The Development of Fair Play in Physical Education and School Sports:
A Systematic Review

Benjamín Navarro Domínguez a, José Antonio Cerrada Nogales a, Manuel Tomás Abad Robles a, * , Francisco Javier Giménez Fuentes-Guerra a

a University of Huelva, Spain

Abstract

In today's society, values are already an important part of any social and educational project. Physical activity and sport are excellent instruments to promote the conveyance of values resulting in personal and social development. However, an increasing number of authors state that the mere practice of physical activity in itself does not develop morality. The aims of this study were: 1) to conduct a systematic review of the effects of those research studies related to fair play where intervention programmes were implemented; 2) to describe and review these interventions. For this purpose, a systematic search was undertaken, in accordance with the PRISMA Declaration guidelines, in the Web of Science, Scopus, and SportDiscus databases. A total of 13 studies which met the inclusion criteria were selected. The results showed that the Sport Education Model, with the implementation of a fair play system, obtained a statistically significant increase in the level of respect for social conventions, respect for rules and referees, full commitment, and respect for opponents. On the other hand, the application of the Personal and Social Responsibility model led to improvements in fair play, rough play and the importance of winning. The main practical application of this systematic review is to help teachers and coaches in the development of fair play, as well as to identify those methodologies which provide the best results for the development of fair play in students and athletes during the sports training stage.

Keywords: fair play, methodology, sport training, sport education, personal and social responsibility.

* Corresponding author
E-mail addresses: manuel.abad@dempc.uhu.es (M.T. Abad Robles), benjamin.navarro@alu.uhu.es (B.N. Dominguez), joseantonio.cerrada123@alu.uhu.es (J.A. Cerrada Nogales),jfuentes@dempc.uhu.es (F.J. Giménez Fuentes-Guerra)
1. Introduction

Values represent enduring beliefs that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach, 1973). In today's society, values are already an important part of any social and educational project (Ortega, Mínguez, 2001). Values education could be identified with "that perspective of education which aims to instil in students different ideals of conduct which will enable them to become in the future more solidary, democratic and socially committed citizens" (Giménez, 2003: 36).

Physical activity and sport are excellent instruments to promote the conveyance of values resulting in personal and social development (Escartí et al., 2005; Ruiz, Cabrera, 2004). However, an increasing number of authors state that the mere practice of physical activity in itself does not develop morality (Carranza, Mora, 2003; Gutiérrez, 2004).

Amat and Batalla (2000) claim that for an adequate education in values to take place, physical activity and sport must be approached in such a way as to foster self-knowledge and improve the self-concept, promote dialogue as an instrument to solve conflicts, the participation of everybody, enhance personal autonomy, take advantage of failure as an educational element, promote respect for and acceptance of individual differences, and benefit from game, training and competition situations to work on social skills. Therefore, values education should be a day-to-day process, influenced by the atmosphere created around young people, made up of fathers, mothers, coaches, teachers and peer group (Leo et al., 2009).

From an educational point of view, it is considered that both the game and sport involve unavoidable basic ideals which must be followed and respected by students or players. These should be promoted by teachers and coaches, and one of these basic ideals is fair play (Giménez, Díaz, 2001). In this regard, the Diccionario de las Ciencias del Deporte (Aquesolo, 1992: 220), defines fair play as "respect and recognition for the game rules, having an appropriate relationship with the opponent, an attitude of integrity in victory and defeat, and promoting equality among all participants during sport, as well as rejecting violent attitudes and showing maximum commitment".

On the other hand, Cruz et al. (1996) consider that the possible causes of the detriment to fair play in children and young people are the attitudes, behaviour and values of coaches aimed at competitive success, the behaviour and attitudes of parents and spectators at matches, and the inadequate system of sanctions in some regulations which favours the offender. Therefore, it is necessary to have tools to help convey appropriate behaviours in the educational environment, as well as initiatives to favour the practice of physical and sporting activities based on fair play (Pinheiro, 2013). Furthermore, it should be borne in mind that the way in which the teacher or coach presents and deals with sports content has a significant influence on the adequate promotion and development of values through the practice of physical activity and sport (Guerra, Pintor, 2002). In this sense, in recent years, studies have emerged aimed at developing intervention programmes to improve the ethical behaviour of participants (Cecchini et al., 2003), through the implementation of different models. Among them, it is worth highlighting the Sport Education Model (Siedentop, 1994), designed to provide authentic and educational experiences for students, and Hellison's (1995) Personal and Social Responsibility Model, which is one of the most widely applied at present in terms of the development of personal and social responsibility and sporting behaviours such as effort, cooperation and sportsmanship (Belando et al., 2012; Hellison, 2011).

The practice of sport in educational contexts favours cognitive, social and affective experiences, promotes knowledge and respect for ethical values which are the foundation of civil coexistence and are essential for the exercise of active and conscious citizenship (Tortella, Fumagalli, 2017). Considering the importance of the development of pro-social behaviours, and more specifically, of fair play with school-age boys and girls, the aims of this study were: 1) to conduct a systematic review on the effects of those researches related to fair play in which intervention programmes were implemented; 2) to describe and examine these interventions.

2. Methods

The PRISMA Statement and the practical guide on systematic reviews with or without meta-analysis (Moher et al., 2015; Urrútia, Bonfill, 2010) were used to undertake this study.
Eligibility criteria
The inclusion criteria applied to this study were: a) full text articles, b) articles which implemented an intervention programme, c) date of publication between 2000 and 2020, and d) language: English, Spanish and Portuguese. Therefore, articles were included on the basis of the screening carried out according to the different eligibility criteria outlined above. Two research studies from other sources were also included, after analysing the references of the included articles.

Sources of information
The search for the different documents was based on three databases (Web of Science, Scopus and SportDiscus) during the month of March 2021. Two different search blocks were established: 1) Fair play and 2) Physical Education OR sport.

Selection of studies and data collection process
After conducting the search for the different articles, the title and abstract of the articles were analysed to find the most relevant ones, thus excluding those which did not meet the inclusion criteria. Finally, 12 studies were selected and used for data collection. Fair play, in some of the selected studies, made reference to a part of the intervention programme used, while in others, it was the subject matter of the study.

Quality assessment
The quality assessment of the selected papers was performed using the Standard Quality Assessment Criteria for quantitative and qualitative studies (Kmet et al., 2004). Two observers scored the studies independently. The inter-rater agreement was calculated using the intra-class correlation coefficient, resulting in an almost perfect coefficient of .927 (p < .05) (Landis, Koch, 1977). After implementing the inter-rater agreement, a higher cut-off point of .53 for qualitative studies and .61 for quantitative studies was obtained (see Table 1). The overall points assigned by the first observer for qualitative and quantitative research ranged from .60 to .85 and .62 to .86 respectively, while those of the second observer ranged from .53 to .85 for qualitative studies and .61 to .89 for quantitative studies.

Table 1. Inter-rater agreement scores of studies

<table>
<thead>
<tr>
<th>Quantitative Studies</th>
<th>Observer 1</th>
<th>Observer 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palou et al. (2020)</td>
<td>.82</td>
<td>.82</td>
</tr>
<tr>
<td>Casado-Robles et al. (2020)</td>
<td>.82</td>
<td>.82</td>
</tr>
<tr>
<td>Burgueño and Medina-Casaubón (2020)</td>
<td>.86</td>
<td>.82</td>
</tr>
<tr>
<td>Lis-Velado and Carriedo (2019)</td>
<td>.79</td>
<td>.78</td>
</tr>
<tr>
<td>Naves et al. (2019)</td>
<td>.62</td>
<td>.69</td>
</tr>
<tr>
<td>Gil-Madrona et al. (2016)</td>
<td>.68</td>
<td>.71</td>
</tr>
<tr>
<td>Azevedo et al. (2016)</td>
<td>.68</td>
<td>.61</td>
</tr>
<tr>
<td>Vidoni et al. (2013)</td>
<td>.75</td>
<td>.68</td>
</tr>
<tr>
<td>Cecchini et al. (2007)</td>
<td>.78</td>
<td>.82</td>
</tr>
<tr>
<td>Palou et al. (2007)</td>
<td>.75</td>
<td>.71</td>
</tr>
<tr>
<td>Cecchini et al. (2003)</td>
<td>.82</td>
<td>.89</td>
</tr>
<tr>
<td>Qualitative Studies</td>
<td>Observer 1</td>
<td>Observer 2</td>
</tr>
<tr>
<td>Perlman and Goc (2010)</td>
<td>.85</td>
<td>.85</td>
</tr>
<tr>
<td>Vidoni and Ward (2009)</td>
<td>.60</td>
<td>.53</td>
</tr>
</tbody>
</table>

3. Results
Selection of studies
The initial search generated 535 results. The papers were analysed and 2 additional studies were identified from other sources. In addition, duplicate articles were discarded. This led to the exclusion of 12 studies. The remaining 525 were screened for the different inclusion criteria. Finally, after performing the analysis, 13 studies were included in this systematic review as they passed the different inclusion criteria (see Figure 1).
Fig. 1. Flow diagram for the systematic review process according to PRISMA statements

Characteristics of the studies
The main characteristics of the selected studies are shown below (see Tables 2 and 3).

Table 2. Characteristics of participants, duration, instrument and protocol of the research studies

<table>
<thead>
<tr>
<th>Studies</th>
<th>Country</th>
<th>N (Sample)</th>
<th>Age and educational level/context</th>
<th>Duration of the study</th>
<th>Instruments</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palou et al.</td>
<td>Balearic Islands</td>
<td>1097 adolescents</td>
<td>10-16 years old M = 12.50</td>
<td>Throughout the season</td>
<td>Fair play attitudes scale (Cruz et al., 1996). It is a questionnaire divided into 3 subscales: rough</td>
<td>Control Group: Not specified Experimental Group: Intervention</td>
</tr>
<tr>
<td>Study</td>
<td>Location</td>
<td>Participants</td>
<td>Age Range</td>
<td>Sessions</td>
<td>Play, Importance of Winning and Enjoyment Programme Based on an Adequate Motivational Environment</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------------</td>
<td>-------------------------</td>
<td>--------------------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Casado-Robles et al. (2020)</td>
<td>Granada (Spain)</td>
<td>114 students (62 women and 52 men)</td>
<td>13-16 years old: M = 14.0 SD = 1.1</td>
<td>12 sessions of 60 minutes</td>
<td>Iturbide-Luquin and Elósua-Oliden (2017) Multidimensional sportspersonship Questionnaire</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary Education</td>
<td></td>
<td></td>
<td>Control Group: Direct instruction-based programme Experimental group: Programme based on the Sport Education Model (Siedentop, 1994)</td>
<td></td>
</tr>
<tr>
<td>Burgueño and Medina-Casaubón (2020)</td>
<td>Almeria (Spain)</td>
<td>148 high school students (70 boys and 78 girls)</td>
<td>16-18 years old: M = 17.04 SD = .99</td>
<td>The Spanish version of the Multidimensional Sportspership Orientation Scale (Martín-Albo et al., 2006) was used</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary Education</td>
<td></td>
<td></td>
<td>Control Group: Traditional teaching model where the teacher managed fair play Experimental group: Methodology based on the Sport Education model where a fair play accounting system was established</td>
<td></td>
</tr>
<tr>
<td>Lis-Velado and Carriedo (2019)</td>
<td>Oviedo (Spain)</td>
<td>92 students (50 males and 42 females)</td>
<td>10-12 years old: M = 10.38 SD = .55</td>
<td>3 sessions in each group and 6 days of competition</td>
<td>Fair play attitudes scale (Cruz et al., 1996)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control group: 45 subjects Experimental group: 47 subjects</td>
<td></td>
<td></td>
<td>Control Group: Football league using a traditional competitive system Experimental group: Football league using a system based on Brave League</td>
<td></td>
</tr>
<tr>
<td>Naves et al. (2019)</td>
<td>Asturias (Spain)</td>
<td>9 children</td>
<td>9-10 years old: Football Club</td>
<td>14 sessions over 2 months</td>
<td>Fair play attitudes scale (Cruz et al., 1996)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The football sessions are based on the TARGET model, built on strategies for promoting an atmosphere of mastery and involvement in the task</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Country</td>
<td>Sample Size</td>
<td>Age Range</td>
<td>Intervention Duration</td>
<td>Measures Used</td>
<td>Group Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gil-Madrona et al. (2016)</td>
<td>Spain</td>
<td>274 students</td>
<td>11-13 years old</td>
<td>24 sessions (1 session a week)</td>
<td>Three Likert-scale questionnaires developed by the research team were used</td>
<td>Control Group: In the control group, the existing planning was followed. Experimental group: The intervention involved the integration of values and social skills.</td>
</tr>
<tr>
<td>Azevedo et al. (2016)</td>
<td>United Kingdom</td>
<td>12 eighth graders (12-13 years old) and 9 ninth graders (13-14 years old)</td>
<td>15 sessions of 1 hour (one session a week)</td>
<td>Accelerometers were used to count the number of steps and Moderate to Vigorous Physical Activity (MVPA)</td>
<td>Baseline conditions: Conventional football sessions were conducted. Intervention: The intervention programme based on the Fair Play Game was implemented.</td>
<td></td>
</tr>
<tr>
<td>Vidoni et al. (2013)</td>
<td>United States</td>
<td>70 sixth graders (41 girls and 29 boys) divided into three P.E. classes</td>
<td>17 sessions of between 45 and 50 minutes</td>
<td>Pedometers were used to measure the number of steps per minute of the participants during the PE sessions</td>
<td>Baseline conditions: The lessons were taught in the conventional way using pedometers. Intervention: The intervention programme based on the Fair Play Game was implemented.</td>
<td></td>
</tr>
<tr>
<td>Perlman and Goc (2010)</td>
<td>United States</td>
<td>24 students (17 boys and 7 girls)</td>
<td>15-18 years old</td>
<td>12 sessions of 72 minutes</td>
<td>Interviews were conducted to assess students' and teachers' perceptions of their experiences with the Sport Education model</td>
<td>Methodology based on the Sport Education Model</td>
</tr>
<tr>
<td>Vidoni and Ward (2009)</td>
<td>United States</td>
<td>2 Physical Education classes. In each class, three students were analysed</td>
<td>12-13 years old</td>
<td>18 sessions of 40 minutes</td>
<td>Direct systematic observation was used (Van Der Mars, 2006)</td>
<td>Lesson 1 and 2: Sport Education model with no instruction on fair play and then Sport Education model with instruction on fair play.</td>
</tr>
<tr>
<td>Cecchini et al. (2007)</td>
<td>Asturias (Spain)</td>
<td>186 students (94 females and 92 males)</td>
<td>13-14 years old</td>
<td>20 sessions of 1 hour</td>
<td>Fair play attitudes scale (Cruz et al., 1996)</td>
<td>Control Group: Not specified Experimental</td>
</tr>
</tbody>
</table>
**Control Group**
61 subjects
(30 girls and 31 boys)

**Experimenta**
1 Group A
62 subjects
(32 girls and 30 boys)

**Experimenta**
1 Group B
63 subjects
(32 girls and 31 boys)

**Experimenta**
5 levels of the model to Develop Personal and Social Responsibility were applied

**Experimental group A:**
The five levels of the model to Develop Personal and Social Responsibility were applied

**Experimental group B:**
The first four levels of the model to Develop Personal and Social Responsibility were applied

---

**Palou et al. (2007) Balearic Islands (Spain)**
245 players
15-16 years old
Football clubs

**Control group**
136 subjects

**Experimenta**
1 Group
109 subjects

**Fair play attitude scale (EAF): developed by Boixadó (1998)**
Throughout the season

---

**Cecchini et al. (2003) Oviedo (Spain)**
142 children
12-13 years old
Secondary Education

**Control group**
70 subjects

**Experimenta**
1 Group
72 subjects

**Fair play attitudes scale (Cruz et al., 1996)**
10 sessions of 1 hour

---

Table 3. Objectives, design, intervention programme and main research findings

<table>
<thead>
<tr>
<th>Studies</th>
<th>Study Objective</th>
<th>Design</th>
<th>Intervention programme</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palou et al. (2020)</td>
<td>To analyse the effectiveness of an intervention programme aimed at coaches so as to assess their attitude in favour of fair play in sport, aspects such as enjoyment, the need to win and anti-social behaviour in young players in</td>
<td>Quasi-experimental pre-test, post-test design with control and experimental group</td>
<td>At the beginning of the season, a training session was delivered to the coaches based on two blocks: adaptive motivational environment and positive communicative style. Secondly, the questionnaire was handed out to the athletes. Subsequently, the researcher analysed the behaviour of the coaches during the competitions</td>
<td>In the analysis of football clubs, the value of winning decreases in the experimental group. In the data concerning basketball, downward trends were observed in the sections related to winning and rough play, and finally, the data for volleyball showed positive</td>
</tr>
<tr>
<td>Source</td>
<td>Study Details</td>
<td>Methodology</td>
<td>Findings/Results</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Casado-Robles et al. (2020)</td>
<td>To examine the effect of a teaching unit of the Sports Education Model in Physical Education on sportspersonship and objective levels of regular Physical Activity in comparison with a traditional sports methodology in Secondary Education students.</td>
<td>A programme based on the Sport Education Model was carried out. The intervention was divided into five phases: one introductory phase session, two targeted phase sessions, two pre-season phase sessions, six in-season phase sessions and one final event session.</td>
<td>In the Fair Play dimension, no statistically significant differences were found between the control and experimental groups.</td>
<td></td>
</tr>
<tr>
<td>Burgueño and Medina-Casaubón (2020)</td>
<td>To examine the influence of an intervention programme based on Sports Education on the five orientations of sportspersonship proposed by Vallerand et al. (1996) and Vallerand et al. (1997).</td>
<td>Clustered randomised design, with a non-equivalent control group and pre- and post-intervention measures.</td>
<td>The intervention consisted of three phases. The initial phase was made up of an introductory session and a guided practice. The autonomous practice phase aimed to develop technical and tactical skills. Finally, the final phase included regular competition and a culminating event. In addition, a fair play points accounting system was established which was initiated during the pre-season competition and continued until the end. In both the intergroup and intragroup analyses, there were statistically significant increases in the level of respect for social conventions, respect for rules and referees, full commitment and respect for opponents.</td>
<td></td>
</tr>
<tr>
<td>Lis-Velado and Carriedo (2019)</td>
<td>To analyse the effects of a football competition based on the Brave League (2015) on fair play attitudes, goal orientations, effort, and pressure-stress in students in the fifth year of primary school.</td>
<td>Quasi-experimental pre-test, post-test design with control and experimental group.</td>
<td>In the experimental group, participants took part in a championship with a format characterised by the existence of two types of rankings, one evaluating the fair play of the students and the other being conventional. In this format, the team coming first in the fair play ranking was declared the winner, and only in the event of a tie was the conventional ranking used. Intergroup analysis: the results showed the same results as the preliminary analyses, with significant differences still found in rough play, ( U = 649, Z = -3.198, p &lt; .001, r = .33 ); and in importance in winning, ( t (90) = 2.935, p = .004, d = .62 ).</td>
<td></td>
</tr>
<tr>
<td>Naves et al. (2019)</td>
<td>To verify whether the motivational Not specified</td>
<td>During the sessions, tasks were set as a challenge for In the factor regarding the</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Gil-Madrona et al. (2016)**

To examine the effectiveness of PE lesson plans which focus on teaching social skills and values within the content of fair play, social relations, personal effort and self-improvement, good manners and self-control in the socio-emotional domain of students in the 6th-8th grades. The contents of the intervention programme, focused on values education, were organised in different blocks: enjoyment, effort, emotional control, respect for rules, intervention techniques and fair play, which in turn consisted of: respect for teammates and opponents, respect for referees, learning to be a good winner and accepting when you lose. In the intervention group there was a significant improvement in students’ perceptions of values (t = -8.05; p < .01) and in PE teachers’ perceptions of the values of enjoyment (t = -7.10; p < .01), fair play (t = -8.09; p < .01), social relationship (t = -6.48; p < .01), good manners (t = -7.43; p < .01) and emotional control (t = -6.03; p < .01).

**Azevedo et al. (2016)**

To investigate the effects of Fair Play on objectively measured levels of MVPA among secondary school students from marginal neighbourhoods in the UK with different levels of Physical Activity, during physical education lessons. An intervention based on the Fair Play Game was carried out, consisting of: goal setting, unidentified monitored student, reinforcement after the end of the session by providing examples, feedback and reward. The single-subject analysis revealed that the Fair Play Game intervention displayed a positive but weak treatment effect in participants with low levels of Physical Activity. However, students with medium and high MVPA showed no positive changes between baseline and intervention phases.

**Vidoni et al. (2013)**

To replicate the Fair Play Game intervention programme in three sixth-grade classes and investigate its effects on children’s activity in terms of the number of steps during a handball. An intervention based on the Fair Play Game was implemented. The most relevant aspects of the intervention were: the creation of a wall with the names of the teams where information could be written down, the request for examples to the students about how they could be more active and important of winning in football, there was a decrease of 1.15 points. In terms of the acceptance of rough play, there was also a decrease of 1.01 points, while in the item referring to enjoyment, there was an increase of 0.95 points. One of the three teams belonging to class 1 achieved the objective. In class 2, two of the three teams reached the objectives, and all three teams in class 3 attained the proposed objectives.
<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perlman and Goc (2010)</td>
<td>To provide a qualitative examination of students and teachers perceptions and experiences within two consecutive seasons applying the Sport Education Model by using the perspective of the self-determination theory</td>
<td>Each unit followed a three-phase format. In the first phase, students were placed in teams and were assigned the different roles. In the second phase, they prepared the fields, performed team practices and warm-ups, followed by the practise of proposed games, and finally, in the last phase, a competition was held followed by an award ceremony. In terms of fair play, the implementation of the intervention led to an improvement in the sense of empathy within the class by reducing negative sporting behaviour.</td>
</tr>
<tr>
<td>Vidoni and Ward (2009)</td>
<td>To analyse the influence of the intervention on fair play behaviours during a Physical Education unit and to research the use of the Sport Education Model as a baseline to determine to what extent it promotes fair play behaviours.</td>
<td>Multiple baseline design based on two behaviours. The experimental condition involved a programme called Fair Play Instruction based on the following features: graphic, prompts and praise, positive peer identification and feedback. In class 1, the data for active participation increased with a mean of 77% and the data for waiting decreased with a mean of 24%. In addition, helpful behaviours were constant, while the data for harmful behaviours was lower, with a mean of 0.7. In class 2, the levels of active participation increased with a mean of 70% and helpful behaviours showed similar levels to those prior to the intervention.</td>
</tr>
<tr>
<td>Cecchini et al. (2007)</td>
<td>To examine the impact of Hellison’s (1995) model for the development of personal and social responsibility on fair play and self-control in young people.</td>
<td>Quasi-experimental pre-test, post-test design with control and experimental group. Experimental Group A: The five levels of Hellison’s (1995) intervention programme were applied through an indoor football teaching unit. The design of the sessions included integrated rules and levels aimed at developing values related to fair play and its transfer to the everyday life. Experimental Group B: The first four levels of the intervention were applied through an indoor football teaching unit. In the variable of opinions related to fair play, there were significant differences between groups A and B, when compared to the control group, in all the variables. In both groups there was an increase in the variable of enjoyment ($F_{1,180} = 47.93$, $P &lt; .001$, $n^2 = 0.34$) and decreases...</td>
</tr>
</tbody>
</table>
### 4. Discussion

The aims of this study were: 1) to conduct a systematic review of the effects of those research studies related to fair play where intervention programmes were implemented; 2) to describe and examine these interventions. The selected studies addressed fair play in different ways. Four out of the thirteen studies (Azevedo et al., 2016; Burgueño, Medina-Casaubón, 2020; Gil-Madrona et al., 2016; Vidoni et al., 2013), treated it as an element included in the intervention programme, while another eight (Casado-Robles et al., 2020; Cecchini et al., 2007; Cecchini et al., 2003; Naves et al., 2019; Lis-Velado, Carriedo, 2019; Palou et al., 2007; Palou et al., 2020; Perlman, Goc, 2010), referred to fair play as the subject matter of study. The study carried out by Vidoni and Ward (2009) addressed fair play from both perspectives.

All five studies were conducted in the educational sphere, specifically in the Primary and Secondary Education stages, referring to fair play as part of the intervention programme implemented. This aspect is important to underline, as schools can and should represent the driving force in the promotion of fair play, not only through sport activities, but in all the

<table>
<thead>
<tr>
<th>Study</th>
<th>Methodology</th>
<th>Aim</th>
<th>Intervention Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palou et al. (2007)</td>
<td>Quasi-experimental pre-test, post-test design with control and experimental group</td>
<td>To analyse fair play attitudes in junior football players and to see the effects of an intervention on the promotion of fair play</td>
<td>The intervention conducted with the coaches consisted of a dossier to promote fair play and sportspersonship in football at school age, based on the protocol of advice to coaches by Boixadós (1998). The application of the intervention to coaches and players was undertaken through three theoretical-practical sessions and the dissemination of triptychs and dossiers</td>
<td>Regarding the variable &quot;Attitude towards winning&quot;, there were no significant differences. On the other hand, the results did not vary for the variable &quot;Attitude towards rough play&quot;, and there were no significant differences for the variable &quot;enjoyment&quot;.</td>
</tr>
<tr>
<td>Cecchini et al. (2003)</td>
<td>Quasi-experimental pre-test, post-test design with control and experimental group</td>
<td>To assess the implementation of an intervention programme based on the Personal and Social Responsibility model (Hellison, 1995), in young school children</td>
<td>The daily session was organised in the following phases: open practice and time dedicated to the teacher's personal contact with the students, awareness-raising talk with the entire group, practical development of the activity with integrated standards and levels, and meeting of the entire group to assess the work accomplished and to reflect on the values developed</td>
<td>There were statistically significant improvements related to enjoyment, t (1, 70) = 10.76, p &lt; .001. Furthermore, decreases were observed in variables measuring negative aspects such as rough play, t (1, 70) = -19.32, p &lt; .001 and the imperative pursuit of victory t (1.70) = -13.12, p &lt; .001</td>
</tr>
</tbody>
</table>
dimensions where the educational process is embodied (Pignato et al., 2020). In this regard, the research carried out by Vidoni and Ward (2009) and Burguño and Medina-Casaubón (2020) used a methodology based on the Sports Education Model including elements related to fair play. In the study conducted by Vidoni and Ward (2009), an instruction on fair play was provided to students, obtaining an increase in data on active participation. The differences in the level of active participation, before and after implementing the intervention, are similar to the motor participation reported in previous studies (Grant et al., 1990; Randall, Imwold, 1989). On the other hand, in the study conducted by Burguño and Medina-Casaubón (2020), after the application of the intervention based on the Sport Education model, where a fair play accounting system was established, the results showed a statistically significant increase in the level of respect for social conventions, respect for rules and referees, full commitment, and respect for opponents. In terms of social conventions, Brock and Hastie (2007) obtain results along the same lines, insofar as they found that secondary school students exhibit appropriate behaviours such as shaking hands with opponents and acknowledging their opponents’ good performance. The positive results obtained in the item referring to respect for opponents match those obtained by Méndez-Giménez et al. (2015), and Brock and Hastie (2007), as both studies reveal that students help other classmates and are kind to them. This fact can be explained by the curricular scaffolding of the Sport Education Model which promotes an environment encouraging task participation. Conversely, the results reported in the study by Azevedo et al. (2016) showed that the Fair Play Game intervention had a positive, but weak, treatment effect on participants who engaged in little physical activity. Nevertheless, students with medium and high MVPA did not display positive changes between baseline and intervention phases. These outcomes do not support the results found by Vidoni and Ulman (2012), and Vidoni et al. (2013). One of the possible reasons could be the timing, as the intervention was conducted with a frequency of one day per week.

Regarding the research studies dealing with fair play as a subject matter of study, it was observed that four out of nine studies were conducted in secondary education (Cecchini et al., 2007; Cecchini et al., 2003; Casado-Robles et al., 2020; Perlman, Goc, 2010), two in Primary Education (Lis-Velado, Carriedo, 2019; Vidoni, Ward, 2009) and three in sports clubs (Palou et al., 2020; Naves et al., 2019; Palou et al., 2007).

Both in the study conducted by Casado-Robles et al. (2020) and in those developed by Perlman and Goc (2010) and Vidoni and Ward (2009), an intervention programme based on the Sport Education Model was used. Firstly, in the research carried out by Vidoni and Ward (2009), and referring to the results related to fair play, the beneficial behaviours from a social point of view showed similar levels after the intervention, while the detrimental behaviours were lower and tended to stabilise. Unlike previous studies (Giebink, McKenzie, 1985; Patrick et al., 1998), the results reported in this research do not show such pronounced differences. In the study undertaken by Perlman and Goc (2010), the implementation of the intervention based on the Sport Education Model led to an improvement in terms of class empathy by reducing unsporting behaviour. Meanwhile, in the research carried out by Casado–Robles et al. (2020), no statistically significant differences were found between the control and experimental groups in the dimension of fair play. Nonetheless, studies such as those by Vidoni and Ward (2009), Perlman and Goc (2010) and Wahl-Alexander et al. (2016), unlike Casado-Robles et al. (2020), were conducted following a qualitative methodology. Therefore, the design of the Casado–Robles et al. (2020) study (natural-group randomised controlled) may entail an advantage over most studies based on a single-group design.

The study by Lis-Velado and Carriedo (2019) found no significant differences associated with fair play between the control and experimental groups. These results are similar to those of another study, Sampol et al. (2007), which analysed the effects of an intervention to promote fair play in young football players. In turn, Cecchini et al. (2003) and Cecchini et al. (2007) observed, in pre-adolescents, that participants in the experimental group produced significant improvements in terms of enjoyment, and significant decreases were detected in variables measuring negative aspects such as rough play and the imperious pursuit of victory after an intervention based on Hellison’s (1995) Personal and Social Responsibility model. Both studies highlight the fact that the values learned during the interventions implemented can be transferred to other dimensions, but only if the experiences are specifically designed and conducted for this purpose (Danish et al., 1990).

By contrast, in the study by Naves et al. (2019), there was a decrease in the factors referring to the importance of victory and rough play, and an increase in the item referring to enjoyment.
Previous studies have obtained positive results after the application of this method (Cecchini et al., 2014; Sevil et al., 2018). Likewise, in the study by Palou et al. (2007), an intervention programme aimed at improving sports personship and fair play was implemented, but no statistically significant results were obtained, which does not coincide with the findings of Gibbons and Ebbeck (1997) regarding the desire to win, or with the results reported by Borràs et al. (2003) concerning rough play.

The main limitation of the systematic review is that the studies differ in terms of sample, instruments, and protocols. Regarding the characteristics of the sample, the fact that the studies differ in the size of the sample stands out. In addition, the instruments used, except for four studies that use the same tool, are different and measure fair play in different ways. Some of them analyse the fair play globally and others distinguish sub-scales of measurement within fair play. In addition, the protocols and interventions carried out in research vary significantly. All the above, together with the fact that the studies deal with the concept of fair play in different ways, makes it difficult to analyse them and, therefore, to compare the findings. It should also be mentioned that a meta-analysis was not carried out due to the unequal treatment and measurement of fair play in the analyzed research, and that most of the quantitative articles did not meet the requirements for such a meta-analysis (non-control group, non-reporting of means and standard deviations). Only four of the articles included in the systematic review met the requirements for conducting a meta-analysis, so conducting the meta-analysis may have less power (Jackson, Turner, 2017). Thus, it was considered appropriate to conduct an in-depth qualitative analysis of the 13 studies included in the systematic review. In this sense, future research should aim at studying the influence of the mentioned and new methodologies on fair play, both in educational contexts and in sports clubs, using a common instrument in order to achieve a broader and more complete comparison.

5. Conclusion

The application of the Sports Education Model together with the implementation of other aspects related to fair play can favour the active participation and pro-social behaviours of young people, highlighting respect for social conventions, respect for rules and referees, commitment and respect for opponents. In turn, the application of Hellison’s (1995) model of Personal and Social Responsibility obtained improvements on fair play, such as a remarkable increase on the subscale referring to enjoyment, and significant decreases on the subscales relating to rough play and the importance of victory in the educational context. Alternatively, in the sports context, through the implementation of the TARGET model, positive results can be achieved, as far as fair play is concerned, in the variables relating to the importance of winning, rough play and enjoyment.

The main practical application of this systematic review is to help teachers and coaches in the development of fair play, as well as to identify those methodologies which provide the best results for the development of fair play in students and athletes during the sports training stage.

References


through physical education: implementation of a programme in secondary education. Lecturas: Educación Física y deportes. 54. [in Spanish]


