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## ORIGINAL

### IMPACT OF A MIXED, MULTI-SPORT AND COMPREHENSIVE MUNICIPAL AFTER-SCHOOL SPORTS PROGRAM

### IMPACTO DE UN PROGRAMA MUNICIPAL DE DEPORTE EXTRAESCOLAR MIXTO, POLIDEPORTIVO Y COMPRENSIVO

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## ABSTRACT

The purpose of this paper is to analyze the development of a non-competitive after-school sports program that promoted youth positive development in a Spanish town during the period that spans from 2011 to 2018. A sample of 4222 participants (2838 schoolchildren, 1071 family's members, 261 sports leaders and coaches, and 52 PE teachers) involved in the after-school sports program were administered the annual questionnaire to evaluate the program. First, descriptive statistical analysis tests were performed. *Spearman* correlations analysis followed to establish relationships between studied variables. Results present a continuous improvement in the program as well as the sports facilities satisfaction, positive attitudes toward sport practice, positive stakeholders motor competence perception and educational quality. We conclude that non-competitive this after-school sports program has a higher potential to achieve better educational outcomes than in other sport competitive contexts of sports competition and increase recommended physical activity levels.

**KEY WORDS:** after-school sport, sport pedagogy, positive development, comprehensive models, non-competitive sports practice

## RESUMEN

El propósito de este estudio es analizar el desarrollo de un programa deportivo extraescolar no competitivo que promovía el desarrollo positivo de los jóvenes en una ciudad española entre los años 2011 y 2018. Se administró el cuestionario anual para evaluar el Programa a una muestra de 4222 participantes (2838 escolares, 1071 familiares, 261 monitores/as deportivos y 52 profesores de educación física). Se realizaron análisis estadísticos descriptivos y correlacional de *Spearman* para establecer relaciones entre las variables estudiadas. Los resultados presentan una mejora continua en la satisfacción del Programa y de las instalaciones deportivas, las actitudes positivas hacia la práctica deportiva, la percepción positiva de la competencia motriz de los escolares y la calidad educativa. Se concluye que este programa extraescolar tiene un potencial superior para lograr mejores resultados educativos que en otros contextos anteriores de competición deportiva, así como favorecer el aumento de los niveles de actividad física recomendados.

**PALABRAS CLAVE:** deporte extraescolar, pedagogía del deporte, desarrollo positivo, modelos comprensivos, práctica deportiva no competitiva

## 1. INTRODUCTION

Lifelong physical activity (PA) engagement is an essential aim of public health in many countries due to the short- and long-term benefits it provides, especially, amongst young people (Kirk, 2006; Warburton & Bredin, 2017). The psychological, emotional, social and educational advantages it poses for health are well-documented and associated with a physically active lifestyle (Bailey et al., 2009; Eime et al., 2013; Kirk, 2013; Janssen & Leblanc 2010). Nonetheless, in Spain, the *Report Card on Physical Activity for Children and Youth* revealed that only 34.2% of boys and 26.9% of girls aged 3 to 14 years achieved minimum levels of 60 minutes of PA a day. Further, only 31% of boys and 14.9% of girls aged 3 to 18 years achieved these 60 minutes of PA on five days or more a week (Roman-Viñas et al., 2018). This trend worsens with time (Gough et al., 2020).

Kirk (2006) has already argued that Physical Education (PE) is not managing to provide the appropriate frequency, duration and intensity of PA in order to achieve health benefits. Thus, other spaces are needed to complement those offered through formal education. Specifically, extracurricular sports programs provide excellent opportunities to engage in sport so that many children can reach the recommended levels of PA. Such programs are particularly helpful in vulnerable groups, the overweight, the less skilled and families with low incomes (Fraser-Thomas et al., 2005; Luguetti et al., 2017). Consequently, these programs must not deal with PE and, instead, act as a compliment to it. Previous studies have identified that the outcomes of youth participation in extracurricular interventions represent an important step towards the promotion of active lifestyles.

Research studies exist that highlight the role of extracurricular interventions

in increasing PA levels (De Meester et al., 2016). These types of programs increase motivation to engage in PE (Hortigüela & Hernando, 2017; Shen, 2014), whilst also providing a connection point with culture (Marttinen et al., 2020), or promoting the positive development of children (Armour & Sandford, 2013; Nols et al., 2019; Wright et al., 2016). Nevertheless, only very few contributions from the scientific literature deal with non-competitive extracurricular sport programs based on comprehensive and global models. In this sense, longitudinal studies may provide highly valuable information about satisfaction and participant experiences, whilst also exploring their attitudes towards engagement in sport, perceptions of motor skills (MS) and perceptions of educational quality.

In line with the introduction presented above, the aim of the present study was to analyze the impact of administering a non-competitive extracurricular sports program, which was based on comprehensive and global models with a view towards favoring the positive development of young people in a small Spanish municipality between 2011 and 2018. The study also aimed to examine the evolution of the levels of satisfaction of the agents involved in the program, attitudes generated towards engagement in sport, participant perceptions of motor skills and perceptions of the educational quality of the program, whilst also establishing relationships between the aforementioned variables.

### **1.1. ORGANIZED SPORTS PROGRAMS AS EXTRACURRICULAR ACTIVITIES**

Extracurricular time is defined as “a key point of transition at where students can find structured educational activities after timetabled school time and before many parents/legal guardians get home from work” (Marttinen et al., 2020, p. 411). Programmed activities outside of teaching time offer a space in which young people can participate in structured and educational initiatives at their school. These types of programs tend to be more accessible in terms of location and price (De Meester et al., 2017), and less demanding than federated clubs with regards to motor skills.

Regardless of their accessibility, participation in extracurricular sports programs may be influenced by schoolchildren's experiences and attitudes towards PE (Kjønniksen et al., 2009). In this way, when experiences of and positive attitudes towards PE classes improve, the participation of schoolchildren in extracurricular sporting activities later improves (Goudas et al., 2001). This being said, it is also possible that extracurricular activities favor positive attitudes towards PE and PA (Hortigüela & Hernando, 2017; Kjønniksen et al., 2009). In the same way, perceived MS are related with the participation of these schoolchildren in this type of program (Laukkanen et al., 2020). A positive correlation has been found between the time spent engaged in PA and the MS of participants (Barnet et al., 2016; Lubans et al., 2010). In this way, work conducted by Stodden et al. (2008) suggested that as MS improve, engagement in PA also increases and that this increase, at the same time, leads to further improvements in MS. Further, schoolchildren with positive perceptions of MS in PE are more likely to perceive PA experiences as being positive (Gråstén et al., 2017), whilst those with poor or negative perceptions of their MS tend to be more inactive (Barnett et al., 2016; De Meester et al., 2016). In addition, the parental perspectives and attitudes pertaining to PA are influential factors when it comes to signing their children up to these types of programs, thus, facilitating this type

of PA engagement and adherence to an active lifestyle (Coulter et al., 2020; Johansen & Green, 2019). In this sense, a study conducted by Palacios et al. (2015) found that attitudes toward sport engagement are a determining element of satisfaction with non-competitive extracurricular sports programs. Nonetheless, other research studies have questioned the effectiveness of these programs given that schoolchildren tend to compensate for the amount of PA that they have performed during their leisure time by being more inactive during the remainder of the day or the week (Cheung, 2019).

### 1.1.1. COMPREHENSIVE SCHOOL SPORT PROGRAM

The comprehensive school sport program (PIDEMSG) is a sport program that was run between 2008 and 2018 as an alternative to traditional and selective models (Manrique-Arribas et al., 2011; Jiménez-Herránz et al., 2014; Jiménez-Herránz et al., 2019). Before being put into practice in this municipality that is home to some 52000 inhabitants, an autonomic model based on competition according to sport modalities was being implemented whose main goal was the classification of participants via subsequent competitive stages (Pérez-Brunicardi, 2011). This new program eliminated standings and organized competition in primary education, and fought for mixed gender and age categories and multi-sport engagement in order to promote the highest engagement possible of schoolchildren. Further, it was proposed as a complement to PE, in collaboration with teaching staff and institutions.

Methodologically, the program is based on the application of comprehensive and global models (García & Gutiérrez, 2016; Fernández et al., 2018) with a "focus centered on students and play for the learning of games related with sport with strong links to the constructivist approach to learning" (Griffin & Butler, 2005, p.1). Further, the program is focused towards horizontal learning, as opposed to the vertical approach taken to traditional sports teaching, in which tactical learning of sport is common in specialties that share the same internal logic (Ruiz-Omeñaca, 2012). This enables a more globalized orientation towards sport and helps schoolchildren to actively participate, turning them into thinking players (Kirk & MacPhail, 2002; Kirk, 2017). Further, this program shares a number of points in common with the *Personal Assets Framework* (PAF) proposed by Côté et al. (2014). Personal factors, relational factors and organizational factors are required elements for understanding the positive developmental processes undergone by schoolchildren in this program.

Participation in the program is free for all schoolchildren during the entire school year. In this way, they learn different sports through modified games, which are used to reduce the demands of the games and provides opportunities for all (Harvey et al., 2018; Serra-Olivares et al., 2016). To achieve this, participants are grouped according to age ranges: 4-6 years, 6-7 years, 7-8 years, 9-10 years, 11-12 years, 13-14 years and 15-17 years (Pérez-Brunicardi et al., 2018). Each group receives one hour of training, two days a week, with a sports monitor who is trained in the philosophy of the program (Jiménez-Herranz et al., 2016). Further, sports meets are arranged for the different age groups on Fridays for two hours. These events are run on Fridays so as not to coincide with other competitions, especially federated competitions. At these meets, students from different schools meet up to play various simplified and modified sports and

games, such as those played during weekly training sessions (Jiménez-Herranz et al., 2016). To ensure correct roll out, sports monitors receive training on this pedagogical model during the academic year. Whether or not the educational sport model is successful depends on the knowledge and engagement of participants (Manrique-Arribas et al., 2013). Thus, training is imparted by experts in the comprehensive model and is composed of an initial theoretical and practical course. Seminars are delivered weekly or fortnightly by program coordinators, through general meetings in which monitors can report their concerns, doubts or issues in the teaching approach (Lobo et al., 2020).

## 2. METHOD

The present research is quantitative in nature. A retrospective longitudinal study was conducted of the delivery of a non-competitive school sport program over a six-year period. This methodological choice enables inferences to be made about the changes produced in participants, and potential determinants and consequences (Müggenburg & Pérez, 2007).

### 2.1. PARTICIPANTS

The sample was selected via non-probabilistic and convenience sampling. Participants were chosen in consideration of the availability and accessibility of researchers. It was composed by a total of 4,222 individuals who participated on the PIDEMSG between 2011 and 2018 (Table 1). Of these, 2838 were pupils (47% boys and 53% girls) enrolled on infant (0.1%), primary (72.8%) and secondary (27.1%) education from schools and institutions in the municipality and its adjoining neighborhoods. 1071 were parents of students participating on the program (7% infant, 78% primary and 15% secondary), 261 were sports monitors and 52 were PE teachers (2% infant, 90% primary and 8% secondary).

**Table 1.** Participant distribution according to year

Group	11/12	12/13	13/14	14/15	15/16	16/17	17/18	Total
Pupils	313	343	552	468	432	441	289	2838
Relatives	136	110	196	194	123	188	124	1071
Coaches	50	23	70	46	31	19	22	261
PE teachers	6	16	17	8	N/A	5	N/A	52
<b>Total</b>	<b>505</b>	<b>492</b>	<b>835</b>	<b>716</b>	<b>586</b>	<b>653</b>	<b>435</b>	<b>4222</b>

Note: N/A: Information not available

### 2.2. INSTRUMENT

The present study is based on the annual program evaluation questionnaire. This questionnaire was elaborated *ad hoc* in order to obtain quantitative data anonymously. It was administered during the seven years of program roll out. This scale was used in a study conducted by Palacios et al. (2015) with 1098 participants during the 2010/2011, 2011/2012 and 2012/2013 school years. This previous paper presents validity and reliability of the tool, revealing adequate reliability.

The questionnaire requires participants to rate their level of agreement on a five-point *Likert* scale, which runs from 0 (totally disagree) to 4 (totally agree). It



is composed of different variables, including both generic and group specific questions, which are completed by pupils, parents, PE teachers and sports monitors at the end of the academic year. On this occasion, we have selected the 24 items related with four variables: Satisfaction with the program and sports facilities, attitudes towards sport engagement, perceptions of motor skills, and perceptions of educational quality (Table 2 and Table 3).

### 2.3 DATA COLLECTION

Questionnaires were administered yearly between the months of March and June. Each one of the groups involved in the program, received the questionnaire designed towards them. The data collection process in the pupil group depended on sports monitors. Monitors were given the responsibility of informing pupils about the purpose of the questionnaire and of administering it individually to schoolchildren during the 10-15 first minutes of specified training sessions towards the end of the year. Prior to finishing the session, sports monitors delivered questionnaires to pupils for them to pass them onto their families so that their parents would fill out questionnaires at home. Pupils then returned completed questionnaires to their monitors in the next training session. With regards to infant pupils, members of their family were asked to read the questions to the pupils in order for them to be able to respond. On the other hand, each monitor was administered a questionnaire which was destined towards the group of monitors for them to respond and return completed, together with those of the pupils and parents, during the visit of program coordinators to some of the later training sessions. With regards to program coordinators, these were put in charge of delivering questionnaires to PE teachers at the educational institutions, which were later collected together with those completed by monitors and pupils in the following training session. Following this, collected information was given to study researchers.

**Table 2.** Items selected for the present study

Dimension	Subcategory	Number of items	Chosen items
Satisfaction	Satisfaction with the program (SP)	4	1.- Satisfaction with the school sport program. 2. – Satisfaction with running of the school sport program. 3. – I would participate again in this school sport program. 4. – I would recommend that my friends sign up to this school sport program.
	Satisfaction with sports facilities (SIP)	2	5.- Satisfaction with training facilities. 6.- Satisfaction with meet facilities.
Attitudes towards sport engagement	Positive attitudes (AP)	4	7- I play sport for the pleasure of having pleasant experiences. 8.- What I like about sport is being able to relate with my teammates. It teaches me to be able to collaborate with other classmates. 9.- Engagement in physical activity or sport is good for health.
	Negative attitudes (AN)	1	10.- Sport means enjoying free time. 11.- Physical-sporting activities are performed because it is important to compete and win.

Motor and sport perceptions	Positive motor perceptions (PMP)	5	<p>12.- I feel highly able to perform sporting activities.</p> <p>13.- I possess good physical qualities for performing sporting activities.</p> <p>14.- I like to do sporting activities because I possess good physical faculties for doing them.</p> <p>15.- I am fairly well coordinated and am normally successful at the time of playing sports.</p> <p>16.- I am good and playing sport.</p> <p>17.- I don't do federated sporting activities because my level is not good enough to compete.</p>
	Negative motor perceptions (PMN)	4	<p>18.- I am a little clumsy.</p> <p>19.- My body is not ready to withstand big physical efforts.</p> <p>20.- I will never be able to play in a federated team because I do not have the physical qualities for it.</p>

Source: Developed by the authors

**Table 3.** Items selected for the present study

Dimension	Subcategory	Number of items	Chosen items
Educational quality	Educational quality (CE)	4	<p>21.- I make enough effort to improve at the sport, and be a better teammate and person.</p> <p>22.- They teach me interesting things in school sport at my school (play sports well, treat people better, speak calmly, etc.)</p> <p>23.- Sport helps me in the things that I find most difficult (making friends, improving at the sport, etc.).</p> <p>24.- My monitors help me to improve personally, in addition to teaching me sport.</p>

Source: Developed by the authors

## 2.4. DATA ANALYSIS

Firstly, analysis of descriptive statistics was performed (mean and standard deviation) with the statistics program SPSS version 24. As data did not follow a normal distribution, *Spearman* correlations were performed in order to identify the type of relationships established between the dimensions examined in the present work. Correlation values were interpreted in the following way:  $r = 0.10-0.29$  interpreted as weak,  $r = 0.30-0.49$  deemed medium and  $r = 0.50$  or above deemed as strong associations (Field, 2009). Following this analysis, a second examination was performed of obtained information in order to filter out the most important dimensions studied in the present article.

## 3. RESULTS AND DISCUSSION

The purpose of the present study was to evaluate the development of a non-competitive extracurricular sport program which promoted the positive development of PA and sport during seven school years. During these years of development, this school sport model has quadrupled in number of participants

(Table 4) and has involved virtually all institutions delivering mandatory education in the municipality, whether stat-owned or mixed funding.

**Table 4.** Participants registered on the program annually

Year	11/12	12/13	13/14	14/15	15/16	16/17	17/18	Total
Participants	330	829	1242	1260	1248	1346	1349	7604

Satisfaction with the program (SP) presented high scores, with mean scores higher than 2.83 in 4 of the different groups (Table 6). The group of monitors was found to be most critical in relation to this variable, although they also presented the best improvement over time between 2011 and 2018, with scores of 2.83 in 2011/12 and 3.22 in 2017/18, showing an increase of 0.39. With regards to pupils, this group were shown to be the most satisfied with this variable, recording scores higher than 3.35. This group also improved their score by 0.05 over the years, with scores of 3.47 in 2011/12 and 3.52 in 17/18. On the other hand, an increase of 0.37 was seen in the group pertaining to parents, with scores of 3.22 in 2011/12 and 3.59 in 17/18, whilst, in the group of PE teachers, scores dropped by 0.07, with scores of 3.35 in 2011/12 to 3.27 in 16/17. Over the course of the seven years, this variable was the most highly rated variable, tending towards improvement (Table 5) and obtaining scores higher than 3.33.

The sports facilities (SIP) used in the program were rated with scores higher than 2.35 out of 4 (Table 6). An improvement of 0.28 could be appreciated over the years in the group of pupils, with scores of 2.60 in 2011/12 and 2.78 in 2017/18. An increase of 0.13 was shown in the group pertaining to parents, with scores of 2.79 in 2011/12 and 2.92 in 2017/18. In teachers, we found a greater increase in this dimension with an increase of 0.75 and with scores of 2.50 in 2011/12 and 3.25 in 2016/17. In the group of sports monitors, this variable increased by 0.11 over the years, with scores of 2.84 in 2011/12 and 2.95 in 2017/18. Although this dimension experienced highs and lows over the years, in increased, on average, by 0.16 over the years, moving from 2.67 in 11/12 to a score of 2.83 in 17/18. Specifically, in the 14/15 school year, this variable obtained its highest average rating of 2.96, with sports monitors being the group that was most satisfied with this variable.

High satisfaction with the program and sports facilities has also been concluded by outcomes obtained in studies conducted by Jiménez-Herranz et al. (2014), Jiménez et al. (2016), Jiménez-Herranz et al. (2019) and Pérez-Burnicardi, et al. (2018). These previous works found that the sports facilities used presented some deficiencies with regards to appearance or aesthetics but, more importantly, were deemed acceptable and adequate for engagement in sport. The present correlational analysis indicated that a weak positive relationship existed between satisfaction with the program and satisfaction with its sports facilities (Table 8). This statement is in accordance with that expressed by Palacios et al. (2015), who revealed that sports facilities were not a significant determinant of general satisfaction with the program.

Obtained outcomes show that the agents involved in the program gave scores higher than 2.43 out of 4 for the variable pertaining to positive attitudes towards sport engagement (AP) (Table 6). This coincides with Agbuga et al. (2013), in whose study participants also showed AP towards extracurricular PA program because they had a



good time in them, engaged in and played diverse games, and benefited PA engagement. The group of sports monitors was the most critical in relation to this aspect, although their score increased by 0.08 between the years 2011 and 2018. Similarly, PE teachers were fairly critical regarding this variable, reporting, in contrast to monitors, a decrease of 0.15 in the rating of AP between 2011 and 2018. Parents, in contrast, obtained an increase of 0.97 in their ratings of AP, with scores of 2.58 in 2011/12 and 3.55 in 2017/18 (Table 7). With regards to pupils, this group provided scores above 3.20 for AP, apart from during the 2013/14 year, in which they gave a score of 1.72 for this aspect. Despite this, pupils presented an improvement of 0.09 between 2011 and 2018. Thus, it seems important to incorporate PE teachers' and parents' viewpoints when designing PA programs and plans outside of the school timetable (Cheung, 2017; Manrique-Arribas et al., 2011; Marttinen et al., 2020). This is crucial to ensure that schoolchildren do not miss out on any opportunity to participate in PA activities outside of the school timetable and improve their health in all ambits. Positive attitudes towards these types of programs may be influenced by intrinsic motivation and participant attitudes towards PE (Goudas et al., 2001), in addition to parent perspectives around what makes PA healthy in all senses. This perspective is important for facilitating the transfer of opportunities into the participation of their children in programs (Coulter et al., 2020; Johansen & Green, 2019). In this regard, Casey & Quennerstedt (2015) indicated that PE is directly related with the development of positive attitudes and motivation towards PA. Likewise, it is also possible that when participants have no or few positive attitudes towards PA, their participation in this type of program serves to improve positive attitudes (Kjønniksen et al., 2009; Shen, 2014).

**Table 5.** Descriptive statistics pertaining to the studied variables

Category	Year							All years
	11/12	12/13	13/14	14/15	15/16	16/17	17/18	
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
SIP	2.67 (1.121)	2.58 (1.111)	2.81 (1.033)	2.96 (.999)	2.92 (.967)	2.82 (.951)	2.83 (.870)	2.81 (1.017)
SP	3.34 (.726)	3.35 (.734)	3.45 (.648)	3.41 (.793)	3.59 (.537)	3.43 (.683)	3.52 (.570)	3.44 (.683)
AP	3.03 (.679)	3.02 (.700)	2.08 (.722)	3.39 (.693)	3.42 (.629)	3.40 (.630)	3.39 (.636)	3.05 (.844)
AN	.95 (1.391)	.96 (1.328)	2.01 (1.516)	1.35 (1.517)	1.37 (1.460)	1.17 (1.415)	1.07 (1.312)	1.33 (1.481)
PMP	N/A	N/A	3.06 (.763)	3.07 (.978)	2.96 (.804)	2.94 (.808)	2.95 (.764)	3.00 (.833)
PMN	N/A	N/A	1.37 (1.020)	1.03 (1.014)	1.13 (1.037)	1.03 (.970)	.91 (.902)	1.12 (1.008)
CE	N/A	N/A	N/A	N/A	N/A	3.20 (.710)	3.22 (.698)	3.21 (.705)

Note: N/A: Information not available.

It is especially meaningful that participants did not attribute importance to competition. Negative attitudes towards sport engagement (AN) received scores lower than 2.44, with the group containing sport monitors giving the highest scores for AN, with means lower than 0.83. In contrast, the group of pupils presented the highest scores, especially during the 2013/14 school year, in which a mean of 2.43 was obtained. Nonetheless, all other years tended to present AN scores lower than 1.50. Parents and teachers improved their AN scores, with ratings dropping by 0.37 and 0.20, respectively, between 2011 and 2018, whilst ratings given by pupils and sport

monitors worsened, increasing by 0.22 and 0.64, respectively, with the passage of time. A possible explanation for the low AN found could be the mixed-sport nature of the program. Indeed, Gottfredson et al. (2010) have argued that mere engagement in conventional sport, such as football and basketball, was associated with negative experiences in AF, as opposed to those who engage in a wide variety of sports and without the demands of achieving good outcomes with regards to standings. Present outcomes pertaining to positive and negative attitudes enable the identification of participants as individuals who perform PA, given that they perceive this to lead to considerable benefits and few drawbacks (Nelson, 2010). Further, it is not surprising that participants reported high levels of satisfaction with the program and expressed AP towards PA, finding a medium sized positive correlation in both dimensions (Table 8). This finding is in accordance with outcomes reported by Palacios et al. (2015). These authors also highlight that attitudes, or approaches to justifying participation in non-competitive sports programs, are more focused on achieving a type of PA engagement that is more oriented towards health and based on collaboration with other teammates. In this sense, outcomes of the present research could support the idea that the employment of comprehensive and global models increases motivation for and adherence to PA, at the same time of reducing sport dropout (Barquero-Ruiz et al., 2020; Hortigüela & Hernando, 2017). Nonetheless, correlational analysis revealed that AP was more strongly linked with educational quality. With regards to AN, this held a very weak, almost non-existent, relationship with satisfaction with the program and was strongly related with negative perceptions of motor skills (Table 8).

With regards to perceptions of motor skills (CM), positive motor skill perceptions (PMP) obtained scores higher than 2.64. Over the course of the program, it was found that PMP tended to decrease within pupils, with a drop of 0.24 between 2011 and 2018, whilst, in parents, PMP tended to increase by 0.28. This is largely consistent with outcomes reported by Gråstén et al. (2017), who found that perceptions of motor competence increased following school sport programs. In the case of the present study, PMP in pupils stayed constant around the 3 mark, indicating high PMP. Nonetheless, this rating decreased with the passage of time. These outcomes are coherent with those reported by De Meester et al. (2016), who concluded that high CM perceptions enabled pupils to be more active and engaged in sporting activities. In this sense, Barnet et al. (2016) showed that PA was positively correlated with the development of CM. Along these lines, Logan et al. (2015), Devís-Devís et al. (2015) and Laukkanen et al. (2020) suggested that perceived CM in PA acts as a predictor of PA adherence. Thus, the present study may support the standpoint provided by Stodden et al (2008) and Lubans et al. (2010), in which they express that whilst CM can be improved in line with greater PA engagement, further PA engagement also occurs as CM continues to improve. This creates a continuous cycle of increasing self-perceptions and, consequently, higher self-esteem.

In another sense, items relating to negative motor skill perceptions (PMN) obtained ratings of lower than 1.45 out of 4. Within the group of pupils, PMN scores dropped by 0.39 between 2013 and 2018. Likewise, the group containing parents, PMN ratings reduced (0.59) with the passing of time. This is especially important because if participants did not have sufficient CM, they would not have enjoyed engaging in sport if teaching focused excessively on the mastery of technique. A possible explanation of obtained outcomes could be the use of modified games in

this non-competitive program. Given that, as indicated by Harvey et al. (2018), demands on these skills are reduced and opportunities for participation are promoted so that everybody has as many opportunities as possible and, in this way, players become active and more competent. It is important that these types of programs seek to develop a positive environment in which participants can feel safe and comfortable when engaging in PA (Luguetti et al., 2017). This program serves to avoid exclusion and dropout. In the present work, an inverse relationship was found between PMP and PMN, in the sense that as PMP increase, PMN reduces. In addition to using modified games, the philosophy of non-competition and early specialization was implanted in the program as a means to preventing negative outcomes in terms of personal development (anxiety or the fear of failing) and the lack of PA adherence in adult life. To this end, participatory discourse was promoted with competition being employed from an educational standpoint. Pupils were provided with a safe and supporting environment in which learning was the main focus of attention (Layne, 2014). In agreement with Jiménez-Herranz et al. (2016), given the non-competitiveness of the present program, a notable increase in participants with low CM was seen over the years of program implementation. It can be deduced that young athletes with low motor skills find the chance to engage in PA through the program, more so than in organized and competitive sporting activities. Further, young people report improving tactical-technical knowledge, autonomy and successful development of motor skills following application of comprehensive and global models (Barquero-Ruiz, 2020; Fernández et al., 2018).

Finally, with regards to educational quality (CE), those involved reported high scores, above 3.11, as shown in Table 5. Scores for this dimension evolved favorably over the years in pupils and parents, increasing their best ratings by 0.02 and 0.09, respectively. On the other hand, teachers provided a high score for this dimension with a rating of 3.20. Nonetheless, the group pertaining to monitors was more critical, giving a score of 2.75. These outcomes are in accordance with those found by Lobo et al. (2020) and highlight that, in the same way as with PE, extracurricular sports programs have great training potential. In other words, learning to play sports as a means to understanding their internal logic, forming quality social relationships, generating prosocial attitudes or speaking calmly in order to resolve potential conflicts and, in this way, cover important aspects from cognitive, social and affective ambits (Armour & Sandford, 2013; Bailey et al., 2009; Fernández et al., 2018; Kirk, 2013; Nols et al., 2019). It may be that this is partly due to the employment of comprehensive and global models. Through these models, participants learn not only to play games but, also, to develop thinking strategies for problem solving (Kirk & MacPhail, 2002, García & Gutiérrez, 2016), increase their autonomy, motivation and enjoyment, increase their motor skills perceptions (De Meester et al., 2017; Gil-Arias et al. 2020; Hortigüela & Hernando 2017), develop positive and quality relationships and interactions with other participants, and increase adherence to PA (Barquero-Ruiz, et al., 2020). In order to achieve these ends, the current program appears to be effective at establishing a positive social and physical environment (Côté et al., 2014), with the training of sports monitors playing an important role on the educational quality of the program (Manrique-Arribas et al., 2013). It is assumed that these achievements can be transferred to other contexts (Jacobs & Wright, 2018) and that users will continue to feel satisfied if they follow the training guidelines indicated previously in order to develop positive attitudes towards PA. Concretely, this dimension demonstrated to be most strongly and positively linked with SP (Table 8).

**Table 6.** Descriptive statistics of examined variables in each group

Category	Group	Year						
		11/12	12/13	13/14	14/15	15/16	16/17	17/18
		M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
SIP	ES	2.60 (1.218)	2.55 (1.163)	2.82 (1.094)	2.91 (1.05)	2.93 (.997)	2.80 (.962)	2.78 (.876)
	F	2.79 (.928)	2.58 (1.033)	2.75 (.935)	3.00 (.887)	2.88 (.926)	2.82 (.940)	2.92 (.856)
	MO	2.84 (.917)	3.21 (.687)	2.86 (.857)	3.25 (.880)	3.08 (.659)	3.15 (.834)	2.95 (.857)
	EF	2.50 (1.183)	2.36 (.693)	2.97 (.717)	2.87 (.694)	N/A	3.25 (.500)	N/A
SP	ES	3.47 (.738)	3.44 (.765)	3.49 (.682)	3.36 (.901)	3.62 (.546)	3.40 (.738)	3.52 (.617)
	F	3.22 (.649)	3.20 (.660)	3.48 (.525)	3.53 (.524)	3.60 (.459)	3.50 (.535)	3.59 (.418)
	MO	2.83 (.588)	2.84 (.365)	3.14 (.563)	3.39 (.564)	3.11 (.496)	N/A	3.22 (.599)
	EF	3.35 (.441)	3.30 (.377)	3.23 (.732)	3.45 (.395)	N/A	3.28 (.334)	N/A

Note: N/A: Information not available. ES (Pupils), F (Relatives), MO (Coaches), EF (PE teachers)

**Table 7.** Descriptive statistics of the variables examined in each group

Category	Group	Year						
		11/12	11/12	11/12	11/12	11/12	11/12	11/12
		M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
AP	ES	3.29 (.680)	3.21 (.714)	1.72 (.408)	3.40 (.747)	3.41 (.646)	3.35 (.653)	3.38 (.672)
	F	2.58 (.431)	2.57 (.411)	2.80 (.793)	3.56 (.504)	3.64 (.419)	3.55 (.540)	3.55 (.491)
	MO	2.63 (.332)	2.44 (.426)	2.68 (.319)	2.76 (.330)	2.62 (.412)	N/A	2.71 (.338)
	EF	2.75 (.418)	2.85 (.263)	2.83 (.330)	2.75 (.462)	N/A	2.60 (.518)	N/A
AN	ES	1.14 (1.551)	1.10 (1.466)	2.43 (1.492)	1.48 (1.547)	1.44 (1.481)	1.49 (1.508)	1.36 (1.396)
	F	.79 (1.116)	.74 (.931)	1.55 (1.182)	N/A	N/A	.40 (.759)	.42 (.844)
	MO	.26 (.443)	.35 (.573)	.32 (.609)	.30 (.591)	.39 (.495)	N/A	.82 (.958)
	EF	1.00 (1.549)	.47 (.516)	.53 (1.068)	.38 (.518)	N/A	.80 (.447)	N/A
PMP	ES	N/A	N/A	3.20 (.725)	3.00 (.958)	2.97 (.820)	3.00 (.817)	2.96 (.751)
	F	N/A	N/A	2.65 (.725)	3.21 (1.012)	2.90 (.748)	2.80 (.772)	2.93 (.796)
	MO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	EF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PMN	ES	N/A	N/A	1.44 (1.063)	1.04 (.987)	1.18 (1.092)	1.14 (1.038)	1.05 (.955)
	F	N/A	N/A	1.18 (.855)	.99 (1.078)	.973 (.804)	.77 (.725)	.59 (.660)
	MO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	EF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CE	ES	N/A	N/A	N/A	N/A	N/A	3.24 (.766)	3.26 (.756)
	F	N/A	N/A	N/A	N/A	N/A	3.12 (.559)	3.21 (.560)
	MO	N/A	N/A	N/A	N/A	N/A	N/A	2.75 (.408)
	EF	N/A	N/A	N/A	N/A	N/A	3.20 (.480)	N/A

Note: N/A: Information not available. ES (Pupils), F (Relatives), MO (Coaches), EF (PE teachers)

**Table 8.** Correlation coefficients between studied variables

	SIP	SP	AP	AN	PMP	PMN	CE
SIP	1	.254**	.123**	.002	.130**	.021	.143**
SP	.254**	1	.308**	-.057**	.264**	-.140**	.372**
AP	.123**	.308**	1	-.205**	.162**	-.228**	.407**
AN	.002	-.057**	-.205**	1	.080**	.243**	-.074*
PMP	.130**	.264**	.162**	.080**	1	-.276**	.387**
PMN	.021	-.140**	-.228**	.243**	-.276**	1	-.185**
CE	.143**	.372**	.407**	-.074*	.387**	-.185**	1

\* p<.05

\*\*p <.01.

#### 4. CONCLUSIONS

Development of a school sport model through the application of a training-based philosophy over a seven-year period permits us to conclude that the current program has a greater potential for achieving better educational outcomes than other previously applied sport competition models. Participant satisfaction was proven to increase from one year to the next as young athletes went on developing and internalizing the non-competitive model, with educational quality being the most influential variable on their satisfaction. At the same time, participants' perceptions of high degrees of motor skills whilst on the program has a resultant effect on their satisfaction with it. Development of sufficient motor competence forms part of the educational philosophy pursued by this alternative model of school sport. Thus, schoolchildren who acquire active lifestyles over the course of their life, also generate greater self-esteem and sufficient self-perceptions to be able to take on any challenge and in any context. Finally, this program has managed to achieve that positive attitudes towards sport predominate above negative attitudes and generate situations that make them feel safer and more physically able. These qualities are presented as predictors of favorable behavior towards healthy PA at adult age. Further, it serves to highlight that the yearly increase of participants on this non-competitive program may be due to the influence of their families who motivated their children to participate. From this perspective, the present study sought to rethink the extracurricular sport model so as not to exclude any student due to their abilities for sport. It also sought to stimulate awareness and motor self-perceptions in participants, which can help them to overcome any challenge in any context. In light of that presented, the present study was also limited by not having information available for all age groups or all examined variables. For this reason, it would also be interesting to collect information in this regard in order to be able to develop a more in-depth view of the present non-competitive school sport **program**.

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