

## PEDAGOGY

# Perceptions of the Physical Education Doctoral Experience: Does Previous Teaching Experience Matter?

*K. Andrew R. Richards, Gabriella M. McLoughlin,  
Karen Lux Gaudreault, Victoria Nicole Ivy*

### Abstract

*In the United States, physical education doctoral programs place great stock in recruiting students who have prior in-service teaching experience. However, little is known about how this experience influences perceptions of doctoral education. We conducted this cross-sectional, exploratory study to develop an initial understanding of how prior teaching experience and gender influence physical education doctoral students' perspectives of program experiences. Participants included 60 physical education doctoral students (29 females, 31 males) who completed an online survey related to their experiences in doctoral education. Data were analyzed using  $2 \times 2$  factorial ANOVAs, and the differences among study variables based on gender and prior teaching experience were examined. Females without experience had more positive perceptions of their program experiences than did those with experience. These results reinforce the role of prior socialization experiences in framing doctoral program socialization. Further research on the recruitment and education of doctoral students with and without teaching experience is warranted.*

---

K. Andrew R. Richards is an assistant professor of physical education pedagogy, Department of Kinesiology, The University of Alabama. Gabriella M. McLoughlin is a graduate student, Department of Kinesiology and Community Health, University of Illinois, Urbana-Champaign. Karen Lux Gaudreault is an associate professor, School of Kinesiology and Recreation, Illinois State University. Victoria Nicole Ivy is a graduate student, Department of Kinesiology, The University of Alabama. Please send author correspondence to [karichards2@ua.edu](mailto:karichards2@ua.edu)

Using theoretical frameworks such as occupational socialization theory, researchers have investigated the experiences and perspectives of in-service physical education (PE) teachers working in school environments (e.g., Keay, 2006; Lux & McCullick, 2011; O'Sullivan, 1989; Stran & Curtner-Smith, 2010). Over 25 years ago, Lawson (1991) also argued that attention needed to be given to the study of PE teacher education (PETE) faculty and doctoral students. Few studies (e.g., Casey & Fletcher, 2012; Lee & Curtner-Smith, 2011; Richards, Eberline, & Templin, 2016), however, have been designed to examine the socialization and perspectives of individuals training for careers in PETE. In contrast to the dearth of information related to the socialization of doctoral PETE (D-PETE) students, the socialization literature in higher education is more abundant (e.g., Austin & McDaniels, 2006; Gardner, 2008; Golde & Walker, 2006). Doctoral education, however, is uniquely positioned within the discipline in which it occurs (Gardner, 2010), and there is a need to extend these findings to the study of D-PETE students (Richards et al., 2016). This work is important to the future of PE as D-PETE students will go on to become stewards of the discipline (Golde & Walker, 2006) and advance the field as they conduct research, educate future teachers, and provide professional development to in-service practitioners (van der Mars, 2011).

Although numerous questions related to D-PETE need to be addressed, one particular concern relates to the influence and relevance of in-service teaching experience in K–12 school environments<sup>1</sup> on an individual's development as an aspiring PETE faculty member (van der Mars, 2011). In the United States, much emphasis is placed on recruiting D-PETE students who have previous teaching experience (Parker, Sutherland, Sinclair, & Ward, 2011; Woods, Goc Karp, & Judd, 2011), with some scholars contending that the ability to draw upon prior teaching experience is essential to being an effective teacher educator (Boyd, Harris, & Murray, 2007). Nevertheless, Casey and Fletcher (2012) called into question indoctrinated views about the necessity of such experience and highlighted ways in which it can form a barrier, as practices that do not transfer

---

<sup>1</sup>In the current study, we define teaching experience as having held a formal position as an in-service PE teacher in an elementary or secondary school environment. This precludes field experiences, including student teaching, that are part of preservice teacher education programming.

to higher education must be unlearned. This could negatively affect how individuals with teaching experience view doctoral training. Aptly, van der Mars (2011) insisted that “until we actually have some data, I propose a moratorium on arguments over the experience factor” (p. 198).

Students’ genders should be considered in the design of studies related to D-PETE socialization, as previous research has illustrated that females face more challenges integrating into the social environments of higher education, which are often constructed around the experiences of males (Ellis, 2001; Gardner, 2008; Nettles & Millett, 2006). Given that doctoral student satisfaction relates to motivation through program completion (Mason, 2012), it is integral that studies of doctoral student socialization include the perspectives of doctoral students themselves (Taylor & Van Every, 2000). In the current study, we sought to understand how gender and prior teaching experience influence D-PETE students’ perceptions of program experiences. Specifically, we examined D-PETE students’ perceptions of program quality, satisfaction, student–faculty relationships, student interrelationships, advisor strategies and networking, research training, and teaching preparedness.

### **Socialization and Prior Teaching Experience**

Occupational socialization theory (Richards, Templin, & Graber, 2014; Templin & Schempp, 1989) has been conceptualized as “all kinds of socialization that initially influence persons to enter the field of PE and later are responsible for their perceptions and actions as teacher educators and teachers” (Lawson, 1986, p. 107). As such, it can be used as a conceptual framework for understanding doctoral student education and the potential influence of prior teaching experience on D-PETE students’ perspectives of their program experience (Lawson, 1991). This perspective is considered dialectical in that researchers recognize individuals’ abilities to resist the influences of others who seek to socialize them (Schempp & Graber, 1992). Traditionally, occupational socialization theory comprises the three phases of acculturation, professional socialization, and organizational socialization (Templin & Richards, 2014). *Acculturation* examines the ways individuals are led to choose careers in PE through interactions with parents, teachers, coaches, and counselors while they are school-age children and adolescents. *Professional*

*socialization* refers to PETE programming, which typically occurs in a higher education setting (Lawson, 1983a; Lortie, 1975).

*Organizational socialization* occurs on the job and in the context of the schools in which individuals teach (Lawson, 1983b). Teaching in the K–12 school setting, particularly one in which PE is marginalized, can lead to feelings of isolation and reduced importance related to core academic subjects (Lux & McCullick, 2011). These experiences influence how PE teachers view their discipline (Lynn & Woods, 2010; O’Sullivan, 1989), as well as teaching strategies that are effective for working with children (Casey & Fletcher, 2012). When in-service teachers transition into D-PETE, these experiences contribute to their subjective filter (Richards et al., 2014), or the lens through which they understand and interpret D-PETE experiences.

The shift from school-based PE and university PETE programs (e.g., teaching strategies that work with school-age children, but not college students) require a transformation of practice, which may be difficult for those who have worked as in-service teachers (Casey & Fletcher, 2012). They could, for example, struggle to abandon practices that are not in line with D-PETE program expectations. Having teaching experience could, therefore, become a barrier to integration into D-PETE programs, which could negatively affect the way individuals with teaching experience view doctoral training (Lee & Curtner-Smith, 2011; van der Mars, 2011). Conversely, individuals who enter D-PETE programs without teaching experience are likely to have a different frame of reference (van der Mars, 2011). They may, for example, view PE through an idealized lens without considering the realities of life in schools.

## **Doctoral Education and Preparation for Faculty Roles**

When entering doctoral programs, individuals begin *secondary professional socialization* in preparation for faculty roles (Lee & Curtner-Smith, 2011). Golde (1998) defined this as a process “in which a newcomer is made a member of a community—in the case of doctoral students, the community of an academic department in a particular discipline” (p. 56). Doctoral programs can be conceptualized as a sequence of formal education and informal modeling of behaviors intended to prepare doctoral students for careers in academia (Golde & Walker, 2006). Doctoral students must simultaneously learn about the culture operating within their department

and the discipline within which they are socialized (Reich & Reich, 2006). This culture includes explicitly communicated expectations, as well as unwritten rules that must be learned through graduate school (Austin, 2002; Golde, 1998).

Some evidence suggests that supportive faculty members, clearly articulated program goals, relevant and meaningful coursework, and a developmental department culture can play a positive role in doctoral student development (Pallas, 2001). Students form relationships with and seek support from faculty and peers (Gardner, 2010), as well as individuals outside of their institution such as family members and personal friends (Baker Sweitzer, 2009; Weidman, Twale, & Stein, 2001). Students within the same program often bond with one another as they simultaneously experience the trials and tribulations of graduate school (Gardner, 2007). Weidman et al. (2001) noted four factors influential in promoting effective doctoral education: (1) the departmental culture should present clear, non-contradictory expectations for performance upon which all faculty members agree; (2) students should be afforded opportunities for formal and informal interactions with doctoral students and faculty members; (3) education should occur in a noncompetitive, supportive environment; and (4) the student and professional roles should be blended so the student does not perceive conflict between them.

Specific to D-PETE students, Lee and Curtner-Smith (2011) noted that graduate education represents a potent socializing experience shaped by influential faculty, relationships with other students, and the opportunity to engage in undergraduate teacher education. As such, students in graduate PETE programs may be more likely to adopt more innovative perspectives on teaching PE than those in undergraduate PETE programs (O'Bryant, O'Sullivan, & Raudensky, 2000). However, some evidence also suggests that individuals who developed very conservative orientations toward PE through prior socialization may experience challenges when transitioning into D-PETE (Lee & Curtner-Smith, 2011). This could include the development of beliefs and practices during organizational socialization that do not align with D-PETE (van der Mars, 2011). Other research, however, indicates that the opportunity to practice the role of faculty member during doctoral education (Casey & Fletcher, 2012) and involvement in professional organizations (Richards et al., 2016) are key experiences in the doctoral student development process.

## **Sensemaking and Doctoral Program Experiences**

An important part of understanding secondary professional socialization relates to how D-PETE students make sense of their program experiences. Sensemaking is connected to socialization in that it comprises ongoing, retrospective explanations that help individuals to rationalize their thoughts, behaviors, and feelings (Weick, Sutcliffe, & Obstfeld, 2005). Individuals make sense of their experiences, and these perceptions influence their actions and interactions with others. In other words, “sensemaking is a way station on the road to a consensually constructed, coordinated system of action” (Taylor & Van Every, 2000, p. 275). Individuals’ beliefs, grounded in their prior socialization, are viewed as precursors to actions within a social setting (Ajzen, 2012). Sensemaking therefore relates to the dialectical nature of socialization (Schempp & Graber, 1992) and corresponds to the active role individuals play in negotiating their own socialization experiences (Richards et al., 2014).

When interpreting and reinterpreting prior socialization and learning experiences, individuals formulate behavioral responses that may align with, or contradict, the motives and beliefs of the agents that seek to socialize them (Richards & Levesque-Bristol, 2016). Socialization experiences during their time as an in-service physical educator have the potential to influence D-PETE students’ perspectives on doctoral education through the development of beliefs and perspectives that do not align with doctoral programming (Lee & Curtner-Smith, 2011). Similarly, skipping the organizational socialization phase and proceeding directly into D-PETE programming leaves individuals with limited direct knowledge of, or experience teaching, PE in school settings, which may result in a different frame of reference (Casey & Fletcher, 2012).

In addition to prior teaching experience, perceived experiences, satisfaction levels, and commitment may be different for male and female D-PETE students. Gardner (2008) found that the doctoral education experience can disadvantage women, and K. Ward and Bensimon (2002) asserted that “historically, higher education has and continues to be a male-dominated enterprise . . . academic culture and the socialization that accompanies it reflect the experiences of men” (p. 432). Women have espoused greater isolation and more

challenges building relationships with faculty and other students than men have (Ellis, 2001; Nettles & Millett, 2006).

## **Purpose and Research Questions**

Although researchers have highlighted effective elements of doctoral education in the PE and extant literatures, numerous questions remain. One particular question that needs to be addressed is whether previous teaching experience influences the process of doctoral training in preparation for faculty roles (van der Mars, 2011). Further, given that doctoral student socialization experiences may differ according to gender (Ellis, 2001; Nettles & Millett, 2006), it is important to account for differences between males' and females' perceptions and understanding of doctoral programming. The purpose of this cross-sectional, exploratory study was to develop an initial understanding of D-PETE students' perspectives of their program experience. Research questions included the following: (1) To what extent are D-PETE students' perceptions influenced by whether or not they taught in school settings prior to doctoral education? (2) What role does gender play in influencing D-PETE students' perspectives on their experience?

## **Method**

### **Participants**

Given that this was a cross-sectional exploratory study, we used an open sampling technique (Strauss & Corbin, 1998), in which any D-PETE student interested in participating was invited to do so. Recruitment occurred through two channels. First, students were recruited through e-mail messages sent through electronic mailing lists maintained by the Society for Health and Physical Educators (SHAPE America) and the Research on Learning and Instruction in Physical Education special interest group of the American Educational Research Association. Second, we identified universities with large doctoral degree programs and asked the program directors to forward e-mail invitations to their D-PETE students.

Participants included 60 D-PETE students (29 females, 31 males) pursuing PhD degrees at institutions of higher education in the United States. Most of the students identified as White ( $n = 42$ ; 70.0%), and other racial/ethnic affiliations included Asian ( $n = 11$ ;

18.0%), African American ( $n = 4$ ; 6.7%), Hispanic ( $n = 2$ ; 3.3%), and multiple races/ethnicities ( $n = 1$ ; 1.7%). Participants included those who had ( $n = 39$ ; 65.0%) and had not ( $n = 21$ ; 35.0%) taught in K–12 environments prior to pursuing graduate degrees. Of those who had teaching experience, the average student had spent 3.27 years in K–12 schools ( $SD = 4.59$ ). Most participants were U.S. citizens ( $n = 45$ ; 75.0%), but a notable minority were international students ( $n = 15$ ; 25.0%). The average participant was 33.18 years old ( $SD = 7.07$ ), and over one third were married or cohabiting ( $n = 23$ ; 38.2%). Further, 17 of the participants (28.3%) reported having an average of between one and two children ( $M = 1.88$  children,  $SD = 1.05$ ). Most participants attended very high research activity universities<sup>2</sup> ( $n = 44$ ; 73.3%), but some attended high ( $n = 10$ ; 16.7%) and moderate to low ( $n = 6$ ; 10.0%) research activity institutions.

## Research Procedures and Data Sources

Following human subjects approval, we reviewed the higher education literature to identify topics and experiences found to be influential in doctoral student socialization. This resulted in the identification of several topics (e.g., relationships with faculty and other students, research training, opportunities to teach) that were used to frame questions in initial focus groups with D-PETE students. Three focus groups were conducted in a D-PETE-focused session at a national level conference in the spring of 2014. The focus groups were semistructured (Patton, 2015) in that they were guided by a list of discussion topics gleaned through the initial literature review, but also allowed us the flexibility to pursue topics introduced by participants. Twenty D-PETE students who did not subsequently participate in the study were included in the focus groups. Following transcription, we reviewed the interviews to identify topics relevant to the D-PETE students' experiences. These topics were considered in the subsequent selection of survey constructs.

After identifying topics important to the experience of D-PETE students through the literature review and focus groups, we searched the literature to find psychometric instruments that tapped into relevant constructs. Following this search, we selected items from existing instruments and developed them into an online survey using

<sup>2</sup>Level of research activity was determined in reference to the Carnegie classification system available at the time of the study.



Qualtrics survey software. The survey consisted of 52 items drawn from the University of Massachusetts Graduate Student Experience Survey (Henderson & Stassen, 2008), Mason's (2012) study on satisfaction with graduate school, and Rensselaer Polytechnic Institute's (2011) Graduate Student Survey. After development, the survey was revised by members of the research team and then pilot tested with 15 doctoral students in the fall of 2014. The pilot test led to minor corrections related to survey structure and flow, and the survey was estimated to take 15 to 20 min to complete.

**University of Massachusetts Graduate Experience Survey.** The majority of the survey questions were derived from Henderson and Stassen's (2008) University of Massachusetts Graduate Experience Survey. The survey includes nine subscales that measure various elements of the graduate student experience. In this study, we drew upon the following subscales: perceived program quality (e.g., please rate the intellectual quality of the faculty), student–faculty relationships (e.g., it has been difficult for me to find a faculty member with whom to work), student interrelationships (e.g., experienced students in my program mentor new students), advisor strategies and networking (e.g., my advisor/chair teaches me strategies for succeeding in my field), and research training (e.g., the training you received before undertaking your own research). The anchors varied by subscale, but all items were set on a 5-point Likert-type scale. Internal consistency has been previously established (Henderson & Stassen, 2008) and was adequate to good in the current study (Cronbach's  $\alpha$  ranged from .79 to .85).

**Satisfaction.** In a study of doctoral student motivation, Mason (2012) developed a measure of doctoral student satisfaction with program experiences. The three satisfaction items were set to a 5-point Likert-type scale anchored by 1 (*does not correspond at all*) and 5 (*very strongly corresponds*). An example item was “if I had to do it over again, I would definitely choose this graduate school.” Mason reported good internal consistency for the satisfaction construct, and it was excellent in the current study (Cronbach's  $\alpha = .90$ ).

**Teaching preparation.** Rensselaer Polytechnic Institute (2011) developed a graduate exit survey that includes four items to measure perceptions of teaching preparedness. These items were administered because the University of Massachusetts Graduate Experience

Survey did not include questions that examined perceptions of teaching. Items were set on a 5-point Likert-type scale anchored by 1 (*strongly disagree*) and 5 (*strongly agree*). An example item included “teaching assistants in my program are appropriately prepared and trained before entering the classroom.” Prior internal consistency information was not available, but the construct had good internal consistency in the current study (Cronbach’s  $\alpha = .81$ ).

## Data Analysis

Primary data analyses involved  $2 \times 2$  (Gender  $\times$  Previous Teaching Experience) factorial ANOVAs. Prior to running these analyses, we conducted standard procedures for data cleaning and screening (Tabachnick & Fidell, 2013). The following assumptions of factorial ANOVA were checked: (1) the dependent variable should approximate an interval level of measurement; (2) the independent variables should consist of categorical, independent groups; (3) independence of observations; (4) there should be no extreme outliers (i.e.,  $3 \times$  the interquartile range); (5) the dependent variable should be normally distributed; and (6) there should be homogeneity of variance (Warner, 2012). Descriptive statistics and bivariate correlations were then calculated for all variables with Spearman’s rank correlation coefficient.

After finding that all of the assumptions were met, we used  $2 \times 2$  factorial ANOVAs to evaluate differences in D-PETE students’ perceptions of study variables based on gender and prior teaching experience. We used partial eta squared to estimate effect size in the factorial ANOVA models. A partial eta squared value between .01 and .06 is associated with a small effect, between .06 and .14 with a medium effect, and greater than .14 with a large effect (Warner, 2012). Significant interaction terms were interpreted using post hoc tests for simple effects in the general linear model (GLM) procedure, which compares the marginal means for the interaction (Becker & Coolidge, 1991). We applied a Bonferroni adjustment to the post hoc tests to account for multiple comparisons. All statistical analyses were conducted using IBM SPSS 21.0.

## Results

### Preliminary Analyses

Table 1 displays means, standard deviations, skewness, kurtosis, and minimum and maximum values for each variable. In aggregate, participants perceived high levels of all of the variables (i.e., above 4.00 on the 5.00 scale), with the exception of research training and teaching preparedness, which were moderately high (i.e., between 3.00 and 4.00 on the 5.00 scale). Using Kline's (2005) guideline of skewness  $< |3.00|$  and kurtosis  $< |10.00|$ , we found that all of the variables were within acceptable ranges of normality.

**Table 1**

*Aggregate Descriptive Statistics for All of the Variables*

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max	Skew	Kurtosis
Program Quality	60	4.48	.57	2.67	5.00	-1.35	1.87
Satisfaction	60	4.43	.80	2.00	5.00	-1.51	1.65
Student-Faculty Relationships	60	4.22	.63	2.33	5.00	-.59	-.01
Student Interrelations	60	4.29	.69	2.33	5.00	-.75	-.02
Advisor Strategies and Networking	60	4.17	.70	2.33	5.00	-.73	-.04
Research Training	57	3.84	.68	2.20	5.00	-.40	-.14
Teaching Preparedness	50	3.69	.92	1.50	5.00	-.65	-.03

*Note.* *N* = 60 D-PETE students; *n* for research training and teaching preparedness is lower because not all students engaged in research and teaching responsibilities. Survey variables measured on a 5-point Likert-type scale.

Correlations were examined among all of the survey variables, along with gender and prior teaching experience, with Spearman's rank correlation coefficient. All of the survey variables were significantly correlated (Table 2). The strongest associations were between satisfaction and program quality,  $\rho(60) = .67, p < .05$ , and program quality and advisor strategies and networking,  $\rho(60) = .63, p < .05$ . The weakest correlations were between student-faculty relationships and research training,  $\rho(57) = .33, p < .05$ , and student interrelations and teaching preparedness,  $\rho(57) = .29, p < .05$ . Gender and teaching experience did not correlate significantly with one another or any of the survey variables.

**Table 2**  
*Bivariate Correlations for All of the Variables*

Construct	1	2	3	4	5	6	7	8	9
1. Program Quality <sup>a</sup>	1.00								
2. Satisfaction <sup>a</sup>	.67**	1.00							
3. Student-Faculty Relationships <sup>a</sup>	.63**	.54**	1.00						
4. Student Interrelations <sup>a</sup>	.51**	.53**	.44**	1.00					
5. Advisor Strategies and Networking <sup>a</sup>	.53**	.60**	.42**	.45**	1.00				
6. Research Training <sup>b</sup>	.38**	.51**	.33*	.29*	.51**	1.00			
7. Teaching Preparedness <sup>c</sup>	.59**	.56**	.52**	.35*	.60**	.48**	1.00		
8. Gender <sup>a</sup>	.16 <sup>NS</sup>	.08 <sup>NS</sup>	.07 <sup>NS</sup>	.22 <sup>NS</sup>	.03 <sup>NS</sup>	.03 <sup>NS</sup>	-.04 <sup>NS</sup>	1.00	
9. Teaching Experience <sup>a</sup>	.20 <sup>NS</sup>	.12 <sup>NS</sup>	.16 <sup>NS</sup>	.11 <sup>NS</sup>	.14 <sup>NS</sup>	.13 <sup>NS</sup>	.03 <sup>NS</sup>	.08 <sup>NS</sup>	1.00

*Note.* Gender is coded 0 for female and 1 for male. Prior teaching experience is coded 0 for teaching experience and 1 for no prior teaching experience. Correlations calculated using Spearman's rank correlation coefficient. NS = not significant.

<sup>a</sup>*N* = 60 D-PETE students. <sup>b</sup>*N* = 57 D-PETE students. <sup>c</sup>*N* = 50 D-PETE students.

\**p* < .05. \*\**p* < .01.

## Examining Perceived Differences Based on Gender and Teaching Experience

Following preliminary descriptive analyses,  $2 \times 2$  factorial ANOVAs were conducted for each of the study variables and are summarized in Table 3. For program quality, the main effects for gender and previous teaching experience were not significant. However, there was a significant Gender  $\times$  Previous Teaching Experience interaction,  $F(1, 56) = 4.35, p < .05$ , partial  $\eta^2 = .072$ , which is illustrated in Figure 1. Bonferroni-adjusted post hoc tests for simple effects indicated that female students without teaching experience had significantly more positive perceptions of program quality than did those who had prior teaching experience,  $F(1, 56) = 5.27, p < .05$ , partial  $\eta^2 = .086$ . No significant difference was found between the scores of male participants with and without teaching experience.

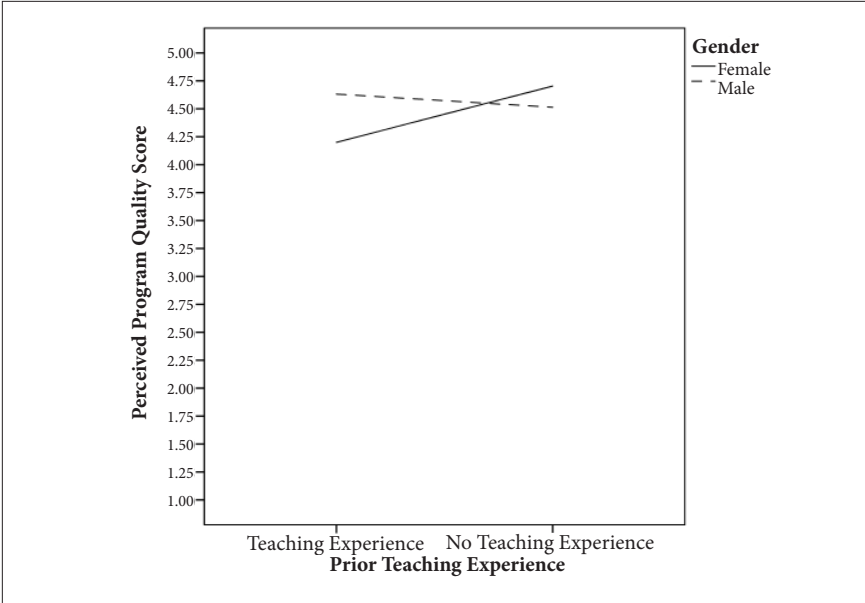
In the  $2 \times 2$  factorial ANOVA for satisfaction, the main effects for gender and previous teaching experience were not significant. However, there was a significant Gender  $\times$  Previous Teaching Experience interaction,  $F(1, 56) = 7.44, p < .05$ , partial  $\eta^2 = .117$ , which is illustrated in Figure 2. Post hoc tests for simple effects using a Bonferroni adjustment for multiple comparisons indicated that female participants without teaching experience were more satisfied with their program experiences than were those who had taught previously in schools,  $F(1, 56) = 4.45, p < .05$ , partial  $\eta^2 = .074$ . However, no significant difference was found between male students who had and had not previously taught in schools relative to satisfaction.

For student interrelations, the  $2 \times 2$  factorial ANOVA indicated that the main effects for gender and previous teaching experience were not significant. However, there was a significant Gender  $\times$  Previous Teaching Experience interaction effect,  $F(1, 56) = 3.96, p = .050$ , partial  $\eta^2 = .066$ , which is illustrated in Figure 3. Bonferroni-adjusted post hoc tests for simple effects indicated that among female D-PETE students, those without teaching experience had more positive perceptions of student interrelations than did those who had taught before pursuing a PhD,  $F(1, 56) = 4.29, p < .05$ , partial  $\eta^2 = .071$ . There was not, however, a significant difference between males who had and had not taught previously.

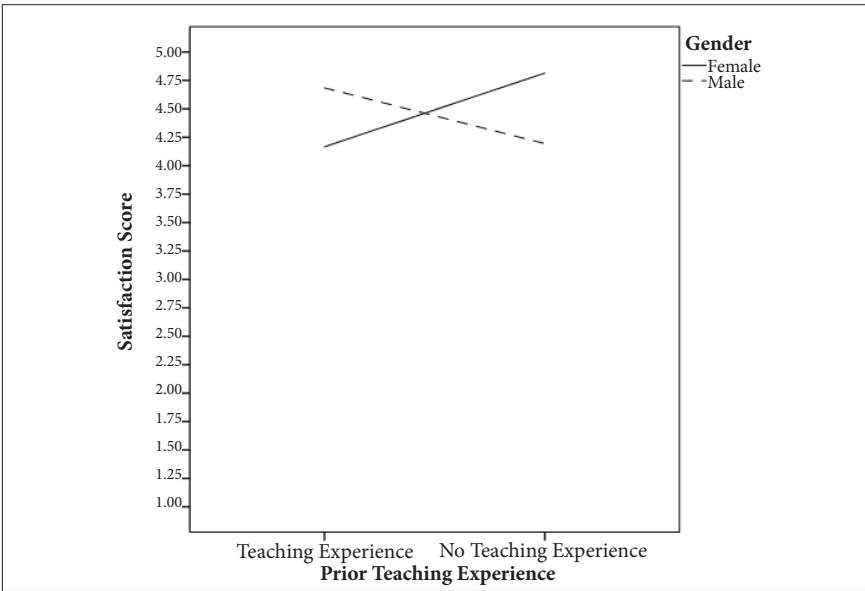
**Table 3***ANOVA Tables for the Variables by Gender and Prior Teaching Experience*

Construct by gender	Prior teaching experience		Factor								
	Yes <i>M (SD)</i>	No <i>M (SD)</i>	Experience			Gender			Interaction		
			<i>F</i>	<i>p</i>	Partial $\eta^2$	<i>F</i>	<i>p</i>	Partial $\eta^2$	<i>F</i>	<i>p</i>	Partial $\eta^2$
Program Quality	<i>n</i> = 39	<i>n</i> = 21	1.68	.201	.029	.66	.421	.012	4.35	.042*	.072
Female ( <i>n</i> = 29)	4.20 (.67)	4.70 (.44)									
Male ( <i>n</i> = 31)	4.63 (.35)	4.51 (.64)									
Satisfaction	<i>n</i> = 39	<i>n</i> = 21	.14	.706	.003	.06	.806	.001	7.44	.008**	.117
Female ( <i>n</i> = 29)	4.17 (.85)	4.81 (.38)									
Male ( <i>n</i> = 31)	4.68 (.45)	4.19 (1.13)									
Student-Faculty Relationships	<i>n</i> = 39	<i>n</i> = 21	.74	.393	.016	.04	.853	.001	1.39	.244	.024
Female ( <i>n</i> = 29)	4.09 (.55)	4.44 (.61)									
Male ( <i>n</i> = 31)	4.26 (.56)	4.21 (.87)									
Student Interrelations	<i>n</i> = 39	<i>n</i> = 21	1.14	.291	.020	1.73	.194	.030	3.96	.050*	.066
Female ( <i>n</i> = 29)	3.93 (.83)	4.48 (.60)									
Male ( <i>n</i> = 31)	4.52 (.48)	4.36 (.63)									
Advisor Strategies and Networking	<i>n</i> = 39	<i>n</i> = 21	1.86	.179	.032	.31	.581	.005	7.25	.009**	.115
Female ( <i>n</i> = 29)	3.91 (.79)	4.65 (.31)									
Male ( <i>n</i> = 31)	4.30 (.63)	4.10 (.71)									
Research Training	<i>n</i> = 36	<i>n</i> = 21	1.27	.265	.023	.007	.931	< .001	1.86	.178	.034
Female ( <i>n</i> = 26)	3.62 (.76)	4.09 (.52)									
Male ( <i>n</i> = 31)	3.89 (.50)	3.85 (.87)									
Teaching Preparedness	<i>n</i> = 33	<i>n</i> = 17	.14	.706	.003	1.11	.299	.023	5.67	.021*	.110
Female ( <i>n</i> = 24)	3.48 (.92)	4.21 (.57)									
Male ( <i>n</i> = 26)	3.84 (.96)	3.31 (.93)									

\**p* < .05. \*\**p* < .01.



**Figure 1.** Means plot displaying interaction for perceived program quality for gender (male and female) and teaching experience (teaching experience and no teaching experience).



**Figure 2.** Means plot displaying interaction for satisfaction for gender (male and female) and teaching experience (teaching experience and no teaching experience).



**Figure 3.** Means plot displaying interaction for student interrelations for gender (male and female) and teaching experience (teaching experience and no teaching experience).

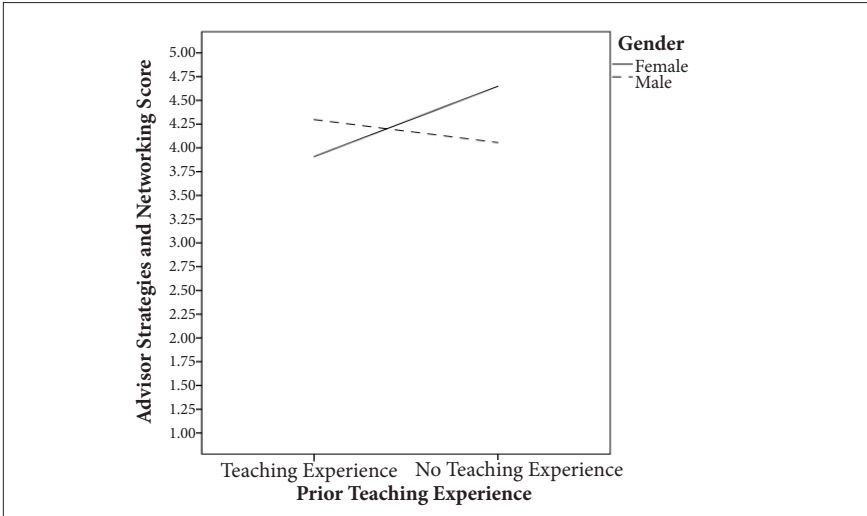
The  $2 \times 2$  factorial ANOVA for advisor strategies and networking indicated that the main effects for gender and previous teaching experience were not significant. There was, however, a significant Gender  $\times$  Previous Teaching Experience interaction effect,  $F(1, 56) = 7.25, p < .05$ , partial  $\eta^2 = .115$ , which is depicted in Figure 4. Post hoc test for simple effects using a Bonferroni adjustment for multiple comparisons indicated that female D-PETE students without teaching experience had more positive perceptions of advisor strategies and networking than did those who had previously taught,  $F(1, 56) = 7.58, p < .05$ , partial  $\eta^2 = .119$ . There was not, however, a significant difference between males who had and had not taught previously.

For teaching preparedness, the  $2 \times 2$  factorial ANOVA indicated that the main effects for gender and previous teaching experience were not significant. Nevertheless, there was a significant Gender  $\times$  Previous Teaching Experience interaction effect,  $F(1, 46) = 5.67, p < .05$ , partial  $\eta^2 = .110$ , which is displayed in Figure 5. Bonferroni-adjusted post hoc tests for simple effects were used to interpret the interaction. Although the interaction effect was significant, the adjusted post hoc tests indicated no significant differ-

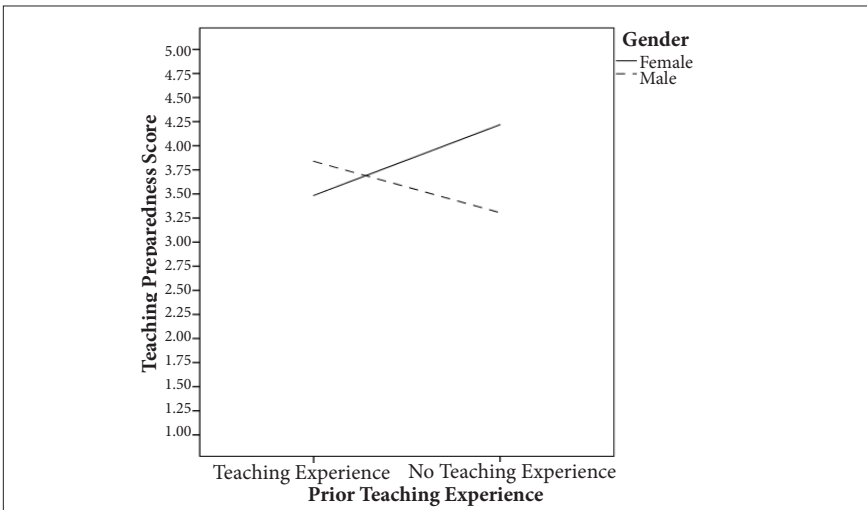


ences relative to prior teaching experience for either male or female students.

The tests for student–faculty relationships and research training were not significant.



**Figure 4.** Means plot displaying interaction for advisor strategies and networking for gender (male and female) and teaching experience (teaching experience and no teaching experience).



**Figure 5.** Means plot displaying interaction for teacher preparedness for gender (male and female) and teaching experience (teaching experience and no teaching experience).

## Discussion

The purpose of this investigation was to develop an initial understanding of how prior teaching experience and gender influence D-PETE students' perceptions of their program experiences. The D-PETE students who participated in this survey generally reported positive perceptions of program quality, satisfaction, student–faculty relationships, and student interrelations, and moderately positive perceptions of advisor strategies and networking, research training, and teaching preparedness. Although the effect sizes of some of the significant interactions were fairly small and warrant caution for interpretation with regard to practical significance, it was revealed that female students without prior teaching experience had more positive perceptions of their D-PETE experiences than did their counterparts with experience.

Several implications manifest from the results of this study for occupational socialization (Richards et al., 2014; Templin & Schempp, 1989), particularly regarding students' perceptions of D-PETE experiences. According to the doctoral student socialization literature in higher education, relationships with faculty (Gardner, 2010) and peers (Weidman et al., 2001) are important facilitators in helping graduate students navigate the social realities of doctoral education programs. Further, doctoral students' program satisfaction has been found to relate to their motivation through program completion (Mason, 2012). In the current study, female D-PETE students without teaching experience perceived more positive student interrelations and, although no differences were found relative to student–faculty relationships, female D-PETE students also felt as if their advisors were more supportive of networking. Although some important differences were found relative to female students with and without teaching experience, it should be noted that no differences were found relative to research training (Weidman et al., 2001). Similarly, although the interaction for teaching preparedness was significant, follow-up tests did not detect significant differences.

Although additional research will be needed for those in the field to completely understand why female D-PETE students without teaching experience had more positive program perceptions than did those with teaching experience, one hypothesis drawn from the work of Casey and Fletcher (2012) is that females without teach-

ing experience may have less tension moving into secondary professional socialization. This may be due to the lesser need to “unlearn” practices and perceptions of the field that were developed through organizational socialization in school settings but do not transfer to higher education settings. Individuals who teach in schools prior to entering D-PETE programs may have strongly formed beliefs about the realities of teaching that could conflict with doctoral programming (Lee & Curtner-Smith, 2011; Richards et al., 2014). Those without teaching experience, many of whom just finished undergraduate studies, may be more abreast of current practices in the field. Further, this result could relate to the type of recruit who forgoes teaching experience and enters secondary professional socialization. This individual is more likely to be younger and perhaps less likely to be cohabiting with a partner or have children and thus may have more time and energy to dedicate to D-PETE studies.<sup>3</sup>

Individuals pursuing doctoral degrees in education, including D-PETE, may be different from the general population of doctoral-seeking students. Nearly half of all graduate students are between the ages of 20 and 29, with many coming directly out of undergraduate programs, and pursuing a doctoral degree can be a challenge for older students (Gardner, 2008). Stacy (2006) went as far as to say that it is “almost impossible for older, mid-career students” to enter chemistry doctoral programs (p. 4). However, because many individuals work as in-service teachers before moving into education doctoral programs, D-PETE doctoral students are likely to be older and may be further removed from previous learning in higher education settings. This may require them to relearn how to be a student, in addition to becoming immersed in their doctoral education experiences. For example, given that some D-PETE students are coming into programs without in-service teaching experience, older students may experience challenges associated with learning to form relationships with much younger peers (Gardner, 2008). This topic merits further attention for future research to disentangle the effects of being older from those that result from having prior teaching experience.

---

<sup>3</sup>In this study, D-PETE students with teaching experience were on average 35.10 years old ( $SD = 7.52$ ), 46.20% were cohabiting with a partner, and 35.90% had children. The D-PETE students without teaching experiences were an average of 29.62 years old ( $SD = 4.39$ ), 23.80% were cohabiting with a partner, and 14.30% had children.

Prior research in higher education (e.g., Ellis, 2001; Nettles & Millett, 2006) has documented that gender can play an important role in doctoral student socialization, with female students noting greater challenges in progressing through their programs than their male counterparts did. In the current study, when examined holistically, gender was not significantly related to any of the program variables. Gender differences were observed only with teaching experience. Further research is necessary to reveal the meaning behind these interactions, but one explanation could be that females who had spent time in schools have greater difficulty letting go of subjective theories of PE (Grotjahn, 1991; Richards et al., 2014) developed through previous socialization experiences. These experiences may present greater barriers to successful integration into academic settings (Casey & Fletcher, 2012). Alternatively, because traditional gender roles place greater marital and parental stress on women, and D-PETE students with teaching experience may be more likely to be married and have children, the less favorable impressions may be a function of work–family role conflict (Netemeyer, Boles, & McMurrin, 1996). Congruent with the findings of Gardner’s (2008) research, female D-PETE students with prior teaching experience may struggle more with balancing school and personal roles than those who go straight to doctoral training.

While acknowledging the importance of prior teaching experience, Casey and Fletcher (2012) noted that prior teaching experience “is not a guaranteed indicator of a high quality teacher educator. There are outstanding teacher educators who have no prior K–12 experiences” (pp. 363–364). Our findings do not provide direct support for Casey and Fletcher’s (2012) observation, as we did not measure the effectiveness of D-PETE students with or without teaching experience, and satisfaction with doctoral education is not synonymous with a successful experience in preparation for faculty roles. However, we believe that the results of this study provide the impetus for further study of the “teaching experience question.” Through additional targeted inquiry, the field will develop a more comprehensive understanding of how doctoral students experience their education, including the role played by prior socialization in framing D-PETE experiences (Lee & Curtner-Smith, 2011).

## Limitations of the Study and Future Directions

Although the findings of this study hold relevance to those interested in D-PETE training, several limitations should be borne in mind. First, the open sampling strategy (Strauss & Corbin, 1998) used to recruit participants precluded our ability to calculate a response rate or conduct any analyses on the characteristics of students who chose not to respond. The sample was also skewed toward Caucasian students from the United States, which may inhibit the generalization of findings to students of other racial/ethnic backgrounds and international students. Given that the study was cross-sectional, we were not able to capture changes in D-PETE students' experiences over time. It is probable that D-PETE students' experiences are likely to change as they progress through their programs, but such variance can only be captured through longitudinal designs. Further, although most of the instruments from which questions were drawn had undergone some prior validation, they have primarily been used for program evaluation rather than empirical research.

It should also be noted that we did not account for years of prior teaching experience or the D-PETE students' current point of matriculation in their programs. Beginning students may have different perspectives than their more advanced counterparts, and students who taught in schools for several years may have been socialized differently than those who only taught 1 or 2 years before enrolling in D-PETE. Finally, this study focuses on D-PETE students' perceptions of their experiences. These results, therefore, do not speak to the objective effectiveness of graduate training, nor do they highlight the observed effects of prior teaching experience on one's effectiveness as a teacher educator. Although the current research into D-PETE students' perceptions is an important step in understanding individuals' experiences, additional research is needed for the field to objectively understand the influence of prior teaching experience on faculty role development and ultimately on the effectiveness of faculty as teacher educators.

In addition to those outlined, several future directions for research merit mention. First and foremost, this study is part of a much larger question related to the influence of prior in-service teaching experience on an individual's practice as a teacher educator. Additional research will be necessary for those in the field to

understand the preparation and effectiveness D-PETE students and PETE faculty members with and without such experience. As future scholars approach that question, factors such as the Carnegie classification of the institution should be considered. Students studying at smaller institutions may, for example, have different experiences with research training than those studying at very high research activity universities. Students' point of matriculation in their respective programs should also be considered, as individuals toward the end of their degree programs may have different views than those beginning their D-PETE program. Finally, work with D-PETE students will need to extend into PETE faculty for those in the field to understand how teaching experience influences faculty beliefs and behaviors once those individuals enter a PETE faculty position.

### **Conclusions and Future Directions**

In conclusion, the primary finding of this study is that among female D-PETE students, lacking teaching experience was associated with an enhanced perception of program experiences. Additional work related to the influence of prior teaching experience and secondary professional socialization is warranted, particularly because a notable number of individuals are seeking entrance into D-PETE programs who do not have traditional in-service teaching experience. Due in part to the financial implications of leaving a full-time teaching position to become a student again, it is becoming difficult to recruit in-service teachers into D-PETE programs (van der Mars, 2011), and even those faculty and administration working in D-PETE programs with teaching experience requirements are being forced to make exceptions to facilitate program entrance (P. Ward et al., 2011). It is therefore critical for those in the field to understand the role of prior teaching experience in individuals' attitudes, beliefs, and behaviors as teacher educators.

### **References**

- Ajzen, I. (2012). The theory of planned behavior. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology: Vol. 1* (pp. 438–459). Thousand Oaks, CA: Sage. <https://doi.org/10.4135/9781446249215.n22>

- Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *Journal of Higher Education*, 73, 94–121. <https://doi.org/10.1080/00221546.2002.11777132>
- Austin, A. E., & McDaniels, M. (2006). Preparing the professoriate of the future: Graduate student socialization for faculty roles. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 397–456). Bronx, NY: Agathon Press. [https://doi.org/10.1007/1-4020-4512-3\\_8](https://doi.org/10.1007/1-4020-4512-3_8)
- Baker Sweitzer, V. (2009). Towards a theory of doctoral student professional identity development: A developmental networks approach. *Journal of Higher Education*, 80, 1–33. <https://doi.org/10.1080/00221546.2009.11772128>
- Becker, L. A., & Coolidge, F. L. (1991). On the proper interpretation of residualized interaction means in an analysis of variance: A reply to Rosnow and Rosenthal. *Psychological Reports*, 68, 483–490. <https://doi.org/10.2466/pr0.1991.68.2.483>
- Boyd, P., Harris, K. R., & Murray, J. (2007). *Becoming a teacher educator: Guidelines for the induction of newly appointed lecturers in initial teacher education*. Bristol, United Kingdom: Higher Education Academy.
- Casey, A., & Fletcher, T. (2012). Trading places: From physical education teachers to teacher educators. *Journal of Teaching in Physical Education*, 31, 362–380. <https://doi.org/10.1123/jtpe.31.4.362>
- Ellis, E. M. (2001). The impact of race and gender on graduate student socialization, satisfaction with doctoral study, and commitment to degree completion. *Western Journal of Black Studies*, 25, 30–45.
- Gardner, S. K. (2007). “I heard it through the grapevine”: Doctoral student socialization in chemistry and history. *Higher Education*, 54, 723–740. <https://doi.org/10.1007/s10734-006-9020-x>
- Gardner, S. K. (2008). Fitting the mold of graduate school: A qualitative study of socialization in doctoral education. *Innovations in Higher Education*, 33, 125–138. <https://doi.org/10.1007/s10755-008-9068-x>

- Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high- and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *Journal of Higher Education, 81*, 61–81. <https://doi.org/10.1080/00221546.2010.11778970>
- Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. In M. S. Anderson (Ed.), *The experience of being in graduate school: An exploration* (pp. 55–64). San Francisco, CA: Jossey-Bass.
- Golde, C. M., & Walker, G. E. (Eds.). (2006). *Envisioning the future of doctoral education: Preparing stewards of the discipline—Carnegie essays on the doctorate*. San Francisco, CA: Jossey-Bass. <https://doi.org/10.1002/he.10105>
- Grotjahn, R. (1991). The research programme subjective theories: A new approach in second language research. *Studies in Second Language Acquisition, 13*, 187–214. <https://doi.org/10.1017/S0272263100009943>
- Henderson, L. A., & Stassen, M. L. (2008). *The University of Massachusetts graduate student experience survey*. Amherst: University of Massachusetts.
- Keay, J. (2006). Collaborative learning in physical education teachers' early-career professional development. *Physical Education and Sport Pedagogy, 11*, 285–305. <https://doi.org/10.1080/17408980600986322>
- Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
- Lawson, H. A. (1983a). Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education (part 1). *Journal of Teaching in Physical Education, 2*(3), 3–16. <https://doi.org/10.1123/jtpe.2.3.3>
- Lawson, H. A. (1983b). Toward a model of teacher socialization in physical education: Entry into schools, teachers' role orientations, and longevity in teaching (part 2). *Journal of Teaching in Physical Education, 3*(1), 3–15. <https://doi.org/10.1123/jtpe.3.1.3>
- Lawson, H. A. (1986). Occupational socialization and the design of teacher education programs. *Journal of Teaching in Physical Education, 5*, 107–116. <https://doi.org/10.1123/jtpe.5.2.107>
- Lawson, H. A. (1991). Future research on physical education teacher education professors. *Journal of Teaching in Physical Education, 10*, 229–248. <https://doi.org/10.1123/jtpe.10.3.229>



- Lee, H. M., & Curtner-Smith, M. (2011). Impact of occupational socialization on the perspectives and practices of sport pedagogy doctoral students. *Journal of Teaching in Physical Education, 30*, 296–313. <https://doi.org/10.1123/jtpe.30.3.296>
- Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
- Lux, K., & McCullick, B. A. (2011). How one exceptional teacher navigated her working environment as the teacher of a marginal subject. *Journal of Teaching in Physical Education, 30*, 358–374. <https://doi.org/10.1123/jtpe.30.4.358>
- Lynn, S. K., & Woods, A. M. (2010). Following the yellow brick road: A teacher's journey along the proverbial career path. *Journal of Teaching in Physical Education, 29*, 57–71. <https://doi.org/10.1123/jtpe.29.1.54>
- Mason, M. M. (2012). Motivation, satisfaction, and innate psychological needs. *International Journal of Doctoral Studies, 7*, 259–277. <https://doi.org/10.28945/1596>
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology, 81*, 400–410. <https://doi.org/10.1037/0021-9010.81.4.400>
- Nettles, M. T., & Millett, C. M. (2006). *Three magic letters: Getting to Ph.D.* Baltimore, MD: Johns Hopkins University Press.
- O'Bryant, C. P., O'Sullivan, M., & Raudensky, J. (2000). Socialization of prospective physical education teachers: The story of new blood. *Sport, Education, and Society, 5*, 177–193. <https://doi.org/10.1080/713696033>
- O'Sullivan, M. (1989). Failing gym is like failing lunch or recess: Two beginning teachers' struggle for legitimacy. *Journal of Teaching in Physical Education, 8*, 227–242. <https://doi.org/10.1123/jtpe.8.3.227>
- Pallas, A. M. (2001). Preparing education doctoral students for epistemological diversity. *Educational Researcher, 30*, 6–11. <https://doi.org/10.3102/0013189X030005006>
- Parker, M., Sutherland, S., Sinclair, C., & Ward, P. (2011). Not suprised, but concerned: The professoriate's reaction to PETE doctoral education in the United States. *Journal of Teaching in Physical Education, 30*, 157–177. <https://doi.org/10.1123/jtpe.30.2.157>

- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.
- Reich, S. M., & Reich, J. A. (2006). Cultural competence in interdisciplinary collaborations: A method for respecting diversity in research partnerships. *American Journal of Community Psychology*, 38(1), 56–62. <https://doi.org/10.1007/s10464-006-9064-1>
- Rensselaer Polytechnic Institute. (2011). *Graduate student survey*. Retrieved from [gradoffice.rpi.edu/](http://gradoffice.rpi.edu/)
- Richards, K. A. R., Eberline, A., & Templin, T. J. (2016). Secondary professional socialization through professional organizations: An exploratory study. *Journal of Teaching in Physical Education*, 30, 70–75. <https://doi.org/10.1123/jtpe.2014-0180>
- Richards, K. A. R., & Levesque-Bristol, C. (2016). Role conflict in the academy: A faculty development perspective. *Journal of Faculty Development*, 30(1), 7–14.
- Richards, K. A. R., Templin, T. J., & Graber, K. (2014). The socialization of teachers in physical education: Review and recommendations for future works. *Kinesiology Review*, 3, 113–134. <https://doi.org/10.1123/kr.2013-0006>
- Schempp, P. G., & Graber, K. (1992). Teacher socialization from a dialectical perspective: Pretraining through induction. *Journal of Teaching in Physical Education*, 11, 329–348.
- Stacy, A. M. (2006). Training future leaders. In C. M. Golde & G. E. Walker (Eds.), *Envisioning the future of doctoral education: Preparing stewards of the discipline* (pp. 187–206). San Francisco, CA: Jossey-Bass.
- Stran, M., & Curtner-Smith, M. (2010). Impact of different types of knowledge on two preservice teachers' ability to learn and deliver the Sport Education model. *Physical Education and Sport Pedagogy*, 15, 243–256. <https://doi.org/10.1080/17408980903273147>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research, techniques, and procedures for developing grounded theory*. London, England: Sage.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.
- Taylor, J. R., & Van Every, E. J. (2000). *The emergent organization: Communication as its site and surface*. Mahwah, NJ: Erlbaum.

- Templin, T. J., & Richards, K. A. R. (2014). C. H. McCloy lecture: Reflections on socialization into physical education: An intergenerational perspective. *Research Quarterly for Exercise and Sport*, 85, 431–445. <https://doi.org/10.1080/02701367.2014.964635>
- Templin, T. J., & Schempp, P. G. (Eds.). (1989). *Socialization into physical education: Learning to teach*. Indianapolis, IN: Benchmark Press.
- van der Mars, H. (2011). Reflecting on the state of U.S. PETE programs . . . “Houston, we’ve had a problem.” *Journal of Teaching in Physical Education*, 30, 189–208. <https://doi.org/10.1123/jtpe.30.2.189>
- Ward, K. A., & Bensimon, E. M. (2002). Socialization. In A. M. Martinez Aleman & K. A. Renn (Eds.), *Women in higher education: An encyclopedia* (pp. 431–435). Santa Barbara, CA: ABC-CLIO.
- Ward, P., Sutherland, S., Woods, M. L., Boyce, B. A., Goc Karp, G., Judd, M. R., . . . Sinclair, C. (2011). The doctorate in physical education teacher education in the 21st century: Contexts and challenges. *Journal of Teaching in Physical Education*, 30, 178–188. <https://doi.org/10.1123/jtpe.30.2.178>
- Warner, R. M. (2012). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Los Angeles, CA: Sage.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organizational Science*, 16, 409–421. <https://doi.org/10.1287/orsc.1050.0133>
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage?* San Francisco, CA: Jossey-Bass.
- Woods, M. L., Goc Karp, G., & Judd, M. R. (2011). Search chair and physical education teacher perceptions about filling PETE positions. *Journal of Teaching in Physical Education*, 30, 129–144. <https://doi.org/10.1123/jtpe.30.2.129>