, 4,* 75–97. http://dx.doi.org/10.1080/1357332990040106

Doolittle, S. A., & Rukavina, P. B. (2014). Case study of an institutionalized urban Comprehensive School Physical Activity Program. *Journal of Teaching in Physical Education, 33,* 528–557. http://dx.doi.org/10.1123/jtpe.2014-0073

Erwin, H. E. (n.d.). Implementing classroom-based physical activity. Retrieved from http://www.pelinks4u.org/articles/erwin0610.htm

Erwin, H., Beighle, A., Carson, R. L., & Castelli, D. M. (2013). Comprehensive school-based physical activity promotion: A review. *Quest, 65,* 412–428. http://dx.doi.org/10.1080/00336297.2013.791872

Graber, K. C., Erwin, H., Woods, A. M., Rhoades, J., & Zhu, W. (2011). A national profile of teacher education faculty: The construction of an online survey. *Measurement in Physical Education and Exercise Science, 15,* 245–256. http://dx.doi.org/10.1080/1091367X.2011.594353

Hall, T. J., Little, S., & Heidorn, B. D. (2011). Preparing classroom teachers to meet students' physical activity needs. *Journal of Physical Education, Recreation, and Dance, 82*(3), 40–52. http://dx.doi.org/10.1080/07303084.2011.10598596

Heidorn, B., & Centeio, E. (2012). The director of physical activity and staff involvement. *Journal of Physical Education, Recreation, and Dance, 83*(7), 13–21. http://dx.doi.org/10.1080/07303084.2012.10598806

Institute of Medicine. (2013). *Educating the student body: Taking physical activity and physical education to school.* Washington, DC: The National Academies Press.

Jones, E. M., Taliaferro, A. R., Elliott, E. M., Bulger, S. M., Kristjansson, A. L., Neal, W., & Allar, I. (2014). Feasibility study of Comprehensive School Physical Activity Programs in Appalachian communities: The McDowell CHOICES project. *Journal of Teaching in Physical Education, 33,* 467–491. http://dx.doi.org/10.1123/jtpe.2014-0065

Kagan, D. (1992). Professional growth among pre-service and beginning teachers. *Journal of Teacher Education, 41,* 44–49.

Langille, J. D., & Rodgers, W. M. (2010). Exploring the influence of a social-ecological model on school-based physical activity. *Health Education and Behavior, 37,* 879–894. http://dx.doi.org/10.1177/1090198110367877

Lortie, D. (1975). *School teacher: A sociological study.* Chicago, IL: University of Chicago Press.

Lounsberry, M. A. F., McKenzie, T. L., Morrow, J. R., & Holt, K. A. (2011). *School physical activity policy assessment (S-PAPA)* [Measurement instrument]. Retrieved from Active Living Research Tools and Measures database: http://activelivingresearch.org/school-physical-activity-policy-assessment-s-papa-0

McKenzie, T. L. (2007): The preparation of physical educators: A public health perspective. *Quest, 59,* 346–357. http://dx.doi.org/10.1080/00336297.2007.10483557

McKenzie, T. L., & Lounsbery, M. A. F. (2013). Physical education teacher effectiveness in a public health context. *Research Quarterly for Exercise and Sport, 84,* 419–430. http://dx.doi.org/10.1080/02701367.2013.844025

Metzler, M. W., & Freedman, M. S. (1985). Here's looking at you, PETE: A profile of physical education teacher education faculty. *Journal of Teaching in Physical Education, 4,* 123–133.

National Association for Sport and Physical Education. (2008a). Comprehensive School Physical Activity Programs. Retrieved from http://www.wheresmype.org/downloads/Comprehensive-School-Physical-Activity-Programs2-2008.pdf

National Association for Sport and Physical Education. (2008b). National standards for initial physical education teacher education. Retrieved from http://www.aahperd.org/naspe/grants/accreditation/upload/2008-National-Initial-Physical-Education-Teacher-Education-Standards-Edited-1-5-12.pdf

National Physical Activity Plan Alliance. (2011). Education. Retrieved from http://www.physicalactivityplan.org/education_st1.php

SHAPE America & Human Kinetics. (2014). *National standards & grade-level outcomes for K–12 physical education.* Reston, VA: Author.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Tatto, M. T. (1998). The influence of teacher education on teachers' beliefs about purposes of education, roles, and practice. *Journal of Teacher Education, 49,* 66–77. http://dx.doi.org/10.1177/0022487198049001008

Ward, D. S. (2011). *School policies on physical education and physical activity: A research synthesis*. Retrieved from Active Living Research website: http://activelivingresearch.org/school-policies-physical-education-and-physical-activity

Webster, C. A. (2011). Relationships between personal biography and changes in pre-service classroom teachers' physical activity promotion competence and attitudes. *Journal of Teaching in Physical Education, 30,* 320–339.

Webster, C. A., Beets, M. W., Weaver, R. G., Vazou, S., & Russ, L. (2015). Rethinking recommendations for implementing Comprehensive School Physical Activity Programs: A partnership model. *Quest, 67,* 185–202. http://dx.doi.org/10.1080/00336297.2015.1017588

Webster, C. A., Erwin, H., & Parks, M. (2013). Relationships between and changes in pre-service classroom teachers' efficacy beliefs, willingness to integrate movement, and perceived barriers to movement integration. *The Physical Educator, 70,* 314–335.

Webster, C. A., Monsma, E., & Erwin, H. (2010). The role of biographical characteristics in pre-service classroom teachers' physical activity promotion attitudes. *Journal of Teaching in Physical Education, 29,* 358–377.

Webster, C. A., Webster, L., Russ, L., Molina, S., Lee, H., & Cribbs, J. (2015). A systematic review of public health-aligned recommendations for preparing physical education teacher candidates. *Research Quarterly for Exercise and Sport, 86*(1), 30–39. http://dx.doi.org/10.1080/02701367.2014.980939