




HEALTH-RELATED FITNESS

Physical Education Preservice Teachers' Perspectives on Teaching Health-Related Fitness

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Abstract

This aim of this study was to examine the relationship between preservice teachers' acculturation and their beliefs related to teaching health-related fitness (HRF) within the K–12 setting. Participants included three preservice physical education teachers enrolled in an HRF course. Inductive analysis determined the factors that contributed to participants' perceptions and conceptions of teaching HRF in physical education. Data analysis revealed three prominent themes regarding the preservice teachers' conceptions of teaching HRF: (a) HRF content belongs in physical education, (b) lacking pedagogical expertise, and (c) physical education teachers are made at home. This exploratory study suggests that preservice teachers learn their conceptions of HRF from a variety of environments, contexts, and leadership figures and that their experiences can be deeply personal. These personal beliefs regarding HRF manifest themselves in preservice teachers' understanding of how HRF content should be practiced in physical education. Physical education teacher education programs could provide more direct opportunities for preservice teachers to develop a more broad understanding of HRF content and field experiences allowing them chances at successful model implementation.

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Prospective teachers' beliefs and values influence the way they react to and receive content taught within physical education teacher education (PETE; Richards et al., 2014). When prospective physical educators have positive experiences in their own formative physical education classes, they are more likely to develop viewpoints of physical education that align with best practices (Richards et al., 2019). Evidence suggests intentionally structured PETE experiences that use reflective strategies to encourage reflection on previous experiences during the K–12 years can lead the modification of recruits' conceptions of physical education and pedagogical methods they employ (McMahon & MacPhail, 2007). Research also suggests PETE can help preservice teachers develop perspectives that emphasize physical activity and health promotion (Mordal-Moen & Green, 2014) and help them develop confidence in their teaching abilities.

The Health-Related Fitness Model

The health-related fitness (HRF) curriculum model is widely used in physical education to promote healthy behaviors and the lifelong adoption of a healthy lifestyle (Haerens et al., 2011). Most scholars agree that some general agreed-upon purposes of HRF in physical education are to promote a healthy and active lifestyle (Fairclough et al., 2002) by providing personally relevant, interesting, and enjoyable activities that positively influence adolescents to engage in these activities outside of school (Hassandra et al., 2003). Scholars have conceptualized HRF in a number of ways. One conceptual aim of HRF is to maximize physical activity during lessons and keep students active in moderate to vigorous physical activity (MVPA) for at least 50% of class time (Nelson et al., 2011; Sallis et al., 2012; Webster et al., 2015; Webster et al., 2016). Focusing solely on MVPA can have an immediate impact, but physical education that does not go beyond a focus on MVPA limits the possibility of learning a variety of skills (Dwyer et al., 1983).

Some have argued that HRF will be a by-product of teaching within the multiactivity framework in that pupils learn the skills and dispositions to participate in a lifetime of health-based activity (Webster et al., 2016). As a result, the effects of an HRF program in terms of health may be delayed. Those scholars have suggested that traditional team sports-based approaches to physical education

might not be ideal for teaching health-enhancing behaviors if physical educators are focused on making a meaningful contribution to health promotion and in the process assisting young people to be active and healthy adults (Haerens et al., 2011; Webster et al., 2016).

Some physical education scholars and health professionals view HRF as a response to the growing concern of a public health epidemic, believing physical education is the ideal setting for teaching youth the benefits of leading a healthy lifestyle (Dwyer et al., 1983). However, through the efforts of physical education alone, students have been unable to achieve recommended MVPA levels (Sallis & McKenzie, 1991). As a result, Webster et al. (2015) and Webster et al. (2016) have argued that the goals of both of these first two groups might be best achieved if the physical education teacher acts as a coordinator for a comprehensive school physical activity program (CSPAP). Comprehensive school physical activity promotion programs seek to engage students in physical activity, not only within compulsory physical education but also throughout the school day (Webster et al., 2015; Webster et al., 2016).

Theoretical Framework

The theoretical lens that guided data collection and analysis was the occupational socialization theory (Lawson, 1983a, 1983b; Templin, 1979). Occupational socialization theory examines the ways in which individuals are recruited, trained, and socialized into the role of physical educator. This theory focuses on how the beliefs and values with which preservice teachers enter PETE programs influence their reception and implementation of the knowledge and skills presented to them throughout their teacher training and into their job placement (Richards et al., 2014).

Socialization phases are often represented on a time-oriented continuum (Richards et al., 2014). However, socialization is an ongoing process, and individuals are not confined to experiencing these phases in lock-step order. Nevertheless, a three-phase approach has typically been adopted in the literature (Richards et al., 2014). The first phase, *acculturation*, represents the time when recruits learn

about the profession from teachers, coaches, and other significant individuals before entering a teacher education program (Richards et al., 2019). The second phase, *professional socialization*, refers to the time when future teachers are enrolled in a teacher certification program at a college or university. The third phase, *organizational socialization*, is the time when individuals assume the role of physical educator (Richards et al., 2014).

This study focused on the first phase of socialization, acculturation. During this time, prospective recruits engage in an apprenticeship of observation (Lortie, 1975) whereby they develop initial understandings of what it means to be a physical education teacher through interactions with teachers, coaches, family members, and other socializing agents. Through this process, they develop subjective theories (Grotjahn, 1991) or personal understandings of teaching physical education. Some evidence indicates that acculturation is the most potent type of socialization experienced by physical education teachers (Curtner-Smith et al., 2008) and can be more powerful than formal PETE programs (Zeichner & Gore, 1990).

When introducing the potential existence of a fitness orientation in recruits, Richards and Padaruth (2017), hypothesized that acculturative experiences in recruits' lives such as participation in sports, physical activity, and "changes in social culture related to physical activity and fitness" (p. 43) may play a role in their motivation for pursuing a career in physical education and their beliefs surrounding the purpose of physical education. However, little is known about preservice teachers' beliefs regarding teaching HRF and the impact of these beliefs on the practice of teaching physical education. Therefore, the purpose of this study was to examine and describe the relationship between the preservice teachers' acculturation and their beliefs related to teaching HRF. Specifically, the research questions were (a) What factors influence the preservice teachers' beliefs about teaching HRF in the K–12 setting? (b) What components of HRF do preservice teachers believe should be taught in the K–12 setting? and (c) How do preservice teachers believe these components should be taught?

Method

Participants and Setting

The participants in this exploratory study were John, David, and Mary (pseudonyms). Participants were three preservice teachers enrolled in their first year of a PETE program at a large research-oriented university in the southeastern United States. A small number of participants were chosen to enable us to provide a detailed analysis.

The three participants in this study were chosen due to their unique background and experiences related to health and physical activity. In addition, participants were chosen based on their enthusiasm toward HRF and having demonstrated eagerness toward achieving high MVPA during early field experiences. The preservice teachers had not taken specific HRF-focused coursework during their university education, but they were enrolled in PETE coursework concurrent with the time of the study. The main topics covered in their PETE coursework included, but were not limited to, traditional pedagogies including the multiactivity model, models-based practices (Metzler, 2005), classroom management, and assessments such as the Fitnessgram.

John, a 21-year-old African American male who had engaged in a lifetime of physical activity, was a college football player. John did not participate in high school physical education, as his involvement in athletics exempted him from participation. Most of his physical activity knowledge, sports nutrition knowledge, and exercise knowledge came from interactions with former coaches.

David was a 21-year-old Caucasian male who struggled with obesity prior to the time of the study. David, who is 5'10", successfully brought his high school weight of over 300 pounds down to 170 pounds. While David participated in high school physical education, he insists his weight loss was completed without the help of his parental or school influences and that his health practices were mainly self-taught.

Mary was a 20-year-old Caucasian female who did not participate in high school physical education, as her involvement in competitive gymnastics replaced the otherwise required physical education credit. Like David, Mary did not credit her physical educa-

tion teachers as being the sources of knowledge regarding her health and fitness knowledge; rather, she adopted the knowledge and health behaviors of her mother—sporadically engaging in temporary exercise patterns and highly inconsistent dieting.

Data Collection

Each participant was formally interviewed once for a period of approximately 3 hr each. Interviews focused on participants' acculturation and perspectives on teaching HRF. For example, participants were asked to look back on their physical activity patterns as a child and student in physical education classes, to describe their sources of health information from childhood, and to describe their perceived responsibility to cover HRF content as a future physical education teacher. The interview script for all three participants was identical. However, the protocol allowed for multiple prompts that allowed us to conduct in-depth conversations with each participant. All three interviews were transcribed verbatim. Prior to the interviews commencing, preservice teachers were assigned fictitious names to protect their identity. In addition, preservice teachers signed a consent form in congruence with the university's human subjects research policy.

Data Analysis

Analysis involved the review of raw data for overall and repeat themes from responses to the interview questions. We used inductive analysis on the interview transcripts to determine the factors that contributed to participants' perceptions and conceptions of teaching HRF in physical education. Using constant comparative analysis (Goetz & LeCompte, 1981), we looked for recurrent themes or regularities that became categories for focus throughout the collection and analysis. Multiple techniques that enhance credibility, transferability, and dependability were employed to ensure methodological rigor, thus establishing trustworthiness: (a) interviewer memoing after interviews and throughout the data analysis process to provide additional insights to data meaning; (b) checking data sources for consistency to locate negative cases that could challenge emerging themes; and (c) member checking, which involved asking participants to corroborate our interpretation of the participants' responses.

Results

Data analysis revealed three prominent themes projected from the data regarding the preservice teachers' conceptions of teaching HRF: (a) HRF content belongs in physical education, (b) lacking pedagogical expertise, and (c) physical education teachers are made at home.

Health-Related Fitness Content Belongs in Physical Education

The preservice teachers in this study had high congruence with one another that HRF is a natural fit in physical education. Furthermore, they also made similar claims regarding what concepts should be covered in an HRF unit. Topics and subjects believed to be of highest priority included nutrition, exercise, fun with exercise, variety of activities, and planning for immediate health and fitness action as well as future action.

Each participant mentioned promoting “lifelong” activity in their students. This major aim of physical education and the HRF model is naturally embodied by the principles of lifelong health, and preservice teachers made a clear connection between the two. Each preservice teacher also emphasized illustrating to their students the significance of *why* it is important to care about HRF concepts and linking *the why to the how* for effectiveness. John stated,

A lot of people don't seem to know why HRF is important. That's why we still see a lot of obesity and illness and diseases that are curable through health and exercise . . . if all we teach [children] is the *how* and the *where*, but not the *why*, it's a waste of time.

It was clear that the preservice teachers regarded physical educators as primarily responsible for teaching HRF content to children. David, who has struggled with obesity in his lifetime with virtually no help from his parental or school influences, was asked if he thought the burden of responsibility of teaching HRF concepts fell on the physical education teacher. He responded, “Yeah I do. Sure I was self-taught, but this is easier if the [physical education] teacher is an expert and they can guide you . . . I mean, who else in a school has the job title?”

Lacking Pedagogical Expertise

The preservice teacher participants in this study were optimistic about being able to deliver quality HRF in physical education, but they lacked the sophistication of physical education pedagogy to express how they would achieve such goals.

In struggling to provide specific answers to the question, “How will you teach HRF?” all three preservice teachers emphasized they would employ generally traditional pedagogies to teaching such as the multiactivity model but would assess children using cognitive assessments as a primary focus rather than psychomotor or fitness-based assessments such as the Fitnessgram. Generally, their rationale for selecting cognitive assessments was claimed to be in an effort to recognize “children’s individual differences” and to always “bring the content back to the benefits of lifelong physical activity.”

As the preservice teachers had no university coursework in HRF, understandably they did not provide perfectly confident answers to questions regarding the pedagogies they would employ while teaching HRF content. In fact, when directly asked how they plan to teach their desired HRF concepts, Mary simply responded, “I don’t know.” Through follow-up prompts, she provided a more thoughtful answer about how she may relate nutritional concepts to her students: “I’d use the resources of the school like the Home Economics room so that [students] could cook healthy meals like I’ve talked about [as an important HRF topic].” Her suggestion to engage other sources of health knowledge in efforts to enhance health behaviors is an advanced approach, in line with proponents of CSPAP (Webster et al., 2015; Webster et al., 2016). However, her initial response is representative of the greater theme in that, thus far, their professional socialization has not adequately prepared them to answer specifically what pedagogical approaches they will take to meet their objectives for their students. For PETE programming to be effective in providing the tools necessary for preservice teachers to teach in line with best practices, opportunities to fully develop multiple conceptions of pedagogy must be introduced early and often during PETE programming. Until that happens, acculturation experiences will continue to provide the sources of knowledge upon which physical educators will practice.

Physical Education Teachers Are Made at Home

In line with the suggestions of occupational socialization theory scholars (Curtner-Smith et al., 2008), preservice teachers have been strongly influenced by their home environments, and those influences lead to their future practice of teaching physical education. According to the preservice teachers, parents and/or older siblings provided the source of HRF knowledge and health behavior inspiration. Perhaps concerning, participants' former physical education teachers were described as poor objects of observation from which to develop desirable subjective theories regarding the role of the physical educator in teaching and promoting healthy behaviors and lifelong practices. All three preservice teachers described their physical education experiences as "weak" or "without focus." They claimed that a variety of movement opportunities, cooperative tasks rather than competitive tasks, and fewer team sports would have more likely led to a better overall experience and/or a more focused HRF learning opportunities. Furthermore, all three preservice teachers indicated all their physical education teachers were former or current coaches. These teacher/coaches favored the athletes. Athletes received more focused instruction and were more encouraged to participate, be active, and be healthy. For other students, the teacher/coaches "rolled out the ball" and did not emphasize any health-enhancing content (or any other valuable content).

Mary mirrored her mother's health behavior practices of exercising "in waves" and dieting inconsistently. She is the clearest example of relying on home support and family culture to shape her beliefs and practices of HRF, but her beliefs and personal practices do not lend themselves to broadening her conception of teaching physical education or HRF content. Admittedly, Mary claimed she did not have well-thought-out ideas about how she will teach physical education or HRF. Optimistically, she recognized that her acculturation experiences as a K-12 physical education student were not ideal, and she is motivated to provide a better experience for the children in her care than her physical education teachers did for her. Mary stated at the conclusion of her interview that she is hopeful to receive instruction in her upcoming professional socialization (i.e., field experiences and methods courses) on how to approach teaching HRF content, because she recognizes its importance.

John has only engaged in physical activity prescribed, instructed, and supervised by coaches. This likely impacted his conception of the role of the physical education teacher in teaching HRF content to students. He claimed that it is a key responsibility of the physical educator to provide students with HRF knowledge, but he had no concrete ideas of how to do so other than weight room training, field conditioning, and sports nutrition programs he encountered as an athlete under the direction of a coaching staff motivated to win, not to educate. He did not possess the ability to convert his expansive HRF knowledge and training principles into K–12 pedagogies. This could be attributed to all the HRF-related decision making (i.e., exercise programs, practice times, meal plans) being made for him. In this sense, the lack of health behavior autonomy has limited his perception of HRF to only what he has personally experienced during acculturation. For John, content and methods emphasizing HRF provided within PETE programming could expand his viewpoint of the topic and provide him with methods and practices relating it to K–12 children in physical education, not sports athletics.

David, with some help from older siblings, was mainly self-taught in the area of HRF. During the interview, he described himself as “addicted to exercise.” He mentioned that he “stays away from unhealthy food at all costs” and “[doesn’t] allow anything sweet or else I workout double that day.” He also mentioned that he has a looming fear of returning to his former 300+ pound self. Perhaps, if he had received more complete instruction and attention from a trained physical educator about health, fitness, and holistic approaches to wellness he would have a more balanced mindset to his diet and lifestyle. When asked if there would ever be a condition under which eating a chocolate cake would be healthy, he responded, “No. Never.” When asked a follow-up question phrased as “Even if you ate that cake with your grandmother after you baked it together from an old family recipe, while she told you about her time growing up and raising your mother/father? Isn’t that, in a way, a broadly ‘*healthy experience*?’” He responded with a simple “No. Cake will never be healthy.” Many health professional scholars prescribe to the belief that being healthy extends far beyond just physical activity and what one eats (Minkler, 1999). David’s acculturative experiences regarding HRF left him with a narrow viewpoint of *health*, and he may

benefit greatly from a PETE program that does more to emphasize holistic conceptions of health and wellness and how to apply pedagogies toward that end for future generations. David's acculturation experiences in physical education class did not equip him with sophisticated knowledge of HRF or how to teach it. In concluding his interview, David remarked, "It's kind of a shame I just heard about this [HRF] model . . . 'cause it kind of seems like that's what physical education is all about."

Discussion

This exploratory study suggests that preservice teachers learn their conceptions of HRF from a variety of different environments, contexts, and leadership figures and that their experiences can be deeply personal. These personal beliefs regarding HRF manifest themselves in preservice teachers' understanding of how HRF content should be practiced in physical education. Additionally, the participants expressed some level of ignorance regarding the model's complexity, implementation, and pedagogies required for best practice. Physical education teacher education programs could provide more direct opportunities for preservice teachers to develop a more broad understanding of HRF content and field experiences offering them opportunities for successful model implementation. This gap in content knowledge could be filled by university PETE programs.

Comprehensive school physical activity promotion programs could be an addition to PETE programs in response to the need to prepare preservice teachers to meet many health-related challenges in their schools. Recall Mary's response to the questions about how she may relate nutritional concepts to her students—by involving other resources and experts in nutritional health such as a home economics instructor. Without recognizing it, she alluded to a highly recommended method for increasing physical activity and healthy behaviors of children in schools—CSPAP. Further, she suggested HRF adoption is a "combined effort on the part of the school"—a sentiment echoed by proponents of CSPAP (Webster et al., 2015). To be successful, CSPAP must contain certain components in its implementation. For example, achieving student MVPA is a main focus, physical activity is pursued throughout the school day, before and/or after school and at recess, a full staff buy-in must occur, and family and community must be engaged. It would be difficult

for the CSPAP champion to achieve success if any one element is missing from the program. If physical educators are to embrace the role of CSPAP champion, they must receive training in their PETE professionalization (Webster et al., 2015). Many PETE scholars have claimed preservice teachers do not receive adequate training in addressing/or promoting MVPA (McKenzie, 2007). Webster et al. (2016) recommended that preservice teachers and physical education teachers increase their knowledge of health and fitness content (including related knowledge in nutrition and/or nursing) beyond sport and physical education and increase their knowledge in physical activity promotion. In addition to receiving more training in PETE, Bulger and Housner (2009) recommended future physical educators seek certifications outside of physical education in related areas of health and fitness (e.g., personal training certifications) and physical activity promotion. Successfully preparing physical education teachers to disseminate HRF knowledge to schools and students could demarginalize physical education, thus raising the status of the field. If nothing else, it may provide the opportunity for a struggling child to receive the health and wellness guidance they are not getting elsewhere.

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