Long-term effects of the pedagogical approach on the perceptions of physical education by students and teachers

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Abstract:
The main goal of the study was to assess the effects of the prolonged use of two different pedagogical approaches on students and teachers’ perceptions. 241 students enrolled on the 3rd and the 4th grade of Compulsory Secondary Education and 2 teachers agreed to participate. Two study groups were formed: A: attitudinal style (student-centered), and B: traditional approach (teacher centered). All of them participated in three consecutive learning units of team sports (24 sessions). A pre-test, post-test experimental design with intact classes was used; as well as a mixed quantitative-qualitative procedure to obtain data. Results showed that students who experienced the attitudinal style perceived the physical education class significantly more useful. This group also developed a significantly stronger empathy towards the teacher. Participating teachers highlighted three main ideas: transference of learning, teacher-student connection, and content organization and sequencing.

Key words: cooperative focus, competitive focus, student attitudes, mixed methodology

Introduction
Physical Education (PE) has become a fundamental area for students’ motor, emotional, motivational and relational development (González-Cutre, Sicilia & Moreno, 2008). Nevertheless, depending on the teaching approach used, the students’ learning experience and perception can be completely different (Hortigüela, Pérez-Pueyo & Salicetti, 2015). PE may well be the main channel to make students feel confident on their abilities and motivated to undertake physical activity outside school, or a subject that creates frustration, discrimination and lack of understanding of what they do (Sicilia, Ferriz & Sáenz, 2013). The methodology used by the teaching staff, the interaction between class members and students’ predispositions toward the subject are all of essential importance to the learning processes (Ni Chróinín & Cosgrave, 2013). Elements such as teacher coordination, content selection and grading system were also relevant.

One trait that differentiates PE from other subjects is the lack of boundaries in content selection, since it often overlaps over various academic years due to a lack of planning and sequencing (Capel, 2007). What are the core aims of PE? What should be taught? Cañabate, Torralba, Cachón and Zalagaz (2014) found that it is truly difficult for a student to have a positive attitude toward PE, when it does not involve a positive learning experience, a connection with classmates and/or emotional and psychomotor satisfaction. The teacher-student relationship is also essential, influencing interactions between classmates and the motivational atmosphere generated. Timken and Gay-McNamee (2012) pointed out that when joined teacher-student reflection is promoted, students become more interested in what is being taught and, consequently, more involved in the learning activities. Students’ perceptions are therefore a key variable that has to be taken into consideration in order to foster psychological elements such as personal self-image, a reliable indicator of the durability of learning and acquired habits (Pan, 2014). Within this perception, how students see the subject's organization is linked to its rigor and status (Spittle, Petering, Kremer & Spittle, 2012). If the content is poorly sequenced and introduced, it will be hard for students to become involved in a process that goes beyond merely playing for the sake of playing and the grade obtained (López-Pastor, 2009).

Physical education in school should go further than traditional sport played outside school (Caamaño, 2015). In 1992, the Spanish Ministry of Education and Culture highlighted the importance of teaching sport in school, but not focusing on competition and exploring different options. Performance should not be the focus, prioritizing values such as inclusion, responsibility and understanding (Mercier & Lacovelli, 2014). The use of competitive, achievement-oriented practices has been found to lead to exclusion, amotivation and less-developed motor skills (García-Mas & Gimeno, 2008). This is even more relevant when content and teaching method are jointly considered, with widely differing results when comparing the teaching of more traditional, analytical or teacher-centered models and more alternative, student-centered or comprehensive approaches (Kirk, 2004).
In view of the above, the aim of this research was to assess the effects of the extended use of two different teaching methods, attitudinal style (student-centered) and traditional style (teacher centered), on PE students and teachers’ perceptions. The first hypothesis was that students who experienced the attitudinal approach will perceive the PE classes more useful. The second hypothesis was that these same students will develop more empathy for the teacher.

Material & methods

Participants

241 secondary school students from a Spanish provincial capital (58.3% females and 51.7% males), with an average age of 13.31 (SD = 1.41) agreed to participate. They were enrolled in four year-9 (n=118) and four year-10 (n=123) secondary school classes. All experienced three consecutive units of team sports, but one group (A=123 students) was taught using the attitudinal methodology while the other group (B=118 students) was taught using a traditional approach. The sampling was intentional, due to the availability and accessibility of the subjects, using natural intact groups. Regarding the teaching staff, both members of the PE department from the school agreed to participate. The teacher that used the attitudinal approach had five years of experience (one year at the participating school); while the teacher that used the traditional approach had 26 years of experience (14 at the participating school). The Group A teacher was member of the “Attitudes” work group, who had been working with this approach for over ten years. The Group B teacher had always used a traditional teaching. Table 1 displays participants’ information.

Table 1. Participants.

<table>
<thead>
<tr>
<th>STUDENTS</th>
<th>METHOD</th>
<th>YEAR 9</th>
<th>YEAR 10</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Attitudinal</td>
<td>62</td>
<td>61</td>
<td>123</td>
</tr>
<tr>
<td>Group B</td>
<td>Traditional</td>
<td>56</td>
<td>62</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td></td>
<td>118</td>
<td>123</td>
<td>241</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TEACHERS</th>
<th>METHOD</th>
<th>EMPLOYMENT</th>
<th>PE EXPERIENCE</th>
<th>YEARS SCHOOL</th>
<th>EXP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Attitudinal</td>
<td>Temporary</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>Traditional</td>
<td>Permanent</td>
<td>26</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Instruments

A. Quantitative. The Attitudes toward Physical Education questionnaire (Moreno, Rodriguez & Gutiérrez, 2003) was used. Its internal consistency (computation of reliability) was verified with the Cronbach Alpha Coefficient, obtaining an r = 0.812, which is considered acceptable (Corbetta, 2007). A confidence level of 95% was used. The questionnaire included a total of 56 questions which the students answered using a Likert-type scale with values from 1 (completely disagree) to 5 (fully agree). Principal Component Analysis was applied to the final questionnaire, to assess the goodness-of-fit of the data. Appropriate scores for the KMO index (0.813) and the Bartlett's sphericity test (p > 0) were obtained. Chi-square test score was 161.131 and 16 degrees of freedom. The indices obtained through the covariance matrix showed an appropriate fit: RMSEA (Root Mean Square Error Approximation) index = 0.061, GFI (Goodness of Fit) index= 0.93 and CFI (Comparative Fit) index= 0.91 (Herrero, 2010). An exploratory factor analysis showed a three-factor solution with an eigenvalue greater than 1. These three factors explained the total variance, once the component matrix was corrected and rotated (Normalized Varimax). The initial eigenvalue for the first factor represented 39.42% of the variance, the second 35.14% and the third 25.44%. The resulting factors were as follows: (1) Use of physical education (22 questions): these questions covered the transference of learning, the importance of the subject in relation to other subjects, the learning derived from them and the repercussions of these experiences in the future; (2) Empathy with the teacher (19 questions): these covered the way teachers monitor work, adjustments to students’ mood, type of relationship with the teacher compared to other teaching staff and feedback throughout the process; and (3) Concordance with the way the subject is organized (15 questions): regulation of subjects’ pace, content programming and sequencing, task involvement, social relations, and assessment procedures. These three factors were the dependent variables of the research, directly related to the proposed aims and the type of analysis employed.

B. Qualitative. Qualitative information was obtained through semi-structured interviews with the two teachers (Group A, Group B). The aim was to comprehensively explore perceptions concerning the influence that a teaching method might have on students' attitudes towards the subject and towards physical activity. These may be the key to understand the way students behave in class (Sentürk & Oyman, 2014). Based on the dependent variables of the study and the content covered in class a pre-prepared script was used. This kind of interview means questions closely related to the aims of the research, to help the interviewee feel comfortable with the structure of the conversation between individuals who are familiar with the subject matter (Patrzek, Grunschel & Fries, 2012). Its open format allows researchers to explore new areas to produce a richer set of data (Smith and Osborn, 2003). Each interview consisted of six initial questions (Table 2). Two interviews were performed for each study factor, bearing in mind that each teacher used a different teaching approach (traditional/attitudinal).
Table 2. Basic script of the teachers’ semi-structured interview.

1. What do you think is the key element to ensure that a student finds PE useful?
2. Is the teaching method in connection with the student learning routines? Why?
3. What kind of relationship do you have with your students?
4. Do you motivate them to practice sport? How?
5. How do you select the contents throughout the school year?
6. Do you feel that teaching sports is important? What approach do you use and why?

Design and procedure

Students in both Group A (experimental) and Group B (control) were taught three units of team sports in the second term: football, korfball and Kin-Ball. In all of them, both technical and tactical aspects of the sport are of fundamental importance to their practice. Each unit lasted eight sessions. The teaching aims and content were the same for both groups, with the key difference that each group’s teacher employed a different teaching method: Group A the attitudinal approach, a tried-and-tested methodology, student-centered, which grounds its work on the students’ perspectives of their own achievements, cooperation, high levels of motivation towards relational aspects and social inclusion. In contrast, the Group B teacher used a more traditional method, student-centered, based on the teaching of isolated technical principles first, and after these have been learnt, they are put into practice in game situations, normally in competitive contexts. Table 3 summarizes both teaching styles.

Table 3. Basic features of the two teaching methods used.

<table>
<thead>
<tr>
<th>Character</th>
<th>Traditional approach</th>
<th>Attitudinal approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session model</strong></td>
<td>Warm-up, main activity, relaxation</td>
<td>Start up, bodily activities, points of interest and procedural and final reflections</td>
</tr>
<tr>
<td><strong>Independence</strong></td>
<td>Proportional to technical proficiency in the sport</td>
<td>During the process, related to task achievement and overall understanding of the sport</td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>Linked to level of achievement. Individual character</td>
<td>Linked to group achievement and learning</td>
</tr>
<tr>
<td><strong>Grouping</strong></td>
<td>Based on level and motor skill</td>
<td>Based on students’ affinity</td>
</tr>
<tr>
<td><strong>Technical-tactical aspects</strong></td>
<td>First, technique. Tactics depending on technical level</td>
<td>First, tactics. Inclusive concept of sport. Technique learnt in play</td>
</tr>
<tr>
<td><strong>Task sequencing</strong></td>
<td>Depending on motor complexity</td>
<td>Based on the group play level and enjoyment</td>
</tr>
<tr>
<td><strong>Motor achievement</strong></td>
<td>Essential to task advancement and improved self-image</td>
<td>Purely a means to other ends</td>
</tr>
<tr>
<td><strong>Relational and emotional aspects</strong></td>
<td>Motor skills are more important</td>
<td>Essential. Satisfaction based on achievement and an atmosphere of positive group work</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>Final. Assessment linked to motor performance</td>
<td>Formative. To raise sport awareness and transference to other contexts</td>
</tr>
</tbody>
</table>

First, permission of the Ethics Committee at the University of the lead researcher was obtained. Second, the management team at the participating school was contacted and it gave full permission to conduct the study. Finally, informed consent from the participating students’ parents or legal guardians was also obtained. Students filled in the questionnaire before and after the three learning units. The questionnaires were anonymous, with data confidentiality also guaranteed. The importance of answering as honestly as possible was stressed; assuring that the answers would not affect school marks. The teachers’ interviews were conducted at the end of term, individually, giving each one enough time and a comfortable space for the conversation. Both interviews were recorded on audio to make the subsequent transcription task easier.

Data analysis

A mixed methodology was used: quantitative (descriptive and inferential) and qualitative analysis (interviews). Repeated measurements (pre-test and post-test) were employed for each of the groups, assessing the intervention’s influence on the students. In addition, each of the teachers assessed the role that their approach had on the teaching of sport. The complementary nature of data treatment between the two subject groups provided a more comprehensive overview of the results obtained, as well as a better understanding of them. It also favored the transformation of the educational processes investigated (Hall & Ryan, 2011).

A. Quantitative. Descriptive (averages and SD) and inferential analyses (two-way repeated measurement independent group ANOVA testing, Pearson correlations and one-way intra-group ANOVA) were conducted. Since the Kolmogorov-Smirnov test (n>50) accepted the null hypothesis (p = 0.113), parametric tests were used in the inferential analysis. The SPSS 22.0 statistical packet (IBM, Chicago) was used.
B. Qualitative. Data was obtained through a structured data collection process: interviews with the two participating teachers. Content was analyzed through the delimitation of categories, assigning information to each one based on specific criteria (Özçimen, 2015). Extracts of coinciding text were encoded using cross coding (Saldaña, 2009). Data reliability, credibility, and transferability was clear, as there was active guidance and analysis, filtered by the researchers (Cuhadar & Kuzu, 2010), assigning the text to the categories in accordance with the dependent variables and the defined objectives. Complementarity with the quantitative phase of the research was sought, analyzing the reasons behind class behavior for a better understanding of the results. Analysis was based on ideas of fragmentation and articulation of Grounded Theory (Strauss & Corbin, 2002). To do so, axial and open coding of the emergent categories were used, facilitating the selection of text using interpretative criteria. Having triangulated and saturated the data, the most representative extracts of text in each category were presented. The WEFT QDA computing program was used to recapitulate, organize and obtain data saturation based on categories derived from the questions asked to the teachers. The abbreviation TTA (traditional teaching approach) was used to refer to the teacher using more traditional methods while ATA (attitudinal teaching approach) was used for the teacher who employed an attitudinal method.

Results

Descriptive analysis and two-way repeated measurement independent group anova testing

Table 4 shows that at pre-test there are no significant differences between factors in either of the two groups, indicating the initial homogeneity of the sample. Significant differences between pre- and post-test were obtained only in Group A and Factor 1, “Usefulness of PE”, with a score of 4.52 and an effect size of 0.94, which is considered large (Cohen, 1988). This factor also showed significant differences between Group A and Group B at the end of the study. Factor 2, “Empathy with the teacher”, also showed significant differences in favor of Group A at the end of the research (post-test).

Table 4. Comparison by factors for each group in the pre– and post-test.

<table>
<thead>
<tr>
<th>Attitudinal approach group (A)</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 Usefulness of PE</td>
<td>3.42</td>
<td>4.52</td>
</tr>
<tr>
<td>Factor 2 Empathy with the teacher</td>
<td>3.79</td>
<td>4.21</td>
</tr>
<tr>
<td>Factor 3 Subject organization</td>
<td>3.31</td>
<td>4.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traditional approach group (B)</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 Usefulness of PE</td>
<td>3.51</td>
<td>3.48</td>
</tr>
<tr>
<td>Factor 2 Empathy with the teacher</td>
<td>3.58</td>
<td>3.34</td>
</tr>
<tr>
<td>Factor 3 Subject organization</td>
<td>3.39</td>
<td>3.72</td>
</tr>
</tbody>
</table>

Note: Different superscripts indicate significant differences at \( p < 0.005 \). Note: \( f \): effect size, *Differences between pre- and post-test in Group A, Factor 1, **Differences at post-test between Groups B and A, Factor 1, ***Differences at post-test between Groups B and A, Factor 2.

Inferential analysis pearson correlation

Table 5 shows that there was only one significant positive correlation (\( r_{(123)} = 0.589, p = 0.011 \)) between Factors 1 and 2 in the group taught using the attitudinal approach (Group A).

Inferential analysis one-way anova of independent groups

Based on the factor analysis performed and in connection to the questions concerning subject satisfaction in each group, the scaled variable “Assessment of the Subject” was created. To do so, a one-way independent group ANOVA testing was performed, to check whether there were statistically significant differences in perceived subject preference based on three variables – academic record, PE mark, and extracurricular sports activities. Post-hoc analysis were also conducted to show which groups significantly differed. The distribution of level-based observation was also conducted, confirming that there were no constant variance problems which might alter the assumption of normality. Similarly, there was an assumption of independence.
between the variables. The first variable, relating to the number of subjects failed during the first term of the school year, was ranged: 1 – “None”; 2 – “Between two and three”; and, 3 – “More than three”. The second variable related to the specific mark for PE was ranged: 1 – “Fail”; 2 – “Pass/Very Good”; and 3 – “Excellent”.

The final variable concerned taking part in extra-curricular sports activities, and it was ranged: 1 – “Never”; 2 – “Between once and three times a week”; and 3 – “More than three times a week”. Table 6 shows the significant differences found for the group taught with the attitudinal approach (Group A), in the “Academic record” variable (F(2,25) = 102.31, p = 0.018), specifically between those that did not fail any subject (Preference toward the highest scoring subject) and those that failed more than three. In the group taught with the traditional approach (Group B), the differences were seen in the “Takes part in extra-curricular sports activities” variable. These differences were found among children who practiced sport more than three times a week (Preference toward the highest scoring subject) and those who never did.

Table 6. Bonferroni ANOVA for each of the independent variables analyzed in the post-test

<table>
<thead>
<tr>
<th>SUBJECT EVALUATION</th>
<th>F</th>
<th>gl</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudinal approach groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic report</td>
<td>102.31</td>
<td>1</td>
<td><strong>0.018</strong>*</td>
</tr>
<tr>
<td>PE mark</td>
<td>96.19</td>
<td>2</td>
<td>0.231</td>
</tr>
<tr>
<td>Takes part in extracurricular sports activities</td>
<td>72.41</td>
<td>1</td>
<td>0.142</td>
</tr>
<tr>
<td><strong>Traditional approach groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic report</td>
<td>93.62</td>
<td>1</td>
<td>0.142</td>
</tr>
<tr>
<td>PE mark</td>
<td>97.82</td>
<td>2</td>
<td>0.185</td>
</tr>
<tr>
<td>Takes part in extracurricular sports activities</td>
<td>68.74</td>
<td>1</td>
<td><strong>0.011</strong>**</td>
</tr>
</tbody>
</table>

Note: *p< 0.05 between “None” (average 4.58) and “More than three (average 3.22), **p< 0.05 between “Never” (average 3.11) and “More than three times a week (average 4.23).

**Qualitative analysis**

The analysis was structured around three categories derived from the study: transference of PE learning, teacher-student relationship and content sequencing. The number of literal text extracts from each category also are presented.

**Transference of learning** (286 text extracts). Both teachers highlighted the importance of transferring learning from PE to other contexts. However, the teacher that used the attitudinal style showed a more pedagogical vision in connection with the values and social relationships that sport can create and which can be taught in an educational environment:

“As well as instilling the habit of taking part in sport, our classes have to tap into related positive aspects through the encouragement of values, respect, being a good loser, companionship [...]”. “We are well aware that the purpose of PE is not that of creating world-class sportsmen and women. The subject should therefore focus on ensuring an understanding of one's body and how to use it, adapted to physical activity contexts, yet without imposing stringent demands” (Group A teacher)

“The transfer is perfectly clear: participating in sport [...]”. “We complain about all the obesity that there is and how sedentary children are, but in class we try to do other things. Why? For many students it's the only physical activity they do”. “We can't pretend that all the kids enjoy sport, but we can at least encourage those that do in their practical activities [...]” (Group B teacher)

**Teacher-student relationship** (303 text extracts). Both teachers highlighted the importance of the relationship with their students in class, although they differed to the extent of the importance. Both were demanding in their groups, but the Group B teacher was not concerned about having a positive relationship with his students:

“The kids have to reach a minimum level, if not they have to accept the consequences. It's the same with mathematics, isn't it? If students don't do well, they fail. Why should it be different for us? [...]”. “It's clear that the students who get the highest grades are the ones who get on best with me, but that doesn’t make me act any differently” (Group B teacher)

“I'm demanding, but not only in terms of motor skills, but also in aspects related to independence, responsibility in tasks [...]”. “It's not enough for a student to be really good at a sport, if they're incapable of thinking about others, organizing their work, being aware of other disciplines [...]”. “At first the students complain because they are not used to working like this, but my relationship with them is positive from the feedback we have. They appreciate it” (Group A teacher)

**Content programming and sequencing** (265 text extracts). Group A teacher worked with all content blocks, while Group B focused on sports and physical fitness:

“Of course you have to work with sports in school, but what about activities in the natural environment and bodily expression? Expression is usually given very little time in our subject, and yet it's really important [...]”. “A number of aspects of sport can be tied in with bodily expression, such as acrobatics, the use of stilts... things that are directly connected to motor skills, creativity and inventiveness” (Group A teacher).
“The Teaching Programme is there, but in the end you have to be clear about what you want to teach and how to do it [...]”. “I do initial physical fitness with a test at the start of the school year to see what the students are like, and then we work on that [...]”. “As well as working on discipline, sports also improve a student’s physical shape” (Group B teacher).

**Discussion**

The main aim of this research was to assess the effects of an extended use (over one term) of two different types of teaching approaches, traditional (teacher-centered) and attitudinal (student-centered), on students and teachers’ Perceptions on Physical Education. Results showed that the attitudinal style created a more positive attitude towards PE: “usefulness of PE” and “empathy with the teacher”. Similarly, Group A (attitudinal approach) showed that the better the academic record, the higher the students’ opinion on PE, while in Group B (traditional approach), those who were more involved in extra-curricular sports held a better opinion of PE.

The first hypothesis was that students experiencing the attitudinal style will perceive the PE classes more useful. Results showed that these students significantly improved their perceived usefulness of the PE class. Moreover, this increase can be considered statistically large (Cohen, 1988). Social relationship, understanding the sport and flexible motor demands that characterize the attitudinal approach seemed to be produce a positive perception of PE among students. Casey and Quennerstedt (2015) pointed out that the use of traditional methods in sports initiation can result in students giving up at an early age, due, in part, to feelings of exclusion caused in students whose motor skills are less well developed. There is a need to differentiate between the focus that sports teaching should have in a PE class and in extracurricular sport (Wallhead, Gran & Vidoni, 2014). As Özkan (2015) and Pérez-Pueyo et al (2011) pointed out, if we want students to try extra-curricular sports, they must have positive experiences in PE. Results from the present study showed that the teaching method used is very important to ensure that students have a better perception of the usefulness of PE classes. Only if this happens they will place greater value on the learning and will transfer it beyond the school walls.

The second hypothesis was that students taught with the attitudinal style will develop greater empathy towards the teaching staff. Results showed that students who experienced this approach developed significantly more empathy towards teachers than those in the traditional group. Among the different factors that may have had a bearing on this outcome is the constant dialogue between the teacher and the student throughout the process; a key feature of the attitudinal style which seeks to make learners aware of the activities that they perform to integrate the learning (Perez-Pueyo et al, 2011). A second factor, which sets the attitudinal method apart from the traditional focus, is the type of assessment used: it is formative, to raise sport awareness and promote transference to other contexts (Pérez-Pueyo, 2010). Previous research (Andrade, Lui, Palma & Hefferen, 2015) has showed similar results. Results also showed a significant correlation between the usefulness perceived by the students experiencing the attitudinal style and their level of empathy with the PE teacher. This indicates that when PE is perceived as useful, the student’s empathy towards the PE teacher increases and vice-versa. These two factors need to be carefully considered as they feed each other. Previous studies have showed that a greater level of student involvement in sport creates greater assertiveness and they value teacher’s comments (García-López & Gutiérrez, 2015).

Students in the attitudinal group with the highest grades had a higher opinion of PE. The variety of tasks, not only related to skills tests, which demand more student interaction and greater responsibility throughout the teaching-learning process could have influenced. It also included inter- and intra-group co-evaluation and self-assessment processes, which implies higher commitment and involvement. Martínez, Calderón and Campos (2012) pointed to the need in PE teaching to use a range of assessment procedures to promote transference to other contexts. On the other hand, in the group that experienced the traditional approach, the students who participated more in extra-curricular sport were the ones who had valuation highest PE. Similarities between the traditional PE class and the sport sessions in clubs outside school could explain the outcome. Pope (2011) highlighted how important was to differentiate between PE and extracurricular sport, respecting the different aims.

As far as the teachers of the two groups, the first of the themes in the qualitative analysis was the importance of ensuring the transfer of learning in the PE classes. Nonetheless, the teacher that used the attitudinal approach referred to the importance of sports teaching with a pedagogical focus to promote values. On the contrary, the teacher that used the traditional approach perceived PE as a strictly physical, sports-based discipline, unrelated to other types of learning: social, value-based etc. Thorburn (2014) believes that working with values in PE is of high social relevance, as it is a clear indicator of dialogue and personal ethics as long-term behavioral habits.

The second themes that appeared in the teacher interviews was the importance of their relationship with the students. Nonetheless, it is not the same. The attitudinal teacher perceived it as being of crucial importance to ensure that there was a positive relationship, while the more traditionally-minded teacher did not see it as so essential. Unfortunately, competitive sports models create exclusion, a weaker educational connection and teacher/coach-student relationship (Casey, 2014). Our results support these ideas, significantly weaker teacher-student relationship (Factor 2. Empathy with the teacher) was observed in the traditional group at post-tests.
Finally, the third theme referred to content programming and sequencing. The teacher of the attitudinal group felt that coherent content sequencing was extremely important, implementing different contents during the schools year. In contrast, the control group teacher highlighted the importance of focusing on physical fitness and sports, at the expense of contents such as health, body expression, motor skills and activities in the natural environment. As Monroy (2008) pointed out, one of the main reasons why PE does not currently enjoy the prestige that it deserves is the lack of consensus and criteria concerning what really needs to be taught, regardless of the way that it should actually be done. Our results clearly reflect the difference in criteria between PE teachers.

Conclusions

Results of this research showed that the extended use (three units) of a teaching method based on an attitudinal approach help students to significantly improve their perception of the PE classes compared to those taught using a traditional approach. Empathy with the teacher was also significantly higher in the group of students taught using the attitudinal approach. In this group, the students with the best academic records had a higher opinion of PE, while in the case of the traditional approach group, the students who were more involved in extra-curricular sports perceived the subject as more important. As far as the participating teachers, three themes emerged from their responses, albeit slightly differing in their focus: transference of learning, teacher-student relationship and content programming and sequencing. The teacher following the attitudinal method had a more pedagogical vision of sports initiation linked to the values and social relationships that sport can create and which can be taught in an educational environment. The same teacher highlighted the importance of the relationship teacher-student and the implementation of different contents. This article could be of interest for PE teachers, coaches and other professionals working in the field of sports, as it reflects upon the impact that different teaching methods have on student perceptions. This may help to refocus pedagogical approaches of a socio-cultural activity as important as sport, directly related to the development of healthy habits.

References


