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Parental support for physical-activity: differences based on sex and level of practice

Apoyo parental para la práctica físico-deportiva: diferencias en función del sexo y nivel de práctica

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Abstract

The purpose of the present study was to analyze the relationship between parental support towards physical-activity and the level of practice of school age boys and girls. 195 boys and girls age 10 to 12 from the Basque Country took part in the study. Results show a relationship between the perceived parental support, a higher frequency of practice and longer physical activity sessions. No differences were found in either the level of practice or the perceived parental support in relation to sex.

Key words

Parents; physical activity; sport; childhood; gender.

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Resumen

En este estudio se analiza la relación entre la actividad físico-deportiva de niños y niñas en edad escolar y el apoyo parental recibido para dicha actividad. Participaron en el estudio 195 niños/as de entre 10 y 12 años de la Comunidades Autónomas Vasca y Cántabra. Los resultados indican que la percepción del apoyo parental se relaciona con una mayor frecuencia de actividad físico-deportiva y con la realización de sesiones de práctica más duraderas. No se encontraron diferencias ni en el nivel de actividad físico-deportiva ni en la percepción del apoyo parental en relación al sexo.

Palabras clave

Padres; actividad física, deporte; infancia; género.

Introduction

Today, the percentage of Spanish children who comply with the recommended 60 minutes of moderate-to-vigorous physical activity per day (WHO, 2010) is extremely low. Recent nationwide studies found that 64% of boys and 68% of girls aged between 0 and 15 engage in no physical activity of any kind during their leisure time, or do so only sporadically (fewer than two days a week) (Ara, Vicente-Rodríguez, Moreno, Gutin, & Casajus, 2009; Laguna, Lara, & Aznar, 2011; Román, Serra, Ribas, Pérez-Rodrigo & Aranceta, 2006). Moreover, of those who do engage in physical activity, only 33% comply with WHO recommendations for children/adolescents (Laguna et al., 2011). Despite the large amount of research that has been carried out in this respect, the key motivating factors for engaging in physical activity during the formative years still remain today one of the most important research topics within the field of public health.

In this sense, parents (or, in general, those responsible for children's day-to-day care) constitute one of the key influences in relation to children and young people's level of physical activity (Brustad, 1993; Khol & Hobbs, 1998; Latorre, Gasco, García, Martínez, Quevedo, Carmona, Rascón, Romero, López & Malo, 2009; Lindsay, Sussner, Kim, &

Gortmaker, 2006; Sallis, Prochaska, & Taylor, 2000). During (at least) the first 18 years of their lives, children and young people spend most of their time in the family environment, thus affording their parents many opportunities to promote certain types of behaviors. Consequently, particularly during childhood, a developmental period in which individuals have less control over the activities in which they engage, parents constitute one of the main providers of experiences in which their children may, or may not, be physically active.

Many studies (mainly conducted with adolescent samples) have observed that parents influence their children's physical activity through a number of different paths, including their own level of activity (Adkins, Sherwood, Story, & Davis, 2004; Beets, Vogel, Chapman, Pitetti, & Cardinal, 2006; Loucaides & Chedzoy, 2005; Ornelas, Perreira, & Ayala, 2007; Sharma, Hoelscher, Kelder, Day, & Hergenroeder, 2008; Springer, Kelder, & Hoelscher, 2006; Welk, Wood, & Morss, 2003; Wilson & Dollman, 2009), their beliefs, attitudes and values in relation to sport and physical activity (Eccles & Harold, 1991), their direct verbal (Allender, Cowburn, & Foster, 2006; Bauer, Nelson, Boutelle, & Neumark-Sztainer, 2008) or instrumental support (Heitzler, Martin, Duke, & Huhman, 2006; Hoefer, McKenzie, Sallis, Marshall, & Conway, 2001) for their offspring's activities and their involvement in said activity (Duncan, Duncan, & Strycker, 2005; Heitzler et al., 2006; Latorre et al., 2009; Prochaska, Rodgers, & Sallis, 2002).

In short, there is a large body of empirical evidence which supports the thesis that parental support for physical activity, in all its various forms, is one of the key factors that should be taken into consideration when aiming to promote physical activity among young people, at least during adolescence. Nevertheless, while adolescence is undoubtedly a crucial period for establishing and maintaining habits such as regular physical activity, it is also true that the teenage years are a stage in which levels of this activity start to decline quite sharply and there is a general trend towards abandoning sport and active pursuits. Hence the importance of identifying, as precisely as possible, the factors associated with the acquisition and maintenance of physically-active habits during childhood.

Bearing this in mind, the study presented here was conducted with the aim of analyzing the relationship between the different dimensions of parental support and the level of physical activity in a sample of school-aged children.

Materials and method

Participants

Of the initial sample group of 202, seven participants (3.46%) were eliminated due to failure to correctly complete the questionnaires. The final sample comprised 195 children, 52.30% boys and 47.70% girls, aged between 10 and 12 (M = 10.85; $S.D.$ = 0.53). Of these, 192 (98.46%) engaged in physical activity or sport during their leisure time, while 3 (1.54%) claimed never to engage in any such pursuits. Participants were recruited using the incidental sampling technique in two public schools in the Autonomous Region of the Basque Country (Spain).

Instruments

The Parental Support Questionnaire (Revuelta, Zulaika, & Acebo, 2016) was used to evaluate *parental support*. The initial version of this questionnaire, which is currently being validated, comprises 45 items with a 5-point Likert-type response scale ranging from 1 = Never to 7 = Always. The instrument records the degree of support perceived by children from their mothers and fathers (separately) in relation to the various dimensions of parental support *(conditional, instrumental, informational* and *motivational*).

Children's physical activity was measured using a brief questionnaire created *ad hoc*, which included the variables *activity, frequency of activity, duration of the sessions* and *intensity of the activity*. In order only to register voluntary activities which were the result of personal choice and motivation, participants were asked to respond only in relation to activities carried out during their free time.

Procedure

Participating schools were contacted through their respective head teachers and/or deputy heads, who were asked to give their consent and authorization for the study to be carried out. Furthermore, given the age of the participants, parental consent and authorization was also requested. Once this had been obtained, the questionnaire was administered to each group or class in 30-minute sessions.

With the aim of reducing the social desirability bias and ensuring the veracity of the responses, participation was strictly voluntary and respondents were assured of the completely anonymous processing of the data obtained. Furthermore, the single blind criterion was followed, thus preventing participants from knowing the aim of the research study being carried out.

Statistical analyses

The data were analyzed using the IBM SPSS Statistics 22.0 package for Windows, with all statistical procedures being run with a confidence level of 95% (significance level of .05).

To compare participants' level of activity (*frequency of activity, duration of the sessions* and *intensity of the activity*), a number of contingency tables were compiled, which were then used for the chi-squared test of independence. The relationship between *parental support*, sex and the descriptor variables of level of physical activity was analyzed using means comparisons (Student's t-test for independent samples).

Results

Level of physical activity

Table 1 shows the sex-related differences observed for frequency of physical activity

Table 1. Differences in Frequency of Activity in accordance with Sex

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Frequency	**Sex**	
	Boy	Girl
Sedentary	22	21
Active	82	70

The results indicate no statistically significant differences in frequency of physical activity (measured on a weekly basis) in accordance with sex.

Table 2. Differences in Duration of the Session in accordance with Sex

Duration	**Sex**	
	Boy	Girl
1-45´	13	13
45-90´	91	78

Again, the results (Table 2) indicate no statistically significant differences between boys and girls in relation to the duration of the sessions in which they engage in physical activity.

Table 3. Differences in Intensity of Activity in accordance with Sex

Intensity	**Sex**	
	Boy	Girl
Low	73	83
High	31	8

Finally, as regards the intensity of the physical activity engaged in, the results (Table 3) reveal statistically significant differences in accordance with sex ($\chi^2_{(195)} = 11.97$, $p = .001$), with boys engaging in more intense physical pursuits than girls.

Relationship between parental support, sex and physical activity

Table 4 shows the results for the support provided by parents in accordance with their children's sex.

Table 4. Differences in Parental Support in accordance with Sex

	Sex	***N***	***M***	***SD***

Parental support	Boy	104	265.17	54.18
	Girl	91	267.97	45.89
Mother's support	Boy	104	128.65	29.28
	Girl	91	133.90	22.12
Father's support	Boy	104	137.48	30.11
	Girl	91	133.22	27.35

The results reveal that for parents in general, support is higher for boys. In other words, boys perceive a greater degree of support from their parents (both mothers and fathers). Girls, on the other hand, perceived a higher degree of support from their mothers. Nevertheless, in neither case were the results statistically significant.

Table 5 shows the results for perceived parental support in accordance with frequency of activity.

Table 5. Differences in Parental Support in accordance with Frequency of Activity

	Frequency	***N***	***M***	***SD***
Parental support	Sedentary	41	233.14	70.93
	Active	154	286.94	44.13
Mother's support	Sedentary	41	115.71	36.26
	Active	154	142.78	18.22
Father's support	Sedentary	41	113.88	35.95
	Active	154	147.57	29.42

The results indicate statistically significant differences, with children who engage in more frequent physical activity, and who are therefore classified as active, perceiving a greater degree of support from their parents ($t_{(195)} = -2.26$, $p = .033$). This is true for both fathers ($t_{(195)} = -2.44$, $p = .029$) and mothers ($t_{(195)} = -2.54$, $p = .018$).

Table 6. Differences in Parental Support in accordance with Duration of the Sessions

	Duration	***N***	***M***	***SD***
Parental support	1-45´	26	230.63	70.35
	45-90´	169	272.78	42.27
Mother's support	1-45´	26	119.16	38.29
	45-90´	169	133.90	22.00
Father's support	1-45´	26	110.69	33.66
	45-90´	169	139.17	25.84

As regards the duration of the sessions (Table 6), similarly to the results shown for frequency of physical activity, global perceived parental support ($t_{(195)} = -2.74$, $p = .008$) and father's support ($t_{(195)} = -2.90$, $p = .011$) was found to be higher among those who engage in longer sessions. Moreover, the difference is statistically significant. As for mother's support, although the results reveal a marginally significant difference, with scores being higher among children who engage in longer sessions, this difference does not reach statistical significance.

Table 7. Differences in Parental Support in accordance with Intensity of the Activity

	Intensity	***N***	***M***	***SD***
Parental support	Low	156	256.88	51.45
	High	39	262.66	62.91
Mother's support	Low	156	125.29	26.06
	High	39	126.72	36.89
Father's support	Low	156	131.37	27.65
	High	39	136.81	28.73

Finally, the analyses conducted in relation to intensity of the physical activity (Table 7) reveal higher parental support scores among children who engage in more intense physical activity. However, in this case, the differences were not statistically significant.

Discussion

Numerous studies have confirmed the importance of the influence exerted on adolescents' physical activity by the behaviors that make up the parental support domain (Beets et al., 2007; Fredricks & Eccles, 2005; Heitzler et al., 2006; King, Tergerson, & Wilson, 2008; Latorre et al., 2009; Thompson, Humbert, & Mirwald, 2003). Nevertheless, when analyzing the promotion and maintenance of physical activity throughout the entire life cycle, it is vital to take childhood into consideration also. Consequently, the aim of the present study was to analyze the relationship between parental support and physical activity in school-aged children.

The results indicate that, as previous research reported, parental support is associated with physical activity in children, at least as far as frequency and duration of said activity are concerned. Children who perceive a greater degree of support from their parents, i.e. those who see their parents engage in more physical activity themselves and who perceive from them more positive attitudes towards this kind of activity in general, and the activity in which they engage in particular, and/or whose parents provide more practical support for their physical pursuits (equipment, transport, etc.), tend to engage in physical activity and/or sport more frequently (measured on a weekly basis) and participate in longer sessions.

This was not, however, found to be true for intensity. Although parental support was observed to increase in accordance with intensity, in contrast to what might be expected in light of the findings of previous similar studies (Kimiecik & Horn, 1998; Nader, Bradley, Hout, McRitchie, & O´Brien, 2008), the differences found here were not statistically significant. Nevertheless, the intensity of physical activity is, without doubt, a variable closely related to the type of activity engaged in, and sometimes bears no relation at all to the individual's motivation level, which may explain the lack of a significant association here.

Intensity is also the only variable for which statistically significant differences were observed between boys and girls. Participants in our study scored similarly for both frequency of activity and duration of the sessions (a finding also which supports the observed absence of any difference between the sexes regarding perceived parental support). In this sense, although the majority of previous studies report sex-related differences in activity levels in all age ranges analyzed (Escalante, Backx, Saavedra, García-Hermoso, & Domínguez, 2011), some also indicate that during the early years these differences between girls and boys as regards level of activity are not particularly notable (Luengo, 2007), although those linked to the type of activity preferred are. These differences may explain the variations observed in intensity, since boys tend to prefer team and/or competitive sports, in which the physical activity engaged in is more intense.

Conclusions and limitations

Although the sample was not particularly large, which in turn renders the sub-groups for analyzing certain variables excessively small and demands that caution be exercised when generalizing the findings, the results obtained confirm, in a sample of school-aged participants, the importance of parental support in relation to children's physical activity. They also have important implications regarding the development and application of educational programs in the field of Physical Education and Health. Although the fostering of measures to increase levels of physical activity among young people is undoubtedly necessary (increase in the hours dedicated to physical education, increase in the offer and variety of sporting activities, etc.), the results suggest the importance of raising awareness also among parents. It is therefore vital that we look beyond traditional approaches centered around physical activity itself and its promotion, in order to acknowledge the value of interventions aimed simultaneously at the individual and his or her immediate environment.

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