

Reigal, R.; Videra, A. y Gil, J. (2014). Práctica física, autoeficacia general y satisfacción vital en la adolescencia / Physical exercise, general self-efficacy and life satisfaction in adolescence. Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte, vol. 14 (55) pp. 561-576. <Http://cdeporte.rediris.es/revista/revista55/artdiseno480.htm>

ORIGINAL

PHYSICAL EXERCISE, GENERAL SELF-EFFICACY AND LIFE SATISFACTION IN ADOLESCENCE

PRÁCTICA FÍSICA, AUTOEFICACIA GENERAL Y SATISFACCIÓN VITAL EN LA ADOLESCENCIA

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Código UNESCO / UNESCO code: 6302.02: Psicología social / Social physchology

Clasificación Consejo de Europa / Classification Council of Europe: 16. Sociología del deporte / Sport sociology

Recibido 17 de enero de 2011 **Received** January 17, 2011

Aceptado 25 de mayo de 2013 **Accepted** May 25, 2013

ABSTRACT

The aim of this study is to examine the relationships between physical exercise, general self-efficacy and life satisfaction. Research participants are 2079 adolescents from the city of Malaga (Spain), aged between 14 and 17 years ($M=15.62$; $ST=.95$). It is a cross-sectional study, in which surveys are used to collect data. The instruments include a questionnaire about sociodemographic variables and physical exercise, the General Self-Efficacy Scale (GSE) and the Satisfaction with Life Scale (SWLS). Results show that people who are physically active have higher levels of general self-efficacy and life satisfaction and that there is a positive relationship between these constructs. Also, there are significant differences in the perception of self-efficacy depending on the frequency of

physical exercise per week and the social context in which the exercise is carried out.

KEYWORDS: physical activity, adolescence, general self-efficacy, life satisfaction

RESUMEN

El propósito de este trabajo es examinar las relaciones entre práctica física, autoeficacia general y satisfacción con la vida. Participan en la investigación 2.079 adolescentes de la ciudad de Málaga (España), en edades comprendidas entre los 14 y 17 años ($M=15,62$; $DT=0,95$). Se trata de un estudio transversal en el que se usa la encuesta como método para recoger los datos. Los instrumentos utilizados son un cuestionario de tipo sociodemográfico y sobre la práctica física realizada, la Escala de Autoeficacia General (EAG) y la Escala de Satisfacción con la Vida (SWLS). Los resultados indican que las personas activas tienen mayores niveles de autoeficacia general y satisfacción con la vida, y que existe una relación positiva entre estos constructos. Además, hay diferencias significativas en la percepción de autoeficacia en función de la frecuencia de práctica semanal y el contexto social en el que la desarrollan.

PALABRAS CLAVE: Actividad física, adolescencia, autoeficacia general, satisfacción vital.

INTRODUCTION

In psychological well-being research, the choice of variables with a positive leaning, leaving aside such others as depression, anxiety or neurosis, has become widespread in recent years (Laca, Verdugo and Guzmán, 2005; García, Matute, Tifner, Gallizo and Gil-Lacruz, 2007; Arruza et al., 2008; Oliva et al., 2010). Reina, Oliva and Parra (2010) highlight self-efficacy or life satisfaction as some of the most relevant constructs, especially at adolescence. During this period, a great deal of learning and changes take place, some of which can seriously affect people's health and be detrimental to their proper development. (Kimmel and Weiner, 1998; Alvariñas, 2004; Buhring, Oliva and Bravo, 2009).

The Self-efficacy Theory stems from the Social Cognitive Theory (Bandura, 1977, 1982), and brings to light the essential role that cognitive factors play in configuring each individual's conduct. Bandura (1986) defines self-efficacy as the judgements that each individual holds on his own competences, and regards them as essential to the organization and execution of his actions. He also argues that these perceptions rule the use of personal skills, because they work independently and heighten the necessary confidence to put those skills into use. Further more, he

explains that self-efficacy is developed through a complex process of factors, like enactive attainment, vicarious experience, social persuasion and physiological states (Weinberg y Stockham, 2000; Álvarez y Villamarín, 2004; Prieto, 2007).

Perceived self-efficacy gives individuals greater stimulus to face situations they have to cope with, putting more effort and persistence on those highly complex. It also makes people tackle those challenges they are confident to master, whereas those they do not feel they can successfully handle are bypassed. (Bandura, 1997). Although some opinions find this construct more useful in specific situations, (González and Tourón, 1992), several authors argue that a general perception of self-efficacy can be a valid measure to assess competences at large (Schwarzer, 1992; Schwarzer and Jerusalem, 1995; Sanjuán, Pérez and Bermúdez, 2000; Luszczynska, Scholz and Schwarzer, 2005; González and Landero, 2008).

Decisions taken throughout life depend, partly, on the ability to face successive challenges along the way and to adapt to new situations. That is why, when we decide to take up or to stick to a particular conduct, as for instance a specific kind of physical activity, self-efficacy plays an essential role (Ortega, 2005; Prieto, 2007). However, self-efficacy has a developmental nature. That is, it can change depending on everyone's experience and his interaction with the environment. As a matter of fact, an initial low level of self-efficacy can improve, if the individual finds himself in the right context and the results are satisfactory (González and Valdez, 2004).

Life satisfaction is the cognitive component of quality of life (Arita, 2005), by means of which individuals assess what they like of their existence (Veenhoven, 1994). It is based on personal opinions which compare current circumstances with desirable ones, by means of assessing priorities, tastes, job satisfaction, healthy states, relationships, abilities, etc. (Diener, Emmons, Larsen and Griffin, 1985; Pavot and Diener, 1993; García and González, 2000; Laca et al., 2005). It is a conscious judgement associated, among other factors, with the ability to face both circumstantial or everyday situations (Moreno, Muñoz, Pérez and Sánchez, 2005). On the other hand, Nuñez, Martín-Albo and Domínguez (2010) point out that they are key components to raise that perception, to adequately satisfy basic psychological needs like personal autonomy, perceived competence or interpersonal relationships.

Several studies have identified those positive correlations between self-efficacy and life satisfaction (Klein-Hessling, Lohaus y Ball, 2005; Khan y Husain, 2010). Personal characteristics are essential to foresee the level of subjective well-being, and self-efficacy is one of the most influential ingredients on people's thoughts and feelings (Bandura, 1992; Van Heck, 1997; DeNeve and Cooper, 1998). Among other factors, the way we face stressing events and the feeling of control that we apply to every situation are fundamental for the adequate psychosocial conduct of

individuals, as much in adult age as in adolescence (Chang, 1998; Grey, Boland, Sullivan-Bolyai and Tamborlane, 1998; Kohler, Fish and Greene, 2002; Wu, Tang and Kwok, 2004).

It is remarkable the wide and varied research work devoted to the repercussion of physical activity on psychological well-being, affecting a large number of factors (Salmon, 2001; Macone, Baldari, Zelli y Guidetti, 2006; Infante y Zulaica, 2008). Some studies have brought to light the influence of physical activity on the degree of both specific and general self-efficacy, at adolescence as much as other stages of life and other kinds of population (Holloway, Beuter and Duda, 1988; Kimiecik, Horn and Shurin, 1996; Ortega, 2005; Olivari and Urra, 2007) and life satisfaction too (Menec, 2003; McAuley et al., 2006; Stubbe, Moor, Boomsma and Geus, 2007; Castillo and Molina-García, 2009).

The aim of this study is to ascertain the links between physical activity and general self-efficacy and life satisfaction constructs, as well as the connections between both psychological measures. The hypothesis of this piece of research are: a) adolescents who do sport activity have a better perception of self-efficacy and life satisfaction, b) the value of the perception of efficacy varies depending on the social context where it is carried out, and c) there is a positive relationship between self-efficacy and life satisfaction.

MATERIAL AND METHOD

Sample

A total of 2079 adolescents from Malaga (Spain) took part in the study, 46.6% boys ($n=969$) and 53.4% girls ($n=1110$). They studied 3rd and 4th year compulsory secondary school and 1st year *bachillerato*, and ages ranged between 14 and 17 years ($M=15.62$; $DT= 0.95$). The sample was collected at random from the whole of all teenagers enrolled in those school years in Malaga city, by means of multistage, stratified, cluster sampling (Ramos, Catena and Trujillo, 2004). First stage units were schools, second stage units, classes, and third stage units, pupils. The margin of error for the whole sample, applying the finite population formula and assuming a hypothesis of maximum population variance ($p=q=50$) was 2.14% to a reliable level of 95%.

Instrument

Several questionnaires were used for data collation, comprising information on socio-demographic aspects, physical activity, social context where it was carried out, and degree of self-efficacy and life satisfaction.

Perceived personal efficacy was measured through the Generalized Self-Efficacy Scale (GSE) by Schwarzer and Jerusalem (1995), that is, the Spanish version developed by Baessler and Schwarzer (1996). It comprises 10 items (e.g. *I can achieve what I want regardless of anyone's opposition*) and measures the stable feeling of competence to deal with different situations. It has been used several times on Spanish populations and its psychometric properties are adequate (Martín et al., 2002). Sanjuan et al. (2000) obtained an internal consistency of 0.87 (Cronbach Alpha, 1951) and a split-half correlation of 0.88 (Spearman-Brown). Answers were given on a Likert scale of four possibilities, from *strongly disagree* (score 1) to *strongly agree* (score 4).

Life satisfaction was measured through the *Satisfaction With Life Scale* (SWLS, Diener et al., 1985), which comprises 5 items (e. g. *I am satisfied with my life*). In the original study, which was carried out on an undergraduate population, it reached a good internal consistency ($\alpha= 0,87$) and a high test-retest coefficient correlation ($r= 0,82$). Participants were given a Likert scale with 4 possible answers, from *strongly disagree* (score 1) to *strongly agree* (score 4). This scale has had its Spanish adapted and validated counterpart with teenage population (Atienza, Pons, Balaguer and García-Merita, 2000). Some studies have been carried out on Spanish population, revealing good properties to measure the construct (Tarazona, 2005; Martínez, Buelga and Cava, 2007; Nuñez et al., 2010).

Procedure

This research work applied a correlational, cross-cutting, non-experimental method (Salkind, 1999; Ramos et al., 2004). A survey was the tool to collect data, and it was carried out on the school premises after the required permits were obtained. Questionnaires were self-administered, but they were thoroughly explained before hand and researchers were present all along to solve any possible questions. They were filled out in the classroom in about 30 minutes. A total of 2237 questionnaires were collected, out of which 2079 were properly completed for good use.

Analysis of data

Inferential and descriptive analysis were made and the following techniques were used: t-student, Pearson correlation and one-factor ANOVA. The SPSS 15.0 pack was used.

RESULTS

Descriptive analysis and reliability of the instruments

Table 1 gives the descriptive data of each item in the GSE and SWLS scales and their respective totals. Reliability analysis revealed adequate internal consistency for GSE ($\alpha= 0,86$) and SWLS ($\alpha= 0,82$) scales.

Table 1. Descriptive data (GSE and SWLS)

	M	SD	Skewness	Kurtosis
GSE 1	3.04	0.73	-0.53	0.26
GSE 2	3.24	0.66	-0.63	0.69
GSE 3	2.95	0.75	-0.35	-0.17
GSE 4	2.94	0.7	-0.29	-0.05
GSE 5	2.95	0.71	-0.37	0.13
GSE 6	2.7	0.76	-0.15	-0.34
GSE 7	2.78	0.71	-0.21	-0.1
GSE 8	3.12	0.65	-0.51	0.75
GSE 9	2.9	0.69	-0.28	0.03
GSE 10	2.93	0.72	-0.35	0.00
Total	2.96	0.47	-0.06	0.73
SWLS 1	2.88	0.77	-0.41	-0.06
SWLS 2	2.97	0.72	-0.35	-0.04
SWLS 3	3.12	0.75	-0.63	0.18
SWLS 4	2.73	0.94	-0.18	-0.9
SWLS 5	3.11	0.72	-0.63	0.48
Total	2.96	0.6	-0.32	0.13

GSE and SWLS analysis depending on physical activity

Before comparing measures, normality was tested (*Kolmogorov-Smirnov*) for each scale and group. Results revealed that active respondents ($n= 1.246$), that is, those who used to take after-school physical activity, got better rates in the general self-efficacy scale than those who did not ($n= 833$), and the differences were statistically significant ($t_{2.077} = -8.18$, $p < 0.001$). Likewise, in the satisfaction with life scale, active respondents got better results than those who were not, and differences were statistically significant too ($t_{2.077} = -5.07$, $p < 0.001$) (see table 2).

Table 2. GSE and SWLS depending on physical activity.

		Z	M	DT	t-student
<i>Active</i>					
GSE	No	1.16 ^a	2.85	0.47	-8.18***
	Yes	1.23 ^a	3.02	0.46	
SWLS	No	0.87 ^a	2.88	0.6	-5.07***
	Yes	1.04 ^a	3.02	0.6	

^ap> 0.05; ***p< 0.001

If active adolescents were classified depending on weekly physical activity, 833 respondents did not do any sport activity, 757 of them did it *up to 3 times a week* [(GSE, M= 2.99; DT= 0.46) and (SWLS, M= 2.99; DT= 0.60)] and 489 of them did it *at least 4 times a week* [(GSE; M= 3.08; DT= 0.60) and (SWLS, M= 2.99; DT= 0.60)]. There were significant differences in GSE ($F_{[2,2.076]}=39.41$; p< 0.001) and SWLS among the three groups ($F_{[2,2.076]}=14.79$; p< 0.001). Since there was variance homogeneity among both GSE (Levene, $F_{[2,2.076]}= 0.49$; p> 0.05) and SWLS (Levene, $F_{[2,2.076]}= 0.14$; p> 0.05) values, multiple comparisons were taken by means of Tukey's HSD test (see table 3).

This test revealed significant differences in the GSE scale between the group that did not do any sport activity and the one that did (p< 0,001). Also, taking the active groups, there were differences between those with less weekly frequency and those with more, with a leaning on the latter (p< 0,01). In the SWLS, data indicated a significant increase in the rates of active respondents, although there were no significant differences between the group who was active up to 3 days a week and the one who was so no less than 4 days a week (p> 0,05).

Table 3. Multiple comparisons. GSE and SWLS results depending on frequency of physical activity.

(I) AWF	(J) AWF	Mean Difference (I-J)	
		GSE	SWLS
3 SPW or less	4 SPW or more	-0.09**	-0.07
	No	0.13***	0.11**
4 SPW or more	3 SPW or more	0.09**	0.07
	No	0.23***	0.18***
No	3 SPW or more	-0.13***	-0.11**
	4 SPW or more	-0.23***	-0.18***

p< 0.01, *p< 0.001

AWF = Activity weekly frequency ; SPW= Sessions per week

Also, correlations between GSE and SWLS were tested which revealed significant results between both constructs, as much in the general sample ($r_{2.079} = 0.41$; $p < 0.01$), as in active ($r_{1.246} = 0.37$; $p < 0.001$) and non-active participants ($r_{833} = 0.43$; $p < 0.001$).

Analysis of physical activity social context and GSE

Out of all the aspects that characterise physical activity, the social context the participant adolescents belong to was also analysed. Data revealed that there were no differences in GSE between those who used to do exercise on their own and those who did not ($t_{1.244} = -0.45$; $p > 0.05$), nor between those who did it with friends and those who did not ($t_{1.244} = 0.03$; $p > 0.05$) and neither between those who did it with family and those who did not ($t_{1.244} = -0.11$; $p > 0.05$). However, those who practised in a team got higher perceived efficacy ($t_{1.244} = -4.05$; $p < 0.001$) than those who did not do any team activity, and the difference was statistically significant (see table 4).

Table 4. GSE depending on social context of physical activity.

Kind of activity		M	DT	t-student
Alone	No	3.02	0.46	-0.45
	Yes	3.03	0.47	
With friends	No	3.02	0.5	0.03
	Yes	3.02	0.45	
With family	No	3.02	0.46	-0.11
	Yes	3.03	0.48	
Team activity	No	2.98	0.46	-4.05***
	Yes	3.09	0.46	

*** $p < 0.001$

DISCUSSION AND CONCLUSIONS

The findings of this piece of research work bring to light the positive correlation between practise of physical activity and some variables connected to subjective wellbeing. As a matter of fact, those adolescents who were physically active got higher scores than those who were not, in both questionnaires, General Self-Efficacy and Satisfaction with Life. These results match the findings of the literature of reference which motivated this research work and which links both these facts in the same way, in Spanish population as well as in other countries (Holloway et al.,

1988; Kimiecik et al., 1996; Blasco, 1999; Rimal, 2001; Olaz, 2004; Ortega, 2005; Stubbe et al., 2007; Castillo and Molina-García, 2009).

Concerning expectations of general efficacy, continuous physical activity is regarded as a source of successful happenings, which add to the acquisition of a wider range of competences and physical skills and all together bring higher self confidence (León, Medina y Munduate, 2008). That is, those who do physical activity more often have higher levels of self-efficacy, which matches assertions by Marcus, Eaton, Rossi and Harlow (1994), who expand on this fact by means of their piece of research. They argue that there are connections between a high rate of physical exercise and a higher feeling of self-efficacy, grounding their argument in the enhancement caused by the basic sources of information which feed such construct.

In line with what Balaguer, Escartí and Villamarín (1995) point out, changes in a motor task enhance firstly physical self-efficacy, but the self-esteem and confidence that they generate can aid other kinds of tasks too. Even more so for adolescents, for whom physical condition has a considerable effect upon other areas of their reality. Also, better physical feelings lead to achieve a more positive mood and a reduction of anxiety levels in front of the difficulties raised by circumstances (O'Neil, 1989; Biddle, 1995; Ortega, 2005; Macone et al., 2006). All of it contributes to increase self-confidence in a wide range of tasks and reinforces the possibility to use general self-efficacy as a valid construct for this kind of situations.

On the other hand, in addition to the psychological benefits, physical activity brings about cardiorespiratory, metabolic and motor improvements, among others of a physiological nature that must be taken into account. (Bailey, 1994; Landers and Petruzzello, 1994; Nieman, 1999; Salmon, 2001; Capdevila, 2005). Besides, those teenagers who get involved in that kind of activities usually increase their number of personal relationships, which enlarge their network of social support, which in turn contributes to raise up their satisfaction with life (Palenzuela, Gutiérrez and Avero, 1998).

In line with the conclusions of other pieces of research on different populations and age groups (Bandura, 1999; Rueda and Pérez-García, 2004; Navarro, Bueno, Buz and Mayoral, 2006; Avendaño and Barra, 2008; Khan and Husain, 2010), another issue included in this study is the positive relationship between personal self-efficacy and satisfaction with life. The range of maladjustments from either cognitive, affective and emotional sources that take place at adolescence can be controlled thanks to a higher feeling of personal efficacy, which brings better adaptation to the circumstances all along (Bandura, 1986; Guillén, Castro and Guillén, 1997; Chang, 1998; Grey et al., 1998; Salvador, 2009). A better perceived self-efficacy results into a more positive assessment with regard to belonging and

performance, which leads to feel life in a more satisfactory way (Sousa and Lyubomirsky, 2001).

The context where adolescents develop their physical activity has been studied and the conclusion is that those who do team activities achieve a higher degree of general self-efficacy. There is a connection between self-efficacy and the way the individual faces challenges and obstacles (Devellis and Devellis, 2000), hence, only those people who believe themselves more efficient dare tread into more hostile environments (Stock y Cervone, 1990). On the other hand, being immersed in an environment of this kind continuously generates interactions that give adolescents an endless source of information and improvement for their skills and abilities (Bandura, 1986). Besides, playing in these environments is more demanding, which provides greater workloads and improves physical condition, and that can increase perceived benefits of personal competences.

This study brings to light the connection between physical activity and perceived self-efficacy and satisfaction with life. Not disregarding the limitations of a cross-sectional study, the data point out the links between active lifestyles and psychological well-being. Besides, the characteristics of physical activity are components that determine a greater or lesser perceived personal efficacy, so that it would be interesting to deeply study those nuances in order to get a better knowledge of that phenomenon. Therefore, we think it necessary to state that physical activity must be an essential ingredient to reach higher well-being rates, and this matches other authors' assertions (Jones et al., 1998; Crews, Louchbaum and Landers, 2004), with an emphasis on such a crucial stage for people's life and development as it is adolescence.

REFERENCES

- Abril, V.J. y Musitu, G. (2000). Un estudio comunitario sobre salud mental en poblaciones de alto riesgo: Determinantes sociales, físicos y psicológicos. *Revista de Psicología Social Aplicada*, 10(2), 1-25.
- Álvarez, M. y Villamarín, F. (2004). El papel de la autoeficacia en el entrenamiento para controlar la frecuencia cardíaca durante pruebas de esfuerzo. *Psicothema*, 16(1), 50-57.
- Alvariñas, M. (2004). *Atribución casual en Educación Física y estilo de vida saludable*. Tesis Doctoral, Universidad de A Coruña. A Coruña (España).
- Arita, B. (2005). Satisfacción por la vida y teoría homeostática del bienestar. *Psicología y Salud*, 15(1), 121-126.
- Arruza, J.A., Arribas, S., Gil De Montes, L., Irazusta, S., Romero, S. y Cecchini, J.A. (2008). Repercusiones de la duración de la actividad físico-deportiva sobre el bienestar psicológico. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*, 8(30), 171-183.

- Atienza, F.L., Pons, D., Balaguer, I. y García-Merita, M. (2000). Propiedades psicométricas de la Escala de Satisfacción con la Vida en adolescentes. *Psicothema*, 12(2), 314-319.
- Avendaño, M.J. y Barra, E. (2008). Autoeficacia, apoyo social y calidad de vida en adolescentes con enfermedades crónicas. *Terapia Psicológica*, 26(2), 165-172.
- Baessler, J. y Schwarzer, R. (1996). Evaluación de la Autoeficacia: Adaptación Española de la Escala de Autoeficacia General. *Ansiedad y Estrés*, 2(1), 1-8.
- Bailey, K. (1994). Physical activity and skeletal health in adolescents. *Pediatric Exercise Science*, 6(4), 330-347.
- Balaguer, I., Escartí, A. y Villamarín, F. (1995). Autoeficacia en el deporte y en la actividad física: estado actual de la investigación. *Revista de Psicología General y Aplicada*, 48(1-2), 139-159.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1982). Self-efficacy in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. En R. Schwarzer (Ed.), *Self-Efficacy: thought control of action* (pp. 3-38). Washington, DC: Hemisphere.
- Bandura, A. (1997). *Self-efficacy: The exercise of Control*. New York: Freeman.
- Bandura, A. (1999). *Autoeficacia: Cómo afrontamos los cambios en la sociedad actual*. Bilbao: Desclée de Brouwer.
- Biddle, S. (1995). Exercise and psychosocial health. *Research Quarterly for Exercise and Sport*, 66(4), 292-297.
- Blasco, T. (1999). Competencia personal, autoeficacia y estrés en árbitros de ciclismo. *Revista de Psicología del Deporte*, 8(2), 195-205.
- Buhring, K., Oliva, P. y Bravo, C. (2009). Determinación no experimental de la conducta sedentaria en escolares. *Revista Chilena de Nutrición*, 1(36), 23-29.
- Capdevila, L. (2005). *Actividad física y estilo de vida saludable*. Girona: Documenta Universitaria.
- Castillo, I. y Molina-García, J. (2009). Adiposidad corporal y bienestar psicológico: efectos de la actividad física en universitarios de Valencia, España. *Revista Panamericana de Salud Pública*, 26(4), 334-340.
- Chang, E.C. (1998). Dispositional optimism and primary and secondary appraisal of a stressor: Controlling for confounding influences and relations to coping and psychological and physical adjustment. *Journal of Personality and Social Psychology*, 74(4), 1109-1120.

- Crews, D., Louchbaum, M. y Landers, D. (2004). Aerobic physical activity effects on psychological well-being in low-income Hispanic children. *Perceptual and Motor Skills*, 98(1), 319-324.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of test. *Psychometrika*, 16, 297-234.
- DeNeve, K.M. y Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197-229.
- Devellis, B. y Devellis, R. (2000). Self-efficacy and Health. En T. Baum, A. Revenson y J. Signer (Eds.), *Hand-book of Health Psychology* (pp. 235-247). Mahwah, NJ: Lawrence Erlbaum.
- Diener, E., Emmons, R., Larsen, R.J. y Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- García, C. y González, I. (2000). La categoría bienestar psicológico, su relación con otras categorías sociales. *Revista Cubana de Medicina Integral*, 16(6), 586-592.
- García, Y., Matute, S., Tifner, S., Gallizo, M.E. y Gil-Lacruz, M. (2007). Sedentarismo y percepción de la salud: Diferencias de género en una muestra aragonesa. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*, 7(28), 344-358.
- González, M.T. y Landero, R. (2008). Síntomas psicosomáticos y estrés: comparación de un modelo estructural entre hombres y mujeres. *Ciencia UANL*, 11(4), 403-410.
- González, M.C. y Tourón, J. (1992). *Autoconcepto y rendimiento escolar*. Pamplona: EUNSA.
- González, N. y Valdez, J. (2004). Un estudio sobre la autoeficacia en jóvenes mexicanos. *Psicología Conductual*, 12(1), 167-178.
- Grey, M., Boland, E., Yu, C., Sullivan-Bolyai, S. y Tamborlane, W. (1998). Personal and family factors associated with quality of life in adolescents with diabetes. *Diabetes Care*, 21(6), 909-914.
- Guillén, F., Castro, J.J. y Guillén, M.A. (1997). Calidad de vida, salud y ejercicio físico: una aproximación al tema desde una perspectiva psicosocial. *Revista de Psicología del Deporte*, 6(2), 91-107.
- Holloway, J.B., Beuter, A. y Duda, J.L. (1988). Self-efficacy and training for strength in adolescent girls. *Journal of Applied Social Psychology*, 18(8), 699-719.
- Infante, G. y Zulaica, L. (2008). Actividad física y autoconcepto físico. En A. Goñi (Ed.), *El autoconcepto físico* (pp. 125-153). Madrid: Pirámide.
- Jones, D., Ainsworth, B., Croft, J., Macera, C., Lloyd, E. y Yusuf, H. (1998). Moderate leisure-time physical activity – Who is meeting the public health recommendations? A national cross-sectional study. *Archives of Family Medicine*, 7(3), 285-289.

- Khan, A. y Husain, A. (2010). Social support as a moderator of positive psychological strengths and subjective well-being. *Psychological Reports*, 106(2), 534-538.
- Kimiecik, J., Horn, T. Y Shurin, C. (1996). Relationships among children's Beliefs, perceptions of their parents' beliefs and their moderate-to-vigorous physical activity. *Research Quarterly for Exercise and Sport*, 63(3), 324-336.
- Kimmel, D.C. y Weiner, I.B. (1998). *La adolescencia: una transición del desarrollo*. Barcelona: Ariel Psicología.
- Klein-Hessling, J., Lohaus, A. y Ball, J. (2005). Psychological predictors of health-related behaviour in children. *Psychology, Health and Medicine*, 10(1), 31-43.
- Kohler, C., Fish, L. y Greene, P. (2002). The relationship of perceived self-efficacy to quality of life in chronic obstructive pulmonary disease. *Health Psychology*, 21(6), 610-614.
- Laca, F.A., Verdugo, J.C. y Guzmán, J. (2005). Satisfacción con la vida de algunos colectivos mexicanos: una discusión sobre la psicología del bienestar subjetivo. *Revista de Enseñanza e Investigación en Psicología*, 10(2), 325-336.
- Landers, D.M. y Petruzzello, S.J. (1994). Physical activity, fitness and anxiety. En C. Bouchard, R.J. Shephard y T. Stephens (Eds.), *Physical activity, fitness, and health* (pp. 213-226). Champaign, IL: Human Kinetics.
- León, J.M., Medina, F.J. y Munduate, L. (2008). Relaciones curvilíneas de la autoeficacia en la negociación. *Revista de Psicología Social*, 23(2), 181-191.
- Luszczynska, A., Scholz, U. y Schwarzer, R. (2005). The general self-efficacy scale: Multicultural validation studies. *The Journal of Psychology*, 139(5), 439-457.
- Macone, D., Baldari, C., Zelli, A. y Guidetti, L. (2006). Music and physical activity in psychological well-being. *Perceptual and Motor Skills*, 103(1), 285-295.
- Marcus, B., Eaton, C., Rossi, J. Y Harlow, L. (1994). Self-efficacy, decision making, and stages of change: An integrative model of physical exercise. *Journal of Applied Social Psychology*, 24(6), 489-508.
- Martín, M., Pastor, M.A., Castejón, J., Lledó, A., López, S., Terol, M.C. y Rodríguez-Marín, J. (2002). Valoración preliminar de la escala de Autoeficacia General en una muestra española. *Revista de Psicología Social Aplicada*, 12(2), 53-65.
- Martínez, Mª., Buelga, S. y Cava, Mª.J. (2007). La satisfacción con la vida en la adolescencia y su relación con la autoestima y el ajuste escolar. *Anuario de Psicología*, 38(2), 5-15.
- McAuley, E., Konopack, J., Morris, K., Motl, R., Hu, L., Doerksen, S. y Rosengren, K. (2006). Physical activity and functional limitations in older women: influence of self-efficacy. *Journal of Gerontology: Psychological Sciences*, 61(5), 270-277.

- Menec, V.H. (2003). The relationship between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology: Social Sciences*, 58B(2), S74-S82.
- Moreno, C., Muñoz, V., Pérez, P.J. y Sánchez, I. (2005). *Los adolescentes españoles y su salud. Análisis de los chicos y chicas de 11 a 17 años (HBSC-2002)*. Madrid: Ministerio de Sanidad y Consumo.
- Navarro, A.B., Bueno, B., Buz, J. y Mayoral, P. (2006). Percepción de autoeficacia en el afrontamiento de los problemas y su contribución en la satisfacción vital de las personas muy mayores. *Revista Española de Geriatría y Gerontología*, 41(4), 222-227.
- Nieman, D. (1999). *Exercício e Saúde*. São Paulo: Manole.
- Nuñez, J.L., Martín-Albo, J. y Domínguez, E. (2010). Propiedades psicométricas de la Escala de Satisfacción con la Vida en sujetos practicantes de actividad física. *Revista de Psicología del Deporte*, 19(2), 291-304.
- Olaz, F.O. (2004). Aportes del meta-análisis a la teoría de la autoeficacia para el desarrollo de la carrera. *Estudios de Psicología*, 25(1), 57-72.
- Oliva, A., Ríos, M., Antolín, L., Parra, A., Hernando, A. y Pertegal, A. (2010). Más allá del déficit: Construyendo un modelo de desarrollo positivo adolescente. *Infancia y Aprendizaje*, 33(2), 223-234.
- Olivari, C. y Urra, E. (2007). Autoeficacia y conductas de salud. *Ciencia y Enfermería*, 13(1), 9-15.
- O'Neill, M.P. (1989). Physical self-concept and psychological mood states: their relationship to aerobic exercise. *Dissertation Abstracts International*, 50, 4780.
- Ortega, E. (2005). *Autoeficacia y deporte*. Sevilla: Wanceulem.
- Palenzuela, D.L., Gutiérrez, M. y Avero, P. (1998). Ejercicio físico regular como un mecanismo de protección contra la depresión en jóvenes. *Psicothema*, 10(1), 29-39.
- Pavot, W. y Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5(2), 164-172.
- Ponce de León, A. (1998). Análisis de la Educación Física escolar desde la perspectiva de una educación para el tiempo libre. *Apunts*, 51, 23-34.
- Prieto, L. (2007). *Autoeficacia del profesor universitario*. Madrid: Nancea S.A. Ediciones.
- Ramos, M.M., Catena, A. y Trujillo, H.M. (2004). *Manual de métodos y técnicas de investigación en ciencias del comportamiento*. Madrid: Biblioteca Nueva.
- Reina, C., Oliva, A. y Parra, A. (2010). Percepciones de autoevaluación: Autoestima, autoeficacia y satisfacción vital en la adolescencia. *Psychology, Society & Education*, 2(1), 47-59.
- Rimal, R. (2001). Longitudinal influences of knowledge and self-efficacy on exercise behavior: Test of a mutual reinforcement model. *Journal of Health Psychology*, 6(1), 31-46.

- Rueda, B. y Pérez-García, A.M. (2004). Personalidad y percepción de autoeficacia: influencia sobre el bienestar y el afrontamiento de los problemas de salud. *Revista de Psicopatología y Psicología Clínica*, 9(3), 205-219
- Salkind, N.J. (1999). *Métodos de investigación*. México: Prentice Hall.
- Salmon, P. (2001). Effects of physical exercise on anxiety, depression and sensitivity to stress: a unifying theory. *Clinical Psychology Review*, 21(1), 33-61.
- Salvador, C.M. (2009). Ecuaciones estructurales como modelos predictivos de una autoeficacia emprendedora en una muestra de jóvenes mexicanos y españoles. *Apuntes de Psicología*, 27(1), 65-78.
- Sanjuán, P., Pérez, A.M. y Bermúdez, J. (2000). Escala de autoeficacia general: datos psicométricos de la adaptación para población española. *Psicothema*, 12(supl. 2), 509-513.
- Schwarzer, R. (1992). *Self-Efficacy: Thought Control of Action*. Berlin: Universidad de Berlin.
- Schwarzer, R. y Jerusalem, M. (1995). Generalized Self-Efficacy scale. En J. Weinman, S. Wright y M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Casual and control beliefs* (pp. 35-37). Windsor, UK: NFER-Nelson.
- Sousa, L. y Lyubomirsky, S. (2001). Life satisfaction. En J. Worell (Ed.), *Encyclopedia of women and gender: Sex similarities and differences and the impact of society on gender* (Vol. 2) (pp. 667-676). San Diego, CA: Academic Press.
- Stock, J. y Cervone, D. (1990). Proximal goal-setting and self-regulatory processes on complex decision making performance. *Cognitive Therapy and Research*, 14(5), 483-498.
- Stubbe, J.H., Moor, M.H.M., Boomsma, D.I. y Geus, E.J.C. (2007). The association between exercise participation and well-being: A co-twin study. *Preventive Medicine*, 44(2), 148-152.
- Tarazona, D. (2005). Autoestima, satisfacción con la vida y condiciones de habitabilidad en adolescentes estudiantes de quinto año de media. Un estudio factorial según pobreza y sexo. *Revista de Investigación en Psicología*, 8(2), 57-65.
- Van Heck, G.L. (1997). Personality and physical health: Toward an ecological approach to health-related personality research. *European Journal of Personality*, 11(5), 415-443.
- Veenhoven, R. (1994). El estudio de la satisfacción con la vida. *Intervención Psicosocial*, 3(9), 87-116.
- Weinberg, R.S. y Stockham, J. (2000). The importance of analyzing position-specific self-efficacy. *Journal of Sport Behaviour*, 23(1), 60-69.
- Wu, A., Tang, C. y Kwok, T. (2004). Self-efficacy health locus of control and psychological distress in elderly Chinese women with chronic illnesses. *Aging Mental Health*, 8(1), 21-28.

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