

METHODOLOGY

Lifetime Participation Methodologies Implemented in Physical Education

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Abstract

Early experiences in physical education (PE) either encourage or repress lifelong participation in physical activity (PA). PE programs supportive of lifelong participation are grounded in self-determination theory, achievement goal theory, and National Standards for PE and have PE teachers who overcome barriers by integrating the theories and standards. The purpose of this study was to educate PE teachers on lifetime participation methodologies and to investigate their perception and integration of these practices. The participants included eight PE teachers in Mississippi who were interviewed about their perceptions and levels of integration. Data analysis revealed themes indicating that teachers integrate a moderate level of lifetime participation methodologies in PE. The majority of the participants agreed lifetime participation methodologies were worthy of integration; however, there were a few contradictions in the occasional perceptions that the barriers were too powerful to overcome or coaching duties took priority.

Physical activity (PA) declines dramatically from childhood (6- to 11-year-olds) to adulthood (20+-year-olds) in the United States (Troiano et al., 2008). This decline in PA cultivates numerous health-related problems, yet 70% of youth and 80% of adults in America do not meet the recommended daily dose of PA (Centers for Disease

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Control and Prevention, 2015a, 2015b). It is essential that health and physical educators encourage a reversal of this decline while teaching the PA health benefits. PA is the leading prevention of 35 chronic conditions, including obesity, type 2 diabetes, coronary heart disease, stroke, hypertension, rheumatoid arthritis, osteoporosis, three types of cancer, bone fractures, depression, and anxiety (Booth, Roberts, & Laya, 2012). Nevertheless, physical education (PE) is fundamental to the prevention of chronic conditions related to a lack of PA, providing support for motor skill development and PA opportunities.

Early experiences in PE can shape lifelong participation in PA (Ennis, 2010, 2017; Esslinger, Pyle, & Hey, 2014; Green, 2014; Kirk, 2005). Children who were physically active during school years were more likely to continue physical activity into adulthood (Tammelin et al., 2014). Lifetime participation results from PE teachers who intentionally and purposefully implement methodologies that nurture and motivate students (Ennis, 2017). However, PE programs have also been reported to be ineffective in promoting healthy lifestyles (Harris, 2014). Subsequently, PE teachers need information on promoting lifetime participation in PA to support healthy lifestyles. Therefore, the purpose of this study was to educate PE teachers on lifetime participation methodologies and to investigate their perception and implementation of these practices.

For this study, a lifetime participation model (Table 1) that simplifies the methodologies leading to lifetime participation in PA was prepared. Lifetime participation methodologies do not include programming a PE class under the public health approach (Ennis, 2017), focusing on target heart rate, exercise prescription, nor conditioning. The lifetime participation model creates a PE class that implements motivational and supportive aspects of achievement goal theory (Nicholls, 1989), self-determination theory (Deci & Ryan, 1985), and the National Standards for K–12 PE, and helps educators to overcome barriers that may prevent the use of the theories and standards.

Achievement goal theory (Nicholls, 1989) grounds the first three principles in the lifetime participation model: increase motivation, decrease competition, and increase choice and cooperation. Increasing motivation is essential for students to be physically active for a lifetime. Achievement goal theory (Nicholls, 1989) explains

Table 1*The Lifetime Participation Model*

Foundation of teaching methodology	Teaching methodology
Achievement Goal Theory	Increase motivation Decrease competition Increase choice and cooperation
Self-Determination Theory	Increase perceived competence Make PE enjoyable
National Standards for K-12 PE	Physically competent teacher Health knowledge Overcome barriers

the effects of goal orientations and motivational climates on motivation to learn. Goal orientations are either ego/performance, when students strive to be better than classmates for a social comparison, or task/learning, when students strive to be better than themselves. For example, students who participate in sports for social recognition are ego oriented and students who participate in sports for improvement are task oriented. Task-oriented students have higher intrinsic motivation and are more likely to engage in PA as adults (Jaakkola, John Wang, Soini, & Liukkonen, 2015; Standage, Duda, & Ntoumanis, 2003), while ego-oriented students focus less on individual effort and are likely to quit PA once they fail to win and they tend to blame outside factors (Ennis, 2010). Increasing task oriented motivation is crucial, leading toward lifetime participation in PA. Since motivation to participate in PA drops with age (Ball & Bice, 2015; Molanorouzi, Khoo, & Morris, 2015), it is especially important for teachers to enhance motivation in PE.

Motivation is not solely up to the students, instead teachers can create an atmosphere/class climate that nurtures motivation (Baric, Vlastic, & Cecic Erpic, 2014; Ntoumanis, 2001; Standage et al., 2003). Class climates are either mastery, which encourage hard work, learning, cooperation, task mastery, and student involvement in the learning process, or performance, which focus on competition, punishing mistakes, and comparing student to each other (Ames, 1992;

Nicholls, 1989). Mastery climates support lifetime participation in PA, while performance climates are contrary.

Decreasing performance climates (decreasing competition and comparisons) would be advantageous toward lifetime participation in PA. Comparing students to one another has created negative self-perceptions and decreased motivation to participate (Taylor, Spray, & Pearson, 2014). Comparison and competition activities (e.g., dodge ball and climb-the-rope) have continuously been on the “Hall of Shame” list of activities that should be avoided in PE (Williams, 2015). Competition is not awful, but children have reported dissatisfaction with PE that focuses on repetitive skill-based activities that lead to an overemphasized competitive game (Aggerholm, Standal, & Hordvik, 2018; Ennis, 2010; Larouche & Shephard, 2015). On the contrary, Bernstein, Phillips, and Silverman (2011) revealed enjoyment in competitive activities in high-, medium-, and low-skilled students. However, students were not developing the skills necessary to compete and reported waiting, standing around, and lack of opportunity to succeed when participating in competitive games (Bernstein et al., 2011). To produce lifetime participation in PA, activities in PE should include the opposite—cooperation and small group activities that can be completed in adulthood.

Creating a mastery climate (increasing choice and cooperation) would be beneficial toward lifetime participation. Students have reported enjoyment when completing a task with cooperation in small groups with greater choice, flexibility, and more emphasis on participation as opposed to performance and physicality (Jaakkola et al., 2015; Larouche & Shephard, 2015). Mastery climates help students reach lifetime participation in PA by encouraging success, increasing perceived competence, and creating task-oriented motivation (Ntoumanis, 2001). To allow students to be physically active in the future, Standage et al. (2003) recommended that PE teachers promote a mastery-focused class structure that allows students to become more self-determined.

Self-determination theory (Deci & Ryan, 1985, 2000) grounds the next two principles in the lifetime participation model: increasing perceived competence and making PE enjoyable. Self-determination theory states self-determination is created when three basic needs are met: autonomy, relatedness, and competence (Deci & Ryan, 2000). Supporting these basic needs facilitates intrinsic motivation.

Individuals who are intrinsically motivated participate in PA for enjoyment, not for awards or social recognition, like those who are extrinsically motivated (Bénabou & Tirole, 2003). Autonomy is sensing control over outcomes, relatedness is experiencing social belonging, and competence is feeling effective and successful. Having competence in one's skill ability is essential for lifetime participation in PA (Ennis, 2017; Fletcher, Rasmussen, & Silverman, 2016; Stodden, Langendorfer, & Robertson, 2009). Competence may be the most important basic need for lifetime participation. Taylor, Ntoumanis, Standage, and Spray (2010) revealed perceived competence and self-efficacy were consistently predictors of lifetime participation intentions. The findings highlight the importance in PE of focusing on the need for competence while not sacrificing the needs of autonomy or relatedness (Taylor et al., 2010). Increasing perceived competence is essential for a person to being intrinsically motivated to participate in PA for a lifetime.

Students who feel competent in their motor skills enjoy PE more than do those who are less competent (Baric, Vlastic, & Cecic Erpic, 2014; Jaakkola et al., 2015). In an examination of the relationships among perceived competence, enjoyment, and interest in PE and goal orientation, children with higher perceived competence had significantly higher enjoyment levels in PE and were more task oriented (Baric et al., 2014). Consequently, enjoyment in PE is a by-product of increasing perceived competence and task-oriented motivation. Furthermore, enjoyment and effort in PE are greater in a class that focuses on motivation and autonomy than in a class without these affective outcomes (Wallhead, Garn, & Vidoni, 2014). Enjoyment in PE during school years has led to adult engagement in PA (Ladwig, Ekkekakis, & Vazou, 2018). Ladwig et al. (2018) retrospectively examined PE enjoyment levels from 1,028 adults in the United States. Attitude about PA, intention for PA, and engagement in moderate and vigorous PA were significantly and positively associated with enjoyment in PE and significant and negative associations were found with sedentary behaviors on weekdays and weekends. Hence, enjoyment in PE could lead to lifetime participation in PA, which makes it crucial for PE teachers to make PE enjoyable for all students.

The National Standards for K–12 PE provide teachers with the foundational skill competencies expected at each grade level. Not

only do the standards guide curriculum content, but they also support physical competence and teaching health knowledge, two principles in the lifetime participation model. Being physically competent and having the knowledge and skills necessary to demonstrate competent movement performances and health-enhancing fitness are mandatory for those in PE teacher education (PETE) programs according to SHAPE America's (2008) PETE National Standards and Guidelines. While PETE students have been more likely to exercise, weight lift, and diet compared to other majors (Krezeminska-Laudanska, 2014; Yager, Gray, Curry, & McLean, 2017), PE teachers may not be meeting the recommended PA levels (Esslinger et al., 2014) or be physically competent enough to complete the FitnessGram test (Hunt et al., 2017). Physical competence is vital for PE teachers because of the lasting effect it has on students' perception and learning (Conlin, 2014; Dean, Adams, & Comeau, 2005; Melville & Maddalozzo, 1988; Thomson, 1996). For example, Conlin (2014) examined middle school students' perception of a healthy role model within PE teachers. Active PE teachers who demonstrate skills and participate in the warm-ups and games were perceived as healthy role models, while the spectator PE teachers were rarely seen as healthy role models. Perceptions of elementary students were also affected by a teacher's physical competence. Elementary students revealed that a credible physical educator "looks like one" in motor skill competencies and physical appearance (Ramos & McCullick, 2015). Subsequently, it is important for PE teachers to be active, skilled, and healthy to be viewed as credible and a healthy role model for lifetime participation in PA. Since PE teachers' physical appearance and fitness are related to their motor skill competencies (Webster et al., 2014), both are mutually necessary to support learning and adherence in PE. It is imperative for PE teachers to be physically competent in motor skills and health to increase teaching effectiveness leading to lifetime participation in PA, while exhibiting adherence to PE content, such as healthy behaviors and health knowledge.

Teaching health knowledge and the meaning of tasks is essential in promoting lifetime participation in PA (Ennis, 2017). Children must understand the connection between their health and practicing movements (Tufan & Macovei, 2015). For example, with 660 eighth-grade students, PA/fitness knowledge significantly predicted PA

participation after school (Chen, Liu, & Schaben, 2017). The effects of health knowledge increase concurrent and future PA participation. DiLorenzo, Stucky-Ropp, Vander Wal, and Gotham (1998) examined social learning and PA data in elementary children across 2 years in two phases. The only predictor of PA was enjoyment during Phase 1; however, exercise knowledge was the only predictor of boys' PA after the 2-year period (DiLorenzo et al., 1998). The findings suggest teaching health and exercise knowledge is supportive of lifetime participation. According to SHAPE America's (2013) national standards for PE, every student should have the knowledge and skills for a lifetime of PA and fitness. Health knowledge includes health, fitness, nutrition, basic anatomy, and movement terms (Buskist, Reilly, Walker, & Bourke, 2016). Once health knowledge is engraved, students will be educated and prepared to excel as physically active adults. Unfortunately, even if students achieve health knowledge and skills, barriers may still prevent lifetime participation in PA.

Barriers in PE toward lifetime participation are inevitable. Barriers are classified as institutional, teacher related, or student related while being different depending on the circumstances (Hills, Dengal, & Lubans, 2015; Jenkinson & Benson, 2010; Mehmeti, 2015a, 2015b; Middlemass et al., 2014; Moore et al., 2010; Sherman, Tran, & Alves, 2010). Institutional barriers include equipment, facilities, overcrowding, time allocation, class size, and low social status in PE. Teacher-related barriers include lack of confidence, ability, interest, qualifications, expertise, attitude, and curriculum content. Barriers that are student related include peer pressure, priorities, past experiences, and home life.

The influence of PE toward lifetime participation in PA may extend beyond class content or the teacher. Predispositions toward sport, outside influences, social background, disabilities, and gender also influence a person's participation in PA for a lifetime (Kirk, 2005). The predispositions can develop into barriers that prevent lifetime participation in PA. Young people can start or stop participating in a sport and PA because of a PE program, but Birchwood, Roberts, and Pollock (2008) argued that predispositions from earlier years ultimately determine lifetime participation. Even though home life and predilections could dictate lifetime participation,

overcoming barriers to the best of a teacher's ability is vital in the lifetime participation model.

The purpose of the lifetime participation model is to increase motivation, decrease competition, increase choice and cooperation, and increase perceived competence to make PE enjoyable for students and to create physically competent teachers who teach health knowledge and can overcome barriers that hinder the integration of the model. The model was derived from self-determination theory, achievement goal theory, the National Standards for K–12 PE, and barriers that prevent the integration of the theories and standards. The purpose of this study was to educate PE teachers on lifetime participation methodologies and to investigate their perception and implementation of these practices.

Method

Participants

Recruitment began with contacting superintendents within 60 miles of the researcher's university (12 Mississippi school districts). Within the five approved districts, eight principals agreed to take part. Interview times were then scheduled during a nonconflicting time. One participant was lost due to unavailability. The final sample size included eight physical educators (seven men, one woman, $M_{\text{age}} = 40.3$ years, range: 28–53 years) from seven schools in three districts in Mississippi. The PE teachers represented a diverse level of experience ($M_{\text{years}} = 9.9$ years, range: 2–20 years) and elementary ($n = 3$), middle ($n = 2$), and high ($n = 3$) schools.

Materials and Procedures

Following institutional review board approval, the researcher contacted PE teachers within approved schools and invited them to participate in the study. Upon the teachers' acceptance to participate and returning informed consents, the researcher met participants individually at their school. Interviews took place in a quiet space selected by the participant such as an office, empty gym, or a field house. Before the interview was initiated, the researcher explained

the purpose of the study was to investigate what lifetime participation methodologies are being used in PE classes today. The researcher gave a brief disclosure of personal information, including PE teaching experience and the study being a part of a master's degree requirement. Participants were given a written copy and discussed the lifetime participation model. The discussion about the lifetime participation model included the topics of increasing motivation, decreasing competition, increasing choice and cooperation, increasing perceived competence, making PE enjoyable, being a physically competent teacher, teaching health knowledge, and overcoming barriers. An audio-recorded interview followed the initial discussion with the researcher asking selected interview questions (Table 2) and participants disclosing their thoughts and use of the lifetime participation model. Interview questions were designed to assess PE teachers' perception and implementation of the lifetime participation model. Interview questions were based on a survey created by Benes, Finn, Sullivan, and Yan (2016). Benes et al. created the Movement Survey to examine teachers' perceptions and integration of movement in the classroom. The researcher modified the Movement Survey by replacing "movement in the classroom" with "lifetime participation model" to meet the purpose of the study.

The researcher designed the interviews to be semistructured to maintain consistency throughout the interviews while allowing for a more natural conversation. For example, all interviews started with the same question: Do you use aspects of the lifetime participation model in your classroom? Following questions were based on the participants' response. Not all of the questions were asked to each participant, because some volunteered similar information in a prior response. Likewise, participants may have been asked supplementary questions. Participants were also asked to give examples and to elaborate on the methodologies used in class so the researcher could gain a deeper understanding. However, all participants answered the open-ended questions regarding their use of the lifetime participation model, their understanding of the connection between the model and lifetime participation in PA, and the role of PE in increasing lifetime participation in PA.

Table 2

Questions From the Interviews

1. Do you use aspects of the lifetime participation model in your classroom?
 2. Do you think that teachers should integrate the lifetime participation model into the classroom? Why or why not?
 3. What practices does your school currently use to get children active during the school day?
 4. What is your understanding of the connections between lifetime activities and adult health?
 5. What do you think are the benefits of using the lifetime participation model in the classroom?
 6. Do you believe that lack of lifetime activities and physical activity in schools is a problem? Why or why not?
 7. What do you think are the barriers and/or challenges of using the lifetime participation model in the classroom?
 8. Do you think that schools should have a role in increasing students' physical activity levels outside of physical education and recess? Why or why not?
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Data Analyses

Transcriptions of the interviews were completed and each was examined in a three-part process for themes among the participants. The meaning of vocation and isolation of themes in the interview questions was determined through an approach by van Manen (1990). Van Manen created three-step method to uncover themes within text of lived experiences. The first step was to analyze the text as a whole and capture a phrase that summarizes the main significance. The second step was to select or highlight the phrases that seem to be essential or reveal a particular experience or idea. The final step was a line-by-line evaluation of every sentence to determine what it means or what the sentence reveals about the experience. This three-step method enabled the emergence of themes within the interviews as well as an accumulative premise. In this process, the researcher first read interview transcriptions and circled a phrase that summarized the interview. The researcher then focused on each interview question and highlighted a key phrase from each response.

Last, the researcher read each line to determine what participants revealed about their experiences or perceptions on implementing lifetime participation methods in PE. For organizational purposes, the researcher used colored highlighters to signify emerging themes. For example, pink highlights were areas of implementation and a positive perception of the model, green highlights were barriers preventing implementation of the model, purple highlights were non-integration or negative perceptions of the model, and yellow highlights were complaints or negative perceptions about other teachers/coaches.

The researcher established data trustworthiness by eliminating bias and aspects that could possibly influence the data, such as knowledge of the profession and participants. The teaching experience of the principal investigator contributed to initial perceptions; however, participant identifiers were eliminated in data analysis and in a peer debriefing following the interviews to limit these biases and allow for a fair data analysis.

Findings

Three major themes were pulled from the interviews including (a) approval and level of integration of the lifetime participation model in PA, (b) disapproval toward the coach mentality, and (c) barriers preventing integration of the lifetime participation model.

Integration and Approval

Each teacher discussed implementing aspects of the lifetime participation model in PE. Half of the participants claimed to make PE enjoyable for the students. This was portrayed by participants saying, “We try to increase motivation and try to make it more enjoyable, because obviously if the kids are not enjoying themselves, they’re not going to want to do anything,” “Definitely, we make it enjoyable,” “We try to make it enjoyable and also [give] the kids a choice,” and “What is important is to get them up and let the kids have fun.”

Various other areas of integration of the lifetime participation model were revealed by participants, but less frequently. Only one participant incorporated activities students can do for a lifetime, including “activities that they will play later on like at the beach.” Only one participant said health knowledge was integrated into the PE curriculum; the students “come in and sit on the floor and I’ll tell

everyone they have to tell me one thing that's healthy for you and then we'll go outside and play." Two participants decrease competition in PE by doing "different games that offer them more aspects than just competition" and "they have their personal goals . . . and it's not a competition thing." Likewise, two participants claimed to be physically competent, mentioning, "I am physically competent myself, I still workout, play with the kids, and participate in some of the games" and "I'm physically confident as a teacher and I can get out and demonstrate any of the activities."

Practically all of the participants confirmed their belief that integration of the lifetime participation model would benefit lifetime participation in PA of their student population. Participants stated a general favorability toward the model with some understanding of the connection to adult participation. Examples of participants perceiving the lifetime participation model include "Yes, because if you can do all of these things and get these students active and involved in PE, then as they grow older, because they enjoyed it so much, then they will want to continue," "Yes, I think each one of these [lifetime participation methodologies] would be helpful," "Yes, I do, I really do, I mean this is a simplified model and it's really well rounded," "Absolutely yes, I mean just looking at this model for the first time I would say yeah," "Definitely, whenever you reach a kid and they're enjoying doing something in the class, they are going to want to do it longer than 45 minutes," and "Doing this kind of stuff is important if you want to have people who are active for a lifetime." These quotes confirm a positive perception of the model leading to lifetime participation in PA.

While many perceived the lifetime participation model to be linked to lifetime participation, one participant felt the opposite: "Yeah, it would be great if a lot of people apply that when they got older, but I don't know if a lot of people do." This quote shows hopefulness toward the model yet an understanding of today's society. As far as nonintegration, it was only evident within the interviews from one participant, who claimed, "As far as choice, I would say we do not do much of that; pretty much what we say is what we do . . . we have more of a competition-oriented class." Following this response, the researcher asked the participant about students feeling discouraged to participate in PE from losing and the participant responded,

“Yeah, I could see where that connection could be, but, I mean, I’m a coach . . . like if you got your brains beat in every game that you play, yeah, I wouldn’t want to do that later in life either.” It was fascinating that the one participant who gave examples of nonintegration also highlighted the coaching role.

Disapproval of the Coach Mentality

The majority of participants mentioned that other teachers/coaches were not fulfilling their PE duties. Several quotes by the participants illustrate this finding: “Here in Mississippi the old attitude is just roll the ball out and the coach sits on his backside and the kids just do whatever,” “The boys play if the coach rolls the ball out there, and a lot of times it’s a coach of a sport and, you know, during class he’s probably planning his practice game plan for the next games,” “You’ll find teachers being specialist in the sports they coach, so when they have a regular PE class, they are trying to recruit kids to play their sport during class,” “I don’t think they integrate this model . . . A lot of the PE teaching jobs in the high school are tied with coaching jobs,” and “in high school, teachers see it like: I have them for one hour and what is easiest.” These quotes confirm PE teachers feel other teachers/coaches do not integrate the lifetime participation model or may not be accomplishing basic teaching duties.

Barriers Preventing Integration

The participants revealed overcrowding and/or funding being the main barriers that prevented or hindered their use of the lifetime participation model in PA. Overcrowding in the gym was a popular barrier mentioned by participants. Participants claimed, “Overcrowding is the big thing and a lot of times the focus is not on PE, you know, they might throw 60 students in there with two teachers and you know that’s hard,” “If I had 15 kids, I’m not going to just say let’s go play basketball or just go do this. We’re going to do organized and structured lessons and we’re going to use this formula. Some days we have competition, some days were going to do different things, but, you know, it’s hard to do that when you have 40,” “If one person is in there with 75 kids, you cannot expect them to have a structured functioning lesson,” and “We have to share the gym with seventh- and eighth-grade sports and drivers ed . . . and our basketball team has to practice in here also, so we have to share

a lot of space.” These quotes suggest there are too many students in the gym for teachers to integrate the lifetime participation model in PA. Overcrowding creates challenges in getting students motivated, moving, and organized. The simple solution to the overcrowding barriers would be to hire another PE teacher, but unfortunately the funds within the school or county are not always prominent. One participant said, “It has a lot to do with funding too, because you’re not necessarily going to have the money to say let’s go hire another PE teacher, sometimes they say we need to have another math teacher.”

The lack of funds was the most common barrier mentioned during the interviews. Over half of the participants assumed other schools had an equipment barrier but their school had sufficient resources. For instance, participants stated, “I am sure there are a lot of places that it is tough to get equipment, but we are pretty fortunate here,” “Some places do have limited resources, now we’re blessed here because, back in 2007, we got a \$75,000 grant,” “A lot of schools just don’t have the funds to make sure all of the equipment is up to date,” and “At the high school, I don’t know if they have a lot of PE equipment.” These quotes illustrate a perception of other programs not having adequate funds to integrate the lifetime participation model.

Others mentioned the growth in their PE program over the years with the little money that has been provided. One participant mentioned, “I used to have nothing, and now I have a bunch; so I know that is probably where you’re going to come into some problems with the high school and how they choose to spend their money, and that makes a huge difference on the program.” This quote demonstrates that teachers have a choice on how to spend the resources provided for PE, and this affects the quality of the program. The only participant who claimed to have minimal equipment also exposed the lack of appropriate spending, expressing, “We don’t have much and I’m not given any money per se, other than, like, a teacher credit card, which is teacher enhancement fund.” This quote suggests the funding may not necessarily go directly toward the purchase of PE equipment and depicts little interest from the teacher to overcome the equipment barrier.

A few participants discussed behaviors to overcome the barriers preventing integration of the lifetime participation model during

the interviews. PE teachers thought it was possible to integrate the lifetime participation model only

if you have staff that is willing to try hard and implement a model like this, and implement other things like that, then yeah, it works really well. But in some places they don't, in some places they are just trying to get through the day and let the kids do this or that.

Others agreed and claimed, "It's going to take someone that wants to do that, somebody who really cares" and "It just depends on if they want to be lazy and take the easy way, or you are going to have those that like to work a little harder." These quotes confirm PE teachers can overcome the barriers hindering integration of the lifetime participation model. Participants in the study believed integration of the model is possible under the circumstance of a PE teacher who is willing to overcome barriers and to work a little harder.

Discussion

This study examined teachers' perceptions about implementing the lifetime participation model to gain a better understanding of the extent of use of lifetime participation methodologies in PE. In conjunction with using lifetime participation methodologies, teachers in the study reported an understanding of the connection between integrating the model and lifetime participation. Teachers believed that lifetime participation methodologies should be implemented in PE to improve children's health. However, it was revealed that teachers/coaches portrayed a disapproval and nonintegration of the model. Participants reported barriers that were either overpowering or still hindered integration of the lifetime participation model, such as overcrowding and limited funds. While there was a moderate level of integration of lifetime participation methodologies, further implementation is contingent upon teachers' willingness to overcome the barriers and to focus their attention on strategies that lead to lifetime participation. The findings reveal a few teachers integrate aspects of achievement goal theory with student motivation, less competition, giving students a choice, and allowing cooperation activities. Many teachers also strive to make PE enjoyable, an aspect of self-determination theory. However, no teachers mentioned increasing

students' perceived competence, which is vital in self-determination theory. The components of the National Standards for K–12 PE of being physically competent and teaching health knowledge were moderately integrated.

The research reveals that teachers who want to overcome the barriers that inhibit integration will. The equipment barrier could be overcome with the proper inclination. Participants explained ways they conquered this barrier with grants, teacher funds, and donations of free equipment. To receive a grant or donations, teachers must go above their teaching duties to write the grant and ask for donations. Otherwise, teachers will continually face an equipment barrier and grumble about lack of equipment while not doing much to overcome this barrier.

Coaching duties suppressed the implementation of lifetime participation methodologies in PE. This was not surprising, since literature has suggested that teachers' behaviors coincide with lifetime participation methodologies with heightened classroom management, while coaches' behaviors lean away from these methodologies with an overemphasis on skillfulness and competition (Rupert & Bucshner, 1989). While narrowing the focus on skills and competition is essential in athletics, it is not in PE. Coaches are highly important figures and well regarded, but coaching duties may overrule and eliminate lifetime participation methodologies in PE. Several participants disclosed their concern of coaches during the interviews by illustrating coaches to “roll out the ball” or “sit on their backside” during PE. These behaviors support skill acquisition and affective behaviors that lead to lifetime participation in all students. The perceived coaching mentality was to emphasize the athletic team, not the enhancement or integration of the lifetime participation model. The coach is not seen as anti-lifelong participation, but as paying attention strictly to the coached sport, not to the average students. Students who do not fit the part or are not selected to play on the team miss their opportunity for PA and PE. This leads to unencouraged students who are sedentary while not learning about health or motor skills in PE.

It seems common that when fulfilling the dual role of coaching and teaching, the educator prioritizes one over the other. Jefferies (2005), a past president of SHAPE America, had an understanding

in the matter: “Successful teaching is less noticed, judged, or rewarded than successful coaching, it’s understandable that many teacher coaches chose to focus most of their energy on athletics” (p. 41). This research also confirmed teachers who fulfill the dual role prioritize coaching over teaching. The teachers showed a lack of concern toward lifetime participation and health status of general PE students. It is believed that PE teachers have a prime role in advocating lifetime participation in students. Teachers could directly influence children to become physically active for a lifetime upon understanding and implementing all of the aspects of the lifetime participation model.

This study had several limitations. The sample of participants was predominantly men with an unbalanced gender ratio of 8:1, which could have influenced the results. The unbalanced gender ratio was not representative of the gender balance of PE teachers across the United States. However, there are more male than female PE teachers in the United States (National Center for Education Statistics, 2015). Also, participants only represented three school districts in Mississippi; therefore, the generalizability is limited to PE teachers from Mississippi. Because participation depended on permission from superintendents and principals, this may have affected the results as compared to random sampling of PE teachers in the United States. The results depended on self-report, which could have misrepresented the methodologies being implemented in the participants’ class. Researchers in future studies could observe teaching episodes of, along with taking field notes describing aspects of, the lifetime participation model being implemented. It is recommended that future reports examine a larger sample size from various states with an equal gender balance for a more adequate representation of the implementation of lifetime participation methodologies in PE.

Subsequently, this study gained an in-depth description of the perceptions and implementation of lifetime participation methodologies in PE teachers in Mississippi. There is a need for more understanding between integrating lifetime participation methodologies and lifetime participation. Ennis (2017) proclaimed the need to test the effectiveness of PE programs that purposefully implement lifetime participation methodologies. Therefore, future studies should include a larger sample size with observations and a follow-up to examine the effectiveness of lifetime participation

methodologies. Physical educators have the responsibility to leave a healthy mind-set stamp on students' lives, be a positive and motivating role model, construct the ideal curriculum, and overcome barriers. Since barriers could overrule lifetime participation methodologies, there could be less transfer from PE to adult life. Administration and PE teachers should be provided with the knowledge, resources, and training necessary to implement in PE lifetime participation methodologies that motivate and support students to be physically active for a lifetime.

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