

MOTIVATIONAL CLIMATE CREATION, TEACHING STYLES USE, AND HEGEMONIC
MASCULINITY REINFORCEMENT IN SPORT EDUCATION

by

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A DISSERTATION

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ABSTRACT

This study's purpose was to compare Sport Education (SE) to the Multi-Activity (MA) model to determine if SE created a superior motivational climate, encouraged teachers to use more indirect teaching styles, and discover if SE supported or combatted Hegemonic Masculinity (HM). Achievement Goal Theory, Mosston's Spectrum Theory, and Connell's Theory of Hegemonic Masculinity underpinned this investigation. Quantitative and qualitative methods of data collection and analysis were utilized. The video data bank employed by Parker and Curtner-Smith (2005) of one male and one female Preservice Teacher (PT) in the southeastern United States teaching 10 MA and 10 SE units in an early field experience (EFE) was recoded with two systematic observation instruments, the Physical Education Climate Assessment Instrument (PECAI) and the Instrument for Identifying Teaching Styles (IFITS). The interpretive techniques of non-participant observation and extensive notetaking, document analysis, stimulated recall, formal and informal interviews were conducted with two additional PTs (also 1 male/1 female in the southeast), each teaching two units of SE during their student teaching. Descriptive statistics and lesson-by-lesson profiles were generated for PECAI and IFITS data. A chi-square test for independence and independent t-tests were employed to compare the motivational climate created and the different teaching styles employed in SE vs MA during the EFE. Analytic induction and constant comparison were applied to develop themes reinforcing or combatting HM during the two PTs' student teaching. No significant differences were found between the motivational climates created or teaching styles used in SE and MA during the EFE. HM was reinforced during the SE units of the PTs' student teaching. Possible reasons

for these findings could be the inexperience or prior socialization of the PTs leading to conservative deliveries of the SE model or the curricular scaffolding and pedagogies of SE that limit the motivational climates that can be created, the teaching styles that can be used, or the opportunities to contest HM. Future research should explore an interconnection of these topics and employ multiple methodologies and focus on multiple and more extensive units of SE with veteran teachers who possess a teaching orientation and more experience imparting well taught SE.

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CHAPTER I

A COMPARISON OF THE MOTIVATIONAL CLIMATES CREATED DURING MULTI-ACTIVITY INSTRUCTION AND SPORT EDUCATION

Abstract

Previous research suggested that Sport Education (SE) might be a superior curriculum model to Multi-Activity (MA) teaching because its pedagogies and structures led to the creation of a task-involving motivational climate. The purpose of this study was to describe and compare the objective motivational climates created by teachers within both the MA and SE models. Specific goals were to determine whether (a) different kinds of climates were actually created in the two models and (b) the climate created in SE was superior to that created in MA teaching. Participants were two preservice teachers (PTs) who turn-taught one 10-lesson MA unit and one 10-lesson SE unit during a middle school early field experience. The content of both units was soccer. Quantitative methods were employed to produce descriptive data for each unit and to make comparisons between units. Units were filmed and coded with the Physical Education Climate Assessment Instrument (PECAI), an event recording instrument which determines the degree to which a physical education lesson's climate is task-involving, ego-involving, or neutral. Descriptive data were generated for individual lessons within and across each unit. Lesson-by-lesson profiles of climate production within each unit were plotted. A chi-square test for independence was employed to determine if there were differences in the climates created within the units. Results indicated that similar climates were created within both the MA and SE units and that these climates were strongly ego-involving. Discussion focused on possible reasons for the SE climate being ego-involving and whether or not this may have negated the positive effects of the model. Possible reasons for the SE climate being ego-involving were an overemphasis of the competitive elements of the model, or the fact that it might be impossible to create authentic sporting experiences without also creating an

ego-involving climate. Successful SE, therefore, may be more to do with its authenticity, excitement, and curricular scaffolding than its climate.

Key Words: Motivational climate, sport education, multi-activity teaching

A Comparison of the Motivational Climates Created During Multi-Activity Instruction and Sport Education

Sport Education (SE) (Siedentop, Hastie, & van der Mars, 2004) is arguably the most fashionable and exciting physical education model of the early 21st century. Developed from observations of high quality youth sport and the teacher effectiveness literature concerning management, SE is consistent with other instructional approaches including pupil-centered learning, games for understanding, cooperative learning, authentic assessment, constructivism, and outcome-based education (Siedentop, 2002). The objectives of the model are to mirror the best elements of authentic sport and to produce persons who are *competent, literate, and enthusiastic* (Siedentop et al., 2004).

A SE season is usually lengthier than traditional units of instruction and developed from a framework of six characteristics. *Seasons* are designed so that pupils develop a sense of *affiliation*, participate in *formal competition*, and keep *extensive records*. Moreover, teachers strive to create an *atmosphere of festivity* in large part by working towards a *culminating event*. In addition, during the course of a season teachers aim to give their pupils as much ownership and responsibility as possible. This is achieved by shifting from the use of direct to indirect pedagogies and requiring students to take on a plethora of sport-related roles.

Reviews of the research of SE provided by Curtner-Smith and Sofo (2004), Wallhead and O'Sullivan (2005) and Kinchin (2006) indicated that the overall response by teachers and pupils to SE has been positive. For example, pupils of all abilities and both genders especially enjoy the opportunity to socialize and engage in more decision making than usual. They also seem to

appreciate the opportunity to engage in administration and taking on roles other than player. Team membership appears to be highly valued and, consequently, effort, participation, cooperation, skill, and tactical and strategic knowledge and execution levels are relatively high.

Preservice and inservice teachers have also indicated that they enjoy using the model.

Preservice teachers (PTs) it seems, often favor the model because it is compatible with key elements of their occupational socialization. In-service teachers have also expressed enthusiasm for the model and as a result have taught longer units, used more of what Mosston and Ashworth (2008) termed production styles of teaching, and employed more authentic modes of assessment. Moreover, they have more readily engaged in school politics and believed that their pupils gain more from the model, particularly in the affective domain.

Comparison of Sport Education and Traditional Forms of Games Teaching

Traditionally, high class games teaching has usually involved teachers employing mostly direct instruction and developing units and lessons in which pupils engage in increasingly complex skill drills, practices, and small-sided and conditioned games (Curtner-Smith, 2001). This type of instruction has commonly been referred to as multi-activity (MA) instruction (Siedentop, Mand, & Taggart, 1986). A theoretical comparison between the MA and SE models suggests that SE has an advantage because it is more culturally relevant (Alexander & Luckman, 2001; Alexander, Taggart, & Thorpe., 1996). As noted by Kirk and Almond (1999), in Lave and Wenger's (1991) terms, SE encourages greater "legitimate peripheral participation" in authentic sporting contexts and is, therefore, a prime example of "situated learning."

In addition, other researchers have noted that SE has an advantage because, theoretically, it is less demanding on teachers than MA teaching. This is because, within SE, teachers move to the periphery of the action as the pupils assume more responsibility. MA teaching, on the other hand, is a teacher-driven model and so involves the teacher being in the center of the action (Alexander et

al., 1996). Moreover, researchers who have examined SE and MA instruction using a task structures or ecological perspective (Carlson & Hastie, 1997; Hastie, 2003; Hastie & Pickwell, 1996; Hastie & Siedentop, 1999; Sinelnikov & Hastie, 2008) have noted that the purpose of the teacher's managerial system in MA teaching is, in part, to dampen the pupil social system so as to allow the instructional system to flourish. This kind of management requires a constant and significant effort from the teacher. In contrast, the SE model tends to accommodate and even encourage the pupil social system without adversely influencing the instructional system or learning outcomes.

Expanding on this line of thinking, Alexander and Luckman (2001) implied that the SE model was theoretically superior to MA instruction because its structure empowered teachers and, as a consequence, facilitated an improvement in teacher-pupil relationships. Similarly, Ennis (1999) noted that the MA model's "curricular scaffolding" creates "negative forces" and compels even the most skilled teachers to spend a good deal of time intervening during student activity in order to facilitate positive social interactions between pupils, make sure pupils do not get overcompetitive, and provide support for pupils with lower skill levels. By comparison, Ennis (1999) observed that the SE model's scaffolding produces positive forces which are a help to the teacher in a number of ways. Specifically, SE promotes "positive social relations" within a class because it helps cultivate a "sense of community" and disperses ownership and authority. This state of affairs, in turn, decreases the need for teachers to negotiate with highly skilled and dominant groups of pupils over various aspects of the curriculum including instructional tasks and levels of accountability.

Despite these various and compelling theoretical arguments for SE being a superior model to MA teaching, there have been few well designed empirical studies aimed at comparing high level SE and MA teaching. Of the studies that have been completed, Curtner-Smith and Sofo (2004) found that PTs who taught 10-lesson soccer units using both models perceived the SE unit to have been more successful. Similarly, Browne, Carlson, and Hastie (2004) found that pupils taught rugby

football within a 20-lesson SE season improved their understanding of the game to a greater degree than pupils who were taught the same content within a well-designed MA unit of the same length. In contrast, both models led to similar gains in pupils' knowledge about the game. Finally, one study comparing the influence of 10-lesson SE and MA soccer units on factors related to pupils' gains in health-related fitness produced surprising results. In contrast to their hypothesis and the findings of Hastie and Trost (2002), Parker and Curtner-Smith (2005) found that, as recommended in the publication *Healthy People 2010* (US Department of Health and Human Services [USDHHS], 2000), the middle school pupils in the MA unit spent more than the 50% of lesson time in moderate to vigorous physical activity (MVPA). In comparison, pupils in the SE season did not approach this rate of engagement in MVPA. Moreover, PTs allocated little time for fitness instruction or activity and spent little time demonstrating or promoting fitness in both units. Inferential statistical tests were non-significant for health-related variables; trends in the data, however, indicated that pupils were likely to participate in MVPA less often and less likely to learn directly about health and fitness in the SE unit.

Theoretical Framework

Achievement Goal Theory

One theoretical perspective which sport pedagogy researchers and psychologists have given a good deal of attention to in the last 20 years is achievement goal theory (Chen, 2001; Duda, 1996; Duda & Nicholls, 1992; Nicholls, 1989; Todorovich & Model, 2005). In the physical education setting, those doing this work have either focused on the nature of pupils' goals or on the climate created by teachers which might influence these goals (Carpenter & Morgan, 1999).

Achievement goal theory argues that pupils are generally oriented to one of two types of goals when making decisions as to whether or not they have succeeded in achievement settings such as physical education (Ames, 1992a, 1992b; Dweck & Leggett, 1988). Pupils who gauge success

based on self-improvement and task-mastery exhibit a task orientation. Conversely, pupils who determine success by contrasting the performances of others with their own possess an ego orientation (Nicholls, 1984, 1989). More recently, researchers have suggested that individuals who are ego-oriented can be subdivided into those who are motivated by outperforming their peers' (performance-approach) and those who avoid participating in tasks and activities for fear of failing to come up to the standards of their peers (avoidance-approach) (Elliot & Church, 1997; Xiang, McBride, & Bruene, 2006).

Achievement goal theory also suggests that the motivational climates created by teachers can, in turn, influence the goal orientations of their pupils (Ames, 1992a, 1992b; Dweck & Leggett, 1988). Climates which focus on self-improvement (i.e., task-involving climates) appear to foster a task orientation. Conversely, climates which promote comparisons of performance and ability among pupils (i.e., ego-involving climates) appear to foster an ego orientation (Todorovich & Curtner-Smith, 2002, 2003). While some scholars have examined participants' *perceptions* of the motivational climate during their research (Treasure & Roberts, 2001), a number of sport pedagogists have studied the actual or *objective* climate created by instructors (see, for example Curtner-Smith & Todorovich, 2002).

Most researchers have argued that pupils are much better off being task-oriented because those with this perspective are more likely to enjoy, persist with, and engage in activity (Duda, 1996; Treasure & Roberts, 1995). Moreover, there is a limited amount of research which has also indicated that ego-involving climates promote more negative and maladaptive behaviors (e.g., giving up when faced with difficulty, selecting tasks which are easy), while task-involving instructional climates promote more positive and adaptive behaviors (e.g., persisting when faced with problematic tasks and selecting more challenging tasks in the first place) (Carpenter & Morgan, 1999). In addition, there is some evidence which suggests that pupils learn more (Biddle, 2001; Martin, Rudisill, &

Hastie, 2009), are more likely to believe that effort leads to achievement (Solmon, 1996), engage in higher intensities of physical activity (Parish & Treasure, 2003; Treasure & Roberts, 2001), increase intrinsic motivation (Mitchell, 1996), and are highly satisfied (Treasure, 1997) in a task-involving climate. Conversely, ego-involved climates have been associated with a decrease in pupils' intrinsic motivation (Papaioannou, 1995) and pupils' perceptions of teacher favoritism towards more able performers (Treasure, 1997).

A few researchers have, however, taken issue with this line of thought and argued that teachers would be better advised to provide a mixed climate which includes both task-involving and ego-involving elements (Steinberg, 1996; Steinberg & Maurer, 1999). The rationale behind this type of thinking has been that eventually pupils need to make comparisons with others so as to determine whether or not they are really successful. In addition, these researchers have suggested that the self-esteem of ego-oriented pupils can be significantly enhanced when they are taught within an ego-involving climate. Further, in their extensive review of research on pupils' goals, interests, and motivation, Hidi and Harackiewicz (2000) suggested that "the positive consequences of performance [ego] goals have been under-appreciated to date, and we believe it is critical to consider the possibility that performance [ego] goals can promote adaptive achievement behavior in some educational settings" (p. 164).

To date, only one study has used achievement goal theory to measure the *objective* motivational climate of SE and only two have used it as the basis for actually comparing the effects of SE and MA teaching. Sinelnikov and Hastie (2010) found a mixed, overall motivational climate of both "mastery" (task-involving) and "performance" (ego-involving) when an expert taught an SE volleyball unit (16 lessons) to male and female, 9th grade, Russian students who were unfamiliar with the model. However, Wallhead and Ntoumanis (2004) found that an 8-lesson SE basketball unit led to an increase in 14-year-old male pupils' enjoyment and perceived effort, whereas an MA unit of

the same length and on the same content did not. Importantly, an increase in the pupils' perceptions of a task-involving climate in the SE season was shown to be largely responsible for these results. Wallhead and Ntoumanis suggested that this increase was likely to be because SE "has many similarities with the contextual features of a task-involved climate" (p. 6). These authors, did, however, concede that the overemphasis on formal competition by some teachers could serve to promote an ego-involved climate and negate any positive influence of SE on pupils, particularly those who are less able. This conclusion is supported by Sinelnikov and Hastie (2010) who found a more performance oriented climate during the formal competition phase of the SE unit.

Additionally, Spittle and Byrne (2009) found that 5-lesson invasion game MA units led to a decrease in 13- and 14-year-old pupils' perceived competence, while 10-lesson SE units on the same content did not. Spittle and Byrne also found that pupils' perceptions of the class climate being task-involving decreased significantly during MA units but not during SE units. These findings led them to suggest that the climate created by teachers during SE units was more task-involving than in the MA units and that it was this climatic superiority that was responsible for maintaining levels of motivation, in terms of perceived competence, within the SE units.

Purpose

Although their studies were strong and very informative, Sinelnikov and Hastie (2010) did not directly compare SE and MA and Wallhead and Ntoumanis (2004) and Spittle and Byrne (2009) measured the motivational climates in SE and MA units as *perceived* by pupils. In addition, both Wallhead and Ntoumanis (2004) and Spittle and Byrne (2009) employed a pre-post design which involved them measuring pupils' perceptions of the climate before the units started and after they were completed. "Black box" experiments like these which do not involve examining the pedagogies employed by teachers were heavily criticized when sport pedagogy research was in its infancy (see Locke, 1977). Moreover, both sets of researchers used a paper and pencil inventory to measure

perceived climate. Specifically, Wallhead and Ntoumanis used the Learning and Preference Orientations in Physical Education Classes Questionnaire (LAPOPECQ) (Papaioannou, 1995) and Spittle and Byrne (2009) employed the Perceived Motivational Climate in Sport Questionnaire (PMCSQ) (see Walling, Duda, & Chi, 1993). Paper and pencil inventories have also been criticized by sport pedagogy researchers (e.g., Hastie, 2007; Zmudy, Curtner-Smith, & Steffen, 2009) on the grounds that they yield data that may not be as accurate as those generated by observing instruction directly. In short, their designs meant that Wallhead and Ntoumanis and Spittle and Byrne could only infer that the teachers in their studies had used pedagogies and structures which created task-involving climates during SE and that these climates were different and superior to those created in MA units.

In the current study, therefore, the purpose was to describe and compare the *objective* motivational climates created by teachers within both the MA and SE models. The specific goals were to determine whether (a) different kinds of climates were actually created in the two models and (b) the climate created in SE was superior (i.e., task-involving) to that created in MA teaching.

Method

Participants and Context

The study involved the third analysis of a data bank of filmed teaching. The participants in this data bank were two PTs engaged in an early field experience (EFE) within a physical education teacher education (PETE) program at a large public university in the southeast of the United States. They were purposefully selected for the study because they had shown considerable pedagogical ability and potential. The PTs were Caucasian and one was male while the other was female.

The PTs had studied teaching styles; effective teaching behaviors; evaluation, unit, and lesson planning; management; and different curriculum models, including the MA and SE models, prior to beginning the EFE within a campus-based secondary methods course. The EFE involved

the PTs teaching at a local middle school on two occasions each week during a 5-week period. The school was attended by pupils mainly from low-income families and included both Caucasians and African-Americans. Prior to the EFE's commencement, the school's physical education teachers explained that the PTs might face some difficult disciplinary situations.

Within the EFE, the PTs team/turn-taught one 10-lesson mini-SE season to 6th grade pupils and one 10-lesson mini-MA unit to a combination of 7th and 8th grade pupils. Both classes were comprised of girls and boys. The subject matter of both units was soccer. The specific content for each unit is provided in Figures 1 and 2.

Mean length of SE lessons was 31.60 minutes (range 20.22 to 38.08 minutes) while mean length of MA lessons was 33.18 minutes (range 22.76 to 40.78 minutes). Mean class size for the lessons during the SE unit was 9.70 (SD = 0.82) and mean class size for MA lessons was 9.40 (SD = 0.52).

The PTs alternated as the lead teacher for each lesson within each unit. Lessons were taught on a community field close to the school with the exception of the fourth, sixth, and tenth lessons of both units which were taught in a section of the school gymnasium. In the competitive phase of the SE season, (lessons 5 to 9), the pupils taught by the PTs' in the study played against teams of pupils taught by other PTs. For both units one soccer ball was available for every two pupils.

Data Collection

All lessons in both the SE and MA units were filmed. The camera was located in a peripheral position so that it did not disrupt instruction. The lead PT wore a wireless microphone so that all verbal behavior of both PTs could be recorded. Filming commenced when the lead PT stated that a lesson was beginning and ended when the pupils were dismissed from the field or gymnasium.

Lesson	Content
1.	i. Warm-up (chasing game). ii. Practices juggling soccerball. iii Practices dribbling soccerball. iv. 2 v 2 Small-sided game (keep ball). v. Closure.
2.	i. Warm-up (soccerball juggling practice). ii. 2 v 2 small-sided keep-ball game. iii. Practices dribbling soccerball. iv. 2 v 2 small-sided game. v. Closure.
3.	i. Warm-up (tag-dribbling soccerball). ii. 2 v 2 small-sided game (keep ball using zones). iii. Practices dribbling soccerball. iv. 2 v 2 small-sided game. v. Closure.
4.	i. Warm-up (king of the ring). ii. Practices soccer tackling. iii. 2 v 2 small-sided game (end-to-end). iv. Closure.
5.	i. Warm-up (bandits). ii. 2 v 2 small-sided game (end-to-end). iii. Practice soccer tackling. iv. 4 v 4 small-sided game (end-to-end). v. Closure.
6.	i. Warm-up (bulldog). ii. Practices in beating an opponent. iii. 1 v1 group tournament (end-to-end). iv. 4 v 4 small-sided game (end ball). v. Closure.
7.	i. Warm-up (3 vs. 3 small-sided game). ii. Practices in beating an opponent. iii. 5 v 5 small-sided game. iv. Closure.
8.	i. Warm-up (tag-dribbling soccerball). ii. Practices passing soccerball. iii. 5 v 5 small-sided game. iv. Closure.
9.	i. 5 v 5 small-sided game. ii. Skills assessment. iii. Closure.
10.	i. Cognitive assessment. ii. 5 v 5 small-sided game. iii. Closure.

Figure 1. Multi-activity unit content.

Lesson	Content
1.	a. Team announcement. b. Explain concept of Sport Education. c. Making of team list. d. Captain election. e. Coach election. f. Team name selection. g. Team color selection. h. Board member election. i. Deciding of team logo. j. Taking of team picture. k. Equity officer election. l. 4 v 4 small-sided game. j. Closure and explanation homework (students to complete player profile sheet).
2.	a. Design team notice board and post team picture and schedule for season. b. Captains lead warm-up supplied by PTs. c. Teacher-directed lesson over basic skills, strategies, and rules (2 v 2 small-sided game; practices dribbling soccerball; 4 v. 4 small-sided game). d. Closure.
3.	a. Coaches lead warm-up supplied by PTs. b. Teacher-directed lesson over basic skills, strategies, and rules (4 v 4 small-sided game; practices soccer tackling; 4 v 4 small-sided game). c. Provide handout for homework so pupils can learn basic rules. d. Election of two newspaper reporters and provide them with an interview guide. One reporter interviews the captain and one interviews the coach on the team's probabilities for the upcoming season. e. Closure.
4.	a. Multiple-choice rules assessment (must pass to be eligible to play). b. Instruct scorekeeping (hand out scoresheets), keeping statistics (hand out a statsheet), and officiating (brief edification). c. Team scrimmage (2 v 2 or 3 v 3) while "off-field" students officiate, keep score, and record statistics. Pupils rotate so all learn each role. d. Class board to effect pre-season poll. e. Post interviews from captain and coach onto notice board. f. Post other pertinent and motivating information on notice board. g. Closure.
5.	a. Furnish rules assessment results and reexamine if necessary. b. Pre-season scrimmages (5 v 5). Games are to last 12 minutes with 2-minute half-times for captain and coach-led team-discussions. Pitches are 25 x 15 meters. 5-meter, cone-marked goals. Regular rules except no off-side. Goalkeepers can only handle ball within 5 meters of the goal. Defending players must be 5 meters from site of free-kick, corner-kick, or goal-kick. Typical throw-ins. Penalty kicks taken from 8 meters. Coach or captain can substitute players when ball is dead. c. Duty team to keep score, collect statistics, and officiate (provide all necessary materials and clothing). d. Put up results on notice board. e. Two information officers must be elected to write a brief report of team's pre-season games. f. Team scout election to watch first opponent in "World Cup" and complete teacher-provided scouting report sheet. g. Class board to conduct second pre-season poll. h. Closure.
6, 7, 8, 9.	a. Pupils participate in culminating event (World Cup). b. Rules same as pre-season. c. Scoring: 3 points for a win, 1 for a draw, 0 for a loss, and 0 or 1 for fair play and sportspersonship (judged by officials). All ties in league play broken by fair play scores, then by goal difference, and then penalty kicks. d. Class board to select Most Valuable Players (MVPs), Most Sporting Players (MSPs), Most Improved Players (MIPs), and All-Tournament teams.
10.	a. Awards ceremony (select a student to MC). b. Awards presented to winners, MVPs, MSPs, MIPs, and All-tournament teams. c. Provide refreshments.

Figure 2. Sport education unit content.

Verification of SE and MA Models

Metzler (2001) argued that sport pedagogy researchers studying the effects of curricular models should verify that the teaching being studied was congruent with each models' guidelines.

The verification process employed with this data bank involved comparing the tasks listed in Figures 1 and 2 with what was observed on videotape and live during the EFE. This protocol revealed that the PTs followed the EFE plan closely and that all the key features of the MA and SE models were included in their units.

Systematic Observation Instrument

The 20 filmed lessons from both the SE and MA units were coded with the Physical Education Climate Assessment Instrument (PECAI) (Curtner-Smith & Todorovich, 2002). The PECAI is a systematic observation instrument which determines the actual or objective motivational climate of a physical education lesson.

The PECAI is based on the principles described by Epstein (1988) and Ames (1992b) regarding classroom climate and structure. These principles concern the components of a lesson which a teacher can alter. These components are *task, authority, rewards, grouping, evaluation, and time* and they are often referred to with the acronym TARGET. They are shown in Figure 3. The degree to which a classroom is more ego or task-involving is determined by the choices teachers make regarding these components.

Using the PECAI involves a researcher coding all tasks that occur within a physical education lesson. The definition of a task is “a unit of work given verbally and/or visually by the teacher that focuses [pupils] on the intended skill or aspect of that skill to be executed once the activity is initiated” (Rink & Werner, 1989, p. 272). When coding each task, the researcher decides whether its task, authority, rewards, grouping, evaluation, and time components indicate that an ego-involving or task-involving climate is being created by the teacher-based on criteria outlined by Epstein (1988) and Ames (1992b). Moreover, if the orientation of one of these components for a specific task cannot be determined, it is coded as neutral. Following the presentation or introduction of each task, the film is paused and the task and authority components are coded. The film is then allowed to run until the

Alterable Element	Ego-involving*	Task-involving
Task	All pupils attempt the same task. Goals for the task are determined by the instructor.	Pupils choose to attempt different tasks. They are permitted to set their own goals.
Authority	The instructor makes all decisions about what pupils will learn, sets up all equipment, and carries out all pupil evaluations.	Pupils choose what they will attempt to learn, are given the opportunity to set up their own equipment, and are encouraged to evaluate their own performances.
Rewards	Recognition of pupils' accomplishments are made public and rewards are given for superior performances.	Recognition of pupils' accomplishments are kept private and rewards are given for improvement.
Grouping	An entire class or squad works on one task or pupils are grouped by their ability.	Pupils work on individual tasks or in small cooperative groups. Grouping is flexible and heterogeneous.
Evaluation	Evaluation is norm-referenced or rank-ordered and public. Progress is judged on the basis of whole group objectives and performance.	Evaluation is self-referenced, and private. Progress is judged on the basis of individual objectives, participation, effort, and improvement.
Time	The instructor gives strict time limits for all pupils to complete tasks and establishes timelines for improvement.	Time limits for task completion are flexible. Pupils help to schedule timelines for improvement.

*A strong ego-involving motivational climate is produced during a physical education lesson or sports practice under conditions described in the middle column of the table, whereas a strong task-involving climate occurs under the conditions described in the right column.

Figure 3. Definitions of the elements coded by the Physical Education Climate Assessment Instrument

task has been completed. At this point, the film is paused again and the rewards, grouping, evaluation, and time components are coded. Following the coding of all the tasks in a lesson, the proportions for each component coded as task, ego, or neutral are calculated for each unit by the lesson.

Coding and Inter- and Intra-Observer Reliability

The 20 filmed lessons were coded by the first author. The order of their coding was random. Observer training consisted of studying the components of the PECAI and coding practice films.

Prior to coding, inter- and intra-observer reliability were established following the protocol described by van der Mars (1989). The inter-observer reliability check involved the first and second authors coding a filmed lesson designated as the “reliability lesson.” These codings were carried out independently. Inter-observer agreement was computed by using event-by-event comparisons of TARGET components. Specifically, the number of agreements between the two coders were divided by the number of agreements plus the number of disagreements and multiplied by 100. This process continued until an agreement level of 80.30% was achieved.

The intra-observer reliability check involved the first author recoding the reliability lesson 7 days following the establishment of inter-observer reliability. At this time, the first author’s first and second coding of the reliability lesson were compared and yielded an agreement level of 87.88%.

To check for observer drift, further intra-observer reliability checks were made following the coding of the 5th, 10th, and 15th lessons. Each time, this involved the author comparing a further coding of the reliability lesson with the original. Results of these checks yielded agreement levels of 84.85%, 81.82%, and 84.85%, respectively.

Finally, following the coding of all 20 lessons in the study, additional intra-observer reliability checks were made by recoding three randomly selected lessons from the study and the reliability lesson for a fifth time. Reliability percentages resulting from these checks were 89.58%, 100.00%, 100.00%, and 83.33%, respectively.

Data Analysis

To determine the type of motivational climate created during the SE season and MA unit and allow descriptive comparisons at the lesson and unit level, the first step was to compute the

percentages of ego, task, and neutral codings for each of the six 'TARGET' components and in total for the individual lessons. The second step was to calculate the mean percentages of ego, task, and neutral codings across the lessons of each unit for the six 'TARGET' components and in total. Lesson-by-lesson profiles of climate production within each unit were plotted. A further comparison between the two units was made at the unit level by determining whether or not the task codings in total differed significantly by employing a chi-square test for independence.

Results

Climates Created Within the MA and SE Units

MA unit. As shown in Table 1, coding of the MA unit indicated that the climate created by the two PTs was ego-involving. The mean percentage of ego codings across the 10-lesson unit was 83.64%. Conversely, the mean percentages of task and neutral codings were 4.63% and 11.73%, respectively. Moreover, Table 1 also reveals that the mean percentage of ego codings across all lessons for the MA unit for each of the six 'TARGET' components ranged from 50.00% to 100.00%, while the mean percentage of task codings ranged from 0.00% to 12.96% and the mean percentage of neutral codings ranged from 0.00% to 46.30%.

SE unit. Table 1 reveals that the two PTs also created an ego-involving climate within the SE unit. The mean percentage of ego codings across all lessons of the SE unit in total was 87.88%, while the mean percentages of task and neutral codings were 2.02% and 10.10%, respectively. In addition, the mean percentage of ego codings across all lessons in this unit for each of the six 'TARGET' components ranged from 38.89% to 61.11%, while the mean percentage of task codings ranged from 0.00% to 5.56% and the mean percentage of neutral codings ranged from 0.00% to 22.22%.

Table 1

Mean Percentages of Task, Ego, and Neutral Codings Across the Multi-Activity and Sport Education Units in Total and for Each TARGET Component

TARGET	MA Unit			SE Unit		
Component	Task	Ego	Neutral	Task	Ego	Neutral
Task	0.00	100.00	0.00	0.00	100.00	0.00
Authority	0.00	100.00	0.00	0.00	100.00	0.00
Rewards	12.96	62.96	24.07	9.09	69.70	21.21
Grouping	0.00	100.00	0.00	0.00	100.00	0.00
Evaluation	3.70	50.00	46.30	0.00	63.64	36.36
Time	11.11	88.89	0.00	3.03	93.94	3.03
Total	4.63	83.64	11.73	2.02	87.88	10.10

Comparison of the MA and SE Units

The data displayed in Table 1 suggest that the PTs created ego-involving climates of similar strength within both the MA and SE units. The chi-square test for independence supported this conclusion. It indicated that there was not a significant difference between the climates created by the PTs in either unit [$\chi^2 (z, n = 517) = 2.85, p = .240$]. The lesson-by-lesson plots for the MA and SE units, shown in Figures 4 and 5, also indicate that the PTs created similar climates while working within both curriculum models. Moreover, Figure 4 reveals that the ego-involving climate within the MA unit was at its strongest during lessons 7 and 8 when pupils spent the highest proportion of time engaged in competitive game play. Similarly, Figure 5 reveals that the ego-involving climate in the SE unit gained strength as the pupils moved into the competitive phase of their soccer season, particularly during lessons 8 and 9.

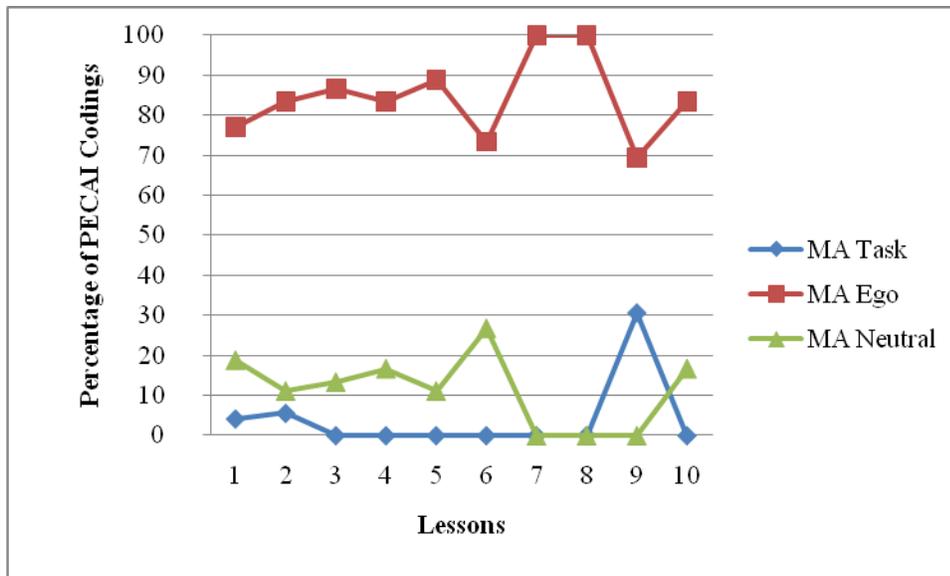


Figure 4. Percentage of task, ego, and neutral codings in total during the multi-activity unit.

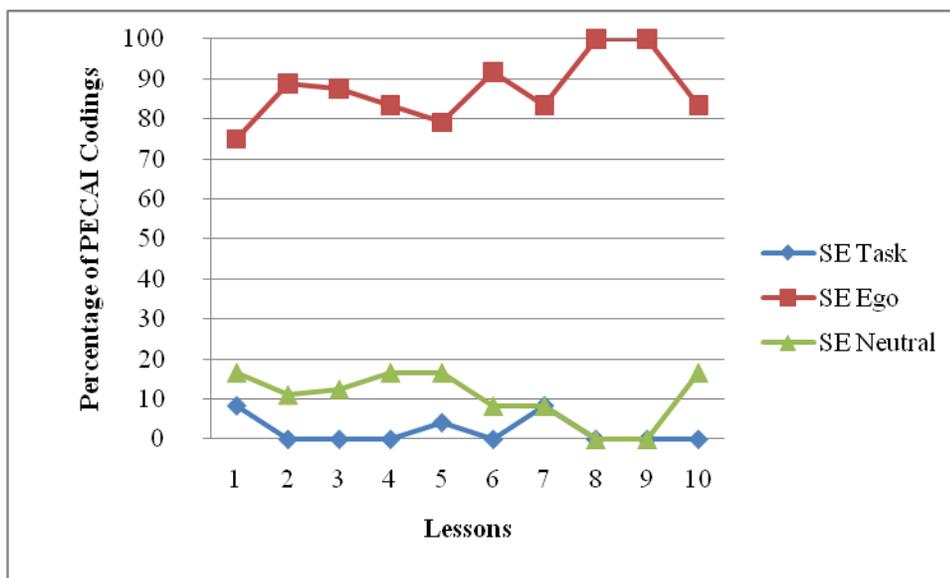


Figure 5. Percentage of task, ego, and neutral codings in total during the sport education unit.

Summary, Discussion, and Conclusions

The purpose of this study was to describe and compare the actual or objective motivational climates created by teachers within the MA and SE curriculum models. The aim was to determine

whether or not (a) different kinds of climates were created within the two models and (b) the climate created in SE was superior to that created in MA teaching. The main findings were that similar climates were created within both the MA and SE units and that these climates were strongly ego-involving.

Given the direct and traditional pedagogies employed during MA teaching, the fact that the objective climate of the MA unit was found to be ego-involving was not a surprise. That the objective climate of the SE unit was also found to be ego-involving, however, was somewhat unexpected and in contrast to the results of the studies previously conducted by Wallhead and Ntoumanis (2004) and Spittle and Byrne (2009). Recall that Wallhead and Ntoumanis found that pupils' perceptions of increased enjoyment and effort during an SE unit were associated with their increased perceptions of a task-involving climate and that Spittle and Byrne found that pupils' levels of perceived competence and their perceptions of a task-involving climate were maintained during SE units but not during MA units. Also recall that both sets of researchers speculated that the SE model's apparent superiority over the MA model, in terms of promoting or maintaining perceived enjoyment, effort, and competence, was due to it being inherently more task-involving.

Two key questions emanating from the results of the current study, then, are (a) why was the climate of the SE unit so strongly ego-involving? and (b) did the strong ego-involving climate created in the SE unit negate any potential positive impacts on pupils, as previous research (Spittle & Byrne, 2009; Wallhead & Ntoumanis, 2004) suggested it might? Obviously, answering these questions with real conviction goes beyond the scope of the data generated in the current study and so they should form the bases for further research. Logical speculation at this juncture, however, may aid and inform these future investigations.

Following Wallhead and Ntoumanis (2004), one possible reason for the climate created in the SE unit being so strongly ego-involving is that, like PTs that have been studied in the past (see

Curtner-Smith, Hastie & Kinchin, 2008), the PTs in the current study overemphasized the competitive sport elements of the model. This is certainly likely considering that both PTs had particularly strong backgrounds in and had been socialized through competitive sport themselves. Alternatively, it may be that in order to create authentic sporting experiences in which pupils engage, which is the core of SE, it is impossible not to also create an ego-involving climate. Research which examines the degree to which different “readings” (Gore, 1990), interpretations, and deliveries of “real” or “proper” SE are possible will help answer this question.

Regardless of which of the alternative answers to the first question is, in fact, correct, based on anecdotal evidence (i.e., observations of pupils and PTs’ testimony), the tentative answer to the second question is that pupils taught within the SE unit appeared to be much more motivated and willing to take part in physical education than those who were taught within the MA model. In short, the SE unit appeared to have positive effects on pupils’ enthusiasm and effort despite the fact that it was taught within such a strong ego-involving climate. Perhaps the ego-involving climate corresponded with the pupils’ pre-existing orientation given they were middle school level and the ages of that level are becoming self-aware of their skill limitations despite their best efforts to surpass them. If correct, this suggests that successful SE has more to do with its authenticity, excitement, and curricular scaffolding than its climate. Moreover, this line of thinking lends support to those (e.g., Hidi and Harackiewicz, 2000; Steinberg, 1996; Steinberg & Maurer, 1999) who have argued that ego-involving climates may well lead to positive gains for pupils in some contexts. Research of SE which includes measures of pupils’ learning and experiences as well as of the objective motivational climate would obviously provide a more definitive answer to this question.

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CHAPTER II

PRESERVICE TEACHERS' USE OF PRODUCTIVE AND REPRODUCTIVE TEACHING STYLES WITHIN MULTI-ACTIVITY AND SPORT EDUCATION UNITS

Abstract

There has been little research that has examined the effectiveness of physical education teacher education (PETE) components designed to prepare preservice teachers (PTs) to use a range of teaching styles. The purpose of this study was to examine the influence of one such PETE component on PTs' use of Mosston's spectrum of teaching styles within an early field experience (EFE). Specific goals were to ascertain whether PTs were able to use the teaching styles in congruence with the requirements of the curricular models they employed and to compare teaching style use within different curricular models. Participants were two PTs who were trained to use Mosston's spectrum within a secondary methods course. PTs then turn-taught one 10-lesson multi-activity (MA) soccer unit and one 10-lesson sport education (SE) soccer unit during a middle school EFE. Units were filmed and coded with the Instrument for Identifying Teaching Styles (IFITS), an interval recording instrument which records the time in which teachers manage and use the teaching styles in Mosston's spectrum. Percentages of intervals for management and each teaching style were computed for each lesson. Lesson-by-lesson profiles of teaching style use within each unit were plotted. Descriptive statistics were computed across all 10 lessons for both units. Comparisons of total teaching style use during the two units were made by employing independent t-tests. The Dunn (Bonferroni) method was used to control for inflated type I errors. The pattern of teaching style use employed by the PTs during the MA and SE units was virtually identical. This pattern was largely congruent with the requirements of the MA model but did not match the requirements of the SE model. Reasons suggested for PTs' patterns of teaching style use included their underlying beliefs

about the goals of secondary PE, lack of confidence, socialization, relative inexperience, concerns for survival and control, and the emphases of the methods course.

Key Words: Teaching styles, sport education, multi-activity teaching

Preservice Teachers' Use of Productive and Reproductive Teaching Styles Within Multi-Activity and Sport Education Units

Despite its longevity (it was first lauded by leaders in the sport pedagogy field over 30 years ago [e.g., Locke, 1977]), Mosston's spectrum of teaching styles (Mosston, 1981; Mosston & Ashworth, 2002, 2008) still provides a major theoretical basis for the kinds of teacher behavior that faculty in many physical education teacher education (PETE) programs attempt to train their charges to employ within content courses, methods classes, early field experiences (EFEs), and student teaching. Indeed, currently the spectrum is enjoying something of a renaissance as evidenced by the historic 2007 *Spectrum Conference* held in Buckeystown, Maryland, the consequent development of a new *Spectrum Teaching and Learning Institute* (STLI) (STLI, 2007), and the fact that in a few universities, for example East Stroudsburg University and the University of Wyoming (Byra, 2000a), it is the main theoretical framework which drives most decisions about PETE curricular content, structure, and organization.

The spectrum has appealed to PETE faculty because it is a complete, practical, and relatively straightforward theoretical framework of different approaches to teaching which is not content-dependent and that both preservice teachers (PTs) and practicing teachers can comprehend relatively easily (Ashworth, 1990, 1992). Moreover, as implied by Goldberger (1991), it is compatible with and encompassing of many alternative conceptions of physical education teaching such as teacher effectiveness (see Silverman, 1991) or the idea that learners be taught to *plan, perform*, and

evaluate movement in the British National Curriculum for Physical Education (NCPE) (see Curtner-Smith, Hasty, & Kerr, 2001; Curtner-Smith, Todorovich, McCaughtry, & Lacon, 2001).

Theoretical Framework

Spectrum Theory

At the heart of spectrum theory is the notion that the teaching-learning process consists of a chain of decision-making. Mosston (see Mosston & Ashworth, 2002, 2008) noted that there are three sets of decisions to be made during each “teaching episode” and these decisions lead to the “anatomy of a [teaching] style.” These decisions are (a) planning or preimpact decisions, (b) implementation or impact decisions, and (c) evaluation or postimpact decisions. Different styles of teaching/learning result from who makes these decisions—the pupils or the teacher.

Mosston suggested that theoretically two “pure” teaching styles exist. At one end of the spectrum is a style in which all the decisions are made by the teacher and at the other end is a style in which all the decisions are made by the pupils. To date, 11 “landmark styles” have been identified in between these two styles. A unique decision-making anatomy exists within each of these styles which dictates how pupils and teachers interact. For this reason, the theory is that the landmark styles realize different objectives and facilitate different “developmental effects” on pupils. Specifically, these objectives are classed as cognitive, affective, or psychomotor and they are theorized as influencing pupils’ physical, social, emotional, cognitive, and moral development.

The spectrum includes two clusters of landmark styles. Those in the first cluster are known as “reproductive styles” since, within each style pupils are required to reproduce skills or information demonstrated or provided for them by the teacher. By contrast, those in the second cluster are known as “productive styles” since pupils are required to produce skills or knowledge which they have not previously encountered. This second group of styles is also often referred to as “problem-

solving" or "discovery" styles because of the cognitive processes pupils employ when they are taught with them.

Finally, Mosston also suggested that there are an infinite number of "non-landmark" teaching styles within the spectrum which fall between the landmark styles. Each of these styles, it is thought, has its own unique decision-making structure. These non-landmark styles are described as falling "under the canopy" of the nearest landmark style.

Purpose

To date, there has been a fair amount of research on the impact of the reproductive styles of teaching on pupils' learning, relatively little research of the productive styles (Byra, 2000b, 2002, 2006), and a few studies describing and comparing teachers' use of both clusters of styles in different contexts (e.g., Cothran et al., 2005; Curtner-Smith, Hasty, et al., 2001; Curtner-Smith, Todorovich et al., 2001; Kulinna & Cothran, 2003). In addition, there has been some recent research on learners' perceptions of being taught by different teaching styles (Cothran, Kulinna, & Ward, 2000). There has, however, been little research that has examined the effectiveness of PETE program components designed to prepare PTs to use the spectrum of teaching styles. The primary purpose of this study, therefore, was to examine the influence of one such PETE component on PTs' use of Mosston's spectrum of teaching styles within an EFE. A first specific goal of the study was to ascertain whether or not PTs were able to use the teaching styles in congruence with the requirements of the curricular models they employed. A second goal was to compare teaching style profiles and use within different curriculum models.

Method

Participants and setting

This study was the second in a series of three which involved analyzing a data bank of filmed physical education lessons. Two PTs taught the lessons in this data bank while taking part in an EFE as part of their PETE program at a large public university situated in the southeastern United States. The PTs were purposefully selected due to their pedagogical promise and ability. They were both Caucasian and traditional students. One was female and one was male.

The methods course. Prior to the EFE, the PTs had taken a secondary methods course with 14 other PTs. Within this course, taught by one PETE professor, the PTs had focused on three main pedagogical areas. These were *Mosston's spectrum of teaching styles*, *effective teaching behaviors*, and various *physical education curricular models*. Sport pedagogy scholars will recognize that these three foci represent and encompass the shifts in the theoretical and research basis for cutting-edge PETE methods courses in American universities in the last 30 years. Prior to the mid-1970s and the onset of serious sport pedagogy research the only theoretical basis for PETE programs was the spectrum (see Locke, 1977). From the mid-1970s until the mid-1990s many of the new breed of sport pedagogy researchers being produced followed the lead of classroom researchers (see Graham & Heimerer, 1981) and Daryl Siedentop at the Ohio State University (Siedentop, 1983) and shifted partially or totally to basing their PETE programs on training PTs in the use of effective teaching behaviors. These behaviors were generated by positivistic researchers schooled in applied behavioral analysis techniques and systematic observation and interpretive researchers who worked within the ecology paradigm. More recently a second shift has taken place whereby many PETE programs are focused on enabling their PTs to acquire the pedagogies of a limited number of curriculum or instructional models before they graduate (see Metzler, 2005). Again, in some programs, this second shift has meant that prior foci on the spectrum and teacher effectiveness have been totally or

partially jettisoned. In other programs, however, the view has been that learning Mosston's teaching styles and effective instructional and managerial methods are compatible with and prerequisites for learning how to deliver different curricular models. This was the position taken by the PETE professor of the methods course that was investigated.

The methods course component aimed at teaching the PTs the spectrum was divided into three stages. Stage 1 involved the PTs attending a 2-hour lecture/discussion led by the PETE professor in which spectrum theory was explained and each of the eight original teaching styles initially identified by Mosston (1981)¹ was described through multiple examples and videotaped extracts.

Stage 2 involved the PTs being taught in each of the eight styles by the PETE professor in a small gymnasium. This practical session involved the professor teaching a series of 5- to 10-minute episodes using each of the eight styles. At the conclusion of each episode, the professor described and emphasized what he and the PTs had done in terms of decision-making with the goal of reinforcing the anatomy of each style. The content of the episodes is described in Figure 6.

Stage 3 involved all the PTs within the methods course forming pairs. Each pair then planned and turn/team-taught a 10-20 minute mini-lesson on any content of their choice to their peers using an assigned teaching style. Again, following the conclusion of each mini-lesson, the anatomy of the style that the pair of PTs had utilized was described and emphasized by the PETE professor.

Finally, wherever appropriate, spectrum theory was referred to and incorporated in the PETE components aimed at familiarizing the PTs with effective teaching behaviors and various curriculum models. For example, it was pointed out that the concepts of effective teaching and direct instruction could be associated with Mosston's style B—practice style. In addition, it was emphasized that the multi-activity (MA) curriculum model was primarily aimed at realizing

Teaching Style	Episode
Style A (Command)	Task: The teacher demonstrates basic soccer dribbling technique. PTs then dribble, in unison, in different directions following the teacher's commands of "forward," "backward," "right," "left," and "stop." The teacher then supplies performance and motivational feedback.
Style B (Practice)	Task: The teacher demonstrates basic soccer dribbling technique. PTs then dribble across the gymnasium and back again at their own pace while the teacher supplies performance and motivational feedback.
Style C (Reciprocal)	<p>Task 1: The teacher demonstrates basic soccer dribbling technique. The PTs then form pairs. One PT in each pair dribbles across the gymnasium and back. The other observes him/her and notes which skill components the dribbler appears to have mastered on a checklist. The observer then shows the dribbler the checklist and tells him/her which skill components still need work and how, specifically, they can be improved. The teacher provides the observers with advice and feedback as they watch the dribblers. The roles of each pair are then reversed.</p> <p>Task 2: The teacher demonstrates basic soccer dribbling technique. The PTs form pairs. All the dribblers are on one side of the gymnasium. All the "controllers" are opposite their partners on the other side. Each controller then gives directional commands to his/her dribbler (i.e., "forward," "backward," "left," "right," "stop"). The teacher asks the controllers to make the degree of difficulty they provide in the drill congruent with their dribbler's skill level and provides feedback to the controllers on their ability to do so. The roles of each pair are reversed several times.</p> <p>Task 3: Identical to task 2 except instead of using verbal commands, the controllers are now required to use hand signals.</p>
Style D (Self-Check)	Task: The teacher demonstrates basic soccer dribbling technique and provides each PT with a checklist on dribbling skill components. The PTs are then required to dribble across the gymnasium and back several times before evaluating their ability to dribble on the checklist. The teacher asks questions of each PT designed to facilitate the evaluation process.
Style E (Inclusion)	Task: The teacher demonstrates basic soccer dribbling technique. The PTs are then invited to dribble through one of three different slalom courses made with cones. Each slalom course poses a different degree of difficulty. PTs are free to change slalom courses if they believe that the course they are currently working on is too difficult or too easy.
Style F (Guided Discovery)	<p>Task 1: The teacher asks the PTs to find a space in the gymnasium, hold their soccer ball in two hands, drop it, and keep it off the ground with any part of their body except their hands. The PTs begin to experiment with different juggling techniques. Periodically, the teacher stops the action and asks the PTs a series of questions which leads them to the realization that juggling is best performed using large flat surfaces, particularly the thigh or the top of the foot.</p> <p>Task 2: The teacher asks all PTs to form a line in order of ascending age. The PTs are not allowed to talk as they form the line. Instead, they solve the problem by using a series of hand signals.</p>

Figure 6 (con't.)

Teaching Style	Episode
Style G (Divergent)	<p>Task 3: The teacher directs the PTs to form a “human knot” by bunching together and holding hands. The PTs’ task is to untangle without letting go of other PTs’ hands or changing their grip. This means they must communicate, cooperate, and move at a variety of levels.</p> <p>Task 1: The PTs form groups of four and have one soccer ball. The teacher then sets them a variety of problems to which there are multiple correct answers. For example, “all PTs in the group must be connected, one PT must be inverted, another PT must have one foot off the ground, and the ball must be balanced on any body part of one group member.”</p> <p>Task 2: The PTs form groups of 6 to 10, are provided with a variety of equipment, and asked by the teacher to devise invasion, net/wall, target, or striking/fielding games. PTs must come up with a set of rules, playing area dimensions, and tactics and strategies for their game.</p>
Style H (Going Beyond)	<p>Task: The teacher provides the PTs with a contract sheet. The sheet requires the PTs to list an area of physical education in which they wish to improve (e.g., a sport, sports skill, or dance design), a number of tasks in which they can engage so as to facilitate improvement, and methods/criteria by which their performance will be evaluated.</p>

Figure 6. Content of teaching styles episodes.

psychomotor goals (i.e., the acquisition of skills and strategies) but that affective and cognitive goals were also targeted. For this reason, while the predominant teaching style employed in this model would probably be the practice style, more skilled MA teachers would also employ a wide variety of other reproductive and productive styles. Similarly, PTs were informed that when employing the sport education (SE) curriculum model teachers should aim to shift from using more direct (i.e., reproductive) styles of teaching to more indirect (i.e., productive) styles as they gradually gave their pupils more responsibility for their own learning.

The early field experience. The EFE took place at a middle school twice a week for five weeks. Pupils attending the school were primarily from low income homes and included both

African-Americans and Caucasians. According to the schools' physical education teachers, poor behavior was often a problem in physical education classes.

During the EFE, the PTs team/turn-taught one 10-lesson mini-MA soccer unit to 7th and 8th grade pupils and one 10-lesson mini-SE soccer unit to 6th grade pupils. The content included in each lesson within the MA and SE units is shown in Figures 7 and 8.

Both classes were mixed gender. Class size means were 9.40 (SD = 0.52) and 9.70 (SD = 0.82) for the MA and SE units, respectively. The mean length of the MA lessons was 33.18 minutes (range 22.76 to 40.78 minutes) and the mean length of the SE lessons was 31.60 minutes (range 20.22 to 38.08 minutes). The ratio of soccer balls to pupils was 1:2 for both units.

The PTs alternated taking on the role of lead teacher during the lessons within each unit. Lessons in both units were taught on a community field next to the school with the exception of lessons 4, 6, and 10 which took place in section of the school's gymnasium. During lessons 5 to 9 of the SE unit, the pupils taught by the two PTs in the study participated in competitive games against teams formed by pupils taught by other PTs.

Data Collection

The 10 lessons in both units were filmed with a camera located in a position peripheral to instruction. The lead PT for each lesson wore a wireless microphone to enable the accurate recording of both PTs' verbal behavior. Filming began when the lead PT stated that a lesson was commencing and ended when the lead PT dismissed the pupils from the field or gymnasium.

Lesson	Content
1.	a. Warm-up (chasing game). b. Ball juggling practices. c. Dribbling practices. d. Small-sided game (2 vs. 2 keep ball). e. Closure.
2.	a. Warm-up (juggling practice). b. Small-sided game (2 vs. 2 keep ball). c. Dribbling practices. d. Small-sided game (2 vs. 2). e. Closure.
3.	a. Warm-up (dribble tag). b. Small-sided game (2 vs. 2 zone keep ball). c. Dribbling practices. d. Small-sided game (2 vs. 2). e. Closure.
4.	a. Warm-up (king of the ring). b. Tackling practices. c. Small-sided game (2 vs. 2 end-to-end). d. Closure.
5.	a. Warm-up (bandits). b. Small-sided game (2 vs. 2 end-to-end). c. Tackling practices. d. Small-sided game (4 vs. 4 end-to-end). e. Closure.
6.	a. Warm-up (bulldog). b. Beating a player practices. c. Group tournament (1 vs. 1 end-to-end). d. Small-sided game (4 vs. 4 end ball). e. Closure.
7.	a. Warm-up (3 vs. 3 small-sided game). b. Beating a player practices. c. Small-sided game (5 vs. 5). d. Closure.
8.	a. Warm-up (dribble tag). b. Passing practices. c. Small-sided game (5 vs. 5). d. Closure.
9.	a. Small-sided game (5 vs. 5). b. Skills testing. c. Closure.
10.	a. Cognitive testing. b. Small-sided game (5 vs. 5). c. Closure.

Figure 7. Content of multi-activity unit

-
- | Lesson | Content |
|----------------------|---|
| 1. | a. Announce teams. b. Explain concept of Sport Education. c. Make team list. d. Elect captain. e. Elect coach. f. Select team name. g. Select team color. h. Elect board member. i. Decide on team logo. j. Take team photograph. k. Elect equity officer. l. Small-sided game (4 vs. 4). m. Closure and explain homework (complete player profile sheet). |
| 2. | a. Set up team notice board and post team photograph and season schedule. b. Captain-led warm-up supplied by PTs. c. Teacher-directed lesson on basic skills, strategies, and rules (2 vs. 2 small-sided game; dribbling practices; 4 vs. 4 small-sided game). d. Closure. |
| 3. | a. Coach-led warm-up supplied by PTs. b. Teacher-directed lesson on basic skills, strategies, and rules (4 vs. 4 small-sided game; tackling practices; 4 vs. 4 small-sided game). c. Supply handout so pupils can learn basic rules for homework. d. Elect two newspaper reporters and supply them with an interview guide. One reporter interviews the coach and one interviews the captain on the team's chances for the upcoming season. e. Closure. |
| 4. | a. Multiple-choice rules test (must pass to be eligible to play). b. Teach scorekeeping (hand out a scoresheet), statkeeping (hand out a statsheet), and officiating (brief lecture). c. Team scrimmage (2 vs. 2 or 3 vs. 3) while "extras" officiate, keep score, and record stats. Rotate pupils so all learn each role. d. Class board to conduct pre-season poll. e. Post interviews of captain and coach on notice board. f. Post other useful and motivating information on notice board. g. Closure. |
| 5. | a. Provide rules test results and retest if necessary. b. Pre-season "friendly scrimmages (5 vs. 5). Games to last 12 minutes with 2-minute half-time for captain and coach-led team-talk. Pitches are 25 x 15 meters. 5-meter goals marked by cones. Normal rules except no off-side. Goalkeepers can only handle within 5 meters of the goal. Defending players must be 5 meters from site of free-kick, corner-kick, or goal-kick. Regular throw-ins. Penalty kicks taken from 8 meters. Coach or captain to substitute players when ball is dead. c. Duty team to keep score, collect statistics, and officiate (supply all necessary materials and clothing). d. Post results on notice board. e. Elect two information officers to write a brief report of team's pre-season games. f. Elect team scout to watch first opponent in "World Cup" and complete teacher-supplied scouting report sheet. g. Class board to conduct second pre-season poll. h. Closure. |
| 6,
7,
8,
9. | a. Pupils participate in World Cup. b. Rules as in pre-season. c. Scoring: 3 points for a win, 1 for a draw, 0 for a loss, and 0 or 1 for fair play and sportspersonship (judged by officials). Ties in league play broken by fair play scores, then by goal difference, then penalty kicks. d. Class board to select Most Valuable Players (MVPs), Most Sporting Players (MSPs), Most Improved Players (MIPs), and All-Tournament teams. |
| 10. | a. Awards ceremony (select pupil to MC). b. Present awards to winners, MVPs, MSPs, MIPs, and All-tournament teams. c. Supply refreshments. |
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Figure 8. Content of sport education unit.

Systematic Observation Instrument

Lessons from both units were coded with the Instrument for Identifying Teaching Styles (IFITS) (Curtner-Smith, Hasty et al., 2001). IFITS is an interval recording instrument designed to record the time in which teachers use the five reproductive styles (style A [command], style B

[practice], style C [reciprocal], style D [self-check], and style E [inclusion]) and three productive styles (style F [guided discovery], style G [divergent], and style H [going beyond]) originally identified by Mosston (1981). IFITS also records the time teachers are managing, the activity they are engaged in when not employing one of the eight teaching styles. Definitions of the teaching styles and management are provided in Figure 4.

A coder using IFITS decides which teaching style a teacher is employing or whether the teacher is managing pupils in some form every 20 seconds. When the teacher employs two or more teaching styles within an interval, the least direct style is given priority and recorded. If the teacher both manages and employs one of the eight teaching styles during an interval, the teaching style is given priority and recorded.

Coding, Intra-, and Inter-Observer Reliability

All 20 lessons were coded by the first author. The order of their coding was randomized. Observer training involved learning the IFITS categories and periods of prolonged practice coding filmed lessons which were not part of the study.

Before coding the data bank tapes, intra- and inter-observer reliability were established by following the protocols suggested by van der Mars (1989). Intra-observer reliability was initially established by the first author coding and recoding a lesson designated as the "reliability lesson." The time period between each of these codings was 7 days. Reliability was checked by comparing the second coding with the original using strict interval by interval comparisons. The reliability percentage resulting from this check was 90.16%, which surpassed the 80% minimum standard suggested by van der Mars (1989).

Additional intra-observer reliability checks were made in order to check for "observer drift" following the coding of lessons 5, 10, and 15. During each check, the author recoded the reliability

lesson and the new coding was compared with the original. Reliability percentages resulting from these checks ranged from 83.87% to 91.80%.

A final series of intra-observer reliability checks was made following the coding of all 20 lessons by recoding three randomly selected lessons from the study and the reliability lesson for a fifth time. Reliability percentages resulting from these checks ranged from 81.16% to 91.00%.

Inter-observer reliability was established by comparing the independent codings of the reliability lesson by the first and second authors. The reliability percentage that this check yielded was 83.61%.

Data Analysis

Percentages of intervals for management and each teaching style were computed for each lesson so as to allow for the development of a profile of teaching style use within the MA and SE units. These data were entered into a Statistical Package for the Social Sciences (SPSS) (2001) program and descriptive statistics were computed across all 10 lessons for both units. Comparisons of total teaching style use during the two units were made by employing independent t-tests. Since multiple t-tests were performed, the Dunn (Bonferroni) method (Glass & Hopkins, 1984) was used to control for inflated type I errors when necessary.

Results

Teaching Style use Within the MA and SE Units

MA unit. Percentages of IFITS intervals in which the PTs employed each of the eight teaching styles and managed their pupils within both the MA and SE units are shown in Table 2. The table indicates that the PTs spent the majority of their time employing the practice style within the MA unit. Conversely, they rarely used the three productive styles of teaching or the reciprocal and command styles and did not use the self-check or inclusion styles at all. Management time was relatively high.

Table 2.

Percentage of IFITS Intervals for Teaching Styles for the MA and SE Units

Teaching Style	(MA Unit)		(SE Unit)	
	M	SD	M	SD
<u>Reproductive Styles</u>				
Style A (Command)	2.18	2.26	1.00	2.11
Style B (Practice)	76.77	9.17	64.82	21.49
Style C (Reciprocal)	0.73	2.29	3.70	9.70
Style D (Self-Check)	0.00	0.00	0.00	0.00
Style E (Inclusion)	0.00	0.00	0.00	0.00
<u>Productive Styles</u>				
Style F (Guided Discovery)	2.68	3.39	4.42	5.33
Style G (Divergent)	0.64	1.71	1.02	2.18
Style H (Going Beyond)	0.09	0.29	0.09	0.29
<u>Management</u>	16.91	7.46	24.95	20.50

The SE Unit. Table 2 indicates that the main teaching style employed by the PTs during the SE unit was also the practice style. Again, little time was spent using the three productive styles and no self-check or inclusion style teaching was recorded. Moreover, the PTs spent very little time using the command style. In addition, the PTs spent close to a quarter of their time managing their pupils.

Comparison of the MA and SE units

The descriptive statistics across all 10 lessons for both units suggest that the PTs employed the same pattern of teaching style use whether they were working within the MA or SE curricular frameworks. The independent t-tests carried out during the course of the study led to the same

conclusion as they revealed no significant differences between the percentages of time employed for each teaching style or management in either model. The lesson-by-lesson plots for PTs' use of the teaching styles within the reproductive and productive clusters for both the MA and SE units, shown in Figure 9, also confirm that the PTs' pattern of teaching style use was similar when working within either curriculum model.

Summary, Discussion, and Conclusions

This study was designed to examine the effects of one component of one PETE program on PTs' use of Mosston's spectrum of teaching styles. One goal was to ascertain whether or not PTs were able to use teaching styles in congruence with the requirements of the MA and SE models which they employed during an EFE. A second goal was to compare the PTs' teaching style profiles within these two curriculum models.

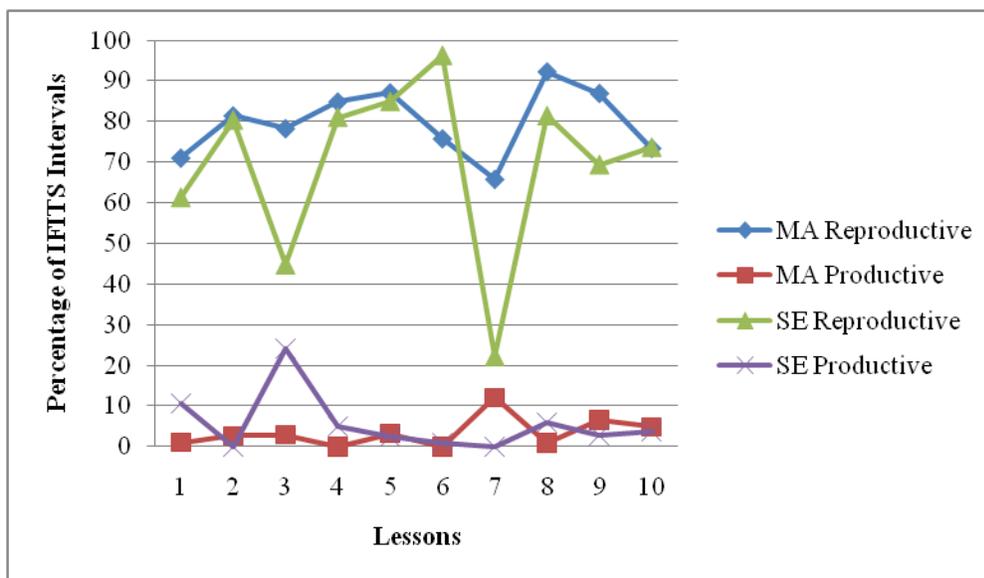


Figure 9. Percentage of time in which preservice teachers used reproductive and productive styles of teaching during the multi-activity and sport education units.

The key finding from the study was that the pattern of teaching style use employed by the PTs during the MA and SE units was virtually identical. This pattern was largely congruent with the

requirements of the MA model but did not match the requirements of the SE model. In addition, it was very similar to the teaching style profiles of inservice teachers who employed the MA curriculum model within the British national curriculum (Curtner-Smith, Hasty et al., 2001; Curtner-Smith, Todorovich et al., 2001).

The heavy use of practice style teaching and the fact that the more indirect reproductive styles and the productive styles were used infrequently within the MA unit suggest that the PTs were either focused almost exclusively on the psychomotor domain and were much less interested in realizing affective and cognitive goals within this model or that they were not very confident in their ability to employ other styles. Additionally, the PTs' predominant use of the practice style during MA teaching was likely to have been influenced significantly by their pre-PETE socialization. Practice style is the most traditional and widely used of styles and, therefore, probably the style by which the PTs had most often been taught themselves. Finally, the early emphases within the methods course on acquiring effective teaching behaviors, sound management, and skill learning, coupled with their relative lack of experience and consequent concern for survival and control (see Behets & Meek, 1996), could all have played a significant part in shaping the PTs' pedagogies and their major use of the practice style within the MA unit.

The PTs' underlying beliefs about the goals of secondary PE, their lack of confidence, their socialization, their relative inexperience, and the emphases of the methods course could also undoubtedly have accounted for why the PTs failed to shift from the predominant use of direct styles at the beginning of the SE unit to spending more time employing indirect styles towards the end of the unit. In addition, their own and their pupils' relative unfamiliarity with SE's pedagogical structure as well as their pupils' potential for disruptive behavior could have influenced the teaching styles they employed within the SE unit. Moreover, and as found previously (e.g., Curtner-Smith, Hastie, & Kinchin, 2008; McCaughtry, Sofu, Rovegno, & Curtner-Smith, 2004), it may have been

that these PTs failed to fully understand the SE model, particularly the managerial advantages afforded by its structure (see Curtner-Smith & Sofo, 2004; Ennis, 1999). It may also have been that a 10-lesson SE unit was simply not enough time for the PTs to make the transition from direct to indirect instruction safely and effectively. Finally, it may simply have been that too little time was spent on learning and practicing Mosston's spectrum of styles in the first place, that the pedagogies by which the spectrum was taught were faulty, or that the strategy of layering effective behaviors and curricular models on a foundation of spectrum theory within an initial methods course was flawed.

Future research in this line which could yield useful results should focus on the effects of different types of methods courses in terms of structure, content, theoretical underpinnings, and organization and pay more attention to the contexts in which PTs teach. Longitudinal and cross-sectional studies of PTs' teaching style profiles within PETE and following graduation may also be of use. Finally, qualitative studies investigating the influence of PTs' beliefs and socialization on their willingness to use a range of different teaching styles may prove enlightening.

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Footnote

¹As indicated earlier in the paper, in later versions of the spectrum (e.g., Mosston & Ashworth, 2002) 11 styles were identified in total. This was accomplished essentially by dividing the components of the three productive styles of the earlier version of the spectrum (i.e., Style F—Guided Discovery, Style G—Divergent, and Style H—Going Beyond). The PETE professor's rationale for using the earlier 8-style version of the spectrum with his PTs was that its relative simplicity made it much easier for PTs to learn and use.

CHAPTER III

SPORT EDUCATION: A PANACEA FOR HEGEMONIC MASCULINITY IN PHYSICAL EDUCATION OR MORE OF THE SAME?

Abstract

Sport education (SE) has received considerable support from teachers, teacher educators, and the sport pedagogy literature as a cure for much that ails physical education. The purpose of the study described in this paper was to determine the extent to which teachers employing the SE model rejected and combatted or supported and reinforced masculine bias and sexism. Participants were one male and one female preservice teacher (PT). Data collection and analysis were driven by the theory of Hegemonic Masculinity (HM). Data were collected using a series of qualitative techniques as the PTs taught four SE seasons to middle school pupils. They were analyzed by employing analytic induction and constant comparison. Results revealed that HM was supported and reinforced and masculine bias and sexism were prevalent within the SE seasons. These findings suggest that merely adhering to the curricular scaffolding of the SE model provides no more insulation against inequality than working within more traditional curricular frameworks. It was hypothesized that the support and reinforcement of HM were due to the PTs' orientations to teaching/coaching, interpretation of SE, and inexperience.

Key Words: Sport education, physical education, hegemonic masculinity

Sport Education: A Panacea for Hegemonic Masculinity in Physical Education or More of the Same?

Developed from “play education” (Siedentop, 1968) and based on the idea that “a mature sport culture represents an evolution of culture toward a more meaningful form” (Siedentop, 2002, p. 412), sport education (SE) (Siedentop, Hastie, & van der Mars, 2004) is a relatively new curriculum model that many scholars believe will be the savior of upper elementary and secondary school physical

education (Locke, 1992) The model is congruent with several other curricula and pedagogies including constructivism, games for understanding, peer tutoring, and cooperative learning. It was, however, developed by combining managerial components from the teacher effectiveness literature and positive elements of “real sport” (Siedentop, 2002).

SE is geared to providing an authentic physical education for children and youth. The heart of the model is organized formal *competition*, usually within modified game forms designed to promote greater engagement and success. Pupils participate in comparatively long SE *seasons* allowing them to develop a sense of *affiliation* with members of their teams. *Records* are kept throughout a season to promote accountability as well as sporting and academic authenticity in terms of measuring pupils’ progress. The end of a season is marked by a *culminating event* which plays a major role in creating an atmosphere of *festivity*. Contrary to a good deal of modern youth, amateur, and professional sport, a key goal of SE is to promote exemplary sporting behavior as well as an ethic of fair play. Moreover, teachers employing the SE model are expected to aid their charges in becoming *competent*, *literate*, and *enthusiastic* sport persons. Specifically, pupils should be competent in terms of tactical knowledge and technical expertise, literate in terms of their ability to value sport and comprehend what constitutes negative and positive sporting practices, and enthusiastic in terms of taking part in the spirit of sport (Siedentop et al., 2004). Finally, during the course of an SE season, the teacher’s role gradually shifts from prime instructor to facilitator. At the same time, pupils are expected to take on more responsibility for their own learning by filling a number of roles which make sport the cultural event it is including coaching, captaining, officiating, scorekeeping, collecting statistics, scouting, and writing newspaper reports.

Sport pedagogy researchers and scholars have made much of the theoretical advantages that SE appears to have over the hitherto dominant games curriculum model in physical education usually known as multi-activity (MA) teaching (Siedentop, Mand, & Taggart, 1986). For example,

and often borrowing from Lave and Wenger's (1991) theory of "situated learning," they have highlighted the fact that SE promotes more "legitimate peripheral participation" in authentic sporting forms (Alexander & Luckman, 2001; Alexander, Taggart, & Thorpe, 1996; Kirk and Almond, 1999). In addition, they have noted that SE has an advantage over MA teaching because it is less demanding on teachers in terms of driving instruction (Alexander et al, 1996), incorporates the pupils' social system as opposed to competing with it (Hastie & Siedentop, 1999), empowers teachers and pupils and so consequently improves the relations between them (Alexander & Luckman, 2001, Ennis, 1999), and decreases the need for teachers to negotiate the curriculum with dominant male pupils (Ennis, 1999).

Theoretical optimism has, by and large, been supported by research of the SE model (see reviews of this research by Curtner-Smith & Sofo, 2004; Kinchin, 2006; and Wallhead & O'Sullivan, 2005). For example, a few studies have suggested that SE is superior to MA teaching in terms of promoting learning (Browne, Carlson, & Hastie, 2004), enthusiasm, enjoyment, and perceived effort (Curtner-Smith & Sofo, 2004; Wallhead & Ntoumanis, 2004). In addition, a good deal of research has indicated that both preservice teachers (PTs) and inservice teachers are more than positive about the model, partly because of its technical advantages and partly because of its appeal due to its compatibility with their occupational socialization. Moreover, the bulk of research suggests that pupils enjoy being taught within the SE model and are particularly attracted to it by opportunities for decision-making, taking on roles other than player, and bonding with teammates.

Purpose

While there has been considerable research conducted on SE within the positivistic and interpretive paradigms, to date, there have been very few studies carried out with a critical orientation and comparatively little critical comment on the model. The work that has been conducted in this latter paradigm, however, suggests that sport pedagogy researchers and physical

education teachers need to be at least somewhat wary of the possible downsides of SE. These include, for example, the fact that teachers may simply choose not to teach at all rather than take advantage of the freedom the SE model provides them (Alexander et al., 1996), and the suggestion that, in Africa, SE has been viewed as “an ideological apparatus for the reproduction of a culture, the *laissez-faire* of competitive capitalism in the playground” (Shehu, 1998, p. 232).

Moreover, basing their rationale on Young’s (1998) notion of a “connective specialism,” Penney and Waring (2000) and Penney, Clarke, and Kinchin (2002) suggested that, in its purest form, SE was limited in its ability to promote pupils’ participation in sport outside the school gates because it was not as authentic as some believed. Further, they argued that the usual interpretation of SE in schools was, in fact, fairly conservative which meant that, rather than changing the sporting culture for the better, it was used as a vehicle to fit pupils into current and flawed versions of institutionalized sport. These arguments, then, were congruent with those of Kirk and Macdonald (1998) who suggested that if SE, as taught in schools, managed to mirror the outside sporting culture, it was very likely that pupils would learn values and practices that were undoubtedly undesirable.

In addition, the SE model may not be as inclusive as some would like to think. Brock (2002), for instance, found that pupil power and status in SE were determined by class, gender, attractiveness, academic ability, and skill level. Similarly, Penney, Clarke, Quill, and Kinchin (2002) reported that activity type determined the degree to which pupils were included or excluded within SE. Specifically, a sport’s unique culture privileged some pupils and marginalized others based on their race, ethnicity, gender, ability and age. The same authors also noted that the culture of a sport dictated which roles pupils perceived as legitimate and worthwhile and which pupils were suited to carry these roles out. Finally, some research has indicated that girls are marginalized in mixed-gender

SE when it comes to decision-making, participation in competitive play, and taking on the most powerful roles (Curnow & Macdonald, 1995; Hastie, 1998).

The study described in this paper was aimed at continuing and adding to the work of those who have previously examined SE from a critical perspective. Its purpose was to determine the extent to which teachers employing the SE model rejected and combatted or supported and reinforced masculine bias and sexism evident in so much MA teaching (see for, example, Ennis, 1995, 1999; Griffin, 1984, 1985; Hastie, 2003; Pope & O'Sullivan, 2003).

Theoretical Framework

Data collection and analysis within this study were driven by Connell's theory of Hegemonic Masculinity (HM) (Connell, 2005, 2008; Connell & Messerschmidt, 2005). This perspective was defined by Connell (2005) as "the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women" (p. 77). The key concept within this theory is that dominant forms of masculinity such as being aggressive, firm, violent, mesomorphic, and tough are, within reason, lauded, supported, and reinforced by cultural institutions, social groups, and individuals such as the media, sport, educational system, and physical education teachers. Moreover, the ways in which these dominant forms of masculinity are manifested are influenced by race and socioeconomic status (e.g., see Bramham, 2003). Further, both males and females are socialized into this form of thinking and contribute to its continuity and survival and traits of different and opposing masculinities are assimilated if they threaten to change the status quo.

Behaviors that are congruent with this dominant form of masculinity are, therefore, deemed as being superior while those which are not are seen as inferior and often labeled as "feminine." It follows, then, that those men and boys who do not display "masculine" traits and behaviors are

marginalized as are “feminine” women and girls. In short, HM serves to elevate and authorize mainstream forms of masculinity and subordinate and marginalize other forms of maleness as well as all things feminine.

Examples of HM at work in physical education and school sport are numerous. Some have been chilling and obvious. For instance, Pope and O'Sullivan's (2003) description of “Darwinism in the gym,” provided various accounts of girls' marginalization from sport and physical activity based on a perceived lack of ability and conformity with gender stereotypes (Griffin, 1984; Schmalz & Kerstetter, 2006; Wright, 1996), and the hierarchies of boys, based on physical size, intimidatory power, and sporting ability, which Griffin (1985) and Parker (1996) described. Others, such as the labeling of activities as masculine and more important (i.e., competitive sporting forms) and feminine and less important (i.e., aesthetic sporting forms) (Klomstein, Marsh, & Skaalvik, 2005), the movement and use of the body by girls and boys in congruence with gendered expectations (Paechter, 2003), and the importance of boy's physical ability in gaining acceptance by their peers (Drummond, 2003, Pugsley, Coffey, & Delamont, 1996; Woodruff & Curtner-Smith, 2007) have been relatively subtle.

A number of researchers have attempted to counter HM in physical education with various pedagogical interventions (e.g., Gard, 2003; Hickey & Fitzclarence, 1999) but their efforts have often been thwarted by the powerful forms of socialization which influence physical education teachers and their consequent deep-rooted beliefs in practices that are complicit with HM (Brown, 1999, Skelton, 1993). The compatibility of SE with this socialization and these beliefs on the one hand, and its apparent contradictions of HM when delivered in its purest form on the other, may mean that SE can succeed where other interventions have largely failed. Conversely, the implications of the work completed by Penney, Clarke, and Kinchin (2002) are that the focus on authentic sport in

SE and the potential for teachers to deliver a conservative version of the model could actually make things worse and lead to HM being supported and reinforced.

Method

Participants

The participants in this study were two purposefully selected Caucasian PTs from a large research university situated in the southeastern United States. Stacy¹ was female and 24 years old. Trenton was male and 23 years old. Both PTs had entered physical education teacher education (PETE) with what Lawson (1983a, 1983b) referred to as a “coaching orientation.” That is, their main motivation was to coach extracurricular school teams while teaching was a “career contingency.” This orientation also meant that they had a relatively conservative view of sport. Rather than being “hard core,” however, both PTs’ coaching orientations had been of “moderate” strength (see Curtner-Smith, Hastie, & Kinchin, 2008 and Sofo & Curtner-Smith, in press) and, by the time the study began, they had been socialized by Physical Education Teacher Education (PETE) faculty to the extent that they indicated a willingness to consider their coaching and teaching roles as equally important.

PTs’ SE-PETE

Prior to the study, the PTs had completed 3 semesters of PETE. During this time, they had been trained to use the SE model in a series of four progressive stages. The professors providing this training followed the guidelines for high class SE-PETE suggested by Curtner-Smith et al. (2008).

The first stage took place during the PTs’ secondary methods course. During this course, they read about and discussed SE, were provided with examples of SE season and lesson plans, participated in a practice SE season, and were assessed on their understanding of the model.

During the second stage, within their secondary early field experience (EFE), they team-taught a 10-lesson mini-SE soccer season to pupils at a local middle school. The plan for this season was written by the professor teaching the class. PTs, however, were responsible for developing lesson plans from this season plan.

In stage 3, the PTs team-taught three more 10-lesson mini-SE seasons to middle school pupils at two different schools within two more EFEs. Both PTs taught a volleyball season. Stacy also taught seasons of softball and tennis while Trenton taught seasons of softball and track and field. Again, season plans for this teaching were written by the PETE professors supervising the EFEs and PTs were responsible for writing individual lesson plans.

Finally, stage 4 took place during the PTs' elementary methods course and EFE. During these courses, the PTs reviewed the SE model in some detail and then team-taught a full-length SE season on striking-fielding games to upper elementary school pupils. As in previous EFEs, they were responsible for developing lesson plans from a season plan written by the professor teaching the methods course and supervising the EFE.

Setting

The study took place during Stacy's and Trenton's 7-week secondary student teaching experiences at the beginning of the fourth and culminating semester of their PETE. The PTs student taught at different public middle schools which catered to 6th, 7th, and 8th grade girls and boys and had adequate facilities and equipment to teach SE. The schools' normal curricula consisted of various MA and health-related fitness units. The only SE the pupils at either school had been exposed to previously had been taught by PTs from the same university as those in the study. Stacy and Trenton were supervised by their assigned cooperating teachers and university instructor from their PETE program. As well as teaching SE at their respective schools, both PTs also taught units of health-related fitness.

Pupils at Stacy's school were primarily from middle income families. Stacy's classes consisted of 53% girls and 47% boys and 66% Caucasian and 32% African American pupils. They ranged in size from 33 to 49 pupils. She taught full-length SE seasons of badminton (16 lessons) and tennis (16 lessons).

Pupils attending Trenton's school were also predominantly from middle income backgrounds. Trenton's classes ranged in size from 28 to 40 pupils. Fifty percent of these pupils were girls and 50% were boys. Seventy-two percent were Caucasian while 26% were African American. Trenton taught full-length SE seasons of basketball (21 lessons) and floor hockey (21 lessons).

Data Collection

Data were collected using a series of qualitative techniques. The goal was to gather data which indicated the degree to which HM was reinforced or rejected during the PTs' SE seasons. *Non-participant observation* was the prime data collection technique and involved significant field work during which lessons were observed and copious notes written. Semi-structured *formal interviews* (Patton, 1990) took place at the beginning and end of the PTs' student teaching experience. These interviews were audio recorded and transcribed verbatim. *Informal interviews* of the PTs were also carried out whenever an opportunity arose. Detailed notes recalling the contents of these interviews were written as soon after they had taken place as possible. Stacy and Trenton also completed two *stimulated recall interviews*. On each occasion, these involved them viewing film of a lesson they had taught which was paused periodically while they responded to questions about the thought processes behind specific actions they had taken during the lesson. These interviews were also audio recorded and transcribed verbatim. Finally, *document analysis* was conducted on the contents of PTs' teaching portfolios which contained season plans, lesson plans, pupil evaluations, and other documentation of their teaching.

Data Analysis

Standard interpretive methods were used during the analysis process. Initially, this involved identifying data which indicated the degree to which masculine bias and sexism was present within the PTs' SE seasons. Second, data indicating whether each of the PTs taught in such a way as to reject and combat HM or to support and reinforce it were identified. Both these subsets of data were then coded and categorized using the techniques of analytic induction and constant comparison (Goetz & LeCompte, 1984). Coded and categorized data were then reduced to meaningful themes. Data trustworthiness and credibility were established by triangulation of findings, extensive member checking, and the search for discrepant and negative cases (Goetz & LeCompte, 1984).

Results and Discussion

Data gathered during the study overwhelmingly indicated that HM was supported and reinforced, rather than rejected and combatted, during the course of the SE seasons taught by both PTs. This support and reinforcement was revealed within four themes: *male dominance*, *female conformity*, *racial differences*, and *PTs' perceptions and behaviors*.

Male Dominance

Throughout all four SE seasons taught by the two PTs there were numerous examples of boys being dominantly positioned over girls. Some of this dominance was obvious and some was more subtle and less easy to detect. As illustrated in the following data extracts, more obvious forms of male dominance included boys taking most of the leadership roles central to the SE seasons, controlling game play, and making most of the decisions when pupils were encouraged by the PTs' to take on more responsibility:

Before the game begins, Johnny, a Caucasian boy, mandates the team strategy and what each person will do. "We're going to use man coverage," he says. "Suzi you cover Beth and Tamara you cover Josh [a weaker male]." Jamarcus, the only other boy on the team, is the only one allowed to offer any suggestions. "You should let me take point 'cause I'm faster

than you,” he says but he is forbidden as the point guard position appears to be the prized position on all courts. . . . Johnny barks orders throughout the game. “Move up! . . . You have to set picks for Jamarcus!” . . . Johnny does all the coaching during half-time. Suzi attempts to get a word in but is cut off. At this point, both of the girls disengage and become disinterested. They simply do what the boys say but not very enthusiastically. (Trenton, field notes, basketball)

During the games today, boys have contested every tip-off except one in which one girl (Maggie) was involved. . . . The boys call for the ball a lot and take the majority of shots. . . . The girls are pretty quiet. The boys are also doing all the “coaching.” . . . Roughly two-thirds of score/statistics keepers are girls. Boys are more energetic and girls are more passive during the game. (Trenton, field notes, basketball)

Stacy comes over to a court where the teams are hitting the shuttle back and forth but not employing any real strategy. She encourages the captains (Marisha and Tessa) to try some kind of strategy. After she walks away, one of the boys (Dykwan) says, “Okay, come on. Let’s go.” (Stacy, field notes, badminton)

Darius gets upset and complains when the goalie (Leslie) allows a goal. Trenton just replaced Darius with Leslie a few moments ago. When Trenton isn’t looking Darius forces Leslie out of goal and shouts, “You suck. I need to be goalie again!” Darius commandeers the role despite being consistently scored on when he played goalie. (Trenton, field notes, floor hockey)

Slightly more subtle forms of male dominance included boys staking claim to the best times and spaces within the gym and usurping and undermining girls who were placed in leadership roles by the PTs. These two forms of dominance are revealed in the following field note excerpts:

Stacy begins class by stating, “Everyone has to play before the end of class. No sitting out.” Stacy’s stimulated recall interview indicated that she has deliberately formed teams with equal numbers of girls and boys. . . . She also explained that it was up to the pupils who played in the first and second games of the session. . . . However, the first games are all boys vs. boys. . . . The second games are all girls vs. girls. . . . After the second set of games the boys and girls do play mixed doubles. (Stacy, field notes, tennis)

As Trenton assigns courts, the boys start complaining and making their own suggestions as to where the teams should be playing. Michael says, “We should play that team, they have more boys.” . . . Marcus asks, “Why do we have to play on the side court first?” . . . “Why can’t we play on the end court?” Trenton caves in and changes the court assignments. (Trenton, basketball, field notes).

Trish is the team captain (within game leadership). . . . A Caucasian boy, Jake, is the coach (out-of-game leadership). . . . Jake contradicts Trish as she makes play calls. . . . The other male member of the team, Nigel, begins to argue calls with her. . . . Jake says, “We need to

play zone!” Trish responds by yelling, “Keisha can’t block Darius. He’s too tall. We need to stay man.” . . . Jake yells back, “Zone!”. (Trenton, basketball, field notes)

In addition to the general pattern of boys dominating girls within the SE seasons and in congruence with previous research (Griffin, 1985; Parker, 1996; Pope & O’Sullivan, 2003), larger, more physically able and aggressive boys dominated those who were smaller, less physically gifted and timid. The following field note passages illustrate this form of domination:

During the match, two African American boys (Keyshan and Jerry) start to “crack” on a third (Jashan) whose partner (Tanisha) is retrieving a tennis ball. . . . Keyshan says, “Maybe if you’d stop droolin’ ova Tanisha like she’s a plate a fried chicken and hit the stupid ball we might get done with dis today.” Other pupils laugh upon hearing the verbal taunts. . . . The two taunters continue to hurl verbal insults. . . . One of the taunting boys (Jerry) crosses under the net to physically intimidate Jashan. (Stacy, field notes, tennis)

Marvin, an African American boy, becomes upset when the other team goes up eight unanswered points. . . . He yells at his team and is reprimanded by Trenton. . . . After Marvin scores a three point shot “in the face” of Robert, a Caucasian boy from the opposing team, Robert says something [partially inaudible] about the score prompting Marvin to hold his arms wide and walk chest first into Robert, a Caucasian boy on the opposing team, almost knocking him down. (Trenton, field notes, basketball)

Moreover, and also in line with previous research (Drummond, 2003, Pugsley et al., 1996; Woodruff & Curtner-Smith, 2007), when this form of male-on-male domination was more overt, it appeared to be an avenue through which dominating boys gained acceptance of their peers by revealing their “maleness.”

So far on five occasions larger, more skilled boys have “cracked” and “fronted” on Jashan, a smaller boy. Other boys, and some girls, have encouraged these actions verbally (“Yeah, you tell’em what’s up!”) or physically (touching fists or high fives). (Stacy, field notes, tennis)

Marquan laughs at the two African American boys his team is playing. He tells them that their strokes are “weak” and makes an explicit joke about one of their mothers. Two other boys (Keyshan and Jerry) on an adjacent court laugh and yell “Ooh!” . . . A dispute over the score begins between two teams when a player from another court (Joseph) accidentally breaks up a long rally. Stacy demands they resume play. Both teams argue until Marquan says, “Stop whining! She done told you to just start over.” (Stacy, field notes, tennis)

Chris sinks his second three point shot in a row while Karl, a very skilled player, tries to block him. Chris begins a sort of skip around the court while taunting Karl. “What’s that? That’s in your eye!” he gloats. The other boys yell, “Whoa” while the girls look apprehensive. They appear to be afraid that Karl will retaliate. . . . Chris speaks over Doug (the team coach)

during halftime. Doug does not resist. The team listens to Chris tell them what defense to employ. (Trenton, field notes, basketball)

Female Conformity

Faced with these various forms of male domination, most girls were quite content to take on and engage in peripheral, supporting, less physical, and more feminine roles and behaviors. Some of these roles and behaviors made a real contribution to the SE season, some were versions of what Tousignant and Siedentop (1983) referred to as “competent bystanding,” that is subtle avoidance of participation in any meaningful way, and others were completely off-task and aimed at socializing with other like-minded peers:

A non-officiating girl (Jessica) who is rotated out of play avoids returning to the game and “helps” another girl (Rachel) who is officiating make calls. When a boy (Mark) complains, Trenton says she is “practicing” officiating. (Trenton, field notes, basketball)

A girl (Sarah) who is supposed to be playing in the game talks with another girl (Kate) who is officiating. . . . Her team complains because she is not covering her opponent. Sarah continues to talk even after her teammates get Trenton to reprimand her. . . . Sarah persists in talking so the boys on her team banish her to the side where she can socialize while the boys play 2 vs. 2 instead of 3 vs. 3. (Trenton, field notes, basketball)

Stacy is spending more time and energy getting pupils to play today. . . . A group of girls is discussing sensational events from the day including the latest relationship gossip and some alleged fighting. . . . Some girls convince the boys on their teams to switch courts so that they can be close to their friends and talk. Stacy shepherds the girls back to their original courts (Stacy, field notes, tennis)

Stacy asks for volunteers fill each team role. Only boys raise their hands for captain. . . . Stacy asks for volunteers to take on the role of “sports writer.” She explains the person in this role will conduct interviews and polls. There are no volunteers until Shaniqua asks when they would do this. Stacy replies, “During class, while we are playing.” A number of girls then raise their hands. Only one boy raises his hand. (Stacy, field notes, badminton)

Again, these findings are congruent with those of previous studies of MA teaching and sport (Griffin, 1984; Paechter, 2003; Pope & O’Sullivan, 2003; Schmalz & Kerstetter, 2006; Wright, 1996).

Not all girls, however, conformed with gendered expectations and, as the following field note passages indicate, some more physically able, aggressive, and confident girls (in other words those who displayed more “masculine” traits and behaviors) were prepared to battle for equal status

with dominant boys, flourished in leadership roles, competed on an equal footing with boys during games, and were not afraid to voice their opinions when given the opportunity:

Dion is attempting to take over the court on which two girls (Dezré and Shaniqua) are playing but the girls run him off, wielding tennis racquets as weapons. Dezré screams, “This is our court! Go back to your own sucky court.” . . . Four other girls are engaged in a doubles match. . . . The boys rarely seem to “crack” on these particular girls. . . . On two occasions when the boys do “crack” on them, the girls “crack” back: “You betta watch who you crackin’ on. I ain’t the one crying ‘cause they losin’.” (Stacy, field notes, tennis)

Jake continues to tell Trish and Nia where to position themselves on court but the two girls band together. Nia tells him, “If you try to tell us what to do again, we’ll quit and you can play by yourself.” (Trenton, field notes, basketball)

Moesha, an African American girl, tells her team to get back in a “diamond” formation. The team is able to gain possession of the puck. . . . Chris calls for a “man” defense and tells Nick, a Caucasian boy, to cover Travis, a smaller boy. Moesha argues against covering Travis because “Becky’s got it.” . . . Becky steals the puck from Travis and passes to a teammate for an assisted goal. (Trenton, field notes, floor hockey)

As illustrated by the following field note extracts, ironically, less physically able girls were only stirred to resist male domination if it encroached on roles, activities, and spaces they believed were reserved for them:

Karl keeps trying to tell Mary what the score is while he is playing. She tells him if he doesn’t stop telling her how to keep score she is going to assign “negative sportsmanship” points. . . . Karl walks over and tells Mary how to score again and she marks something on the page and his teammates tell him to “shut up.” (Trenton, field notes, basketball)

During game play Kia is explaining how to score to Courtney. A boy from another court (Casey) tries to interject and explain but they chase him off. Kia says, “Go on, we got it! What?! You think we stupid or somethin’? Besides, this is our net, get your own.” (Stacy, field notes, badminton)

Racial Differences

In line with Bramham (2003), the findings of the study also indicated that there were some differences in the ways male dominance was gained and received between Caucasian and African American boys and girls. African American girls, for example, were more likely to resist male dominance but socialize when their participation was restricted by it than Caucasian girls:

The boys play in the first round of games. Two African American girls waiting to play (Shaniqua and Mercy) are talking, teasing, and generally trying to get the attention of the four boys on court. The boys acknowledge the girls and chat with them between points. (Stacy, field notes, badminton)

The boys on both teams try to make the girls sit out. The Caucasian girls start to leave until the only African American girl (Sherri) on the court tells the boys she's not leaving as it is her turn and threatens to tell Trenton. After this display, the rest of the girls join her and pick their sticks up again. (Trenton, field notes, floor hockey)

More powerful and skilled African American boys were often observed engaging in rituals of dominance within game play which involved taunting and verbally and physically intimidating other boys while Caucasian boys were not. Typically, these rituals were aimed at other African American males. In addition, African American boys were more likely to engage in what Robinson (2005) referred to as "gendered performance." These were overtly sexualized displays aimed at female pupils of either race with the goal of impressing them and which served to reinforce their male dominance. Examples of both these types of behavior are illustrated in the following field note excerpts:

After winning a point, one African American boy (Keyshan) crosses over the net and stands over another (Donovan) with his chest out yelling, "What? What?" . . . One African American boy (Marquan) starts using chest bumps to physically push another (Jashan). He is literally pushed off the court while the other boys (also African Americans) taunt him. (Stacy, field notes, tennis)

One African American boy (Jamarcus) tells another (Marcus) to stop flirting with a Caucasian girl (Maggie) who is keeping score/stats. Marcus retaliates by suggesting that if the other boys could actually shoot as well as he can, then the game wouldn't take so long. He looks at Maggie who laughs at this putdown and smiles back. (Trenton, field notes, basketball)

PTs' Perceptions and Behaviors

Trenton and Stacy did little to disrupt or dismantle the pattern of HM described in the preceding paragraphs. To the contrary, they often reinforced traditional gender roles and expectations. For example, Trenton explained that on one occasion he had "talked to [two girls] . . . about how [he] thought a lady should act . . . so they [could] be respected by the guys." Similarly,

Stacy stated that she thought pupils of either sex should “know their responsibilities . . . just like any girl or guy.” The following data extracts provide further evidence of the PTs reinforcing HM within their SE seasons:

While attempting to rebound, Beth appears to jam her finger. Trenton comes over to check on her as she cries and asks her if she needs to sit out. . . . Trenton encourages Beth to come back in and play but she says she’s hurt and scared. He allows her to stay out. . . . Jason is accidentally hit in the face with the ball. Trenton checks him out and has him sit out. . . . After what seems to only be one monitoring sweep, Trenton tells Jason to return to play. No protest from Jason is allowed. (Trenton, field notes, basketball)

Dezré tries to attack Scott who has teased her during the class period. She is stopped by her teammate (Shaniqua). Stacy pulls Dezré off to the side near me and says, “That is not how a young lady acts.” After Dezré tells Stacy what happened she calls over Scott and tells him to “act like a gentleman.” (Stacy, field notes, tennis)

Finally, both PTs also pointed out that intervening in their classes in order to promote gender equity was not “stressed,” and suggested that even if they had attempted to make changes, they would have had little effect as behaviors and roles taken on by either sex were “natural.” During both interviews and stimulated recall interviews, both PTs suggested that the pattern of male dominance observed in their classes was inevitable:

I think the girls like to score keep ‘cause they get to always do their writing and make little comments. It’s just their nature. . . . Girls are always like that, the doodlers, and the ones that like to write are always wanting to The girl would be the scorekeeper and the guy would be the official I also think the guys like to boss people around Of course, the guys always wanted to be the captain and the coach, so they really enjoyed that the most. And I saw all the girls were pretty much board members or equity officers or the warm-up leaders and I think they just enjoyed to write and, you know, write little daily articles about their team or you know, work on a posterboard and make it all colorful. (Trenton, stimulated recall interview 1)

[Sport is] ingrained into their heads in the south when they’re little kids as boys, ya know. From the time they’re little, ‘til later. And it is in some girls, too. I mean, I’ve played sports my whole life, but ya know, I feel like it’s more ingrained in boys than it is in girls in the south. So I think that’s why guys work for it harder and are pushed harder by their parents than girls are. (Stacy, final interview)

Conclusions

The main finding of this study was that HM was supported and reinforced within the four SE seasons taught by the two PTs who served as participants and that masculine bias and sexism was prevalent despite their employing what Curtner-Smith et al. (2008) referred to as the “full version” of the model. This finding adds to those previous studies indicating that SE is not necessarily as inclusive or equitable as some have claimed (Brock, 2002; Curnow & Macdonald, 1995; Hastie, 1998; Penney, Clarke, Quill, et al., 2002). It also suggests that merely being faithful to the “curricular scaffolding” (Ennis, 1999) of SE provides no more insulation against inequality and sexism than working within the MA framework. While SE may have greater potential than more traditional curricular models to improve the lot of girls and boys who do not fit with dominant forms of masculinity, something more is needed from the teacher if gains in gender equity are to be made. In short, there must be a conscious effort to focus and reflect on these kinds of critical issues and teach *through* sport.

The PTs in the current study possessed moderate coaching orientations and relatively conservative views about sport. Therefore, although they employed the full version of the SE model, their interpretation of it was also relatively conservative. As noted previously by a number of scholars (Kirk & Macdonald, 1998; Penney, Clarke, & Kinchin, 2002; Penney & Waring, 2000), this kind of conservative interpretation is unlikely to provoke much in the way of positive change in terms of improving the sporting culture in which pupils engage or the values and practices they learn including those concerned with gender expectations and roles. Studies of teachers with strong teaching orientations, comparatively liberal views about sport, and hence relatively liberal interpretations of SE might yield different and more positive results when compared to those of this study.

Finally, although the PTs in the current study had been well trained to deliver SE technically, they were obviously inexperienced teachers. Perhaps, more experience is needed before teachers can both follow the SE model faithfully and reflect on issues of gender equity. Alternatively, perhaps PETE faculty need to consider a greater critical emphasis while teaching their charges the technical aspects of SE. Again, research examining these questions may prove useful.

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Footnote

¹The names of the two PTs and the pupils in this paper are fictitious.