

Original Article

Organizational factors and their influence on participation in the school-age sports program from the teachers' perspective

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Abstract:

The increase of obesity in the child population, together with the decrease in the number of teaching hours of physical education and adolescents' low adherence to physical exercise, makes school-age sport a particularly relevant tool for teach Spanish schoolchildren sports and health habits. Therefore, an in-depth investigation has been carried out, using a quantitative methodology, with a sample of 368 teachers of primary and secondary physical education involved in the school-age sports program in the region of Murcia (Spain). The general objective of the research was to identify organizational factors that can influence school sports participation and to describe an organization model and promotion strategies aimed at increasing sports participation for school-age children. The main results indicate that an increase in the number of activities adapted from conventional and regulated programs, as well as a more playful orientation of a sports promotion championship, could increase participation in school-age sports programs.

Key words: school sports, participation, competition, recreational sports, competitive sports.

Introduction

There is no consensus to define the many realities around youths' sporting practice nor what exactly *school sport* or *sport of school-age children* means (Fraile, 2004). The Consejo Superior de Deportes (or Higher Sports Council; 2010) relates it to the activity carried out in different stages of the current education system (infant, primary and compulsory secondary). In the region of Murcia, Spain, where this study is located, there is a clear evolution in the definition of school sport. In the Law of 8/2015, of March 24th, on Physical Activity and Sports of the Region of Murcia, reference is made to physical activity and school sports as follows: "Physical activity is considered to be physical or sports practice carried out by children and young people, up to 22 years old, who participate in sports programs through educational centers, sports federations or town halls. When this activity is carried out by children and young people of school age and coordinated by an educational center, it will be called school sport." The school environment is ideal to attract young students to practice sports because the students remain in this controlled environment most of their time (Moscoso et al., 2009).

Likewise, it has been proven that sports practice carried out in school centres is related to a greater adherence to physical exercise in adulthood as compared with the practice of sports carried out in other environments (Curtis, McTeer, & White, 1999).

Recent studies affirm that although there is increasing research related to the benefits of physical activity in health, a change towards sedentary lifestyles is taking place, situating the levels of daily physical activity by under the recommendations of the World Health Organization (2000), which is one of the major risk factors closely linked to an increase in obesity, diabetes, hypertension and other non-communicable diseases (Sotomayor, Aquino, Jiménez, & Trejo, 2014). The lack of practice of physical exercise among young people, especially girls, as well as the abandonment of sports is a problem that must be addressed immediately to achieve the positive effects of physical exercise in the population (Cechinni, Méndez, & Contreras, 2005).

Numerous factors affect sports participation among school-age children. From the point of view of social research and psychology, the agents of socialization – parents, educators, coaches, referees, athletes, etc. – are key factors in creating a favourable environment in sports practice (Boixados, Valiente, Mimbreno, Torregrosa, & Cruz, 1998). The role of organizational or management factors that affect sports at school age, as well as the manager's point of view towards school sports, has not been studied in depth and in a holistic manner. Therefore, the main objective of this study is to define what organizational factors influence the levels of participation in the Championship of Sports Promotion in Murcia from the point of view of the teacher.

Methodology

Participants

This study involved 368 teachers enrolled in the school-age sports program. The sample was divided among teachers and teachers of physical education of the Autonomous Community of the Region of Murcia,

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with an average age of 41.43 ± 7.7 years, of which 284 were men (77.2%) and 84 women (22.8%). Of the 368 respondents, 248 (67.4%) work in primary education centres, 77 (20.9%) in secondary education centres and 43 (11.7%) in primary and secondary education centres. Also, 307 (83.4%) of the teachers surveyed work in public centres, 3 (0.8%) work in private centres and 58 (15.8%) work in concerted centres. Regarding years of involvement in school sports, 119 (32.3%) of the respondents have been involved for 6–10 years, 110 (29.9%) for 11–20 years, 60 (16.3%) for more than 20 years and 56 (15.2%) for 2–5 years, 23 (6.3%) for less than 2 years.

Instrument

An ad-hoc questionnaire was designed to assess the influence of organizational variables on the participation of teachers of school-age children. First, a pre-questionnaire was designed with items that included concepts that were analysed and divided into thematic block statements. This pre-questionnaire was administered to a group of 12 experts in the area of school sports. This panel assessed three fundamental aspects of each item: clarity, specificity and significance (Castejón, 2006) on a scale of 1 to 4. Based on the results, a statistical analysis was carried out, eliminating items with a mean, medium or mode less than 2. In the same way, they eliminated from the questionnaire those questions that more than 30% of the experts considered inadequate.

Next, the reliability and validity of the questionnaire was examined. The Cronbach's alpha coefficient was 0.714, and the KMO test resulted in a value of 6.689, meaning there was an average correlation between variables. Finally, the questionnaire was structured to include 49 closed questions. Five questions were of ordinal choice with a socio-demographic character to enrich the information obtained from physical education teachers, while the remaining 44 were ordinal questions rated using a Likert scale.

Process

The test was transformed into an online version, designed and sent using the online survey software, surveymonkey.com. This tool allowed the questionnaire to be self-administered. It was divided into pages with the presentation and informed consent being the first page. The different dimensions of the questionnaire included Activities, Agents, Social Aspects, Entities, Media, Organization, Female Participation and other variables. Each survey had a unique link and was sent to the official emails of each official primary and secondary education centre in Murcia. It was sent to 413 educational centres, corresponding to all the primary and secondary education centres enrolled in the region's school age sports program in the 2016–2017 season, obtaining responses from 368 teachers.

Data Analysis

Once the teachers answered the online questionnaire, the data was automatically transferred to an SPSS database for further study. All surveys answered partially were rejected. For the analysis of normality, validity and reliability, as well as for descriptive analysis and crossover of variables, researchers used the Statistical Analysis Software SPSS version 22.0.

Results

With regard to the results of descriptive statistics and within the Activities dimension, the most prominent item was one in which teachers stated that there should be more adapted activities such as “playing athletics” in the school sports program (4.06 ± 0.847). Nearly half the participants agreed or totally agreed that there is a greater participation in activities that have a greater playful component, while 15.5% were neutral regarding that dimension (Table 1). Most respondents (69.8%) agreed or strongly agreed that school sports should be less competitive and more playful, compared to 18.5% who maintained a neutral criterion and 11.7% who disagreed with that statement. With regard to the role of teachers, 79% of respondents agreed or totally agreed with the statement that they are the most important agents for the development of school sports. A majority also agreed that a greater number of activities should be offered within the sports promotion program (48.5% agree and 25.9% totally agree).

Table 1. Descriptive statistics on activities and teachers

	“Playing athletics” has more participation because it has a greater ludic component		The school sports program should be less competitive and more playful		Teachers are the most important agents for the development of the school sports program	
	N	%	N	%	N	%
Totally disagree	13	3.5	15	4.1	6	1.6
In disagreement	38	10.3	28	7.6	23	6.3
Neither agree nor disagree	57	15.5	68	18.5	46	12.5
Agree	103	28.0	127	34.5	141	38.3
Totally agree	62	16.8	130	35.3	151	41.0
Total	273	74.2	368	100	367	99.7

It should be noted, however, that more than 50% of the responses were in accordance with the fact that federated clubs contribute to increase sports participation in school competition (Table 2). Participants also believed that municipalities had a high level of involvement in the promotion and organization of the competition (45.7% agree and 21.8% totally agree). Regarding a greater involvement of sports clubs in school sports, 50% of participants considered that a greater participation of clubs is necessary, while 20% disagreed or

strongly disagreed. Seventy percent of the participants agreed or totally agreed that the phased organization of the championship is adequate, compared to 16.3% who had a neutral opinion and 10.6% who disagreed.

The results indicate that the respondents agreed (46.6%) or totally agreed (37.9%) that mixed sports in the school sports program is positive for participation (4.19 ± 0.779). Also, 70% of participants agreed or totally agreed that school competitions should be held during school hours to help to increase participation and reduce the abandonment in school sports.

Table 2. Descriptive statistics on entities, media and organization

	Federated clubs increase the participation of school sports	The municipality of my country is involved in the program	Greater involvement of clubs in school sport is necessary	The phased organization of the championships is adequate	It is positive that there is a mixed sport in the school sports program	The competitions should take place during school hours
	%	%	%	%	%	%
Totally disagree	3.8	4.3	4.9	3.5	0.0	1.6
In disagreement	14.9	9.0	14.4	7.1	3.5	14.4
Neither agree nor disagree	27.2	19.0	31.0	16.3	12.0	12.2
Agree	44.0	45.7	38.9	58.7	46.5	37.8
Totally agree	9.8	21.7	10.6	14.1	37.8	30.7
Total	99.7	99.7	99.7	99.7	99.7	99.7

Kendall's Tau-c coefficient [-1,1], calculated for this contrast, indicates that the answers given to question 6 ("the school sports program must be less competitive and more playful") vary significantly depending on the sex of the respondent. The agreement levels of men (3.83 ± 1.126) are more divided than women (4.12 ± 0.962), who more categorically agreed that the program is less competitive and more playful.

Table 3. Question 6. School sports programs should be less competitive and more playful

The school sports program should be less competitive and more playful						
	1	2	3	4	5	Total
Men	13 3.5%	25 6.8%	55 14.9%	96 26.1%	95 25.8%	284 77.2%
Women	2 0.5%	3 0.8%	13 3.5%	31 8.4%	35 9.5%	84 22.8%
Total	15 4.1%	28 7.6%	68 18.5%	127 34.5%	130 35.3%	368 100%

Table 4 shows that answers to question 26 ("the fear of girls' ridicule is usually one of the main causes of their lower participation in sports activities") vary significantly depending on the sex of the respondent. Men were more in disagreement with this assertion that fear of ridicule often is one of the causes of sport abandonment among girls (2.83 ± 0.989). Women have divided criteria with respect to it, with a mean close to and slightly higher than neutral level 3, (3.15 ± 1.058).

Table 4. Question 26. Lower participation among girls in school sports

Fear of girls' ridicule is often one of the main causes of their lower participation in sports activities						
	1	2	3	4	5	Total
Men	19 5.2%	99 27.0%	86 23.4%	69 18.8%	10 2.7%	283 77.1%
Women	2 0.5%	26 7.1%	22 6.0%	25 6.8%	9 2.5%	84 22.9%
Total	21 5.7%	125 34.1%	108 29.4%	94 25.6%	19 5.2%	367 100%

With regard to question 17 ("the secondary school teacher has less involvement in the school sports program than the primary school teacher), the answers from primary school workers (3.23 ± 0.910) and the primary and secondary school workers (3.19 ± 1.385) do not differ significantly from each other (Table 5). The highest frequencies correspond in each group to the neutral level, although in general they agree slightly that the secondary teacher has less involvement in the school sports program. The secondary workers have a significantly opposite criterion (2.62 ± 1.203) according to the Bonferroni test ($p < 0.05$).

Table 5. Question 17: Involvement of secondary school teachers

The secondary school teacher has less involvement in the school sports program than the primary school teacher						
	1	2	3	4	5	Total
Works in primary	7 1.9%	33 9.0%	129 35.1%	52 14.2%	26 7.1%	247 67.3%
Work in secondary	18 4.9%	15 4.1%	28 7.6%	10 2.7%	6 1.6%	77 21.0%
Works in primary and secondary	8 2.2%	5 1.4%	9 2.5%	13 3.5%	8 2.2%	43 11.7%
Total	33 9.0%	53 14.4%	166 45.2%	75 20.4%	40 10.9%	367 100%

Regarding the adequacy of the facilities available to the centre for practicing sports, Table 6 shows significant and opposite differences between the opinions of workers in public (2.87 ± 1.299) and concerted (3.43 ± 0.156) centres ($p < 0.05$). Of the three workers from private centres, two of them fully agreed that the facilities they have are adequate while the third disagreed. The general criterion corresponding to private centres is statistically favourable (4.00 ± 1.732).

Table 6. Adequacy of sports facilities

The facilities that I have in my centre to practice school sports are adequate						
	1	2	3	4	5	Total
Work in public centre	62 16.9%	71 19.3%	41 11.2%	109 29.7%	23 6.3%	306 83.4%
Work in a private centre	0 0.0%	1 0.3%	0 0.0%	0 0.0%	2 0.5%	3 0.8%
Work in a concerted centre	5 1.4%	8 2.2%	10 2.7%	27 7.4%	8 2.2%	58 15.8%
Total	67 18.3%	80 21.8%	51 13.9%	136 37.1%	33 9.0%	367 100%

In the case of having enough materials to practice school sports, Table 7 shows there were no significant differences between the average criteria given by the respondents of the three types of schools considered. Workers from public (2.81 ± 1.212), private (2.33 ± 2.309) and concerted (3.14 ± 1.176) centres show divided criteria when asked if they have enough materials to practice school sports, which indicates that there are more favoured centres than others within each group (material base distributed unevenly).

Table 7. Adequacy of materials available

I have enough materials to practice school sports						
	1	2	3	4	5	Total
Work in public centre	50 13.6%	92 25.1%	45 12.3%	103 28.1%	16 4.4%	306 83.4%
Work in a private centre	2 0.5%	0 0.0%	0 0.0%	0 0.0%	1 0.3%	3 0.8%
Work in a concerted centre	4 1.1%	18 4.9%	8 2.2%	22 6.0%	6 1.6%	58 15.8%
Total	56 15.3%	110 30.0%	53 14.4%	125 34.1%	23 6.3%	367 100%

As shown in Table 8, the General Directorate of Sports seems to adequately fulfil its functions of promoting sports at school age. Workers with 6–10 years of experience in school sports gave a more favourable rating (3.47 ± 0.881), which was significantly different from workers with more than 20 years of experience (2.98 ± 1.00). The other groups have divided ratings that were close to the neutral level.

Table 8. Rating the work done by the General Directorate of Sports

The General Directorate of Sports adequately fulfils its mission of promoting school sports							
		1	2	3	4	5	Total
Years involved in school sports	< 2 years	0 0.0%	2 0.5%	10 2.7%	9 2.5%	1 0.3%	22 6.0%
	2–5 years	2 0.5%	8 2.2%	20 5.4%	22 6.0%	4 1.1%	56 15.3%
	6–10 years	3 0.8%	12 3.3%	40 10.9%	54 14.7%	10 2.7%	119 32.4%
	11–20 years	6 1.6%	16 4.4%	35 9.5%	51 13.9%	2 0.5%	110 30.0%
	> 20 years	6 1.6%	11 3.0%	22 6.0%	20 5.4%	1 0.3%	60 16.3%
	Total	17 4.6%	49 13.4%	127 34.6%	156 42.5%	18 4.9%	367 100%

Discussion

Teachers in this study showed their agreement on introducing sports activities that are booming as well as specialties of their modalities that can positively affect school sports practice, especially within the program. These results coincide with other studies (Mollá, 2007) that affirm that ESO (Compulsory Secondary Education) students also demanded new activities: “They think that more activities should be organized but they want to try new things because it helps to start in practice those boys who have not had the sport in their environment of life” (p. 248).

The new sports modalities can be at the same time a good opportunity for educating young people in values because those modalities are not associated directly or indirectly with attitudes of competitiveness, aggressiveness and a lack of respect for the norms that exist in traditional sports activities (Lara, 2010). In the same way, it can be a good strategy to combat the abandonment of sports, as can be seen in the region of Aragon,

where 43.7% of the technicians considered the lack of sporting offers as one of the reasons young people abandoned the practice of sports (Nuviala & Nuviala, 2005).

General consensus exists among the council representatives, teachers and federation representatives that the collaborative part of sports disciplines for school-age children that have high rates of success is a key factor for good participation. The results of the quantitative phase demonstrate that almost 70% of the teachers agree or totally agree with the more collaborative and less competitive character of sports. It is interesting to contrast these results with the findings of Berengüi and Garcés de los Fayos (2007), who found that 50.49% of sports teachers agree or totally agree with the statement “I think schools sport should be more collaboration and recreation” versus 27% who slightly or strongly disagreed. Perez and Acuña (2002) concluded that you can increase participation in sports through competitions, even during the period of highest abandonment (detected around the 14-year-old mark), if they are oriented to avoid negative aspects.

Teachers place special emphasis on the activities of Playing Athletics and Nano Nana Practical Greco-Roman, which have been designed based on traditional sports but adapted for age and school championship. In this line, García-Cantó and Pérez (2014) stated that 55% of the students who participated in their multidisciplinary school sports program had never done extracurricular sports before and that their participation was due to the fact that the students made an effort to attend the activities because they were fun. These authors concluded that “The marked competitive orientation of sport in our country together with early specialization has led many school children and adolescents, with special mention to the female gender, to practice physical-sporting activities, without offering them alternative models that respond to your interests” (p. 134).

Although there is a majority of neutral criteria, 31.3% agree or totally agree that secondary teachers have less involvement with respect to primary education in the school sports program. The variables association data show the secondary school teachers have an opinion totally opposite to primary school teachers in this factor, being more frequently in disagreement or totally in disagreement.

The school sports experts in Huelva interviewed in a study by Nuviala and Saénz-López (2001) considered the incorporation of physical education teachers as school sports coaches very positive because the quality of the teaching-learning process and the fact of putting the child’s education above all was reinforced. Manrique et al. (2011) arrive at a similar conclusion, finding that parents, teachers and monitors believe that it is important that physical education teachers participate in the design of extracurricular activities to ensure that they function better and to coordinate physical education programs and school sports.

Regarding facilities and materials, we can see that there are centres with good facilities and others with facilities not suitable for school sports. Orts (2005) exposes the same data, stating in regard to school sports facilities that “a great difference can be seen between public and private centres. The latter have a greater number of covered pavilions (almost double), more sports courts with lighting, more gym, and more football fields with lighting” (p. 58).

Similar data exists regarding materials for school sports; 40.4% of teachers say they have enough material to practice school sports compared to 45.1% that do not. In the municipality of Huelva, 58.1% of parents considered school sports facilities adequate, compared to 41.9% who considered them inadequate (Nuviala & Casajús, 2005). Also, in Barcelona, the parents of the students indicated as a barrier to sports practice “the lack of accessible public facilities, or the non-opening of schools outside school hours, have a fundamental weight, according to fathers and mothers, by reducing the possibilities that minors have for practicing sports” (Moscoso et al., 2009, p. 147). Manrique et al. (2011), agree that all groups (students, teachers, coaches, relatives) point out the lack or misuse of the facilities in the municipality of Segovia; this complaint is especially made by the students.

Conclusions

The playful component is very important within school sports programs. Teachers value as very positive the activities of Playing athletics because of this; in this sense, teachers also consider that school sports should have a more playful and less competitive orientation in general. Regarding the gender difference, girls value the playful component more than boys.

The physical education teacher is a key factor for participation in school sports. If the teacher wants students to participate, they will do so to a greater extent than if there is no motivation on their part.

As for the entities, in the municipalities where there are sports clubs of a certain type, with great roots and social mass, there has been an increase in participation in that modality within the sports promotion program. In this sense, federated clubs help to increase participation in the school sports program, like the City Councils, and it has been confirmed that in municipalities in which the entity is more involved, participation is greater.

Referring to primary and/or secondary schools, the teachers’ opinion is that the secondary teacher has less involvement than the primary teacher. It is with these students we must pay special attention because at this age, the dropout rate for girls is higher than that for boys; one of the reasons for this is that they fear making a fool of themselves while participating in the school sports program. The general direction of sports, according to teachers, is that they adequately fulfil their functions of promoting sports during school-age years, and it is teachers who have 6–10 years of experience who have a more favourable opinion in this sense.

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