

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

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PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Consellería de Sanidade. Dirección Xeral de Saúde Pública, Santiago de Compostela, Galicia, Spain.

Abstract: The degree of compliance with the minimum physical activity recommendations is very low in the child and adolescent population in Spain. In order to promote physical activity in the target population it is necessary to understand the reasons why a high percentage of children and adolescents are “inactive.” At present, approaches with a more ecological perspective are being applied to analyse the determinants of the physical activity pattern of this population. The behaviour of the child and adolescent population is influenced by a wide range of factors, some of them modifiable. When promoting physical activity in this age group, both the motivations and aspects that discourage this population must be taken into account. Changing the behaviour of an individual or a population requires multiple and varied efforts. Society as a whole must be involved in this endeavour.

Keywords: physical activity, intervention, social determinants, behaviour, motivation, promotion.

PROMOCIÓN DE LA ACTIVIDAD FÍSICA EN LA POBLACIÓN INFANTOJUVENIL

Resumen: El cumplimiento de las recomendaciones mínimas de actividad física es muy bajo en la población infantojuvenil española. Para promover la actividad física en la población objetivo es necesario conocer las razones por las que un alto porcentaje de niños y adolescentes son “inactivos”. En la actualidad, se están aplicando enfoques más ecológicos para analizar las causas determinantes del patrón de actividad física de esta población. La conducta de la población infantojuvenil está influenciada por multitud de factores, algunos de ellos, modificables. A la hora de promover la actividad física en este grupo etario se deben tener en cuenta, tanto las motivaciones, como aquellos aspectos que desmotivan a esta población. El cambio de conducta de un individuo o de una población exige de esfuerzos múltiples y variados. En esta tarea, debe implicarse toda la sociedad.

Palabras clave: actividad física, determinantes sociales, conducta, motivación, promoción.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

PROMOÇÃO DA ATIVIDADE FÍSICA NA POPULAÇÃO INFANTOJUVENIL

Resumo: O cumprimento das recomendações mínimas de atividade física é muito baixo na população infantojuvenil espanhola. Para promover a atividade física na população-alvo, é necessário conhecer as razões pelas quais uma alta percentagem de crianças e adolescentes é "inativa". Atualmente, estão a ser aplicadas abordagens mais ecológicas para analisar as causas determinantes do padrão de atividade física desta população. O comportamento da população infantojuvenil é influenciado por uma multiplicidade de fatores, alguns deles modificáveis. Ao promover a atividade física neste grupo etário, devem ser tidos em consideração tanto as motivações como os aspetos que desmotivam esta população. A mudança de comportamento de um indivíduo ou de uma população requer esforços múltiplos e variados. Esta tarefa requer o envolvimento de toda a sociedade.

Palavras-chave: atividade física, determinantes sociais, comportamento, motivação, promoção.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

INTRODUCTION

Although there is clear evidence that the regular practice of physical activity during childhood and adolescence is a necessary element for the overall development of this age group, it should be noted that physical activity is a habit with a manifestly negative tendency. In our context, the percentages of boys and girls who have a sufficient level of physical activity are very low and even lower in the case of girls. It is estimated that 60-79% of children and adolescents aged 9-18 do not comply with minimum physical activity recommendations (Fundación para la Investigación Nutricional, 2016).

For years, analyses conducted to understand the causes of the population's low levels of physical activity have focused on the personal motivations and behaviours of individuals. As a result, interventions have been directed almost exclusively at the individual level. However, over the last few decades, the powerful role played by environmental, socio-cultural, and community settings in shaping and maintaining active lifestyles is being further studied and recognised (Physical Activity Guidelines Advisory Committee, 2018).

The purpose of this document is to provide primary care paediatric health professionals, fundamentally, with information on the most relevant aspects for promoting and encouraging the child and adolescent population to attain the minimum recommendations for physical activity.

The promotion of physical activity could be defined as a process (political, social, global) that encompasses actions aimed at strengthening the competences of individuals (i.e. the combination of knowledge, skills, attitudes, emotions, ethical values, motivations, etc. which is deployed to achieve effective action). Furthermore, the promotion of physical activity also includes actions aimed at modifying social, environmental, and financial conditions in order to take advantage of all the benefits (physical, psychological, social, preventive, rehabilitative, etc.) provided by the regular practice of physical activity at any age, thus mitigating the impact of physical inactivity and a sedentary lifestyle on public and individual health.

PROGRESSION OF THE LEVELS OF PHYSICAL ACTIVITY DURING THE LIFE CYCLE OF THE CHILD AND ADOLESCENT POPULATION

As a general rule, children and adolescents have a positive attitude towards physical activities and sports. Nevertheless, as they get older, this positive attitude becomes more ambiguous, leading to reduced participation in physical activities and sports.

Data from studies carried out in the Spanish population have confirmed that the age at which the practice of physical activity decreases is around 11 years of age, the decrease being much more pronounced in girls (Lasheras, Aznar, Merino, & López, 2001).

These data compel us to focus our efforts on early ages and on the female population in particular. Interventions must be targeted at ensuring that their perception of physical activity remains positive and that physical activity is maintained during adolescence and later into

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

adulthood (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006).

WHY IS THE CHILD POPULATION LESS ACTIVE TODAY?

When it comes to promoting physical activity in the target population and ensuring that they attain at least the minimum recommendations established by scientific societies, understanding the reasons why a high percentage of children and adolescents are “inactive” may be quite useful (Table 1 Why are boys and girls less active today?)

There are many factors behind this, as described below.

Table 1 Why are boys and girls less active today?

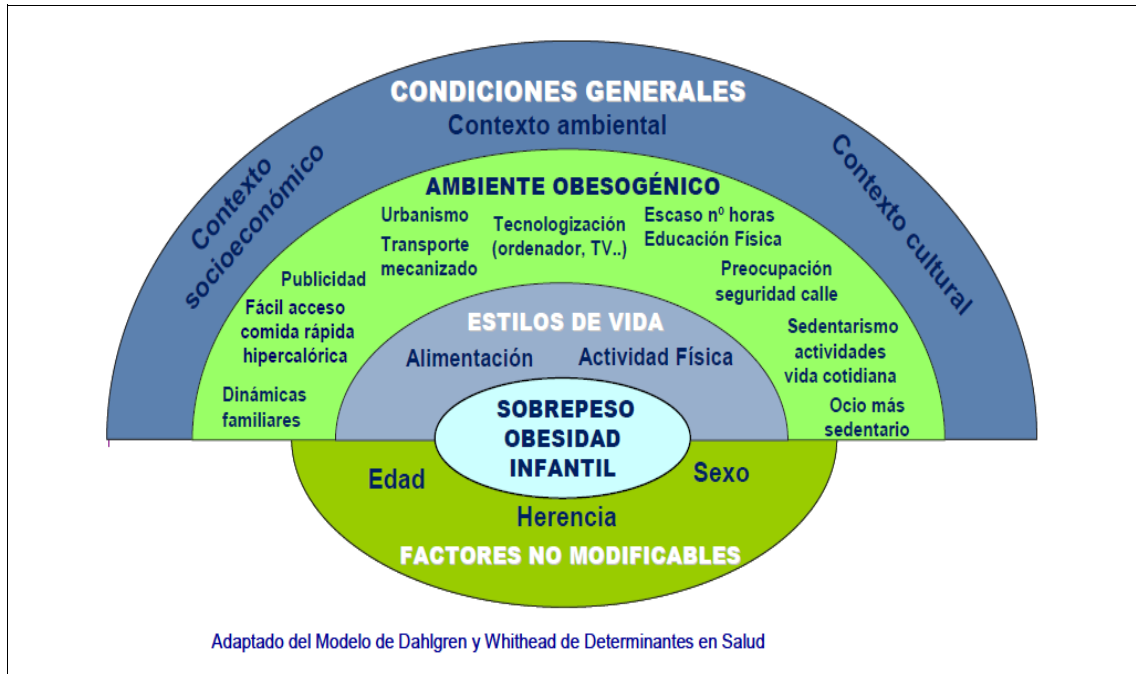
1. More sedentary leisure activities, such as watching TV, surfing the Internet, and playing computer games, which have replaced outdoor playing time.
2. Less physical activity in educational institutions.
3. Fewer opportunities for active leisure.
4. Increased motorised transport (e.g. cars) to and from the educational institution in particular.
5. Increased urbanisation of towns and cities, which does not promote active and safe transport, such as walking or cycling.
6. Increased mechanisation at the heart of society (lifts, escalators, etc.).
7. Overprotection of parents and excessive concern for children’s safety outdoors (e.g. due to high levels of traffic or fear of strangers).
8. An environment (home, educational institution, society) that does not promote physical activity (e.g. obese and inactive parents).

Source: Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). *Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación* [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their education].

At present, approaches with a more ecological perspective are being applied to analyse the causes and determinants of the low physical activity of children and adolescents. The Dahlgren and Whitehead model (Figure 1.), which presents the social determinants of health, is very useful both for understanding which factors or conditions of different nature may affect the physical activity pattern of the population and for designing future interventions. The socio-economic, cultural, and environmental context in which people live determines the existence of an environment (obesogenic, sedentary, pathological, etc.) that conditions the habits and lifestyle of the population, and therefore, the pattern of physical activity.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Figure 1. Social determinants of the physical activity pattern



Source: Madrid Health Service (2013). *Promoción de actividad y ejercicio físico en población infantil y adolescente de la comunidad de Madrid* [Promotion of physical activity and exercise among children and adolescents in the community of Madrid].

Table 2. Figure 1. Social determinants of the physical activity pattern translation

Spanish	English
CONDICIONES GENERALES	GENERAL CONDITIONS
Contexto socioeconómico	Socio-economic context
Contexto ambiental	Environmental context
Contexto cultural	Cultural context
AMBIENTE OBESOGÉNICO	OBESOGENIC ENVIRONMENT
Dinámicas familiares	Family dynamics
Fácil acceso comida rápida hipercalórica	Easy access to high-calorie fast food
Publicidad	Advertising
Urbanismo	Urban planning
Transporte mecanizado	Mechanised transport
Tecnologización (ordenador, TV, etc.)	Ubiquity of technology (computers, TVs, etc.)
Escaso nº horas Educación Física	Low number of hours of Physical Education
Preocupación seguridad calle	Concern for safety in the streets
Sedentarismo actividades vida cotidiana	Sedentary daily living activities
Ocio más sedentario	More sedentary leisure.
ESTILOS DE VIDA	LIFESTYLES
Alimentación	Diet
Actividad Física	Physical activity
SOBREPESO OBESIDAD INFANTIL	CHILDHOOD OVERWEIGHTNESS/OBESITY
FACTORES NO MODIFICABLES	NON-MODIFIABLE FACTORS
Edad	Age

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Herencia Sexo	Heredity Sex
Adaptado del Modelo de Dahlgren y Whithead de Determinantes en Salud	Adapted from the Dahlgren and Whitehead Model of Determinants of Health

The environment described in the figure is characterised by the following:

1. A greater limitation on active daily activities, as well as more sedentary leisure.
2. A type of urban planning that favours motorised transportation and hinders active mobility with almost insurmountable barriers.
3. The promotion of children’s leisure based on viewing screens, thus increasing a sedentary lifestyle.
4. The limited number of hours devoted to physical activity in educational institutions.
5. Overprotection of boys and girls by families.
6. Excessive zeal for the safety of boys and girls in physical environments, etc.

What influences the physical activity behaviour of boys and girls?

The behaviour of the child and adolescent population with regard to physical activity is influenced by a multitude of factors. It is not possible to intervene on some of these factors, but many others can be modified to a certain extent. Figure 2.) depicts the main influences on children’s physical activity behaviour during childhood and adolescence.

Figure 2. Influences on physical activity behaviour in children and adolescents



Source: Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). *Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación* [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their education].

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Table 3. Figure 2. Influences on physical activity behaviour in children and adolescents

Spanish	English
Entorno físico	Physical environment
Entorno social	Social environment
Actividad física	Physical activity
Influencia familiar	Family influence
Características personales	Personal characteristics

Personal characteristics (individual and demographic factors)

Each child has particular and unique physical, psychological, social, and developmental characteristics that will condition the types of physical activity each child will choose. Age and sex appear to significantly influence physical activity levels. As a result, some activities are more suitable for boys than for girls, or more attractive for children than for older ones. On the other hand, some prefer socio-motor activities or organised sports, while others are more drawn to individual activities or unstructured games. For all these reasons, the most important factor in this regard is that children are aware of their skills and enjoy the activities they do, thereby promoting their perception of physical activity as a pleasant habit, thus increasing the likelihood of practicing it throughout their lives (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006)

The family environment

The positive attitude of parents towards practising physical activities and sports provides higher levels of motivation for their children and makes them feel more supported, thereby increasing the likelihood of being more active. In addition, there appears to be a significant association between the levels of physical activity of parents and the levels of physical activity of their children. For all these reasons, the family environment seems to be one of the factors with the greatest influence on the level of physical activity of the child and adolescent population, as well as on other health-related habits (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006)

The physical environment

The scientific evidence available has shown that the physical environment in which people live has a strong influence on the levels of physical activity. In childhood and adolescence, the most relevant environmental determinants associated with participation in physical activities and sports are as follows:

- Access to facilities and equipment.
- The influence exerted by electronic devices: television, tablets, mobiles, computers, etc.
- The season of the year and safety issues (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006)

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

The social environment

In addition to the family, there are other social factors that may influence or even determine the behaviour of the child and adolescent population in relation to physical activity, such as:

- Peer pressure (friendships).
- The influence of other adults (e.g. parents, coaches).
- The influence of other role models (e.g. professional athletes). (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006).

Table 4. Motivating and demotivating factors in relation to physical activity in childhood and adolescence below summarises some of the most important motivating and demotivating factors in relation to physical activity in childhood and adolescence.

Table 4. Motivating and demotivating factors in relation to physical activity in childhood and adolescence

Motivating factors	<ol style="list-style-type: none"> 1. Having fun. 2. The support from the family environment and the provision of role models by parents. 3. Direct participation with other enthusiastic adults who act as role models (e.g. teachers, coaches, etc.). 4. Indirect role models (e.g. professional athletes). 5. The participation of peers. 6. Easy access to facilities and equipment. 7. Feeling safe. 8. Feelings of empowerment (self-perceived effectiveness) and improvement. 9. Feelings of being physically fit (for example, having a healthy weight). 10. Feelings that the activity selected is a personal choice (absence of coercion). 11. Experimentation with various activities and movements. 12. Good weather conditions.
Demotivating factors	<ol style="list-style-type: none"> 1. Lack of fun 2. The lack of support from the family environment and the absence of role models stemming from parents. 3. The absence of other adult role models. 4. Lack of support from the social environment (peers, teachers, etc.). 5. Difficulties accessing facilities and/or equipment. 6. The perception that there is a risk to personal safety or of frequent injuries. 7. The perception that the skills cannot be acquired (because they are too difficult). 8. Feelings of incompetence (self-perceived lack of effectiveness) and of lack of improvement. 9. Feelings of embarrassment (e.g. in overweight children). 10. Lack of freedom of choice or feeling pressured to participate or compete. 11. The activity is “forced” (for example, it is used as punishment.) 12. Performing the same activity over and over again (repetition). 13. Placing more importance on winning rather than playing. 14. Bad weather conditions.

Source: Adapted from: *Actividad física y salud en la infancia y adolescencia. Guía para todas las personas que participan en su educación* [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their education], 2006; *Actividad física saludable. Guía para todo el profesorado de Educación Física* [Healthy physical activity. A Guide for All Physical Education Teachers], 2007.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

PROMOTION OF PHYSICAL ACTIVITY AND PREVENTION OF PHYSICAL INACTIVITY IN CHILDREN AND ADOLESCENTS

In adolescence, there is a rapid and noticeable reduction in physical activity levels, which is more pronounced among girls. To avoid this situation, the following is recommended:

- Intervening during the stages before adolescence, i.e. during childhood.
- Focusing efforts on ensuring that children adopt strong habits.
- Ensuring that children develop a positive attitude towards physical activity.
- Not pressuring children to engage in physical activity against their will to avoid rejection.
- Removing all types of barriers that interfere with the practice of physical activities in a free and pleasant way.
- Valuing physical activity as a priority and not as a secondary activity.

At the end of childhood and at the beginning of adolescence, adolescents are in the midst of a period of great physical, social, and developmental changes that could greatly interfere with the maintenance of active and healthy habits.

As barriers to physical activity, adolescents usually mention time constraints, weather conditions, lack of interest, being in a relationship, etc. These and other barriers or problems (Table 5. Issues related to physical activity in adolescents and suggestions for adults) should be analysed in order to develop effective intervention strategies in this population group, so that they overcome problems and barriers and acquire active habits (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006).

Table 5. Issues related to physical activity in adolescents and suggestions for adults

Issue / Problem	What can adults do to help?
1. Interests change with age. During childhood, physical activity revolves around fun games, most of which require movement. With the onset of adolescence, young people lose interest in these activities as other alternatives for their leisure time emerge.	1. Adolescents should continue to be encouraged to find physical activities that match their changing preferences.
2. Physical activity and sports often lose their appeal to adolescents of both sexes. In childhood, physical activity focuses on non-competitive play. With the advent of adolescence, competition becomes widespread within sports and physical activities, and fitness or physical activity goals may be perceived as both unrealistic and irrelevant. Many adolescents of both sexes will become discouraged and decide to devote their spare time to inactive tasks.	2. Adolescents should be taught that physical activity and sports are excellent ways to spend their spare time, have fun, feel good, make new friends, and improve their health. They should be taught that winning or being the best is not the most important part, but being an active person is.
3. There are many more options available to adolescents for their spare time. Adolescence marks the beginning of adulthood and it makes it possible to engage in new types of "adult" activities that were previously forbidden or uninteresting. Many of these alternatives are often sedentary and unhealthy (e.g. smoking, drinking, nightlife, etc.).	3. There is strong socio-cultural pressure on adolescents of both sexes regarding how they should spend their spare time. Adults have an important role to play in teaching them that there are healthy alternatives. Although they may not seem to pay attention to us, adolescents value our opinion.
4. Conflicts managing time begin to appear. Schoolwork generally increases. There may also be a part-time job. In addition, adolescents sometimes have to help more often with household chores or work tasks. In addition, during adolescence, there is a greater desire to spend more time with peers, and sexual relationships begin.	4. In most cases there is no real lack of time, it is just a matter of becoming better organised. Help them organise their schedules. Adults should be involved in the activities of adolescents of both sexes in their spare time and help them make time for engaging in some form of physical activity.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

5. Parents and teachers begin to lose influence over adolescents of both sexes, while their friends, peers, and social environment acquire more importance.	5. In many cases, what adolescents do in their spare time will depend on what their peers do. If we have taught them and led an active lifestyle, they are more likely to maintain an active lifestyle.
6. Quite often, parents and teachers, either consciously or unconsciously, contribute to reducing the participation of adolescents of both sexes in physical activities. Adults often do not encourage participation in activities outside the school curriculum so that adolescents can devote more time to their studies. Sometimes, adults show less interest in the physical activities of adolescents, especially girls.	6. The “lack of time” for physical activity is usually the result of poor time management. Physical activity is necessary for the health of adolescents of both sexes and can improve their mental performance. A healthy perspective should be applied: if adolescents do not make time for physical activity, sooner or later they will be forced to devote time to illness. If we do not promote physical activity, we will be doing their health a disservice.
7. There may be little social value to physical activity. There is little social awareness that conveys the message that physical inactivity is unhealthy and unproductive (unlike obesity, smoking, or drinking). This problem is especially significant for girls, which probably contributes to the rapid decline in their participation in physical activities in comparison to boys.	7. If we ourselves are active, we will provide adolescents of both sexes with an excellent example they will tend to imitate. If we are not an active role model, we must demonstrate that we value and take into consideration the physical activity habits of adolescents.

Source: Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). *Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación* [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their education].

The change of behaviour of the child and adolescent population necessary to reach the minimum levels of physical activity

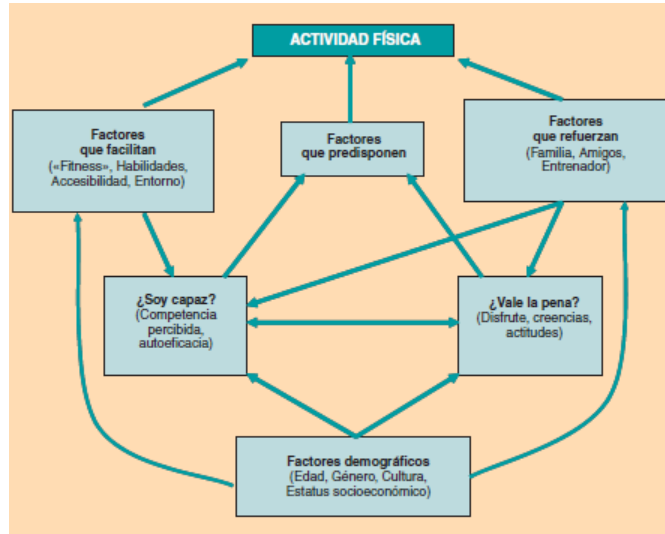
Any change in behaviour, in any population, requires multiple and varied efforts, personal motivations, and the availability of time. The most important factors to consider when trying to change physical activity behaviour in this population are motivations, barriers to physical activity, beliefs related to physical activity, attitudes and self-perceived effectiveness, as well as the development of self-perceptions and identity around physical activity. Understanding these factors allows us to know patients better and, as a result, to increase to the maximum the probabilities that they will engage in appropriate levels of physical activity (Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science, 2006).

One of the models proposed to specifically predict physical activity behaviour in children and adolescents is that of Welk (Welk, 1999). This model integrates the factors outlined above together with two psychological issues: “Am I capable?” and “Is it worth it?”

The Model for the Promotion of Physical Activity among Children and Adolescents is a promising tool for explaining and predicting the physical activity behaviour of children and adolescents, and can be used to provide guidance on how to effectively promote physical activity in this population.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Figure 3: The Model for the Promotion of Physical Activity among Children and Adolescents



Source: Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). *Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación* [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their

Table 6. Figure 3: The Model for the Promotion of Physical Activity among Children and Adolescents translation

Spanish	English
ACTIVIDAD FÍSICA	PHYSICAL ACTIVITY
Factores que facilitan (Fitness, Habilidades, Accesibilidad, Entorno)	Factors that facilitate (Fitness, Skills, Accessibility, Environment)
Factores que predisponen	Predisposing factors
Factores que refuerzan (Familia, Amigos, Entrenador)	Reinforcing factors (Family, Friends, Coach)
¿Soy capaz? (Competencia percibida, autoeficacia)	I am capable? (Perceived competence, self-efficacy)
¿Vale la pena? (Disfrute, creencias, actitudes)	Worth it? (Enjoy, beliefs, attitudes)
Factores demográficos (Edad, Género, Cultura, Estatus socioeconómico)	Demographic factors (Age, Gender, Culture, Socio-economic Status)

Practical suggestions for the promotion of physical activity in children and adolescents

Society as a whole is responsible for helping children include physical activity in their daily routines.

The following are some practical suggestions that may be of great use in helping the different players in the community, where health services are essential, to help children reach the minimum levels of physical activity.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

Table 7. Practical suggestions for the promotion of life-long physical activity in children and adolescents

<p><i>We all can:</i></p>	<ul style="list-style-type: none"> a) Advocate for the existence of adequate, safe, and conveniently located places for children and adolescents to play and engage in physical activity programmes. b) Influence school administrators and school board members to support daily physical activity and school programs that promote life-long physical activity, not only competitive sports. c) Set a good example by practising physical activity ourselves, making healthy nutritional choices, and not smoking. d) Talk to children and adolescents of both sexes about the sports and recreational programmes available in their community. e) Discourage the use of physical activity as punishment.
<p><i>Parents or guardians can:</i></p>	<ul style="list-style-type: none"> a) Encourage their children to be physically active. b) Find out their children's wishes for physical activity programmes and help them choose appropriate activities. c) Volunteer in their children's recreational programmes and sports teams. d) Play and be physically active with their children. e) Teach their children safety rules and ensure that they have the necessary clothing and equipment to participate safely in physical activities. f) Teach their children the principles of fair play and sportsmanship in physical activities and sports.
<p><i>Health professionals can:</i></p>	<ul style="list-style-type: none"> a) Provide assessments of physical activity levels of children and adolescents. b) Monitor obesity/overweightness, non-insulin-dependent diabetes, and other diseases or risk factors in children. c) Send children and adolescents of both sexes to high-quality school or community-based physical activity programmes where appropriate. d) Promote school environments that encourage physical activity. e) Promote community environments that encourage physical activity. f) Promote and develop home environments that encourage physical activity. g) Advise children and adolescents on how and why they should be physically active. h) Understand and be sensitive to cultural practices and beliefs that may interfere with physical activity. i) Promote programmes and physical activities that do not ignore or offend cultural beliefs. j) Establish reasonable and achievable physical activity targets in the short and long term.
<p><i>Teachers, coaches, activity instructors, and camp leaders can:</i></p>	<ul style="list-style-type: none"> a) Use curricula that follow national standards for physical education and health education. b) Ensure that students are physically active during physical education classes. c) Ensure that children and adolescents of both sexes are aware of safety standards and use appropriate clothing and equipment. d) Ensure that children and adolescents understand the principles of fair play and sportsmanship in physical activities and sports. e) Emphasise participation, activity, and having fun rather than competitiveness. f) Expose students to a series of different sports and physical activity choices. g) Help students feel competent in numerous motor and behavioural skills. h) Involve families and community organisations in physical activity programmes. i) Avoid the use of physical activity as a punishment; e.g. doing extra push-ups or laps.
<p><i>School administrators can:</i></p>	<ul style="list-style-type: none"> a) Demand health education and daily physical activity for all students. b) Ensure that physical education and after-school programmes offer life-long activities such as walks and dancing. c) Allocate time during the day (e.g. at recess) for unstructured physical activities, such as walking, skipping rope, or playing in recreational areas. d) Hire physical activity specialists and qualified coaches. e) Ensure that school facilities are safe, clean and open to students during non-school hours and holidays. f) Provide staff members with health promotion programmes. g) Provide teachers with internal training in the promotion of physical activity.
	<ul style="list-style-type: none"> a) Provide a combination of competitive and non-competitive team sports and life-long recreational and fitness activities.

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

<p><i>Community leisure or sports supervisors can:</i></p>	<ul style="list-style-type: none"> b) Increase the availability of parks, public swimming pools, bicycle lanes, and walking routes, as well as other places for physical activities. c) Ensure that physical facilities meet or exceed the safety criteria. d) Ensure that the people in charge of training children are properly qualified. e) Work with educational institutions, businesses, and community groups to ensure that low-income children and adolescents have adequate transportation and equipment to participate in physical activity programmes.
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Source: Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación [Physical Activity and Health in Children and Adolescents. A guide for all those who participate in their education].

REFERENCES

- Fundación para la Investigación Nutricional. (2016). *Informe 2016: actividad física en niños y adolescentes en España*. Recuperado de <https://www.activehealthykids.org/wp-content/uploads/2016/11/spain-report-card-long-form-2016.pdf>
- Lasheras, L., Aznar, S., Merino, B., & López, E. G. (2001). Factors Associated with Physical Activity among Spanish Youth through the National Health Survey. *Preventive Medicine*, 32(6), 455-464. <https://doi.org/10.1006/pmed.2001.0843>
- Physical Activity Guidelines Advisory Committee. (2018). *2018 Physical Activity Guidelines Advisory Committee Scientific Report*. Recuperado de <https://health.gov/paguidelines/second-edition/report/>
- Spanish Ministry of Health and Consumer Affairs; Ministry of Education and Science. (2006). *Actividad Física y Salud en la Infancia y la Adolescencia. Guía para todas las personas que participan en su educación*. Recuperado de <https://www.mscbs.gob.es/ciudadanos/proteccionSalud/adultos/actiFisica/docs/ActividadFisicaSaludEspanol.pdf>
- Welk, G. J. (1999). The youth physical activity promotion model: a conceptual bridge between theory and practice. *Quest (National Association for Physical Education in Higher Education)*, 51(1), 5-23.
- Madrid Health Service (2013). *Promoción de actividad y ejercicio físico en población infantil y adolescente de la comunidad de Madrid* [Promotion of physical activity and exercise among children and adolescents in the community of Madrid]., <http://www.madrid.org/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadervalue1=filename%3DPROMOCI%C3%93N+ACTIVIDAD+Y+EJERCICIO+F%C3%8DSICO+INFANCIA+Y+ADOLESCENCIA+PROFESIONALES+SANITARIOS.pdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1352884866443&ssbinary=true>

PROMOTION OF PHYSICAL ACTIVITY IN THE CHILD AND ADOLESCENT POPULATION

RINSAD

Journal of Childhood and Health, Revista Infancia y Salud (RINSAD) ISSN-L: 2695-2785, arises from the collaboration between administrations Portugal, Galicia, Castilla y León, Extremadura and Andalusia within the project [Interreg España-Portugal RISCAR](#) and aims to disseminate scientific articles related to child health, contributing to researchers and professionals in the field a scientific basis where to know the advances in their respective fields.

The two main orientations of the RINSAD magazine are:

- a) Researchers related to childhood and health.
- b) Professionals in the sector.

Total cost of the project (indicative): 2.418.345,92 €

Total approved FEDER: 1.813.759,48 €

[Interreg España - Portugal RISCAR, Universidad de Cádiz](#) project and [Departamento Enfermería y Fisioterapia del Universidad de Cádiz](#).

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