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ORIGINAL

INFLUENCE OF FAMILY ENVIRONMENT AND PEERS IN PHYSICAL ACTIVITY HABITS OF YOUTH PEOPLE

INLUENCIA DEL AMBITO FAMILIAR E IGUALES EN LOS HABITOS FISICO-DEPORTIVOS DE LOS JOVENES

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ABSTRACT

The aim of the study was to assess the relationship between the social environment and physical activity habits of young Spanish students. Data were collected by questionnaires administered to 6170 students (3053 boys, 3117 girls), aged 12 to 16 years ($M=14.12$, $SD=1.30$) and 16 to 19 years ($M=17.25$, $SD=0.94$). In secondary education, the probability of finding students who have never practiced exercise regularly was higher when father, mother, brothers and sisters have never been physically active. After secondary education, in girls this probability increases considerably. The probability of finding students with insufficient or low activity level was

higher when family members have never been active. The family environment can be considered as risk factor of inactivity in physical and sport activity of adolescents.

KEYWORDS: physical activity, inactivity, family support, peers, students.

RESUMEN

El objetivo es conocer la influencia del entorno social en los hábitos de práctica físico-deportiva de jóvenes estudiantes españoles. Se obtuvieron datos de 6.170 estudiantes (3.053 chicos; 3.117 chicas), entre 12 y 16 años ($M=14,12$; $DT=1,30$) y 16 y 19 años ($M=17,25$; $DT=0,94$), a través de cuestionario. En Enseñanza Secundaria Obligatoria, la probabilidad de encontrar estudiantes que nunca hayan realizado actividad físico-deportiva es mayor cuando padre, madre, hermano/os y hermana/as nunca han sido activos. En Enseñanza Secundaria Obligatoria Postobligatoria, la probabilidad se incrementa considerablemente en chicas. La probabilidad de encontrar estudiantes con un nivel de actividad insuficiente+ligero es mayor cuando padre, madre, hermano/os y hermana/as nunca han sido activos. El ámbito familiar inactivo constituye factor de riesgo en la actividad físico-deportiva de los adolescentes.

PALABRAS CLAVE: Actividad física, apoyo familiar, iguales, inactividad, estudiantes

INTRODUCTION

Nowadays, there is tremendous concern for youth sedentary lifestyle as well as influence of the social environment had habits of young adolescents (Abarca-Sos, Zaragoza, Generelo & Julian, 2010; Navarro, Ojeda, Navarro, Lopez, Brito & Ruiz, 2012; Oviedo, Sanchez, Castro, Calvo, Seville et al., 2013). From a theoretical point of view, socialization in sport and physical activity can be considered a modeling process in which other representative people, such as family members, are models available and effective. In its social cognitive theory, Bandura (1986) described principles of this modeling process. However, relatively little is known about Modeler role of these figures in practice of physical activity among adolescents (Biddle & Goudas, 1996).

There is some consensus about the need for reviewing socio-ecological topics when dealing with models that promote positive behaviors and that promote a healthy lifestyle through regular practice of physical activity (Cantallops, Ponseti, Vidal, Borrás & Palou, 2012; Martínez, Rosemary & Delgado, 2011). These models adopt a multidimensional perspective, emphasizing the influence of organizational aspects, interpersonal relations and those concerning the individual itself. The interpersonal sphere is particularly relevant when it comes to teens (Martínez, Chillón, Martín-Matillas, Pérez, Castle et al., 2012).

Social influence could come either from family or from other significant people that might influence the teenager's life such as that perform at the same moment that teenager does, for instance his friends, his teacher and his coach (Tuero, Zapico &

Gonzalez, 2012). Any of them can intervene in various aspects of its physical practice such as behaviours, emotions and knowledge relating to participation in the sport (practice intentions and effects), just to mention them main ones (Taylor, Baranowski & Sallis, 1994), determining both the beginning and further continuity of its physical practice.

There are several theoretical perspectives over the phenomenon of socialization on sports (Coakley, 1993; Lewko & Greendorfer, 1988) The result of several researches suggest that the support from family and friends can be an effective tool to promote physical activity in young people who are at risk of becoming physically inactive (Tuero, et al., 2012). They highlight the potential advantages about having support from others that could be representative for young people on their physical activity levels. Other several researches have concluded that children and adolescents are more likely to be physically active when their parents and their friends are involved in sport activities (Anderssen & Wold, 1992; Raudsepp & Viira, 2000; Pieron, 2002), drive them to practice (Biddle & Goudas, 1996) and practice sport or physical activity with them (Shropshire & Carroll, 1997).

On an analysis about literature published in between 1970 and 1998, which was about the relationships that showed a significant association with physical activity, Sallis, Prochaska and Taylor (2000) observed positive relationships with parents, others support representatives for the teenager, of brothers and sisters. Another synthesis study carried out on recent publications, from 1998 and to 2005, also emphasized clearly influences about family, as they found a significant relationship with support from friends (Van Der Horst, Paw, Twisk & Van Mechelen, 2007).

Therefore, parents exert a determined influence on various aspects of the development of children, in particular on the physical, psychological and emotional factors. The degree of importance of each of these determinants varies across different stages through which pass youth, as an example, psychological variables that are more important during adolescence (Health Education Authority, 1998). The teenager is in a social setting surrounded by habits and standards of behaviour and even of thought which have to interact within a process of socialization. Although other agents, such as equals, have a growing influence on the stage of adolescence Family remains as the main one of the elements that can lead young to make a regular practice of physical activity or, conversely, to reject it. Young people learn and integrate different values, attitudes and behaviours, as well as other factors of influence on this process of socialization. When a family does not have a common and consistent lifestyle pattern, may fear that there are few possibilities or probabilities that children develop an active lifestyle (Ruiz-Juan, Pieron & Baena-Extremera, 2012).

If family and friends believe that physical activity is good, and they are able to transmit this opinion and highlight the importance of it, there is more chance that young people engage in sport activities. Similarly, if nearby persons engaged in sport or any other form of physical activity, they exercise a function of 'model' to which you want to imitate (Cantalops, et al., 2012). Also, note that the practice of sport activities is determined by the social support that benefits a person. The fact of taking a child to the sports club, pay your registration fee, support it morally, to be sporting partner, etc., are aspects that will lead to the practice of sport activities (Carron, Hausenblas & Mack, 1996; Romero, Garrido & Zagalaz, 2009).

In brief, from the family environment, various types of influence can be distinguished by socialization, especially parents. On one hand, stimulation, engagement on activity, facilities provided and paper model that can play. This last observation makes a good reference about own parent involvement, or the function of "coaches" that parents can develop. On the other hand, parents can perform the sport experiences of their children and provide them with messages about the quality of its services, as well as on the value of participation in sport-related activities. They might also provide emotional support and repeatedly engage on a specific sport.

In this way, the objective of this research is to know the influence of the social environment in the habits of physical practice of young Spanish students. Based on all this review of the literature on the subject, we will depart from the hypothesis that can predict the behaviour and the level of physical activity in leisure time of young people, according to their gender, according to their family environment behaviour (father, mother, brother / I and sisters/as), attitude of his parents and his friends before his physical practice who carried out the practice and initiated it on it.

METHOD

Participants

It departed from a total population of students enrolled in secondary schools during the academic year 2005-2006 (data provided by the Provincial delegation of education of Almeria, Granada and Murcia). To ensure that sample was representative of the three provinces ($\pm 3\%$, 95.5% confidence error), used a multistage stratified by proportional affixation sampling design and cluster, which allows us to extrapolate results to total population. It was taken into account size of population (more than 50.000 inhabitants, 20.001-50,000, 10.001-20.000, 5.001-10.000, 2.001-5.000 and less than 2.001 inhabitants), type of centre (centers intend), gender (boys and girls) and post-compulsory compulsory secondary education - ESPO - course (first quarter of compulsory secondary education - ESO-; first and second).

6170 Students have engaged to this research (3053 students = 49.5%; 3117 girls = 50.5%) secondary of Almeria (1991 students), Grenada (2102 students) and Murcia (2077), of which 3249 (1701 students = 52.4%; 1548 girls = 47.6%) course that studies and 2921 (1.352 students = 46.3%; 1.569 girls = 53.7%) studied ESPO. The range of age, in ESO, was comprised between 12 and 16 years ($M = 14.12$; $DT = 1.30$) and in ESPO, between 16 and 19 years old ($M = 17.25$; $DT = 0.94$).

Instrument

Given the particular characteristics of the research, the data was obtained through one of the sociological technique utilized and more appropriate in these cases: the survey technique. Data collection was carried out through an ad hoc questionnaire name "Physical sport activities and health habits. Lifestyles in young people", which passed the corresponding content and construct validity testing (judgement of experts in the matter and psychometrics) (Pieron & Ruiz-Juan, 2010). Four pilot studies

were conducted in order to test whether the content of questions, terminology and vocabulary were understood by respondents.

The variable of involvement or not in practicing "leisure time physical activity" regularly or abandonment and never have being practiced, have been selected for this article. The patterns of practice of physical activity of the actives were calculated by five questions in a number of physical activity indexes (Raitakari, et al., 1994; Telama, et al., 2005). These questions refer to the frequency, duration and intensity of physical activity during leisure time and participation in organized sports and sports competitions. The lower results are characteristic of less active persons, while the highest scores are indicative of more active individuals. The Cronbach's alpha demonstrates an acceptable reliability of the set of these variables values are $\alpha = 0.82$ (ESO) and $\alpha = 0.80$ (ESPO) and is similar to that obtained with the same instrument in the works cited. To better represent the activity patterns of practitioners and those who left, on the basis of their results and consistent with reference works, were classified as those who perform a light insufficient activity, moderate activity and which show intense activity.

The "behavior in the practice of his father, mother, brother / I and sisters as" ($\alpha = 0.88$, $\alpha = 0.86$, ESPO) were measured with questions that had as options of answers: practice regular, abandonment and have never practiced. "The attitude of parents and friends before their own physical practice" aims to answer options: have drawbacks or obstacles, they were not concerned, have forced me and they have encouraged me. The response options of "with the practice that performs" are: alone, with some Member of the family and with my friends, colleagues. And "who started it in practice" are: myself, PE/coach Teacher, my friends and my parent.

Procedure

A cross-sectional study is presented, carried out in between February and May 2006. The necessary permission have been requested to schools through a letter that explained objectives of research how was going to carry out, as a model of the instrument was accompanied. The questionnaire was self-administered with a massive application with presence of the pollster (previously coached). The forms were completed anonymously in a school day, with consensus and prior training of evaluators. The time spent to complete it was of approximately 30 minutes. All the students were informed about the goal of this study, completed voluntarily with absolute confidentiality of responses and handling of data. There was no right or wrong answers. The study requested from the students the maximum honesty when filling the forms. This work has a positive evaluation report from the Commission of bioethics of the University of Murcia.

Statistical analysis of the data

The statistical package SPSS (17.0) was used to complete the descriptive analysis, inferential (Chi-square test) and a Multinomial logistic regression to shape the association between variables and, thus, to calculate the Odds Ratio (OR). A 95% of confidence interval (CI) for the dependent variables (behaviour before the physical practice and Finnish actives physical activity index and those who left) and the predictor

variables (behaviour in the practice of his father, mother, brother / I and sisters as; parents and friends attitude to their own physical practice; who performs the practice and who started it in practice). We present the results comparing between boys and girls, and between ESO and ESPO.

The procedure followed to establish the model has been followed for main effects. In this type of regression, the results are established according to a categorization of comparison. In our case, it was selected from the dependent variable behaviours before physical practice "active" and category for the Finnish variable index of the category "vigorous" physical activity. They will be considered evidence of the likelihood ratio for the purposes of the model, - 2 log likelihood, Chi-square of the goodness of fit of Pearson and the shunt, R^2 Cox-Snell and the comparison between observed and expected values.

RESULTS

Descriptive and inferential analysis

75.7% of students that claim to be active, i.e. they claim to perform physical activity during their leisure time, while girls percentage is reduced to 50.1%. ESPO, remains the difference between sexes, but occurs a considerable decline of more 15 percentage units in girls (35%). Among inactive, highest percentage is among those who have left, being much higher among girls (36.2%, ESO; 54.8%, ESPO) among boys (16.3%, ESO; 30.6%, ESPO), producing a noticeable increase between both educational stages (table 1). Girls also showed higher percentages than boys in never having made physical activity during leisure time. The differences are significant in all cases ($p < 0.001$).

Actives students obtained a rate of vigorous practice clearly superior to women (38.4% vs. 14.8%) produced 10 percentage units lower in ESPO boys (28%) and three units on girls (11.3%). On the contrary, activity light+insufficient rates are higher in girls (46.6% in ESO; 57.6% in ESPO) in boys (21.1% in ESO, 31.1% in ESPO). These data, with statistically significant differences ($p < 0.001$), demonstrate a higher level of physical activity in boys than in girls (table 1).

Those who have abandoned physical practice of time showed a situation quite similar to actives. The existing significant differences ($p < 0.001$), indicate that girls were less active than boys. But there was that, in both sexes, the percentages of practice light+insufficient are superior to actives (table 1) resulting in a significant decline in those who practiced vigorously.

Table 1. Percentages, X^2 and significance (p value), according to sex.

| | ESO ¹ | | | | ESPO ² | | | |
|--|------------------|-------|-------|----------|-------------------|-------|-------|----------|
| | Male | Woman | Total | X^2 | Male | Woman | Total | X^2 |
| The physical practice behaviors | | | | | | | | |
| Never | 8.0 | 13.7 | 10.7 | | 7.4 | 10.2 | 8.9 | |
| Abandonment | 16.3 | 36.2 | 25.8 | 231.37 * | 30.6 | 54.8 | 43.6 | 215.26 * |
| Active | 75.7 | 50.1 | 63.5 | | 62.0 | 35.0 | 47.5 | |
| Finnish actives physical activity index | | | | | | | | |
| Light + insufficient | 21.1 | 46.6 | 30.7 | | 31.3 | 57.6 | 41.7 | |
| Moderate | 40.5 | 38.5 | 39.7 | 194.07 * | 40.7 | 31.1 | 36.9 | 106.67 * |
| Vigorous | 38.4 | 14.8 | 29.5 | | 28.0 | 11.3 | 21.4 | |
| Finnish index of physical activity of those who left | | | | | | | | |
| Light + insufficient | 35.3 | 56.6 | 49.5 | | 39.4 | 56.9 | 51.2 | |
| Moderate | 47.5 | 37.0 | 40.5 | 43.95 * | 41.5 | 35.2 | 37.3 | 49.93 * |
| Vigorous | 17.3 | 6.4 | 10.0 | | 19.1 | 7.9 | 11.5 | |

*** $p < 0.001$

¹ ESO: compulsory secondary education. ² ESPO: Secondary education obligatory Post.

Both educational levels are characterized because their parents are more active than their mothers (table 2), with eleven points differences in ESO (32.4% parents; 21.5% mothers) and five points in ESPO (24.4% parents; 19.1% mothers). Something similar to what happens with his brothers (60.0% ESO; 55.9% ESPO) and her sisters (46.3% ESO; 40.5% ESPO).

Attitude of parents toward their physical practice has mostly been the cheer them (78.6% ESO; 74.1% ESPO) as well as friends, although to a lower extent (68.1% ESO; 64.8% ESPO). It should be noted that 14.3% (ESO) and a 19.1 (ESPO) % of the parents have not worried being greater the unconcern among friends (25.6% ESO; 30.0% ESPO) (table 2).

Both actives and those who have left, mostly practice (82.6% ESO; 76.6% ESPO) or practiced (78.3% ESO; 78.6% ESPO) with friends and colleagues, producing, in actives, an increase of individualized practice between stage ESO (8.8%) and ESPO (15.6%). Practice with any member of family, among those who have left, is greater in ESO (11.6%) than in ESPO (8.5%) (table 2).

A 56.9% (ESO) and a 61.3% (ESPO) of actives indicated that origin of their participation is situated in self-motivation, although practice is done with friends. That they claim to have abandoned the practice, also shows something similar but with lower percentages (table 2). It is essential to keep in mind that the proportion of young actives indicate that teacher of physical education and/or trainer is cause of this participation is very limited (11.2% ESO; 10.7% ESPO), being lower in those who left (7.2% ESO; 8.6% ESPO). Family and friends, in both educational stages, are presented with agents that motivate or stimulate practice around twenty units percentage being higher influence of friends in those who have left and the family among actives (table 2).

Table 2. Prevalence of the characteristics of participants (valid percentage)

| | ESO ¹ | | ESPO ² | |
|--|------------------|------|-------------------|------|
| | N | % | N | % |
| Sex | | | | |
| Male | 1701 | 52.4 | 1352 | 46.3 |
| Woman | 1548 | 47.6 | 1569 | 53.7 |
| Total | 3249 | 100 | 2921 | 100 |
| The physical practice behaviors | | | | |
| Never | 348 | 10.7 | 260 | 8.9 |
| Abandonment | 838 | 25.8 | 1274 | 43.6 |
| Active | 2063 | 63.5 | 1387 | 47.5 |
| Total | 3249 | 100 | 2921 | 100 |
| Finnish actives physical activity index | | | | |
| Light + insufficient | 634 | 30.7 | 578 | 41.7 |
| Moderate | 820 | 39.7 | 512 | 36.9 |
| Vigorous | 609 | 29.5 | 297 | 21.4 |
| Total | 2063 | 100 | 1387 | 100 |
| Finnish index of physical activity of those who left | | | | |
| Light + insufficient | 415 | 49.5 | 652 | 51.2 |
| Moderate | 339 | 40.5 | 475 | 37.3 |
| Vigorous | 84 | 10.0 | 147 | 11.5 |
| Total | 838 | 100 | 1274 | 100 |
| Behaviors to the practice of the father | | | | |
| Never | 544 | 17.4 | 698 | 24.9 |
| Abandonment | 1570 | 50.2 | 1425 | 50.7 |
| Active | 1015 | 32.4 | 685 | 24.4 |
| Total | 3129 | 100 | 2808 | 100 |
| Behaviors to the practice of the mother | | | | |
| Never | 1082 | 35.2 | 1223 | 43.7 |
| Abandonment | 1331 | 43.3 | 1041 | 37.2 |
| Active | 662 | 21.5 | 533 | 19.1 |
| Total | 3075 | 100 | 2797 | 100 |
| Behaviors to the practice of the brother / I | | | | |
| Never | 372 | 16.4 | 310 | 14.7 |
| Abandonment | 538 | 23.7 | 621 | 29.4 |
| Active | 1364 | 60.0 | 1180 | 55.9 |
| Total | 2274 | 100 | 2111 | 100 |
| Behaviors to the practice of the sister/as | | | | |
| Never | 472 | 24.9 | 381 | 22.3 |
| Abandonment | 547 | 28.8 | 634 | 37.2 |
| Active | 879 | 46.3 | 690 | 40.5 |
| Total | 1898 | 100 | 1705 | 100 |
| Parental attitude toward physical practice | | | | |
| They have been drawbacks or obstacles | 127 | 3.9 | 128 | 4.4 |
| They were not concerned | 463 | 14.3 | 558 | 19.1 |
| I have forced | 104 | 3.2 | 70 | 2.4 |
| They have encouraged me | 2555 | 78.6 | 2165 | 74.1 |
| Total | 3249 | 100 | 2921 | 100 |
| Attitude of his friends to the physical practice | | | | |
| They have been drawbacks or obstacles | 83 | 2.6 | 73 | 2.5 |
| They were not concerned | 832 | 25.6 | 875 | 30.0 |
| I have forced | 120 | 3.7 | 80 | 2.7 |
| They have encouraged me | 2214 | 68.1 | 1893 | 64.8 |
| Total | 3249 | 100 | 2921 | 100 |

| | | | | |
|--|------|------|------|------|
| With whom you regularly do physical activity | | | | |
| Only | 182 | 8.8 | 217 | 15.6 |
| With any member of the family | 176 | 8.5 | 107 | 7.7 |
| With my friends, coworkers | 1705 | 82.6 | 1063 | 76.6 |
| Total | 2063 | 100 | 1387 | 100 |
| Who motivated him or encouraged to perform physical practice | | | | |
| I myself | 1246 | 60.4 | 937 | 67.6 |
| Teacher of PE, coach | 157 | 7.6 | 84 | 6.1 |
| My friends | 325 | 15.8 | 179 | 12.9 |
| My parents/family | 335 | 16.2 | 187 | 13.5 |
| Total | 2063 | 100 | 1387 | 100 |
| With whom you usually did physical activity | | | | |
| Only | 85 | 10.1 | 165 | 13.0 |
| With any member of the family | 97 | 11.6 | 108 | 8.5 |
| With my friends, coworkers | 656 | 78.3 | 1001 | 78.6 |
| Total | 838 | 100 | 1274 | 100 |
| Who motivated him or encouraged to perform physical practice | | | | |
| I myself | 404 | 48.2 | 695 | 54.6 |
| PE Teacher, coach | 60 | 7.2 | 109 | 8.6 |
| My friends | 206 | 24.6 | 269 | 21.1 |
| My parents/family | 168 | 20.0 | 201 | 15.8 |
| Total | 838 | 100 | 1274 | 100 |

¹ ESO: compulsory secondary education. ² ESPO: Secondary education obligatory Post.

Multinomial logistic regression: Behaviors to the Predictor variable and physical practice

The multinomial logistic regression model was significant as a whole ($p < 0.001$) and a good predictor, according to the evidence of likelihood function, of goodness of fit and the coefficient of Cox and Snell, in both sexes in two educational stages (ESO and ESPO) (table 3).

Family environment can predict behaviours before physical practice of students. As you can be seen in table 3, the behaviour of father, mother, brother / I and sister/as, both boys and girls in both stage educational, predicting the behaviours of children and siblings. It also happens with the attitude of parents and friends.

In ESO, probability of finding students that have *never* made physical activity in their free time is greater when father ($OR = 3.67$; $OR = 3.75$ girls), mother ($OR = 2.14$ students; $OR = 2.76$ girls), brother / I ($OR = 2.87$ students; $OR = 2.90$ girls) and sister workers ($OR = 2.67$ students; $OR = 4.04$ girls) have never been active that when you are at present. ESPO, the likelihood increases considerably in the girls, being 4.04 (father), 3.78 (mother), 2.30 (brother / I) and 5.76 (sister/as) times greater when their relatives have never been active that when they are active. So, for girls, biggest prediction for this behaviour is found in sister/as and father while that, in boys, is father and brother / I (table 3). Mother most predicted this behavior in girls than in boys, above all in ESPO ($OR = 3.78$).

Force, worry and put drawbacks or obstacles by parents and friends, in both educational stages, predicts that both boys and girls have never been active. For example, for the boys of ESPO, probability of never being active is 7.77 times greater than if the parents had encouraged him. In girls, carelessness of parents is the greatest

prediction ($OR = 4.50$ ESO; $OR = 5.36$ ESPO) to never be active. For friends of boys from that, put obstacles or stick stands as the greatest prediction ($OR = 4.66$), remain so also for girls of ESPO ($OR = 4.92$), while the carelessness ($OR = 4.16$) predicts that never have been active girls of ESO (table 3).

The *abandonment* of physical practice of ESO, at that time, is greater when father ($OR = 2.15$ students; $OR = 1.95$ girls), mother ($OR = 1.53$ students; $OR = 1.58$ girls), brother / I ($OR = 1.82$ students; $OR = 1.34$ girls) and sister workers ($OR = 2.08$ students; $OR = 1.56$ girls) have never been active. Also when brother / I ($OR = 1.61$ students; $OR = 1.50$ girls) and sister workers ($OR = 1.73$ students; $OR = 2.84$ girls) leave physical practice. In ESPO, abandonment cannot be predicted by having a father and mother who have never been active or have been abandoned. Also have brother / I and sister workers who have abandoned practice. So, for boys, greater prediction of this behavior can be found in father and brother / I while in girls, is sister/ACE, (ESO) father and mother (ESPO) (table 3).

That parents of boys have forced him to do physical activity, rather than having them encouraged, is the greater prediction of its abandonment ($OR = 3.06$ ESO; $OR = 2.82$ ESPO), being unconcern for girls ($OR = 1.44$). Attitude of nonchalance of friends is, for boys ($OR = 2.10$) and girls ($OR = 1.52$) that, prediction of its abandonment, while putting drawbacks and obstacles ($OR = 2.59$) and forget ($OR = 1.45$) is for students at ESPO (table 3).

Table 3. Model of logistic multinomial regression examining the behaviour of physical practice, depending on the behaviour of the family environment, the attitude of parents and friends.

| | ESO ¹ (n=3249) | | | | ESPO ² (n=2921) | | | |
|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|
| | Boys (n= 1701) | | Girls (n= 1548) | | Boys (n= 1352) | | Girls (n= 1569) | |
| | Never OR (95% CI) ^{Sign} | Abandonment OR (95% CI) ^{Sign} | Never OR (95% CI) ^{Sign} | Abandonment OR (95% CI) ^{Sign} | Never OR (95% CI) ^{Sign} | Abandonment OR (95% CI) ^{Sign} | Never OR (95% CI) ^{Sign} | Abandonment OR (95% CI) ^{Sign} |
| Behaviors to the practice of the father | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 3.67 (2.21-6.09)*** | 2.15 (1.45-3.16)*** | 3.75 (2.43-5.77)*** | 1.95 (1.41-2.68)*** | 2,35 (1,30-4,24)** | 2,47 (1,70-3,59)*** | 4,04 (2,38-6,83)*** | 1,63 (1,20-2,20)** |
| Abandonment | 1.20 (0.76-1.86) | 1.02 (0.75-1.37) | 1.33 (0.90-1.97) | 1.10 (0.85-1.42) | 1,00 (0,58-1,74) | 1,77 (1,29-2,44)*** | 1,95 (1,16-3,27)* | 1,55 (1,18-2,01)** |
| Behaviors to the practice of the mother | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 2.14 (1.25-3.67)** | 1.53 (1.04-2.23)* | 2.76 (1.77-4.29)*** | 1.58 (1.16-2.14)** | 1,01 (0,56-1,83) | 1,53 (1,06-2,19)* | 3,78 (2,25-6,34)*** | 1,84 (1,38-2,45)*** |
| Abandonment | 1.16 (0.66-2.03) | 1.22 (0.84-1.77) | 1.43 (0.91-2.24) | 1.25 (0.93-1.67) | 1,04 (0,56-1,91) | 1,28 (0,88-1,86) | 1,46 (0,82-2,59) | 1,87 (1,40-2,50)*** |
| Behaviors before the practice of brother / I | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 2.87 (1.73-4.75)*** | 1.82 (1.21-2.73)** | 2.90 (1.83-4.58)*** | 1.34 (0.92-1.95) | 2,54 (1,35-4,75)** | 1,52 (1,03-2,22)* | 2,30 (1,31-3,99)** | 1,01 (0,66-1,53) |
| Abandonment | 1.28 (0.74-2.23) | 1.61 (1.12-2.31)** | 1.96 (1.27-3.01)** | 1.50 (1.09-2.03)* | 3,37 (1,96-5,79)*** | 1,95 (1,40-2,70)*** | 1,58 (0,99-2,53)* | 1,71 (1,28-2,29)*** |
| Behaviors before the practice of sister/as | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 2.67 (1.55-4.59)*** | 2.08 (1.38-3.12)*** | 4.04 (2.53-6.45)*** | 1.56 (1.06-2.30)* | 1,67 (0,91-3,07) | 1,24 (0,84-1,81) | 5,76 (3,08-10,77)*** | 1,40 (0,92-2,11) |
| Abandonment | 1.82 (1.03-3.22)* | 1.73 (1.14-2.59)** | 2.38 (1.45-3.91)** | 2.84 (2.02-3.98)*** | 1,00 (0,53-1,89) | 1,39 (0,97-1,96) | 2,67 (1,47-4,85)** | 1,84 (1,33-2,52)*** |
| Parental attitude toward physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| They have been drawbacks or obstacles | 2.63 (1.19-5.80)* | 2.03 (1.09-3.73)* | 2.45 (1.20-4.98)* | 1.49 (0.85-2.60) | 1,32 (0,50-3,47) | 1,10 (0,65-1,86) | 4,23 (1,82-9,81)** | 1,34 (0,71-2,51) |
| They were not concerned | 3.35 (2.20-5.08)*** | 1.73 (1.21-2.46)** | 4.50 (3.08-6.57)*** | 1.44 (1.02-2.01)* | 2,64 (1,64-4,24)*** | 1,08 (0,78-1,48) | 5,36 (3,60-7,98)*** | 1,06 (0,79-1,41) |
| I have forced | 3.51 (1.55-7.89)*** | 3.06 (1.65-5.65)*** | 2.95 (1.33-6.54)** | 1.74 (0.91-3.31) | 7,77 (3,04-19,81)*** | 2,82 (1,31-6,03)** | 3,17 (1,15-8,74)* | 0,86 (0,40-1,84) |
| Attitude of his friends to his physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| They have been drawbacks or obstacles | 4.66 (2.11-10.24)*** | 1.48 (0.67-3.28) | 3.16 (1.24-8.03)** | 1.54 (0.72-3.26) | 3,36 (1,07-10,52)* | 2,59 (1,27-5,27)** | 4,92 (1,89-12,80)** | 1,00 (0,47-2,15) |
| They were not concerned | 3.55 (2.41-5.22)*** | 2.10 (1.58-2.79)*** | 4.16 (2.97-5.80)*** | 1.52 (1.17-1.97)** | 2,64 (1,68-4,14)*** | 1,45 (1,10-1,90)** | 3,71 (2,53-5,44)*** | 0,88 (0,70-1,12) |
| I have forced | 2.68 (1.25-5.68)* | 0.95 (0.46-1.97) | 3.45 (1.65-7.20)*** | 0.98 (0.49-1.93) | 3,73 (1,60-8,66)** | 1,01 (0,50-2,04) | 2,46 (0,75-8,01) | 1,00 (0,47-2,15) |
| The model likelihood ratio | 366.974 | | 389.950 | | 334.176 | | 365.234 | |

| | | | | |
|-------------------|-----------|------------|-----------|------------|
| χ^2 Sign | 67.878*** | 115.107*** | 73.725*** | 120.073*** |
| R^2 Cox y Snell | .302 | .386 | .329 | .394 |

¹ ESO: compulsory secondary education. ² ESPO: Secondary education obligatory Post.

Note: The comparison group is "Active" behavior

* $p < 0,05$; * $p < 0.01$; * $p < 0.001$

Multinomial logistic regression: The active and variables predicting physical activity level

The multinomial logistic regression model was significant as a whole ($p < 0.001$; $p < 0,05$) and a good predictor, according to evidence of likelihood function, of goodness of fit of coefficient of Cox and Snell, in both sexes in both two educational stages (ESO and ESPO) (table 4).

Some aspects of family environment can predict levels of physical practice of active students. As you can be seen in table 4, the behaviour of the father, mother, brother / I and sister/as, only students that, predicting Finnish rate of physical activity of children and siblings. The probability of finding students with a level of activity *insufficient+light* is greater when father ($OR = 2.24$), mother ($OR = 1.65$), brother / I ($OR = 1.71$) and sister/as ($OR = 3.01$) have never been active than when they are at present. Also predicts, have parents ($OR = 1.47$) and brother / I ($OR = 1.58$) that have abandoned practice.

Parents and friends of boys that have forced them to do physical activity, rather than having them encouraged, is increased forecast to have a level of activity *insufficient+light* ($OR = 4.53$ parents; $OR = 3.39$ friends). In both educational stages and sexes, disregard for their practice predicts, equally, a level of activity *insufficient+light* (table 4).

Both boys and girls, in both educational stages, physical activity during leisure time individually predicts a level of physical activity *insufficient+light*. It also happens if motivation or stimulation comes from friends rather than parents/family, becoming probability of 8,00 times more in girls of ESPO (table 4).

The probability of finding students with a level of activity *moderate* only is greater when father ($OR = 1.70$) and sister workers ($OR = 1.88$) have never been active than when they are at present. Also predicts that have parents ($OR = 1.46$) that have abandoned the practice (table 4).

Only force and forget it by parents and friends, students in ESO, predicts have *moderate* activity. As it happened earlier, the realization of physical activity during leisure time individually rather than do it with friends, predicts having a level of *moderate* physical activity, in both educational stages and in both sexes (table 4). It also happens if motivation or stimulation comes from friends rather than parents/family, becoming the probability of 6.40 times greater in girls of ESPO.

Table 4. Multinomial logistic regression model examining the Finnish rate of physical activity in the actives, depending on the behaviour of the family environment, the attitude of parents, friends, with whom he performed and who started it in practice.

| | ESO ¹ (n=2063) | | | | ESPO ² (n=1387) | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys (n= 1287) | | Girls (n= 776) | | Boys (n= 838) | | Girls (n= 549) | |
| | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} |
| Behaviors to the practice of the father | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Never | 2.24 (1.34-3.75)** | 1.70 (1.08-2.66)* | 1.86 (0.91-3.79) | 1.45 (0.69-3.05) | 2,03 (0,96-3,54) | 0,87 (0,50-1,51) | 1,33 (0,63-2,84) | 1,22 (0,54-2,72) |
| Abandonment | 1.47 (1.05-2.05)* | 1.46 (1.11-1.91)** | 1.04 (0.65-1.64) | 1.22 (0.76-1.95) | 0,90 (0,58-1,40) | 0,73 (0,49-1,07) | 1,23 (0,66-2,30) | 1,10 (0,56-2,13) |
| Behaviors to the practice of the mother | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Never | 1.65 (1.07-2.53)* | 1.20 (0.84-1.71) | 1.60 (0.87-2.77) | 1.13 (0.63-2.04) | 1,07 (0,63-1,82) | 0,66 (0,41-1,08) | 0,73 (0,36-1,44) | 0,63 (0,31-1,30) |
| Abandonment | 1.03 (0.67-1.55) | 0.99 (0.71-1.37) | 1.21 (0.72-2.02) | 0.98 (0.58-1.64) | 0,97 (0,56-1,67) | 0,69 (0,42-1,13) | 1,24 (0,60-2,58) | 0,84 (0,38-1,81) |
| Behaviors before the practice of brother / | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Never | 1.71 (1.03-2.84)* | 1.09 (0.69-1.71) | 2.03 (0.94-4.38) | 1.01 (0.44-2.33) | 1,37 (0,77-2,41) | 0,99 (0,57-1,73) | 1,45 (0,47-4,45) | 1,16 (0,35-3,85) |
| Abandonment | 1.58 (1.01-2.48)* | 1.36 (0.93-1.99) | 0.84 (0.47-1.50) | 0.96 (0.52-1.64) | 1,17 (0,71-1,92) | 0,81 (0,49-1,31) | 1,16 (0,53-2,53) | 1,03 (0,45-2,39) |
| Behaviors before the practice of sister/as | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Never | 3.01 (1.84-4.90)*** | 1.88 (1.23-2.88)** | 0.89 (0.46-1.73) | 0.49 (0.23-1.04) | 1,09 (0,62-1,94) | 1,36 (0,78-2,36) | 0,66 (0,25-1,77) | 0,81 (0,27-2,35) |
| Abandonment | 1.29 (0.80-2.08) | 1.05 (0.71-1.53) | 0.89 (0.44-1.79) | 1.09 (0.54-2.21) | 1,00 (0,58-1,70) | 1,54 (0,93-2,54) | 0,79 (0,35-1,78) | 1,04 (0,43-2,50) |
| Parental attitude toward physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| They have been drawbacks or obstacles | 1.29 (0.53-3.13) | 1.33 (0.65-2.71) | 0.40 (0.16-1.01) | 0.27 (0.08-1.03) | 2,17 (1,08-4,80)* | 1,10 (0,48-2,50) | 0,44 (0,07-2,47) | 1,81 (0,37-8,66) |
| They were not concerned | 4.04 (2.53-6.42)*** | 2.07 (1.32-3.23)** | 3.14 (1.21-8.12)* | 2.07 (0.77-5.53) | 3,10 (1,86-5,16)*** | 1,59 (0,94-2,66) | 2,61 (1,01-6,81)* | 2,09 (0,76-5,74) |
| I have forced | 4.53 (1.67-12.25)** | 2.07 (1.07-5.56)* | 1.34 (0.27-6.40) | 1.53 (0.32-7.35) | 1,90 (0,44-8,09) | 0,98 (0,21-4,41) | 1,99 (0,24-16,05) | 0,80 (0,07-9,07) |
| Attitude of his friends to his physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| They have been drawbacks or obstacles | 0.87 (0.30-2.47) | 1.08 (0.49-2.36) | 2.62 (0.31-21.64) | 2.37 (0.28-19.99) | 3,83 (0,78-18,72) | 2,15 (0,43-10,78) | 0,74 (0,14-3,70) | 0,37 (0,05-2,74) |
| They were not concerned | 2.56 (1.57-3.24)*** | 1.59 (1.15-2.19)** | 2.01 (1.13-3.55)* | 1.02 (0.55-1.88) | 2,14 (1,38-3,30)* | 1,31 (0,85-2,01) | 1,20 (0,65-2,19)* | 1,14 (0,60-2,17) |
| I have forced | 3.39 (1.49-7.69)** | 3.13 (1.50-6.51)** | 2.06 (0.44-9.49) | 1.78 (0.37-8.39) | 1,09 (0,44-2,69) | 0,50 (0,18-1,34) | 1,00 (0,64-1,69) | 1,01 (0,61-2,41) |
| With whom you regularly do physical activity | | | | | | | | |
| With my friends. coworkers | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Only | 3.08 (1.77-5.37)*** | 2.05 (1.22-3.43)** | 4.05 (1.42-11.58)** | 3.50 (1.20-10.17)* | 2,01 (1,13-3,55)* | 1,57 (1,09-2,75)* | 2,06 (0,93-4,57)* | 2,27 (0,99-5,19)* |
| With any member of the family | 2.00 (1.13-3.56)* | 1.19 (0.70-2.05) | 2.17 (1.09-4.75)* | 2.26 (1.02-4.99)* | 2,01 (1,04-4,79)* | 1,37 (0,57-3,29) | 4,22 (1,26-14,10)* | 2,21 (0,61-7,99) |

Who motivated or encouraged to perform physical practice

| | | | | | | | | |
|----------------------------|--------------------|--------------------|------------------|------------------|-------------------|-------------------|---------------------|--------------------|
| My parents/family | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| I myself | 1.14 (0.74-1.76) | 1.17 (0.82-1.66) | 0.86 (0.48-1.53) | 0.80 (0.44-1.46) | 1,33 (0,78-2,24) | 1,32 (0,81-2,14) | 1,64 (0,84-3,18) | 2,57 (0,92-7,85) |
| Teacher of PE. coach | 1.35 (0.67-2.72) | 1.14 (0.63-2.07) | 0.75 (0.34-1.65) | 0.52 (0.21-1.15) | 0,90 (0,35-2,32) | 1,12 (0,48-2,59) | 2,47 (0,75-8,10) | 2,66 (0,68-10,35) |
| My friends | 2.50 (1.46-4.27)** | 2.13 (1.34-3.36)** | 1.07 (0.48-2.36) | 1.26 (0.56-2.80) | 3,33 (1,63-6,79)* | 2,39 (1,20-4,76)* | 8,00 (1,74-36,74)** | 6,40 (1,22-33,47)* |
| The model likelihood ratio | 734.157 | | 589.261 | | 622.906 | | 553.017 | |
| χ^2 Sign | 84.507*** | | 50.005*** | | 49.941*** | | 34.373* | |
| R^2 Cox y Snell | .278 | | .286 | | .280 | | .278 | |

¹ ESO: compulsory secondary education. ² ESPO: Secondary education obligatory Post.

Note: The comparison group is "Vigorous" activity level

* $p < 0,05$; ** $p < 0.01$; *** $p < 0.001$

Multinomial logistic regression: Physical activity level of those who have left and predictor variables

The multinomial logistic regression model was significant as a whole ($p < 0,05$) and a good predictor, according to evidence of the likelihood function, of goodness of fit of the coefficient of Cox and Snell, children, both educational stages, ESO and ESPO (table 5).

Only very few aspects of family environment can predict levels of physical practice of students who have abandoned it. As you can be seen in table 5, behaviors of brother / I and sister/as, only in boys of ESPO, predict Finnish rate of physical activity of brothers and sisters. You are more likely to find students with a level of activity *insufficient+light* and *moderate* when brother / I and sister workers have never been active than when they are at present.

Predicts the carelessness of the parents, children of ESPO, have a level of activity *insufficient+light* ($OR = 5.32$) and *moderate* ($OR = 4.53$). Equally, the insouciance of friends of boys that predicts your level *insufficient+light* ($OR = 3.40$) and *moderate* ($OR = 2.20$) (table 5).

Realization of physical activity individually during leisure ($OR = 2.17$) predicted to have a level of physical activity *insufficient+light*, children of ESPO, while for girls it is being carried out with a family member ($OR = 3.17$). If motivation or stimulation comes from friends of the boys of ESPO probability of a level is *moderate* is 2.60 times greater than if the stimulation comes from parents/family (table 5).

Table 5. Multinomial logistic regression model examining the Finnish rate of physical activity in which abandoned, depending on the behaviour of the family environment, the attitude of parents, friends, with whom he performed and who started it in practice.

| | ESO ¹ (n=838) | | | | ESPO ² (n=1274) | | | |
|---|---|---|---|---|---|---|---|---|
| | Boys (n= 278) | | Girls (n= 560) | | Boys (n= 414) | | Girls (n= 860) | |
| | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} | Insufficient + light OR (95% CI) ^{Sign} | Moderate OR (95% CI) ^{Sign} |
| Behaviors to the practice of the father | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 1.97 (0.67-5.83) | 1.87 (0.64-5.43) | 1.28 (0.45-3.62) | 0.88 (0.30-2.55) | 1,04 (0,45-2,42) | 1,05 (0,44-2,50) | 0,64 (0,29-1,42) | 0,49 (0,19-1,08) |
| Abandonment | 0.92 (0.41-2.02) | 1.20 (0.56-2.56) | 0.97 (0.41-2.29) | 0.71 (0.29-1.69) | 0,96 (0,45-2,05) | 1,43 (0,66-3,09) | 0,66 (0,31-1,38) | 0,54 (0,25-1,15) |
| Behaviors to the practice of the mother | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 2.17 (0.82-5.72) | 2.03 (0.92-6.62) | 2.31 (0.99-9.20) | 2.11 (0.75-5.93) | 1,38 (0,61-3,12) | 1,48 (0,64-3,37) | 0,91 (0,42-1,97) | 0,68 (0,31-1,52) |
| Abandonment | 1.23 (0.49-3.10) | 2.08 (0.85-5.10) | 1.68 (0.71-3.96) | 1.09 (0.43-2.45) | 0,95 (0,41-2,24) | 1,53 (0,65-3,57) | 0,76 (0,35-1,64) | 0,76 (0,34-1,66) |
| Behaviors before the practice of brother / | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 1.15 (0.40-3.27) | 1.33 (0.48-3.64) | 1.66 (0.46-5.99) | 1.57 (0.41-5.91) | 3,09 (1,08-9,70)* | 3,59 (1,12-11,41)* | 1,01 (0,36-2,78) | 1,28 (0,44-3,67) |
| Abandonment | 1.48 (0.56-3.89) | 1.57 (0.61-4.04) | 1.32 (0.49-3.53) | 1.61 (0.59-4.41) | 0,91 (0,44-1,89) | 1,37 (0,66-2,83) | 0,99 (0,52-1,88) | 1,49 (0,77-2,88) |
| Behaviors before the practice of sister/as | | | | | | | | |
| Active | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Never | 2.05 (0.67-6.25) | 1.74 (0.62-4.79) | 2.40 (0.50-11.52) | 2.92 (0.59-14.49) | 3,32 (1,25-8,81)* | 2,85 (1,08-7,54)* | 1,65 (0,57-4,73) | 1,26 (0,42-3,77) |
| Abandonment | 2.47 (0.79-7.71) | 1.73 (0.60-4.98) | 0.87 (0.35-2.17) | 1.04 (0.40-2.70) | 1,38 (0,65-2,96) | 1,46 (0,70-3,07) | 1,33 (0,64-2,76) | 1,10 (0,52-2,36) |
| Parental attitude toward physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| They have been drawbacks or obstacles | 0.82 (0.13-5.16) | 2.11 (0.44-10.09) | 0.61 (0.16-2.22) | 0.30 (0.07-1.29) | 1,77 (0,46-6,77) | 2,07 (0,56-7,70) | 0,60 (0,19-1,86) | 0,65 (0,19-2,11) |
| They were not concerned | 2.31 (0.80-6.62) | 1.94 (0.68-5.48) | 1.29 (0.43-3.87) | 0.91 (0.29-2.85) | 5,32 (1,81-15,60)** | 4,53 (1,53-13,36)** | 2,27 (0,95-5,44) | 1,96 (0,80-4,82) |
| I have forced | 0.91 (0.20-4.05) | 1.26 (0.32-4.93) | 0.39 (0.10-1.50) | 0.37 (0.08-1.46) | 0,44 (0,09-2,04) | 1,27 (0,37-4,29) | 0,67 (0,14-3,20) | 0,59 (0,11-3,12) |
| Attitude of his friends to his physical practice | | | | | | | | |
| They have encouraged me | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| They have been drawbacks or obstacles | 0.69 (0.09-5.16) | 0.86 (0.15-4.92) | 1.00 (0.45-1.81) | 1.01 (0.42-2.12) | 2,61 (0,54-12,54) | 1,38 (0,27-7,08) | 1,00 (0,41-2,01) | 1,01 (0,44-1,98) |
| They were not concerned | 3.40 (1.46-7.85)** | 2.20 (1.06-4.99)* | 1.78 (0.75-4.25) | 1.23 (0.50-3.01) | 1,77 (0,95-3,28) | 1,06 (0,57-2,00) | 1,16 (0,66-2,05) | 0,96 (0,38-1,24) |
| I have forced | 0.70 (0.13-3.64) | 0.43 (0.08-2.24) | 0.52 (0.10-2.61) | 0.36 (0.06-2.06) | 0,43 (0,09-2,01) | 0,57 (0,14-2,23) | 0,32 (0,09-1,09) | 0,94 (0,06-1,05) |
| With whom you regularly do physical activity | | | | | | | | |
| With my friends. coworkers | 1.00 | 1.00 | 1.00 | 1.00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Only | 2.13 (0.66-6.91) | 1.33 (0.41-4.32) | 3.85 (0.50-29.24) | 5.15 (0.67-39.40) | 2,17 (1,05-5,25)* | 1,00 (0,39-2,56) | 1,06 (0,51-2,18) | 0,83 (0,39-1,77) |
| With any member of the family | 1.00 (0.44-1.96) | 1.01 (0.58-2.47) | 3.36 (0.78-14.50) | 2.26 (0.50-10.12) | 3,38 (0,73-15,57) | 1,63 (0,33-8,06) | 3,17 (1,09-10,46)* | 1,65 (0,47-5,71) |
| Who motivated or encouraged to perform | | | | | | | | |

| | | | | | | | | |
|----------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|
| physical practice | | | | | | | | |
| My parents/family | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| I myself | 0.46 (0.16-1.29) | 0.97 (0.35-2.71) | 0.74 (0.31-1.78) | 1.11 (0.44-2.76) | 1,28 (0,58-2,81) | 1,80 (0,78-4,16) | 0,98 (0,49-1,93) | 1,26 (0,62-2,57) |
| Teacher of PE. coach | 0.71 (0.11-4.65) | 1.33 (0.22-8.09) | 1.31 (0.26-6.59) | 1.88 (0.36-9.86) | 0,57 (0,17-1,83) | 1,24 (0,40-3,85) | 0,69 (0,26-1,81) | 0,99 (0,36-2,68) |
| My friends | 0.61 (0.20-1.88) | 0.69 (0.22-2.15) | 1.04 (0.36-3.01) | 1.87 (0.62-5.60) | 1,42 (0,53-3,78) | 2,60 (1,09-7,04)* | 1,41 (0,61-3,25) | 1,26 (0,52-3,01) |
| The model likelihood ratio | 427.977 | | 622.026 | | 603.867 | | 905.405 | |
| χ^2 Sign | 36.850* | | 39.437 | | 60.489* | | 47.862 | |
| R^2 Cox y Snell | .324 | | .268 | | .336 | | .254 | |

¹ ESO: compulsory secondary education. ²ESPO: Secondary education obligatory Post.

Note: Comparison group is "Vigorous" activity level

* $p < 0,05$; * $p < 0.01$; * $p < 0.001$

DISCUSSION AND CONCLUSIONS

The objective of this research is to learn about the influence of social environment in habits of physical practice of young Spanish students. It has been confirmed the hypothesis that behaviour can be predicted and level of physical activity in leisure time of young people from their family environment behaviour (father, mother, brother / I and sisters/as), attitude, their parents and his friends before his physical practice, who carried out practice and have started it.

Influence of family manifests two main aspects: (1) the model provided by family and friends, (2) the support seeking family, mainly as a result of attitude of constituents towards physical activity.

Paper model

Teens that have never practiced free-time physical activity are part of a group of risk of sedentary lifestyle. Same is true, but to a lower extent, with those who left physical practice. Under this scenario, the father plays an especially important role for this model. For students of two levels of education, likelihood of sedentary children is particularly high when the father does not practice any physical activity, and therefore does not provide a model of regular practice.

The role that model parent can play is made clear in the relationship in between the regular participation of the father in physical activity and participation of children in this type of practice (Cantalops, et al., 2012, Sallis, et al., 2000). On researches using objective measurement of physical activity instruments this relationship is clear (Freedson & Evenson, 1991). In case of studies with questionnaires, dependencies seems to be less clear, sometimes showing positive correlations (Tuero, et al., 2012) and, in other cases, no significant statistical results (Hermoso, Garcia & Chinchilla, 2010).

Dempsey, Kimiecik, and Horn (1993) noted that athletes whose parents played a good role model for such a practical, they had best perceptions of your competence, were more pleasure and possessed a stronger intrinsic motivation. The research results of Anderssen and Wold (1992), about the influence of parents and same on the physical activity in their leisure time, indicate the level of physical activity of parents and their support for it as well as of the same, to play a positive role significant. Several studies have confirmed that physically active parents tend to have physically active children (Anderssen & Wold, 1992; Cantalops, et al., 2012; Dishman, 1990; Freedson & Evenson, 1991; Tuero, et al., 2012; Wold & Anderssen, 1992).

According to the social learning theory (Aaro, Wold, Kannas & Rimpela, 1986), Raudsepp and Viira (2000) study results indicate influence of members of family and same levels of physical activity among adolescents. Raudsepp and Viira (2000) examined relative contributions of aspects such as gender, social class, socioeconomic status of family and behaviour of physical practice of people who are significant for young person (father, mother, sister, brother, best friend), about variability of the physical activities of adolescents from 13 to 15 years liv-

ing in an urban environment. Children who pointed out that his father had made physical activity regular, spent significantly more time to participate in physical activity than those who claimed that his father did not regularly practice physical. These results are independent of the gender of child being able to say that physical activity for boys and girls, involved in this study, could be influenced by the practice of regular exercise of the father. Results suggest that little or no participation of father may be a factor that has an important negative influence on child physical activity.

Shropshire and Carroll (1997) noted that the relationship between activity of children with maternal weren't that significant. Contrary to what reflects the research presented here, since results have shown that the role of mother is also significantly related to activity of their children. Probability of an inactive individual in future in those who have never practiced is always higher than those who left. Even if students abandoned previous practice, their previous experiences allow keeping a positive relationship. In short, in many inactive teenagers, is role of inactivity of father and mother model which prevails.

Support

Means to support physical activity of students are multiple. Included, for example, the psychological support in form of incentives or rewards, transportation of child or teen to place of exercise, to buy sports equipment, pay club dues, etc. (Garrido, et al., 2010; Fredricks & Eccles, 2005; Welk, Word & Morss, 2003).

Issues raised in research allow realizing how young people perceive attitudes of parents and friends related to sport practice. Teens are encouraged to be active when there is a positive attitude towards practice of physical activity in your environment. They also perceive indifference to their practices, as they perceive when there is a rejection of this type of activity by their parents. In addition, they come to experience relationship of parental authority, which would force them to carry out a physical activity regular. As well, the obstacles raised by parents are also likely significant to be sedentary. Similarly, authority of parents, which implies an obligation to be active, is insufficiently perceived by the boys and girls.

In literature, influence of friends appears as very important, mainly at time of adolescence, as they found Hohepa, Scragg, Schofield, Kolt and Schaaf (2007), Ommundsen, Klasson-Heggebo and Anderssen (2006) and Duncan, Duncan, Strycker and Chaumeton (2004). This influence progressively overrides that of adults of the family. In research results here posed, obstacles to be actives that can be friends, as well as indifference, it is clearly far superior in the inactive. Indeed, likelihood of sedentary these students are between three and four times over in teens who are declared actives. With age, these probabilities appear less strong, in particular in Group of 16/17 to 19/20 years. Likely to develop greater autonomy at this age and this will contribute to reduction of probability.

In analysis of relationships (family and particularly brothers), results of Duncan et al. (2004) showed that higher levels of family support were related to levels higher physical activity of the sons and daughters. These data demonstrate importance of social support of family to physical activity for youth (Sallis, et al., 2000). It is important to note that young people who have never practiced are a group with strong probability remains inactive in future, such as longitudinal studies confirm them (Telama, et al., 2005; Yang, et al., 1999).

It is particularly important to considering the following string. Non-observant adolescent, not receive example of practices by their parents and, therefore, their motivations are very limited as a consequence of indifference of their parents give them few extrinsic incentives (for example, support to the place where are her physical practice). Ultimately, indifference of inactive parents can, probably, impinge on that motivation toward physical activity is little developed in their teens.

When the teenager had never practice physical activity, probability of a complete absence of practice of sport activities appears as highly significant in young people that, both boys and girls. Abandonment of practice achieves also a significant probability. This confirms the findings found in the international literature related to the model and the support of parents and friends (Raudsepp & Viira, 2000; Shropshire & Carroll, 1997). In a longitudinal study in girls, Davison and Jago (2009) found that the support of parents decreased from the passage from childhood to adolescence. The role of model and logistical support were progressively reduced. From perspective of maintenance of physical activity, girls who continue their physical activity for several years have parents with a role model more consistent at all ages. Contrary to support of parents, of same (friends) increases in transition from childhood to adolescence. Study of Davison and Jago (2009) constitutes a confirmation of results obtained in studies "cross sectional".

Low aid for parents and same were associated to probabilities smaller regularly to be active after school in leisure (Serra, Generelo & Zaragoza, 2010). Frequency of participation in extracurricular activities is significantly associated to support of same, i.e., students who received limited aid is less likely to be regularly active after school, compared with same receiving higher levels of aid (Hohepa, et al., 2007). Findings also provide further evidence that parents and friends are agents of dominant social influences of physical activity during adolescence (Davison, Symons & Birch, 2006).

In the present study, teens who have never participated in sport activities, presented several sedentary lifestyle risk factors. Parent model and support provided to their children are non-existent or extremely limited. They constitute a risk in socialization of physical activity and confirm sedentary lifestyle of adolescents. Results from this same sample of students (Pieron & Ruiz-Juan, 2010), put highlighted a series of characteristics that indicate a strong correlation with inactivity: a very low intrinsic motivation, a perception of competition very low also, a pedagogical relationship in class little conducive to learning and preparation of an active lifestyle.

Pedagogical implications

Knowledge of the relationships in the family, in what refers to physical activities; find very interesting perspective of intervention or of orientation of pedagogical teacher student relationship and its role in contacts with parents.

We suggest that some programs for promotion of physical activity, youth with high risk of sedentary lifestyle family-based, can be beneficial. Such interventions should focus on the support to be provided to parents in order to define if your children have a danger of physical inactivity. In such situations, it is necessary to make a special effort to involve children in physical activity, creating occasions to make it active and hold it to the extent possible. Among educational consequences, it is necessary to consider the role of teacher, in particular, in their relations with parents. Teachers should try to persuade parents to be more active, to convey to their children a healthy and active life style.

In short, parents should realize of so great importance with peers (friends) in life of your teen. Also, healthy role that they can play themselves, stimulating their children, making them interested by way physical activity continues. Therefore, they should use this knowledge to encourage children to be active. When they are added, on one hand, absence of a positive role model towards physical activity of their parents and, on the other, perception of adolescent of indifference of parents, likelihood of inactive in future increases.

Finally, indicate that for future research it is suitable to deepen the knowledge of the results found here and carry out longitudinal studies that provide relevant information about the importance of each socializing agent at each stage of the life of teenagers and how these can be changed with the passage of time. Also, verify the importance of the school with socializing agent in acquisition of healthy habits in teens.

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