The goal orientation of the lifesavers and the relationship with the satisfaction and the beliefs about the causes of success in sport

Las orientaciones de meta disposicionales y su relación con las creencias sobre las causas del éxito y la satisfacción intrínseca en los practicantes de salvamento acuático deportivo

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Summary

The purpose of this study is two-fold: first, to analyse the relationship between the existing orientation of achievement goals, beliefs about the causes of success, and the degree of intrinsic satisfaction; and second, to verify the main effects of gender interaction in such scales. The sample was composed of 163 professional lifeguards. A descriptive analysis of the multiple variables that were studied was done, as well as a multivariate analysis of variance. A multivariate linear regression by steps was done with the intention of analysing the importance of the various subscales in the prediction of a specific behaviour of professional lifeguards. The majority of the specialists demonstrated a task orientation and enjoyed practicing sports. They believe that with effort, success can be reached in sports.

Key words: lifeguarding, water sports, motivation, goal orientation, causes of success, intrinsic satisfaction.

Resumen

El propósito del estudio fue doble: por un lado, analizar las relaciones existentes entre la orientación disposicional de las metas de logro, las creencias sobre las causas del éxito y el grado de satisfacción intrínseca; y, por otro, constatar los efectos principales y de interacción del sexo sobre dichas escalas. La muestra la formaron 163 especialistas en salvamento acuático deportivo. Se realizó un análisis descriptivo de las diferentes variables investigadas, un análisis multivariante de la varianza y un análisis de regresión lineal multivariado por pasos con la intención de analizar la importancia de las diferentes subescalas en la predicción de un comportamiento determinado de los especialistas. Los resultados muestran que la mayoría de los especialistas revelan una orientación hacia la tarea, se divierten con la práctica deportiva y piensan que a través del esfuerzo se alcanza el éxito en el deporte.

Palabras clave: salvamento acuático deportivo, motivación, orientación de meta disposicional, causas del éxito, satisfacción intrínseca.

Nowadays we understand motivation as a very complex and dynamic process in which diverse variables interact. Motivation can be used to explain the behaviour of athletes (Roberts, 1992). Nowadays, the majority of investigations in motivational physiology that have been carried out in a sport environment have been framed in a socio-cognitive perspective which is founded on the expectations and values people put into their tasks and activities (Roberts, 1995).

In the same way, these investigations support the theory of the perspective of goals and the concept of motivation for achievement of tasks (Cecchini, Méndez & Muñiz, 2003). According to this point of view, situated between the contemporary approaches of the motivational theories of achievement (Castillo, Balaguer & Duda, 2000; Nicholls, 1984, 1989) the objectives of achievement that we possess define the beginning as well as the continuation and the abandonment of behaviours (Jiménez-Castuera, Cervelló, García-Calvo, Santos-Rosa & Iglesias, 2007).

One of the fundamental principles of this theory sustains that people apply these contexts of achievement to demonstrate competence or ability (Cecchini et al., 2003; Cervelló & Santos-Rosa, 2000). Contexts of achievement are those in which people can participate and in which they can be influenced by people in their family, educational, and or sports surroundings (Moreno, López, Martínez, Alonso & González-Cutre, 2006).

Nicholls (1989) states that people conceive their ability and judge their competitors in relation to two perspectives of achievement which subjectively define success and failure. On the one hand is the orientation towards the task or the skill involved, and on the other hand is the orientation towards the ego or towards the result. Those athletes that are directed towards the task perceive the experience as an activity that strengthens their ability to cooperate and increases their interest in learning, complying with rules, honesty, extreme effort, personal progress, social responsibility, improvement in their health, and the perfection of skills in the sport they chose to practice.

These athletes have as an objective in their training the development of new skills and self-comparison. On the contrary, we find that the athletes who are oriented towards ego are those who look for a demonstration of their ability in relation to the rest so as to surpass their rivals or to obtain the same results with minimal effort. These athletes perceive sports as a means of acquiring greater acknowledgment and social status, through this increasing their popularity and possibly improving their financial situation (Balaguer, Castillo & Duda, 2003; Cervelló, Escartí & Balagué, 1999; Duda, 2001). Therefore, and continuing from the previous explanation, depending on how an athlete perceives their aim depends how a task or circumstance will be felt, interpreted and responded to for its achievement (Castillo, Balaguer, Duda & García-Merita, 2004).

On the other hand, highlighting goal orientation is a good predictor of certain motivational variables such as certain beliefs about the reasons for success in sports (Duda, Fox, Biddle & Armstrong, 1992; Moreno, Cervelló & González-Cutre, 2007; Newton & Duda, 1993; Treasure & Roberts, 1994) and the enjoyment of or satisfaction with such sport practice (Cecchini, González, Carmona & Contreras, 2004; Cervelló, Fuentes & Sanz, 1999; Duda & Nicholls, 1992; Duda et al., 1992; Hom, Duda & Miller, 1993; Stucky-Ropp & DiLorenzo, 1993).

From the diverse results of the studies we are able to state that an orientation towards the task is related to the belief that success in sports is achieved through hard work and that even failure is perceived as an element of learning that leads to improvement. Even more importantly, the practice of sport is seen as having the specific purpose of personal improvement and cooperation with others. More pleasure, satisfaction and intrinsic motivation is obtained regardless of the level of competition perceived or the results of the competition, and this leads to greater commitment due to the fact that we persevere in those activities that are fun.

On the contrary, an orientation towards the ego is related to achieving success in sports through great effort or capability and also the use of cheating techniques. Under this orientation, boredom arises and the element of fun is no longer important in the performance of the sport. These athletes find themselves with an inferior level of motivation; they have difficulty maintaining a sense of competitiveness when they perform the activity and present patterns of inadequate behaviour. They tend to disassociate themselves from the practice of sport, especially when small difficulties arise or when they begin to question their own skills (Castillo, Balaguer & Duda, 2002; Cecchini et al., 2004; Cervelló & Santos-Rosa, 2001; Walling, Duda & Crawford, 2002). Even their sense of competitiveness is low (Cervelló, 1999). Therefore, depending on the orientation adopted, the factors of pleasure experienced by the athletes in training and competition can change (Lochbaum & Roberts, 1993; Roberts, Hall, Jackson, Kimiecik & Tonymon, 1995; Treasure & Roberts, 1994).

Even so, the objectives that the study represents are the following: Firstly, to analyse the relationship that

exists between the dispositional orientation of goals, the beliefs about the causes of success and the levels of satisfaction in a Lifesaving context; secondly, considering that the studies carried out to date have shown differences between genders in lifesavers (Castillo et al., 2002), the aim is to demonstrate these differences in the lifesaving context.

Finally, as a way to increase knowledge about this sport and to emphasise that although this type of water sport that has few followers in Spain, it produces great results at a national and international level (Abraldes & Rodríguez-Suárez, 2008). This sport modality includes two types of tests: swimming in pools and swimming in open water. Among the noteworthy pool tests are covering diverse distances, obstacles, pulling a dummy, the use of flippers and rescue tubes, etc., whereas the tests in open water consist of races on the beach, swimming in the sea and avoiding buoys and picking up people, swimming with boards, and ski paddling (Moreno, Cano, González-Cutre, Cervelló, & Ruiz, 2009). In the end, the lack of studies that may help broaden knowledge about water rescue on an international and national level may be due to the fact that this sport is not practiced as much as other sports (Abraldes, 2009).

Method

Participants

Participants were 163 swimmers, specialists in Rescue and Lifesaving, from the youth to the senior category (age: *M* = 18.23; *SD* = 4.02) whose clubs participated in the Youth, Junior, and Absolute Championships in Spain. The sample was made up of 92 men (*M* = 18.80; *SD* = 4.32) and 71 women (*M* = 17.61; *SD* = 3.55) from all the participant clubs.

Instruments

Perception of Success Questionnaire (POSQ; Roberts & Balagué 1989, 1991; Roberts, Treasure & Balagué, 1998). The scale measures the dispositional orientation of achievement tasks within the sports performance context. We used the Spanish version (Cervelló et al., 1999), which has 12 items, six about the dispositional implication on the task and the remaining six on the ego. Participants were asked to answer questions such as: *"When playing sport, I feel most successful when..."*. The answers were recorded on a Likert scale and ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Sport Satisfaction Instrument (SSI; Duda & Nicholls, 1992). This instrument was constructed to determine the enjoyment dimension of sport participation. We used the Spanish version (Balaguer, Atienza, Castillo, Moreno, & Duda, 1997; Castillo et al., 2002, 2004), which has 8 items divided into two scales that measure Satisfaction/Enjoyment (5 items) and Boredom (3 items) during sport practice. Participants were requested to rate their degree of agreement with the items that reflect enjoyment or boredom on a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Beliefs about the Causes of Success in Sport Questionnaire (BACSSQ; Duda & Nicholls, 1992). We used the Spanish version of the inventory (Balaguer, Mayo & Atienza, 1997; Castillo et al., 2002), which has 18 items that measure participants' beliefs about Effort (9 items), Ability (4 items), and the use of Deception (5 items) leading to success in sport. Participants were asked, "*What do you think people should do to be more successful in the sport they practice more often?*" Responses are rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Procedure

We requested permission from the Spanish Federation of Rescue and Lifesaving, the organising office and the participant clubs to perform the study. The request was sent via a letter in which we explained the goals of the investigation, how it would be carried out, and we also provided an example of the instrument. The questionnaire was administered by the researchers during training sessions of the participant teams the day before the competition. All participants were informed about the goals of the study, the voluntary nature of their participation, the confidentiality of their responses and of the data treatment, and that there were no right or wrong responses. Participants were asked to respond with the utmost sincerity and honesty. It took about 30 minutes to complete the instrument. Ethical procedures were followed at all times during the data collection.

Statistical analysis

The analysis of the items, homogeneity, consistency of each subscale (Cronbach's α), analysis of variance and linear regression were carried out using SPSS 17.0. The structures underlying the questionnaires used in this research have been consistently determined in the literature. Therefore, the psychometric properties have been analysed following the *confirma-*

tory factor analysis (*CFA*) and using the maximum likelihood method of the AMOS 18.0 program. In order to either accept or reject a model it is more appropriate to use a combination of different indexes (Bentler, 1995). Hence, we have taken into account some of the most used indexes throughout this research, namely chi-squared random variables divided by their respective *degrees of freedom* (χ^2/df), the *goodness-of-fit index* (*GFI*), the *Root mean square residuals* (*RMSR*), the *Comparative fit index* (*CFI*) and the *Root Mean Square Error of Approximation* (*RMSEA*). The variable χ^2 indicates a resemblance between those observed with those found in the hypothetical model, but, as it is very sensitive to the sampling, authors such as Jöreskog and Sörbom (1993) recommend that it is completed with χ^2/df. According to this, values that are lower than 2 denote a very good adjustment to the model, and values below 5 are considered acceptable (Bollen & Long, 1994; Hu & Bentler, 1999). In the *RMSR* index, values that are equal or inferior to .10 (Cole & Maxwell, 1985) are accepted. Values below .08 indicate a good adjustment to the model, and values that are inferior to .06 denote an excellent adjustment. Finally, values above .90 in the *GFI* and *CFI* (Jaccard & Wan, 1996) indexes designate a good adjustment to the models. For the *RMSEA*, values between .5 and .10 (ideally equal or less than .08) (Cole & Maxwell, 1985; Jöreskog & Sörbon, 1993) are regarded as acceptable.

Descriptive statistics and asymmetrical kurtosis have been calculated close to zero and <2, as recommended by Bollen and Long (1994). This indicates a resemblance between the normal curve and the singular form and this allows for the use of factorial techniques of maximum likeness in the analysis. The reliability between each subscale purpose has been calculated by the authors of Cronbach's α International internal consistency index. The differences related to gender in relation to the different dimensions of the scales have been obtained using variance analysis. To analyse the subscales sports satisfaction instrument and the perception of success, a linear regression analysis was employed.

Results

Psychometric properties of the instruments

The internal consistency analysis of the POSQ has resulted satisfactory for both the subscale *Ego* ($a > .94$) and the *Task* ($a_{male} > .97$ and $\alpha_{female} > .93$), like the *Task* ($a > .80$) ($\alpha_{male} > .75$ and $\alpha_{female} > .86$). In the analysis, none of the items were eliminated since they complied with the established requirements, with an *eigenvalue* > 1 and a minimal correlation between variable superior to a .45 (Pedhazur, 1982). The homogeneity analysis suggests that there are no overlaps of items between the two theoretical dimensions. The model that has been put into practice predicts the existence of two latent variables: dispositional goal orientation towards the ego (*Ego*) and dispositional goal orientation towards the task (*Task*). This underlies the 12 items and provides an account of the covariances observed between them. The Chi squared test was significant ($\chi^2_{(53)} = 137.38$; $p \leq .000$), with the original model showing an adequate goodness of fit index as the results were: $\chi^2/df = 2.59$; *GFI* = .92; *CFI* = .93; *RMSR* = .06; *RMSEA* = .07.

The internal consistency analysis of the SSI was also satisfactory in its different dimensions. The subscale of *Fun* has obtained a $a > .80$ ($a_{male} > .77$ and $\alpha_{female} > .81$) and *Boredom* a $a > .60$ ($a_{male} > .59$ and $\alpha_{female} > .66$). Although in our study this factor showed a reliability or alpha value lower than the recommended .70 (Nunnally, 1978; Peterson, 1994), due to a small number of items (three) composing the different factors, the observed internal validity can be marginally accepted (Hair, Anderson, Tatham & Black, 1999; Nunnally & Bernstein, 1994). In the analysis, none of the items were eliminated since they complied with the requirements that were established, with an *eigenvalue* > 1 and a minimal correlation between variable superior to .45 (Pedhazur, 1982). The Chi squared test was significant ($\chi^2_{(19)} = 41.9$; $p \leq .002$), with the original model showing an adequate goodness of fit index as the results were: $\chi^2/df = 2.21$; *GFI* = .91; *CFI* = .93; *RMSR* = 0.05; *RMSEA* = 0.06.

The internal consistency analysis of BACSSQ showed satisfactory results. The subscale of *Effort* obtained $a > .87$ ($a_{male} > .84$ and $\alpha_{female} > .89$), *Ability* obtained $a > .80$ ($a_{male} > .70$ and $\alpha_{female} > .80$), and *Cheating Techniques* obtained $a > .89$ ($a_{male} > .89$ and $\alpha_{female} > .89$). In the analysis, none of the items were eliminated since they complied with the requirements that were established, with an *eigenvalue* > 1 and a minimal correlation between variable superior to .45 (Pedhazur, 1982). The Chi squared test was significant ($\chi^2_{(74)} = 169.51$; $p \leq .000$), with the original model showing an adequate goodness of fit index as the results were: $\chi^2/df = 2{,}291$; *GFI* = .92; *CFI* = .90; *RMSR* = .04; *RMSEA* = .04.

Descriptive analysis

Table 1 shows the descriptive analysis of each of the variables in the investigation. With regard to measures, in the perception of success, higher scores can be observed on *Task* orientation ($M = 4.23$) than on *Ego*

Table 1. Mean (M), standard deviation (SD) and Cronbach's coefficient (α) of the subscales of POSQ, SSI and BACSSQ. Differences between genders.

	Total			Male			Female			F	p
	M	SD	α	M	SD	α	M	SD	α		
Perception of Success											
Ego	3.06	1.15	.94	3.50	1.07	.97	2.49	.99	.93	35.10	***
Task	4.23	.59	.80	4.25	.57	.75	4.19	.63	.86	-	n.s.
Satisfaction											
Enjoyment	4.26	.61	.80	4.28	.61	.77	4.24	.62	.81	-	n.s.
Boredom	2.51	.92	.60	2.60	.94	.59	2.35	.85	.66	-	n.s.
Beliefs About Causes of success											
Effort	4.08	.68	.87	3.98	.70	.84	4.20	.65	.89	3.80	*
Ability	3.23	.94	.80	3.60	.77	.70	2.74	.94	.80	36.33	***
Deception	2.17	1.17	.89	2.36	1.24	.89	1.91	.99	.89	4.17	*

Note: *p<.05; ***p<.001; n.s. = not significant

orientation (*M* = 3.06). Furthermore, within *Sports Satisfaction*, the factors related to *Fun* (*M* = 4.26) have higher scores than *Boredom* (*M* = 2.51). Finally, *Effort* (*M* = 4.08) has more value than *Perception of Success*, followed by *Ability* (*M* = 3.23). The lowest average corresponds with *Cheating Techniques* (*M* = 2.17).

Principal effects and gender interaction regarding success perception, satisfaction and success beliefs

A multivariate analysis was carried out in which gender was considered an independent variable and in which the goal orientation, satisfaction and success beliefs perception subscales were considered dependent variables (table 1). The result of multivariate contrasts exposed an interaction effect between gender and success perception dimensions (Wilks Lambda = .806; $F_{(2, 151)}$ = 18.14; $p \leq .000$) and perception of success beliefs (Wilks Lambda = .786; $F_{(3, 141)}$ = 12.81; $p \leq .000$). In relation to perceptions about success, the inter-subject effect tests showed that significant differences occurred in the *ego orientation* (*F* = 35.10; $p \leq .000$), with mean values higher for males (*M* = 3.50), as shown in table 1. Also, gender differences in success beliefs perception were found in the three dimensions of that scale, although, it is in the *capacity dimension* (*F* = 36.33; $p \leq .000$) where more differences were found, with higher values among males (*M* = 3.60), who also use more *cheating techniques* (*F* = 4.17; $p \leq .05$); while females (*M* = 4.20) *work harder* than males (*M* = 3.98) (*F* = 3.80; $p \leq .05$).

Regression Analysis

With the aim of studying the importance of the subscales that intervene in this study to predict determined behaviours of swimmers in their orientation towards the ego and their orientation towards the task, a stepwise regression analysis was carried out. The criteria variable taken was the average score of the orientation towards the ego and orientation towards the task. The predictive variables used were the different Sport Satisfaction Instrument and Perception of Beliefs in Success subscales. Gender was also used as a variable.

In Table 2, results of the Regression Analysis were shown. The aim was to verify the different variables in the Ego. For both male and female swimmers, ability was the main variable of the Ego. For males, a number of variables more specifically influenced it. For males, the analysis can be seen with a total of 28%. In the first step, *Ability* (ß = .54) predicts a positive orientation of Ego with an explained variance of 15%. In the second step, 23% of the total variance was reached, showing an *Ability* (ß = .56), the *effort,* as a predictor variable, in a negative and significant way (ß = -.44). This demonstrates that as that a swimmer makes more of an *Effort,* there is a higher probability that his goal is not *Ego*. The third step, *Boredom* (ß = .30), is included as a variable in a significant and positive way and 28% is reached. For women, only an increase in *Ability* (ß = .40) can positively predict an orientation towards the Ego with 18% of the total variance explained.

The results obtained using *Task* as a variable differs from those shown previously. In this case, *Fun* is the main variable, both for men and women. In the case of swimmers, the first and only step suggests 16% of the total explained variance and in which the *Enjoyment* (ß = .35) dimension positively predicts orientation towards the *Task*. In the case of females, the first step introduced was *Enjoyment*, which positively predicts orientation towards *Task* (ß = .41) with 19% total explained variance. The second step incorporates both *Enjoyment* (ß = .32) and *Effort* (ß = .26) with a variance percentage of 27%.

Table 2. Stepwise multiple linear regression by gender. Correlations, beta standardized (ß) and total explained variance (R^2) for each step. Dependent Variable: goal orientation.

	Male						*Female*				
Variable	***F***	***ß***	***R²***	***t***	***p***	**Variable**	***F***	***ß***	***R²***	***t***	***p***
Ego											
Step 1						**Step 1**					
Ability	13.04	.54	.15	3.61	.001	Ability	7.09	.40	.18	2.66	.010
Step 2											
Ability		.56		3.90	.000						
Effort		-.44		-2.80	.006						
Step 3											
Ability		.47		3.27	.002						
Effort		-.49		-3.19	.002						
Boredom		.30		2.42	.018						
Task											
Step 1						**Step 1**					
Enjoyment	11.08	.35	.16	3.33	.001	Enjoyment	11.87	.41	.19	3.45	.001
						Step 2					
						Enjoyment		.32		2.64	.011
						Effort		.26		2.24	.029

Note: *p* is significant to <.05.

Discussion

According to the first objective of the study, our results showed the same as previous studies (Cervelló et al., 1999; Newton & Duda, 1993; Ruiz-Juan, Gómez-López, Pappous, Alacid & Flores, 2010; Treasure & Roberts, 1994). There exists a motivational pattern related to the orientation towards a personal goal. The results reflect that the highest scores in the three scales are obtained in orientation towards the task in sports practice, that *Fun* is a result of such practice and that *effort* is the means of reaching success in a sport. On the contrary, in cases of orientation towards the *Ego, Boredom,* the use of *Ability* and *Cheating Techniques* are results.

We are presented with a motivational pattern which is considered adaptive as, in the case of failure, these athletes perceive it as a learning opportunity which will help them better themselves and which will increase their effort and persistence in the performance of the sports activity (Castillo et al., 2002, 2004; Cervelló et al., 1999).

It is important to clarify that *Ego* is not a negative factor if it is used in a positive way towards the accomplishment of the task (Santos-Rosa, García, Jiménez, Moya & Cervelló, 2007). According to Roberts (2001), the most adaptive motivational patterns in a competitive sport environment are those related to high levels of orientation towards the *Task,* and high orientation levels towards *Ego*. This is the case that is demonstrated by results for a group of canoeists in a study by Ruiz-Juan et al. (2010). This occurs because in competitive sports there is a constant demand for social comparison between the participants (Santos-Rosa et al., 2007).

In previous studies, it has also been shown that orientation towards Task is positively related to *Fun* in practicing sports. Success in sports depends on Effort, while the orientation towards Ego is related to motivational factors in a pattern that is adopted in a lower motivational pattern.

Regarding the second aim, the results demonstrate significant difference in the orientation towards ego with higher values recorded for males. These results coincide with the results found by Castillo et al. (2002) and Moreno, Cervelló and Gonzalez-Cutre (2008). At the same time, they contradict results provided by Ruiz-Juan et al. (2010) where the elite canoeists demonstrated a high perception of success orientated towards the task and a moderate orientation towards the ego, greater in men that in women. On the other hand, studies by Cervelló et al (1999) and Duda and White (1992) state that elite athletes would usually present increased orientations, as much towards *Ego* as towards *Task* due to the fact that despite the importance placed upon the victory and satisfaction it brings, it is assumed that these are achieved thanks to the hard work and personal effort maintained during training and competition.

Other differences have also been found with higher values for males, in all three dimensions of the perception of success, especially in *Ability* and *Cheating Techniques*. Meanwhile, females try harder than males. These are different to previous results provided by

Ruiz-Juan et al. (2010) where a correlation exists in females between the beliefs that success in sports is achieved through *ability*, cheating, and *boredom*. Nevertheless, Cervelló et al. (1999), found that athletes with *Ego* motivation possessed an inappropriate social pattern, based on societal approval and on the belief that success in sports is achieved not only through greater ability but it is also related to satisfaction, the experience of mastery and with the belief that effort is the cause of success.

A regression analysis has been carried out in stages which reflect, without gender distinction, that ability is the main predictive variable of *Ego* orientation in lifesaving, in comparison to effort. More concretely, a gender analysis demonstrates that when male athletes showed greater *ability* and *boredom,* there was a greater probability of orientation towards Ego.

On the other hand, for females, only the variable of ability positively predicts that orientation. The results provide evidence that *enjoyment* is the principle predictive variable of orientation towards the task as much for men as for women, although for women, effort also appears as a predictive variable.

The steps of the various linear regression analyses that have been investigated in this study, which have been given by previous researchers, broaden the information.

Another conclusion that is drawn from this study is that a correlation exists between motivational patterns. This pattern is related to personal goals, where the majority of the rescue professionals show orientation towards the *task*. They enjoy practicing sports and believe that through hard work and effort one can achieve success in this field.

Finally, the existence of differences between genders is corroborated as much in the orientation towards the goal and beliefs about success in sport as in the satisfaction which sports offers them.

BIBLIOGRAPHY

Abraldes, J.A. & Rodríguez-Suárez, N. (2008) Entrenamiento en Salvamento Deportivo. Estudio en la Comunidad Gallega. *Retos. Nuevas tendencias en Educación Física, Deporte y Recreación, 13*, 60-63.

Abraldes, J.A. (2009) *Formación deportiva en Salvamento Acuático*. A Coruña: Federación de Salvamento e Socorrismo de Galicia.

Balaguer, I., Atienza, F.L., Castillo, I., Moreno, Y. & Duda, J.L. (1997) Factorial structure of measures of satisfaction/interest in sport and classroom in the case of Spanish adolescents. *Fourth European Conference of Psychological Assessment*. Lisboa, Portugal.

Balaguer, I., Castillo, I. & Duda, J.L. (2003) Interrelaciones entre el clima motivacional y la cohesión en futbolistas cadetes. *EduPsykhé, 2*(2), 243-258.

Balaguer, I., Mayo, C. & Atienza, F.L. (1997) Análisis de las propiedades psicométricas del Inventario de Creencias sobre las Causas del Éxito en el deporte aplicado a equipos de balonmano femenino de élite. *VI Congreso Nacional de Psicología del Deporte*. Las Palmas de Gran Canaria, España.

Bentler, P.M. (1995) *EQS structural equations program manual.* Encino, C.A: Multivariate Software.

Bollen, K.A. & Long, J.S. (1994) *Testing structural equation models.* Newbury Park, CA: Sage.

Castillo, I., Balaguer, I. & Duda, J.L. (2000) Las orientaciones de meta y los motivos de práctica deportiva en jóvenes deportistas valencianos escolarizados. *Revista de Psicología del Deporte, 9*(1-2), 37-50.

Castillo, I., Balaguer, I. & Duda, J.L. (2002) Las perspectivas de meta de los adolescentes en el contexto deportivo. *Psicothema, 14*(2), 280-287.

Castillo, I., Balaguer, I., Duda, J.L. & García-Merita, M.L. (2004) Factores psicosociales asociados con la participación deportiva en la adolescencia. *Revista Latinoamericana de Psicología, 36*(3), 505-515.

Cecchini, J.A., González, C., Carmona, A.M. & Contreras, O. (2004) Relaciones entre clima motivacional, la orientación de meta, la motivación intrínseca, la auto-confianza, la ansiedad y el estado de ánimo en jóvenes deportistas. *Psicothema, 16*(1), 104-109.

Cecchini, J.A., Méndez, A. & Muñiz, J. (2003) Tendencias o direcciones del deporte contemporáneo en función de los motivos de práctica. Un estudio empírico entre los estudiantes de la Universidad de Oviedo. *Apunts, Educación Física y Deportes, 72*, 6-13.

Cervelló, E. & Santos-Rosa, F.J. (2000) Motivación en las clases de Educación Física: un estudio de la perspectiva de las metas de logro en el contexto educativo. *Revista de Psicología del Deporte, 9*(1-2), 51-70.

Cervelló, E. & Santos-Rosa, F.J. (2001) Motivation in Sport: and achievement goal perspective in young Spanish recreational athletes. *Perceptual and Motor Skills, 92*, 527-534.

Cervelló, E. (1999) Variables psicológicas relacionadas con la elección de tareas deportivas con diferente nivel de dificultad. Consideraciones para el diseño de programas motivacionales de entrenamiento psicológico en el deporte. *Motricidad. European Journal of Human Movement, 5,* 35-52.

Cervelló, E., Escartí, A. & Balagué, G. (1999) Relaciones entre la orientación de meta disposicional y la satisfacción con los resultados deportivos, las creencias sobre las causas de éxito en el deporte y la diversión con la práctica deportiva. *Revista de Psicología del Deporte, 8*(1), 7-21.

Cervelló, E., Fuentes, J.P. & Sanz, D. (1999) Un estudio piloto de las características motivacionales de los tenistas y de los tenistas en silla de ruedas en competición. *Apunts, Educación Física y Deportes, 58*, 73-78.

Cole, D. & Maxwell, S.E. (1985) Multitrait-multimethod comparisons across populations: A confirmatory factor analysis approach. *Multivariate Behavioral Research, 18*, 147-167.

Duda, J.L. & Nicholls, J.G. (1992) Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, *84*(3), 290-299.

Duda, J.L. & White, S.A. (1992) The relationship of goal perspectives to beliefs about success among elite skiers. *Sport Psychologist, 6*(4), 334-343.

Duda, J.L. (2001) Goals perspectives research in sport: Pushing the boundaries and clarifying some misunderstandings. In G.C. Roberts (ed.), *Advances in motivation in sport and exercise* (pp. 129-182). Champaign, IL: Human Kinetics.

Duda, J.L., Fox, K.R., Biddle, S.J.H. & Armstrong, N. (1992) Children´s achievement goals and beliefs about success in sport. *British Journal of Educational Psychology, 62*(3), 313-323.

Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1998) *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice-Hall.

Hom, H., Duda, J.L. & Miller, A. (1993) Correlates of goal orientations among young athletes. *Pediatrics Exercise Science, 5*(2), 168-176.

Hu, L. & Bentler, P.M. (1999) Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.

Jaccard, J. & Wan, K.W. (1996) *LISREL approaches to interaction effects in multiple regression*. Thousand Oaks: Sage, P.L.

Jiménez-Castuera, R., Cervelló, E., García Calvo, T., Santos-Rosa, F.J. & Iglesias, D. (2007) Estudio de las relaciones entre motivación, práctica deportiva extraescolar y hábitos alimenticios y de descanso en estudiantes de Educación Física. *Internacional Journal of Clinical and Health Psychology, 7*(2), 385-401.

Jöreskog, K.G. & Sörbom, D. (1993) *Structural equation modeling with the SIMPLIS command language*. Chicago: Scientific Software International.

Lochbaum, M. & Roberts, G.C. (1993) Goal orientations and perceptions of the sport experience. *Journal of Sport and Exercise Psychology, 15*, 160-171.

Moreno, J.A., Cano, F., González-Cutre, D., Cervelló, E. & Ruiz, L.M. (2009) Flow disposicional en salvamento deportivo: una aproximación desde la teoría de la autodeterminación. *Revista de Psicología del Deporte, 18*(1), 23-35.

Moreno, J.A., Cervelló, E. & González-Cutre, D. (2007) Young athletes' motivational profiles. *Journal of Sports Science and Medicine, 6*, 172-179.

Moreno, J.A., Cervelló, E. & González-Cutre, D. (2008) Relationships among Goal Orientations, Motivational Climate and Flow in Adolescent Athletes: Differences by Gender. *The Spanish Journal of Psychology, 11*(1), 181-191.

Moreno, J.A., López, M., Martínez, C., Alonso, N. & González-Cutre, D. (2006) Validación preliminar de la escala de percepción del clima motivacional de los iguales (CMI) y la escala de las orientaciones de meta en el ejercicio (GOES) con practicantes españoles de actividades físico-deportivas. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte, 1*(2), 13-28.

Newton, M. & Duda, J.L. (1993) Elite adolescents atheletes achievement goals and beliefs concerning success in tennis. *Journal of Sport and Exercise Psychology, 15*, 437-448.

Nicholls, J.G. (1984) Achievement motivation: conceptions of ability, subjetive experience, task choice and perfomance. *Psychological Review, 21*, 328-346.

Nicholls, J.G. (1989) *The competitive ethos and democratic education*. Cambridge: Harvard University Press.

Nunnally, J.C. & Bernstein, I.H. (1994) *Psychometric Theory*. New York: Mc-Graw-Hill.

Nunnally, J.C. (1978) *Psychometric Theory*. New York: Mc-Graw-Hill.

Pedhazur, E.J. (1982) *Multiple regression in behavioral research: explanation and prediction*. New York: Holt, Rinehart and Winston.

Peterson, R.A. (1994) A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research, 21*(2), 381-391.

Roberts, G.C. & Balagué, G. (1989) The development of a social-cognitive scale in motivation. *Seventh World Congress of Sport Psychology*. Singapore, Republic of Singapore.

Roberts, G.C. & Balagué, G. (1991) The development and validation of the Perception of Success Questionnaire. FEPSAC Congress. Cologne, Germany.

Roberts, G.C. (1992) Motivation in sport an exercise: Conceptual constraints and conceptual convergence. In G.C. Roberts (ed.), *Motivation in sport and exercise* (pp. 3-30). Champaign, Il.: Human Kinetics.

Roberts, G.C. (1995) Motivación en el deporte y el ejercicio: limitaciones y convergencias conceptuales. In G.C. Roberts (ed.), *Motivación en el deporte y el ejercicio* (pp.27-55). Bilbao: Descleé De Brouwer.

Roberts, G.C. (2001) Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational process. In G.C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 1-50). Champaign, IL: Human kinetics.

Roberts, G.C., Hall, H.K., Jackson, S.A., Kimiecik, J.C. & Tonymon, P. (1995) Implicit theories of achievement and the sport experience: Goal perspectives and achievement strategies. *Perceptual and Motor Skills, 33*, 219-224.

Roberts, G.C., Treasure, D.C. & Balagué, G. (1998) Achievement goals in sport: the development and validation of the Perception of Success Questionnaire. *Journal of Sport Sciences, 16*, 337-347.

Ruiz-Juan, F., Gómez-López, M., Pappous, A., Alacid, F. & Flores, G. (2010) Dispositional goal orientation, beliefs about the causes of success and intrinsic satisfaction in young elite paddlers. *Journal of Human Kinetics, 26*, 123-136.

Santos-Rosa, F.J., García, T., Jiménez, R., Moya, M. & Cervelló, E. (2007) Predicción de la satisfacción con el rendimiento deportivo en jugadores de tenis: efecto de las claves situacionales. *Motricidad. European Journal of Human Movement, 18*, 41-60.

Stucky-Ropp, R.C. & DiLorenzo, T.M. (1993) Determinants of exercise in children. *Preventive Medicine, 22*(6), 880-889.

Treasure, D. & Roberts, G.C. (1994) Cognitive and affective concominants of task and ego goal orientations during the middle school years. *Journal of Sport and Exercise Psychology, 16*, 15-28.

Walling, M.D., Duda, J.L. & Crawford, T. (2002) Goal orientations, outcome, and responses to youth competition among high/low perceived ability athletes. *International Journal of Sport Psychology, 37*(2), 115-122.