

PEDAGOGY

Motivational Climate in Physical Education Classes: Is It Really Determined by the Instructional Model?

Sima Zach, Rona Cohen, Michal Arnon

Abstract

This study compared the effect of the cooperative learning and direct instruction models on the motivational climate in physical education lessons. Participants were 121 seventh-grade students. The Achievement Orientation Scale examined learners' perceptions of the motivational climate in physical education lessons. One teacher taught a class of boys, a class of girls, and a coed class. Participants completed the questionnaire before and after the learning program, in which the teacher used direct instruction and cooperative learning. In all three groups, the students perceived the mastery climate to be higher than the performance climate, irrespective of the gender composition of the class or the instructional model employed. It is not possible to attribute motivational climate to the instructional model.

Motivational climate has been characterized as an influential factor in determining and developing learners' motivation in physical education (PE) lessons. Two approaches to the motivational climate have been identified in the literature: a climate that nurtures skill

Sima Zach is the former head of the School of Education and Sport Pedagogy and the former director of Teacher Education Program, The Academic College at Wingate, Wingate Institute, Israel. Rona Cohen is a pedagogical instructor and a lecturer, The Academic College at Wingate, Wingate Institute, Israel. Michal Arnon is with the Data Analysis Unit, The Academic College at Wingate, Wingate Institute, Israel. Please send author correspondence to simaz@wincol.ac.il

acquisition, hereafter called the *mastery climate*, and a climate that nurtures improved performance and its demonstration, hereafter called the *performance climate* (Ames, 1992). In a mastery climate, personal improvement is presented as the required achievement and emphasis is on effort and cooperative learning as tools for success. In a performance climate, the required achievement is superiority over the opponent, errors are perceived as failure, and objectives should be attained on a minimal-input/maximum-output basis. The main differences between mastery climate and performance climate are reflected in several measures: the definition of success—personal improvement versus superiority over the opponent; the value of the activity—effort, learning, and improvement versus natural ability; the reasons for individual satisfaction—investing maximal effort versus proving superiority; the definition of error—part of the learning process versus failure; the motives for effort—a tool for self-improvement versus a tool for achieving superiority; and the assessment measure—personal progress versus relative rating. These measures represent the differences between two educational approaches. In a mastery climate, the learning environment serves the individual's desire for personal improvement, while in a performance climate, the learning environment serves society's desire to test individuals and then promote and reward the best of them (Ames & Archer, 1988).

Studies have shown that when a class is perceived as having a mastery climate, the learners express greater enjoyment and satisfaction from physical activity in PE lessons (Ntoumanis & Biddle, 1999), exhibit higher perceived competency and a belief that effort leads to success (Cury et al., 1996), show perseverance and a preference for challenging tasks (Morgan & Carpenter, 2002), and even express the intention to remain physically active in the future (Ntoumanis & Biddle, 1999). In contrast, performance climate has been shown to reflect negative effects such as lack of enjoyment and reduced social and group unity (Ommundsen, Roberts, Lemrye, & Miller, 2005). Focusing on effort and personal improvement appeals to most learners, irrespective of their ability, in a dynamic learning environment in which success is achievable by all. A performance climate, in contrast, has a distancing effect. It rewards only those demonstrating the highest level of ability and leads to social comparisons that affect the others (Smith, Smoll, & Cumming, 2007).

To prevent attrition from an activity and to ensure a positive physical education experience, it is important to examine learners' motives for their participation or nonparticipation. Teachers are the agents who most significantly influence class climate. They have the opportunity to shape the experience of participants in physical activity and thus to affect learners' attitudes toward physical activity and their intention to continue to engage in it (C. Johnson, Erwin, Kipp, & Beighle, 2017).

Direct Instruction

The direct instruction model, also known as the traditional approach, is the most common one used in teaching PE lessons (Metzler, 2011). However, the use of the direct instruction approach during PE lessons has been criticized because it does not empower the learners and their creativity during the lessons (Butler & McCahan, 2005) and focuses more on individual skills and technique rather on the game (Roberts & Fairclough, 2011).

Cooperative Learning

The cooperative learning model is a learning–teaching process that entails reciprocal ties among learners in small heterogeneous groups for the achievement of scholastic goals. Underpinning this method is the perception that creating mutual responsibility among group members—which means that learners are responsible for their own learning and for the learning of their group partners—promotes a broad range of educational aims such as cooperation toward attaining objectives, mutual respect as a basis for group success, stable perceived self-worth, and academic achievements (Slavin, 1987; Zach & Cohen, 2012).

Development of the educational paradigm of cooperative learning can be seen in the research literature. First, the ecological approach to teaching (Doyle, 1977) emphasized the bidirectional teacher–pupil effect and thus the possibility of pupils acting as partners in management, organizational, and learning tasks (Doyle, 1986). Another development, the cultural-historical approach to learning (Kuhn, 1972; Vygotsky, 1978), emphasized that learners progress from their present level to their potential level through two main factors: guidance by an experienced professional and cooperation with peers who are more or less at the same level of development.

The social learning approach (Bandura, 1977) focused on the inner dynamics of learner groups and emphasized the mutual and dependent ties between reciprocity and learning; that is, learning is a product of shared social experiences, which enable individuals in the group to learn and to teach. In other words, as learners, students observe others trying a task and listen to their explanations, and then they undergo the same experience through imitation, comparing their performance to that of their peers and receiving feedback from them. As teachers, students enable others to watch them, they explain what they are doing, and then they give feedback to others trying to perform the same task (Rosenshine & Meister, 1994).

For cooperative learning to succeed, several principles should guide the design of the learning environment: (1) Individuals should feel that their active participation is essential for the group's success. (2) The group shares responsibility for the development of the individual. (3) Individuals are responsible for the development of the group. (4) Individuals are obliged to act with respect and patience toward other members; judgmental behavior and impatience among group members have a negative effect on the required development of trust, which takes time and effort (although members should also learn how to voice constructive criticism when necessary). (5) The group is essential for the success of the individual. Where feasible, teachers should guide learners to work together toward academic achievements; that is, they should regularly reflect on the requirements for learners as part of cooperative learning (Darling-Hammond & Bransford, 2005; D. Johnson & Johnson, 1994). A proper design of the cooperative learning model and appropriate implementation are necessary conditions for the group to function properly. Group members should feel confident enough to try new things even though they may err, knowing that their weaknesses will not be ridiculed by their peers. Reciprocal feedback is also necessary for improving personal and group achievements (Frank, 2004).

In a literature review on cooperative learning in PE, Casey and Goodyear (2015) found that cooperative learning achieves four learning outcomes of physical activity: physical, cognitive, social, and affective. In addition, research shows that cooperative learning facilitates motivational climate in PE lessons. Specifically, students in PE classes in which teachers incorporated cooperative learning and a mastery climate demonstrated effort and a high activity

level (Grasten & Watt, 2016) and an increase in self-confidence, self-esteem, and motivation (Fernandez-Rio, Sanz, Fernandez-Cando, & Santos, 2017; Goodyear, Casey & Kirk, 2014).

Even though the direct instruction approach is mainly used for acquiring techniques and fundamental motor skills, recent research has found that the direct instruction model has fewer positive effects on student motivation and academic achievement than does the cooperative learning model (e.g., Cuellar-Moreno, 2016; Gokhan, 2012; Sánchez, Byra, & Wallhead, 2012; Sánchez-Hernández, Martos-García, Soler, & Flintoff, 2018). As well, the use of mixed models in primary PE lessons significantly improves student attention, satisfaction, and behavior, compared with use of only the traditional style (Cuellar-Moreno, 2016).

Gender Inequality and Physical Education

Gender inequality in PE is prevalent and is perpetuated by gender stereotyping (Koca, 2009). Excising gender stereotypes from the learning environment is a challenging goal, since they are so deeply ingrained in our culture as a whole despite the inroads made in recent years. Solmon, Lee, Belcher, Harrison, and Wells (2003) offered a number of conditions that can help to moderate such stereotypes:

1. Discussing equal potential. Individuals need an environment in which they can internalize the notion that effort leads to results—one that challenges and encourages all to try, without being judged (Koca, 2009).
2. Instilling basic skills equally. Certain motor skills are required if learners are to be skilled in physical activity. These are the building blocks of more complex physical activities (Goodway & Savage, 2001). Complex movement skills do not come naturally, and the more complex or difficult they are, the longer the period of instruction that is needed. Discourse that promotes equal potential is credible only if the same basic skills are taught on an equal basis to both genders.
3. Equal opportunities for participation. All pupils, regardless of gender, should have equal access to content and the same allocation of time and resources.
4. Equal learning opportunities. An environment is needed that is physically and emotionally safe. It must ensure no gender discrimination in terms of learning opportunities and that

all learners can participate in the process of advancing from their present level to their potential level (from the real toward the ideal).

5. Gender-equal assignment into groups where all are equals among equals.

The group is where gender equality can be nurtured and gender stereotypes eliminated. Proper selection of the gender makeup of groups can eradicate gender stigmas and balance academic achievements in a manner that allows learners to express their full biological potential (Jinging, Bin, & Lei, 2016). Gender composition in physical education classes can be either gender separated or coed. Another option is the division of classes into separate groups by gender only for PE lessons, where all other studies are coed.

Studies of gender discrimination in PE lessons and of the question of separation of boys and girls in PE lessons, conducted outside the United States (e.g., Wang & Liu, 2007), revealed a number of difficulties in implementing gender equality. One problem was the dominance of boys in the groups of learners. Evidence indicates that in mixed classes boys dominate the physical and linguistic space as well as the teachers' attention, and as a result, girls cannot express themselves and are ignored by the teacher (Olafson, 2002). Girls become marginal or insignificant in the lesson and receive less training time (Garcia, 1994). Similarly, it was found that girls recoil from contact with boys in PE lessons because they feel that their bodies are on display (Fisette, 2011) as a result of the looks and comments by the boys.

Another problem in gender equality is stereotypical biases among teachers. Cabbei (2004), who sought solutions to the problem of inequality between the genders, contended that one reason for gender inequality in PE lessons is sexist behavior, both direct and indirect, by the teachers. He offered evidence that girls often do not receive egalitarian PE. His solutions included recommendations to teachers to change their language and terminology, give more attention to the girls, and provide the girls more learning opportunities and more chances to demonstrate their abilities.

Shilling (2017) recommended that unless active steps to remove or prevent the development of stereotypes are taken, a mixed class may serve as a platform for internalizing perceived gender inequality.

If the learning environment offers equal opportunities, content, and resources to both genders, then single-sex teams may be the correct choice if it is predicated on differences in interests or significant divergences in potential levels between the genders. In such cases, educational discourse should reflect that the aim of separation is to support the development of each individual's full potential—in an environment of equals among equals. Otherwise, the option of single-sex teams may perpetuate gender stereotypes of inequality (Jinging et al., 2016).

Therefore, this study examined the effect of two instructional models—direct and cooperative—on perceptions of motivational climate in PE lessons. In addition, it examined how this perception was affected by the gender composition of the class—only boys, only girls, or mixed-gender classes. Such knowledge may assist decision makers and curriculum planners in understanding what facilitates better conditions for enhanced performance and improved learning in PE.

Method

Participants

One hundred twenty-one participants (65 boys, 56 girls) in three seventh-grade classes in a mixed-gender junior school took part in the study.

Research Tools

We used the Learning and Performance Orientation in Physical Education Classes Questionnaire (Papaioannou, 1994) to assess the motivational climate of PE lessons. The questionnaire comprises 27 statements that refer to the respondents' perception of the atmosphere in the athletic environment and to the motivational factors necessary to be active in that environment. After a procedure of factor analysis, five factors emerged:

1. Learners' perceptions of the motivational climate created by the teacher (6 items, 1–6). These items examine whether learners perceive the teacher's behavior as promoting learning and self-improvement as the most important achievements to be attained.

2. Learners' attitudes toward personal internal motivational factors (7 items, 21–27). These items examine the extent of satisfaction learners derive from activity in the lesson and from the motivational climate in the class.
3. Learners' perceptions of the motivational climate created by other members of the group (5 items, 7–11). These items examine whether learners perceive superior performance (better than other members of the group) as the primary measure of success and reward in the learning environment.
4. Learners' attitude toward the motivational climate in the group (4 items, 17–20). These items examine learners' perceptions of the connection between effort and success in the learning environment.
5. Learners' perceptions of the motivational climate in the group (5 items, 12–16). These items examine learners' perceptions of the emotional price they pay (e.g., fear, worry, anxiety) if not succeeding in performing the task.

Measures of internal consistency for the factors, as assessed in this study, were 0.84, 0.8, 0.65, 0.71, and 0.71, respectively.

Procedure

After receiving authorization from the college ethics committee, we implemented the study. The same teacher taught all four classes. Class I was only boys ($n = 46$), Class II was only girls ($n = 35$), and Classes III and IV were mixed (19 boy, 21 girls). The teacher received detailed instructions about the cooperative learning program, its objectives, and its implementation. The teacher also received six lesson plans constituting a teaching unit based on the cooperative learning model. In Classes I, II, and III, six sequential lessons were given based on the direct instruction model, after which questionnaires were distributed to the learners. Another six lessons were given according to the cooperative learning model, with no changes in the composition of the group or teacher. To verify teacher adherence to the instructional models, the second author of the study observed the first three lessons of each model and filled out an observation sheet (see Appendices A and B). The last three lessons were observed and video recorded. After the six lessons, the questionnaires were

again distributed to the students. In Class IV, the same procedure was applied, but in regard to the teaching models and the order, the first six lessons were given in a cooperative learning approach and then six lessons were given in a direct instruction approach—the reverse order.

Data Analysis

The data are presented by means of descriptive statistics (frequency, means, and SD). In addition, comparisons were made between the different groups according to the gender composition of the group, via ANOVA tests.

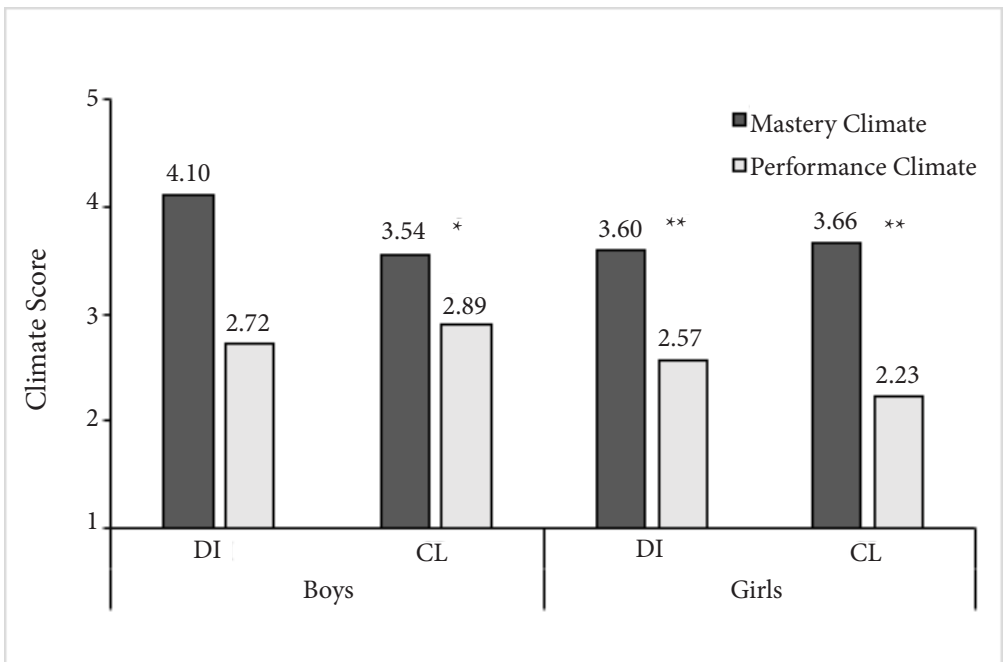
Findings

Table 1 shows the descriptive statistics of the study variables. First, we hypothesized that there would be significant differences between the boys and girls who studied in single-gender classes and between the two teaching models, in motivational climate. A three-way ANOVA (Teaching Model \times Gender \times Motivational Climate) revealed a significant difference between the two motivational climates, $F(1, 77) = 52.11, p < .001, ES = .404$; no gender differences, $F(1, 77) = 3.54, p > .05, ES = .044$; no differences between the teaching models, $F(1, 77) = 1.07, p > .05, ES = .014$; and that none of the interactions were significant. A follow-up analysis via an independent t test showed that in each of these research groups, mastery climate was significantly higher than performance climate; see Figure 1.

To find the differences between the boys in the one-gender class and the boys in the mixed-gender class, we conducted a three-way ANOVA (Class \times Teaching Model \times Motivational Climate). Results showed a significant difference between the kinds of motivational climate, $F(1, 61) = 23.29, p < .001, ES = .276$, and no difference between the teaching models, $F(1, 61) = 2.11, p > .05, ES = .033$, or between the one-gender and mixed-gender classes, $F(1, 61) = 0.74, p > .05, ES = .001$. A significant interaction appeared between motivational climate and teaching model, $F(1, 61) = 5.23, p < .05, ES = .079$, which points out that the differences between the kinds of motivational climate are greater in direct instruction than in cooperative learning (in both teaching models the differences between the kinds of motivational climate were significant). The same analysis was conducted for the girls (Class \times Teaching Model \times Motivational

Table 1*Descriptive Statistics: Means and Standard Deviations of the Study Variables*

Group	n	Mastery climate				Performance climate			
		Direct instruction		Cooperative learning		Direct instruction		Cooperative learning	
		M	SD	M	SD	M	SD	M	SD
Boys	46	4.10	1.02	3.54	1.10	2.72	1.11	2.89	1.08
Girls	35	3.60	0.92	3.66	1.11	2.57	0.66	2.23	0.77
Boys in a mixed-gender class	19	4.13	.460	.313	20.7	2.98	0.71	3.06	0.44
Girls in a mixed-gender class	21	3.96	0.60	4.02	0.70	2.22	0.48	2.14	0.72

**Figure 1.** Motivational climate among boys and girls in two teaching models. DI = direct instruction; CL = cooperative learning.* $p < .05$. ** $p < .01$.

Climate). Results showed a significant difference between the kinds of motivational climate, $F(1, 52) = 85.72, p < .001, ES = .622$, and no difference between the teaching models, $F(1, 52) = 0.25, p > .05, ES = .005$, or between the one-gender and mixed-gender classes, $F(1, 52) = 0.23, p > .05, ES = .004$, and there was no significant

interaction. A follow-up analysis showed that in the the one-gender and mixed-gender classes, in both teaching models, the mastery motivational climate had significantly higher scores than the performance motivational climate.

We further hypothesized that the order of the two instructional models would have a similar effect on the perception of motivational climate in both genders. A four-way ANOVA (Motivational Climate \times Order of Teaching \times Teaching Model \times Gender) revealed significant differences between the two kinds of motivational climate, $F(1, 74) = 140.51, p < 0.001, \eta^2 = 0.66$; a significant interaction between the kind of motivational climate and gender, $F(1, 74) = 18.66, p < 0.001, \eta^2 = 0.20$, and between teaching model and gender, $F(1, 74) = 6.24, p < 0.05, \eta^2 = 0.078$; and a four-direction interaction, $F(1, 74) = 6.26, p < 0.05, \eta^2 = 0.078$. These results show that, generally, for all the situations examined in the study, the mastery climate mean was significantly higher than the performance climate mean ($M = 3.83, SD = 0.68; M = 2.63, SD = 0.69$, respectively), and this difference was higher among girls than boys ($M_1 = 4.00, M_2 = 2.32; M_1 = 3.68, M_2 = 2.92$, respectively). In addition, it was found that among the boys, the general level of motivational climate was higher in direct instruction than in cooperative learning ($M_1 = 3.50; M_2 = 3.12$), whereas among the girls, such differences did not appear ($M_1 = 3.11; M_2 = 3.21$). Since a significant four-way interaction appeared in addition to a significant interaction between gender and kind of motivational climate, we conducted separate analyses for boys and girls.

Boys: Mastery climate. No significant differences were found between the teaching models, $F(1, 39) = 2.02, p > 0.05, \eta^2 = 0.049$, or concerning the order of the models that were taught, $F(1, 39) = 1.21, p > 0.05, \eta^2 = 0.030$, and no interaction was found between the order of the teaching models and the models taught, $F(1, 39) = 3.53, p > 0.05, \eta^2 = 0.083$. These results point to the fact that the mastery climate was significantly higher among boys who studied in a direct instruction model ($M = 3.93, SD = 0.49$) compared with boys who studied in a cooperative learning model ($M = 3.45, SD = 0.78$), and the order of learning these models had no influence.

Boys: Performance climate. A two-way ANOVA revealed significant differences between the instructional models, $F(1, 39) = 6.66,$

$p < 0.05$, $\eta^2 = 0.146$; no differences in the order the models were taught, $F(1, 39) = 0.05$, $p > 0.05$, $\eta^2 = 0.001$; and no interaction between the model of teaching and the order the models were taught, $F(1, 39) = 2.33$, $p > 0.05$, $\eta^2 = 0.06$. These results point to the fact that performance climate was not influenced by the model of teaching or the order the models were taught.

Girls: Mastery and performance climate. In a similar analysis conducted for the girls, no differences were found between the DI model and CL model for skill, $F(1, 35) = 0.02$, $p > 0.05$, $\eta^2 = 0.01$, or performance, $F(1, 35) = 1.28$, $p > 0.05$, $\eta^2 = 0.035$. No differences were found regarding the order of the instructional models for skill, $F(1, 35) = 0.00$, $p > 0.05$, $\eta^2 = 0.00$, or performance, $F(1, 35) = 2.0$, $p > 0.05$, $\eta^2 = 0.054$, and there was no significant interaction among them for skill, $F(1, 35) = 1.68$, $p > 0.05$, $\eta^2 = 0.05$, or performance, $F(1,35) = 2.25$, $p > 0.05$, $\eta^2 = 0.060$. These results point to the fact that the scores of the girls' motivational climate remained stable regardless of the instructional model or the order the models were taught.

Discussion

This study sought to examine whether a cooperative learning instructional model influences the motivational climate in PE classes and, in addition, to determine whether this influence relates to the gender composition of the class. No differences were found between the boys and girls who studied in one-gender classes—neither in the motivational climate nor in relation to the teaching model. In both one-gender classes, skill motivation was higher than performance for the boys and girls. These findings are encouraging, since researchers have reported that the mastery climate has a positive influence on enjoyment of PE classes (Ntoumanis & Biddle, 1999), on self-efficacy and the perception that effort leads to success (Cury et al., 1996), and on the intention to stay physically active in the future (Ntoumanis & Biddle, 1999). No differences were found in this study between boys and girls in same-gender classes and those in mixed-gender classes in either teaching model, and the mastery climate was higher than the performance climate in both of these groups. Therefore, we concluded that the instructional model could not be considered as the only determinant of motivational climate in the class. An interesting finding is that the boys in a mixed-gender class perceived

the performance climate as being higher than did the girls, which suggests that boys in classes with girls place a higher emphasis on their achievements than do the girls. Therefore, we recommend that PE teachers adjust their attitude toward girls so that equality among boys and girls will be maintained, especially in mixed-gender classes.

In the second hypothesis, we postulated that there would be differences between boys in a same-gender class and boys in a mixed-gender class. Results demonstrate differences between the two kinds of motivational climate in both instructional models, but this was regardless of whether it was a same-gender or a mixed-gender class. The mastery climate was significantly higher than the performance climate, and both were higher in a direct instructional model than a cooperative learning model. In other words, boys in a direct instruction model perceived the mastery climate to be higher than their motivational climate in a cooperative learning model. Since all classes were taught by the same teacher, we concur with C. Johnson et al.'s (2017) view that most likely it is the teacher who influences the class motivational climate and forms the learners' experience in the class, rather than the instructional model implemented. Similar findings were obtained for the girls—no differences were demonstrated concerning gender or the instructional model, and in all situations, the mastery climate was higher than the performance climate.

Hence, despite the teacher's contribution to the class climate not being examined directly, it can be cautiously inferred that the instructional model is not the sole influence on the class climate, but, as claimed by others, it is the teacher's attitude and personal teaching characteristics that highly affect both instructional models (e.g., Kunter et al., 2013; Siegle, Rubenstein, & Mitchell, 2014).

In the fourth hypothesis, we assumed that there would be no differences between boys and girls in mixed-gender classes. We found that although no differences appeared between the instructional models, a significant difference appeared between the two kinds of motivational climate and between the boys and girls, and a significant interaction was seen between motivational climate and gender. In addition, for direct instruction no differences appeared between the boys and girls in a mixed-gender class; the performance climate of the boys in these classes was higher than the performance climate of the girls. This finding points out that boys attach a higher

importance to their achievements in mixed-gender classes than in same-gender classes. This is especially interesting, since girls attach a similar importance to achievements in the two different classes, and so the performance climate remains low in either of the class compositions that were examined in this study. This result deserves special consideration, since research shows that not many girls take the opportunity to decrease the gap in sport achievement between girls and boys by participating in coed PE classes (e.g., Williams & Bedward, 2004). Moreover, it has been documented that in mixed-gender classes boys tend to take over the verbal and physical spaces, and therefore girls are able to express themselves more freely in single-gender classes (e.g., Hannon & Ratliffe, 2007; McKenzie, Prochaska, Sallis, & LaMaster, 2004). Further, girls may recoil from contact with the boys, since they feel that they are under constant judgment (Flintoff & Scraton, 2001).

Hence, we join Hills and Croston's (2012) line of recommendation that there is a need to examine not only the PE teachers' methods of teaching but also the implications of class gender composition, keeping in mind the teaching program goals.

Two main limitations of this study should be addressed. First, the small number of participants in each group makes the design similar to a case study and therefore generalizations cannot be made regarding any population. Nevertheless, since the design reflects a field experience, the strength of the study lies in its possibility to point out specific tendencies. Second, the contribution of the teacher to the class climate is known. Different results may have emerged if a different teacher with a different personality and beliefs had taught the classes. To reduce this limitation, we used the same teacher for all the lessons.

We recommend that future research investigate a similar design, in which the lessons are taught by a male teacher, a female teacher, and a mixed-gender pair, to determine whether the teacher's gender has an effect on the class climate in same-gender as opposed to mixed-gender classes. In addition, we recommend that future research assess the teacher's attitude concerning motivational climate, as well as the teacher's teaching beliefs, before the intervention takes place, to examine not only the effect of the instructional model on the class climate but also the contribution of the teacher's approach to the class climate.

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Appendix A

Cooperative Learning Observation Sheet on Teacher Behavior

Items	1 Never	2	3	4	5 At all times
All children participate in groups of four and stay with that group for the whole unit.					
The group shares responsibility for the development of the individual—students help each other.					
Each student takes a specific responsibility along the unit (accountability is demonstrated).					
Students regularly reflect verbally on what is required from them.					
Students share new things/ideas.					
Reciprocal feedback is given.					

Appendix B

Direct Instruction Observation Sheet on Teacher Behavior

Items	1 Never	2	3	4	5 At all times
The teacher teaches the whole class together.					
The teacher verifies that all the students are doing exactly as they were told: the teacher demonstrates and tries to keep them working on the task.					
The teacher verifies that every student tries to achieve the task that was given to them.					
The teacher verifies that after the demonstration and explanation, the students are practicing.					
The teacher elaborates or develops the drills as the students make progress.					
The teacher gives feedback.					
The students are playing 4 × 4. The groups are not fixed, and students change groups frequently.					
The teacher is responsible for the student learning.					