



Dispositional Goal Orientation, Beliefs about the Causes of Success and Intrinsic Satisfaction in Young Elite Paddlers

by

Francisco Ruiz-Juan¹, Manuel Gómez-López¹, Athanasios Pappous²,
Fernando Alacid Cárceles³, Gabriel Flores Allende¹

The purpose of this study was to primarily examine the psychometric properties of the castilian version of three commonly used psychological scales in sport (Perception of Success Questionnaire, Beliefs About the Causes of Sport Success Questionnaire and the Sport Satisfaction Instrument); secondly, to verify the degree of intrinsic satisfaction in a sample of young Spanish paddlers. The participants of this study were 209 elite paddlers classed in the junior category (13-14 years old). Results show that the Castilian versions of the questionnaires demonstrate acceptable validity and reliability in a sample of young paddlers. Athletes report high scores on perception of success oriented task scale, which is positively related with enjoyment and the attribution that success in sport depends on effort. This study also confirmed gender differences in questionnaire responses.

Key words: questionnaire, cross-validation, castilian, motivation, perception of success.

Introduction

The commitment to sport is a psychological disposition that represents the will and determination to continue participating in a sporting activity (Scanlan et al., 1993) and is influenced by the degree of enjoyment in sport, personal investments, and the social environment (Scanlan et al., 2003). During the last thirty years the number of children and young people deciding to engage in both recreational and organized competitive sport has increased (Cruz, 2001). Motivation has been one of the most studied psychological variables which has enabled researchers to examine and further understand the reasons for such an increase of participation in sport and physical activity (Sánchez et al., 2009; Gómez, Granero and Baena, 2010). Having an adequate level

of motivation allows to predict the adherence in the activity and the persistence in the acquisition of the objectives (Dosil, 2008).

Motivation

When considering participation in sport and physical activity, motivation refers to how the social, environmental and individual variables interact to determine the choice of a sport or activity over others, the intensity of practice in the chosen activity, and the persistence in task and performance (Balaguer, 1994). The direction of effort refers to whether an individual seeks out, or is attracted to certain situations. Intensity of effort refers to how much a person applies themselves in a particular situation (Weinberg and Gould, 1996). Both intensity and direction of effort in addition to the reasons for prat-

¹ - Faculty of Sports Science. University of Murcia (Spain)

² - Centre for Sports Studies. University of Kent (U.K)

³ - Royal Spanish Federation of Canoeing (Spain)

cice are relevant and considered to be positively related to continued and sustained participation in physical-sport activity (Cervelló et al., 2007; Ryska et al., 2002). According to Roberts (1992), motivation consists of multiple complex individual processes in which different interacting variables occur. These variables can be used to explain the behaviour of people when they participate in a physical, sport and leisure activity. Presently, researchers recognize the dynamic and interacting characters of motivation and highlight the effect of situational and dispositional variables on the motivational process (Santos-Rosa et al., 2007).

One of the many challenging tasks coaches, athletes and sports psychologists are constantly faced with is how to achieve an optimal psychological state that enhances sport performance (García et al., 2005). However, Cruz (2001) attests that those responsible for youth sport should not only be engendered towards the promotion of number of those participating in sport but also the quality of their experiences. That is to say, improving the competition and understanding the reasons why children choose to participate, since could possibly help to avoid numerous withdrawals commonly occurring between the ages of 12-13 (Côté and Hay, 2002; Gómez et al., 2008). Many scholars have focused on analyses of the reasons people practice sport and/or withdraw from it at some stage (Balaguer and Atienza, 1994; Brodtkin and Weiss, 1990; Carratalá and García, 1999; Kjelsas and Berit, 2003; López and Márquez, 2001). The majority of these studies are framed within the socio-cognitive perspective which is based upon the expectations and values that people provide to different goals and implementation activities (Bandura, 1986). At the same time, these investigations are built upon the goal perspective theory.

The Goal Perspective Theory

The goal perspective theory and the concept of achievement motivation can be understood as the effort and persistence of some athletes to achieve successful performance in competition and its later evaluation of either success or failure (Cecchini et al., 2003). According to this perspective, the achievement goals individuals hold define the initiation, continuation and later abandonment of the behaviours adopted by the person (Jiménez-Castuera et al., 2007).

The aim of the goal perspective theory is placed within the modern approaches of motivational theories of achievement targets (Castillo et al., 2000; Nicholls,

1984, 1989). Stemming from research in education (Ames, 1992), in the past two decades it has become one of the most widely accepted theories within the research of sport psychology (Cervelló et al., 1999b).

A fundamental principle of this theory holds that people become involved in achievement contexts to demonstrate competence or ability (Cecchini et al., 2003; Cervelló and Santos-Rosa, 2000). Achievement contexts are generally referred to as environments in which people participate and from which they can gain influences; these can include the family environment, educative and sport environments (Moreno et al., 2006). At the same time, it is important to note that the subjective perception of success within these contexts depends on the criterion used to define what represents success (Nicholls, 1989), and that the adoption of a success criterion is pre-determined by both personal characteristics (dispositional orientation) and social and situational aspects (motivational climate) in relation to affective, cognitive and behavioural consequences (Cervelló et al., 2002).

Task and Ego orientation

According to Nicholls (1989), people conceive their ability and judge their competence in relation to two goal perspectives that subjectively define success and failure: on the task orientation or ego orientation. Athletes who are task-oriented task they focus on the development of new skills, seek self-improvement and they envisage the practice as an activity that reinforces the ability of cooperation and increases the interest to learn and to progress. On the other hand, athletes who are ego orientated look for the demonstration of their ability in respect of others: overcoming their rivals or obtaining equal results but with less effort. Ego-oriented athletes envisage sport as a means to acquire greater recognition and social status (Balaguer et al., 2003; Cervelló et al., 1999b; Duda, 2001).

Depending on the goal perspective adopted in a specific circumstance, the achievement activity will be felt, interpreted and responded to in a different way (Castillo et al., 2004).

Target orientations are independent in that they are not considered to be opposite ends of a continuum (Nicholls, 1984, 1989) and one does not acquire some sort of orientation at the expense of another. From a statistical point of view (Nicholls, 1989) these individual provisions are not dichotomous but mutually orthogonal. That is to say, people can be simultaneously task and ego oriented, varying the in-

tensity of the motivational pattern (Balaguer et al., 1996) and can express this through the different sports practiced (Martín-Albo et al., 2003).

These goal orientations to which reference has been made to above are good predictors of some motivational variables such as the beliefs about the reasons for success in sport (Duda et al., 1992; Moreno et al., 2007; Newton and Duda, 1993; Treasure and Roberts, 1994; White and Duda, 1993) and the enjoyment or intrinsic satisfaction attained from the practice of sport (Cecchini et al., 2004; Cervelló et al., 1999a; Duda and Nicholls, 1992; Duda et al., 1992; Hom et al., 1993; Stucky-Ropp and DiLorenzo, 1993). The latter is defined as the degree of enjoyment or boredom that people experience when they practice an activity.

From the results of several studies, the conclusion could be drawn that the task orientation is related to the belief that success in sport is obtained by means of effort and that even failure is envisaged as a teaching element that helps improvement. The practice of sport has the aims of personal training, cooperation with others and a greater enjoyment, satisfaction and intrinsic motivation. This is independent from the level of competence perceived or the result in competition

On the other hand, individuals high in ego orientation are generally less intrinsically motivated and do not experience enjoyment as a key element of sport participation. As a result, individuals high in ego orientation are more likely to drop out from sport participation when they are faced with obstacles or when they start questioning their ability to participate in sport. (Castillo et al., 2002; Cecchini et al., 2004; Cervelló and Santos-Rosa, 2001; Peiró and Sanchís, 2004; Walling et al., 2002).

Studies previously analyzed support the relationship between the achievement goals, motivation, intrinsic interest and satisfaction, together with the role of situational motivational states in the prediction of the degree of enjoyment in competition (Cervelló et al., 2006a). However, depending on the adopted achievement goal, the determinants of the satisfaction and the enjoyment that athletes can experience within training and competitive contexts can vary (Lochbaum and Roberts, 1993; Roberts et al., 1995; Treasure and Roberts, 1994).

Usually ego orientated individuals struggle to maintain a sense of competency in the activity they practice and portray patterns of maladapted behaviour, abandoning the activity when their perception

of competence is low (Cervelló, 1999). Different studies have shown that intrinsic motivation can be predicted and that it is positively related to task orientation and negatively related to ego orientation (García et al., 2005; Duda et al., 1995). Generally, the grouping between the goal perspectives and the beliefs about the reasons for success in sport has been referred to as task goal-belief factor or the ego goal-belief factor of athletes on achievement in sport (Duda and Nicholls, 1992). Each one of these meta-beliefs includes the conception that athletes have of their ability, of what they consider success in sport and how to achieve it (Castillo et al., 2004).

Finally, taking into consideration the words by Cervelló et al. (1999a) and justifying the objectives of this research, it is necessary to have a body of investigations analysing the consistency of the goal perspective theory in sport, taking into consideration cultural environments outside of English-speaking countries from which both the majority of studies and the tools used for the measurement of the main analyzed variables currently come from.

While addressing this issue, this study is unique in nature as the goal perspective theory has yet to be applied yet to paddle athletes. So far, scholars who have studied this area of sport have mainly focused on the psychological features related to performance such as emotion, stress in competition, the use of techniques such as hypnosis, and flow theory (Fernández et al., 2004; Jones et al., 2000; Males and Kerr, 1996; Mahamud et al., 2005). In particular and in focusing on Spanish samples, the investigations on the psychometric properties of questionnaires have been made using confirmatory factor analyses only with elite athletes (Guivernau and Duda, 1994). The construct and predictive validity of the tools has not been checked to a confirmatory level within the Spanish population in general as yet. In addition, whilst the investigations carried out within the sporting context have indicated significant gender differences to date, the validity of the questionnaires has not been carried out separately for boys and girls.

Therefore, the purpose of this research is three-fold: firstly, to check the psychometric properties of some of the most used tools in the measurement of sport motivation; to analyze the existing relationship between dispositional orientation of achievement tasks, the beliefs about the reasons for success and the degree of intrinsic satisfaction within the sporting context and thirdly, to corroborate the basic theoretical assumptions in a sample of young Span-

ish paddlers. Finally, taking into account that the investigations carried out so far in the sport context have shown the existence of significant gender differences (Castillo et al., 2002), the analysis will be done separately for the group of boys and girls, with the aim of verifying those differences.

Material and Methods

Sample

The participants of this study were 209 elite paddlers classed in the junior category (13-14 years old, $M=13.29$; $SD=0.90$) who competed in the VII Canoeing Cup Promotion of Spain, integrated within the VII National League of Canoeing "Hernando Calleja" that took place in Los Alcázares – Murcia (on the East coast of Spain). The sample was composed of 105 male kayakers ($M=13.19$; $SD=1.13$): 38 male canoeists ($M=13.44$; $SD=0.57$) and 66 female kayakers ($M=13.35$; $SD=0.60$) selected from 26 canoeing clubs, from 12 autonomous communities. In posture and movement, there are differences in canoeing and kayaking: the kayaker sits in the kayak and performs symmetrical strokes with a double blade paddle, whilst canoeists are characterized by kneeling in a canoe and performing dynamic strokes on one side only with a single blade paddle.

Instruments

The instruments that have been used in the present study are the Spanish versions of the following three questionnaires: Perception of Success Questionnaire (POSQ), Beliefs About the Causes of Sport Success Questionnaire (BACSSQ) and the Sport Satisfaction Instrument (SSI). What follows is a detailed description of the psychometric characteristics of the three questionnaires accompanied with a table with the factor loadings of the items of each scale as it has been observed in this study.

Perception of Success Questionnaire (POSQ) (Roberts and Balagué 1989, 1991; Roberts et al., 1998). The scale measures the dispositional orientation of achievement tasks within the sports performance context. It consists of 12 items, six on the dispositional implication on the task and the remaining six on the ego (Table 1). Participants are 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 *totally disagree* (1) to *totally agree* (5). Previous studies have shown its exploratory and confirmatory validity, as well as its reliability in the physical and sporting field (Cervelló et al., 1999a; Cervelló et al., 2005; Cervelló et al., 2006b; Cecchini et al., 2008; García et al., 2008; Pensaard and Roberts, 2003; Roberts et al., 1994), with values $\alpha=0.90$, $\alpha=0.72$ (subscale task) and $\alpha=0.94$,

Table 1

Factor loadings (standardized solution) –POSQ–

Items	Ego		Task	
	Boys	Girls	Boys	Girls
Soy el mejor (I am the best)	0.80**	0.82**		
Soy claramente superior (I am clearly better)	0.78**	0.81**		
Demuestro a la gente que soy el mejor (I show other people I am the best)	0.76**	0.79**		
Mi actuación supera la de mis rivales (I do better than others)	0.73**	0.74**		
Derroto a los demás (I beat other people)	0.70**	0.72**		
Hago algo que los demás no pueden hacer (I accomplish something others cannot do)	0.69**	0.69**		
Rindo a mi mejor nivel de habilidad (I perform to the best of my ability)			0.74**	0.74**
Supero las dificultades (I overcome difficulties)			0.74**	0.71**
Domino algo que no podía hacer antes (I succeed at something I could not do before)			0.70**	0.70**
Demuestro una clara mejoría personal (I really improve)			0.68**	0.70**
Alcanzo una meta (I reach a target I set for myself)			0.67**	0.66**
Trabajo duro (I try hard)			0.64**	0.65**

** $p < 0.01$, Variance explained in boys: 55.385 - Variance explained in girls: 50.476

$\alpha=0.73$ (subscale ego).

The Beliefs About the Causes of Sport Success Questionnaire (BACSSQ) (Balaguer et al., 1997b; Castillo et al., 2002; Duda and Nicholls 1992) consists of 18 items that measure the perceptions of participants on *effort* (9 items, effort exerted in the performance of the task), the *ability* (4 items, factors related with the possession of ability) and the use of *deception techniques* (5 items, making use of deceptive behavior) allowing them to achieve success in sport (Table 2). In the instructions the participants were asked: "What do you think people should do in order to be successful in the sport they practice more often?". The responses to this question was recorded on a Likert scale from (1) *totally disagree* to (5) *totally agree*. Previous studies, like the one developed by Castillo et al. (2002) have shown internal consistency for the three scales: *effort* (α boys=0.80; α girls=0.81), *aptitude* (α boys=0.80; α girls=0.79) and *deception techniques* (α boys=0.81; α girls=0.82). Cervelló et al. (1999a) and Guivernau and Duda (1994) found alphas between

0.74 and 0.78 for the subscale *effort/motivation*, between 0.62 and 0.71 for the subscale *ability/aptitude* and between 0.71 and 0.72 for the subscale *deceit*.

Sport Satisfaction Instrument (SSI) (Balaguer et al., 1997a; Castillo et al., 2002; Castillo et al., 2004; Duda and Nicholls, 1992). This instrument was constructed to determine the enjoyment dimension of sport participation. The original questionnaire consists of 8 items split into two scales that measure *Satisfaction/Enjoyment* (5 items) and *Boredom* (3 items) in sports (Table 3). The participants were asked to indicate a degree of agreement with the items, recorded on a Likert scale that ranged from *totally disagree* (1) to *totally agree* (5). The psychometric properties of the Spanish version are presented in Cervelló et al. (1999a) and Castillo et al. (2002). The reliability analysis was satisfactory for the scales of *enjoyment* (α boys=0.82 y α girls=0.87) and *boredom* (α boys=0.74 y α girls=0.78) (Castillo et al., 2004).

Table 2

Factor loadings (standardized solution) –BACSSQ–

Items	<i>Effort</i>		<i>Ability</i>		<i>Deceit</i>	
	Boys	Girls	Boys	Girls	Boys	Girls
Le gusta superarse y hacer las cosas cada vez mejor (... like improving)	0.80**	0.77**				
Entrena y trabaja duro (...work really hard)	0.77**	0.74**				
Se ayudan entre sí para aprender (...help each other learn)	0.74**	0.75**				
Siempre se esfuerza al máximo (...always do their best)	0.73**	0.74**				
Le gusta entrenar (...like to practice)	0.72**	0.71**				
Le gusta aprender nuevas habilidades (...likes to learn new skills)	0.69**	0.67**				
Intenta hacer cosas que no había podido hacer antes (...try things they can't do)	0.64**	0.65**				
Es mejor deportista que los demás (...are a better athlete than the others)			0.83**	0.84**		
Es mejor que los demás en competiciones difíciles (...are better than others at tough competition)			0.80**	0.79**		
Siempre intenta ganar a los demás (...always try to beat others)			0.73**	0.74**		
Es un deportista nato (... is born natural athlete)			0.72**	0.70**		
Finge que le cae bien el entrenador (...pretend they like the coach)					0.80**	0.77**
Sabe impresionar al entrenador (...know how to impress the coach)					0.74**	0.76**

** $p < 0.01$, Variance explained in boys: 62.759 - Variance explained in girls: 58.614

Table 3

Factor loadings (standardized solution) –SSI-

Items	Enjoyment		Boredom	
	Boys	Girls	Boys	Girls
Me lo paso bien haciendo deporte (I have fun doing sport)	0.87**	0.87**		
Participo activamente cuando hago deporte (I get involved when I do sport)	0.84**	0.79**		
Encuentro el deporte interesante (I find sport interesting)	0.82**	0.85**		
Me divierto practicando deporte (I enjoy doing sport)	0.80**	0.84**		
Cuando practico deporte me aburro (When I do sport I get bored)			0.85**	0.82**
Cuando hago deporte deseo que la competición termine rápidamente (When I do sport I wish the competition would end quickly)			0.83**	0.85**
En el deporte, a menudo sueño despierto en lugar de pensar en lo que estoy haciendo (In sport, I often daydream daydream instead of thinking about what I really do)			0.80**	0.79**

** $p < 0.01$, Variance explained in boys: 59.782 – Variance explained in girls: 55.132

Procedure

Before conducting the study, permission was gained from the Regatta via a written explanation of the investigative aims and procedures. The questionnaire was administered by the researchers during the collection of the number bibs by the paddlers a day before the competition. All participants were informed of the purpose of the study and assured of confidentiality in the handling of data. They were also informed that there were no right or wrong answers and were encouraged to answer with the utmost sincerity and honesty.

Data Analysis

The analysis of the items, the homogeneity, the correlation between the subscales (Pearson's coefficient), the internal consistency (Cronbach's alpha), gender differences (Students't-test) and the correlations between all the scale dimensions, were performed using SPSS 17.0. The factorial structure of the questionnaires was examined with confirmatory analysis (AMOS 18.0). The analysis procedure established by Carretero-Dios and Pérez (2005) was followed. The statistical analysis of the items was made with focus on the distribution item-factor observed in each original instrument. The criteria was: value ≥ 0.30 in ratio of corrected item-total correlation, Eigenvalue > 1 and that all the options for answering were used (Nunnally and Bernstein, 1995). In order to avoid that the items showed an overlap between the different theoretical dimensions, we discarded the items with a correlational difference smaller than

0.05 between the the item, the total in their dimension and the one estimated or the same item and the overall punctuations in the other factors of the subscale. As stated by Jackson (1970), there has to be a positive difference in favor of the theoretical dimension of membership of at least 0.20. However, as the authors of the original scales suggest where there is a relationship between dimensions, a less restrictive criterion of 0.05 can be used. This was also applicable in the creation of other evaluation tools (Carretero-Dios and Pérez, 2005; 2007). The asymmetry and kurtosis indexes were calculated and, in general, they were close to zero and < 2.0 , as recommended by Bollen and Long (1994). This indicates a similarity with the univariate normal curve and allows us to use factorial techniques of maximum likelihood in the confirmatory factorial analysis.

From a confirmatory perspective, models of structural equations were applied in order to study if the dimensions theoretically proposed by the authors adjusted to the resulting data with the sample used. The factorial structure of each questionnaire was evaluated with an AFC, using maximum veridicity estimation. The techniques of "bootstrapping" (to locate a normal distribution of the data) and the procedure of maximum veridicity (ML were used. These are procedures for estimating structural equation models that assume a normal distribution of the data and a continuous scale of them; as the Mardia's coefficient is > 2 , it indicates lack of multivariate normality in the data and thus, violating one of the basic AFC rules.

The most appropriate procedure to accept or reject a model is the use of a combination of several

Table 4

Descriptive statistics and Alpha Coefficient of the subscales Questionnaires –POSQ, BACS and SSI-. Gender differences

Subscales of the Questionnaires	Total			Boys			Girls			<i>p</i>	Difference Boys -Girls
	α	<i>M</i>	<i>DT</i>	α	<i>M</i>	<i>DT</i>	α	<i>M</i>	<i>DT</i>		
POSQ											
1. <i>Ego</i>	0.89	3.01	1.01	0.90	3.09	1.05	0.87	2.84	0.90	*	0.25
2. <i>Task</i>	0.86	4.23	0.71	0.89	4.23	0.75	0.82	4.22	0.61	NS	0.01
BACSSQ											
3. <i>Effort</i>	0.82	4.48	0.53	0.81	4.52	0.53	0.83	4.40	0.51	NS	0.12
4. <i>Ability</i>	0.81	3.27	1.01	0.83	3.35	1.03	0.78	3.09	0.94	*	0.26
5. <i>Deceit</i>	0.72	2.36	1.24	0.73	2.54	1.27	0.70	1.97	1.07	**	0.57
SSI											
6. <i>Enjoyment</i>	0.75	4.55	0.51	0.77	4.56	0.55	0.72	4.54	0.43	NS	0.02
7. <i>Boredom</i>	0.71	2.27	0.85	0.72	2.26	0.89	0.70	2.29	0.75	NS	-0.03

* $p < 0.05$, ** $p < 0.01$

indices (Bentler, 1995). The model fit was evaluated as a combination of indices of absolute and relative fit. Among the absolutes, the value p was used, associated with χ^2 and the ratio χ^2/df . In a perfect model the value would be 1.0, being the ratios <2.0 indicators of very good fit to the model, while the values <5.0 would be considered acceptable. These indices are affected by the sample size, so the problem is minimized using the index *SRMR*, in which the values ≤ 0.06 indicate an excellent fit and the values ≤ 0.08 show a good fit (Hu and Bentler, 1999). Likewise, the *GFI* which value has to be ≥ 0.90 in order to consider the model fit minimally acceptable.

From the relative indices, *IFI*, *CFI* and *TLI* were selected. The incremental indices (*CFI* and *TLI*) are regarded as acceptable with values >0.85 (Ntoumanis, 2001) even though the ideal indice would be of a value of ≥ 0.90 so as to consider the model fit minimally acceptable and >0.95 would point to an excellent fit (Kline, 1998). Browne and Cudeck (1993) recommend the *RMSEA* as an index that provides a measure of discrepancy per degree of freedom and indicates that the model based on the used simple represents its population in an excellent way when its value is ≤ 0.05 , considering it an acceptable fit when it is <0.08 (Jöreskog and Sörbom, 1993).

The reliability of each proposed subscale was originally calculated by the authors by means of the coefficient of internal consistency to Cronbach's alpha. The correlations among the subscales were analyzed by means of Pearson's coefficient in order to check the presence of specific forms of association. In order to assess whether there were any differences among female and male young paddlers, a student's *t*-test was conducted in which gender served as the independent variable. Finally, the relationships be-

tween the motivational variables of interest were analyzed using the Pearson's Correlations coefficient.

Results

The psychometric properties of the questionnaires

In Table 4 the alpha coefficients are presented and also the means and standard deviations for every paddler are included. All of the subscales showed a satisfactory internal consistency ($\alpha > 0.70$).

In general, all of the paddlers have an intrinsic satisfaction that brings about more enjoyment than boredom, being almost the same in both males and females. They have a high perception of success oriented to the task and moderate to the ego (greater in boys than in girls). They highly attribute the reasons for success to effort (almost equal in both boys and girls), moderately to ability (greater in boys than in girls) and to a lesser degree, deceit (greater in boys than in girls). No statistically significant differences have been found regarding age and modality (kayakers-canoeists).

Perception of Success Questionnaire (POSQ). Based on the analyses, no item was eliminated since they all met the established requirements. The homogeneity analysis shows that there is no overlap of items between the two theoretical dimensions. The tested model hypothesizes the two latent variables (dispositional orientation to *ego* and to *task*), which underlie the 12 items and account for the observed covariances among them. It has an adequate fit to the original model since the results were $\chi^2/df=12$; *GFI*=0.94; *IFI*=0.93; *CFI*=0.91; *TLI*=0.91; *SRMR*=0.04; *RMSEA*=0.05. The correlation between the factors

Table 5

Correlations among the subscales -POSQ, BACSSQ and SSI-

	POSQ		BACSSQ			SSI	
	Ego	Task	Effort	Ability	Deceit	Enjoyment	Boredom
POSQ							
1. Ego	-	0.38(**)	-0.03	0.64(**)	0.16	0.01	0.16
2. Task	0.31(**)	-	0.15	0.22	-0.08	0.30(*)	0.01
BACSSQ							
3. Effort	0.16	0.42(**)	-	0.14	-0.14	0.05	0.02
4. Ability	0.50(**)	0.05	0.15	-	0.38(**)	0.09	0.33(**)
5. Deceit	0.27(**)	-0.01	-0.01	0.50(**)	-	-0.11	0.29(*)
SSI							
6. Enjoyment	0.17(*)	0.41(**)	0.52(**)	0.05	0.01	-	-0.16(*)
7. Boredom	0.11	-0.14	-0.08	0.12	0.13	-0.22(**)	-

* $p < 0.05$, ** $p < 0.01$

Note: on the top diagonal, the correlations for the girls group are indicated. On the bottom diagonal, the correlations for the boys group are shown.

supports the independence of the latent variables ($r_{boys}=0.31$, $r_{girls}=0.38$) (Table 5).

The Beliefs About the Causes of Sport Success Questionnaire (BACSSQ). The analysis of items showed that in boys and girls, the elimination of the items 12 and 15 belonging to the scale *Effort* increased the Alpha coefficient. They were subsequently eliminated for further analysis. The same happened in the scale *deceit* with three items "he/she knows how to pretend to look better than what they are", "he/she knows how to cheat" and "he/she breaks the rules and does not get caught". The homogeneity analysis shows that no overlaps exist between the three theoretical dimensions. The tested model hypothesizes the existence of the three dependent latent variables (*Effort*, *Ability* and *Deceit*), which underlie the 13 items and account for the covariances observed among them. It demonstrates a good fit to the original model since the results were $\chi^2/df=3.88$; $GFI=0.91$; $IFI=0.92$; $CFI=0.92$; $TLI=0.91$; $SRMR=0.05$; $RMSEA=0.06$. The correlations among the factors were significant supporting the dependence of the latent variables. The factors *effort* and *deceit* were negatively related ($r_{boys}=-0.01$, $r_{girls}=-0.14$), whereas the factors *effort* and *ability* ($r_{boys}=0.15$, $r_{girls}=0.14$) and the factors *deceit* and *ability* ($r_{boys}=0.50$, $r_{girls}=0.38$) were positively related (Table 5).

Sport Satisfaction Instrument (SSI). The analysis of the items showed that in boys and girls, the elimination of the item "When I do sport I usually find time flies", belonging to the subscale *enjoyment*, increased the Alpha coefficient of the scale. Thus, this item was eliminated for further analysis. The homogeneity

analysis indicates that there is no overlap of items between the two theoretical dimensions. The tested model hypothesizes the existence of two dependent latent variables (*enjoyment* and *boredom*), which underlies the 7 items and account for the covariances observed between them. It shows a good fit to the original model since the results were $\chi^2/df=3.07$; $GFI=0.93$; $IFI=0.94$; $CFI=0.92$; $TLI=0.92$; $SRMR=0.05$; $RMSEA=0.06$. The correlation between factors supports the dependence of the latent variables ($r_{boys}=-0.22$, $r_{girls}=-0.16$) (Table 5).

Discussion

As stated in our introduction, according to the achievement goal perspective theory within a context such as performance sport, there are at least two goal orientations or two subjective ways of understanding success. On one hand, the ego orientation and on the other hand the task orientation (Castillo et al., 2002). Both conceptions will not only establish the personal objectives in sport, but also the interest towards the sportive practice determining the cognitive and affective responses derived from it (Nicholls, 1989).

Starting from this theoretical framework and taking into account the first proposed objective of this research, it can be concluded from examination of results, that the Castilian versions of the different tools used have shown a factorial distribution similar to the ones found in previous studies. That is to say, they measure the same constructs as the original ones and as a result are valid elements to measure the variables under study. After a more

detailed analysis of our results, it appears that as demonstrated in previous studies, that when measuring the dispositional goal orientation two independent dimensions (ego orientation and task orientation) were obtained.

Concerning the second objective of this study, to determine the differential analysis per gender, results show that paddlers have a high perception of success that is task oriented and a moderate perception of success that is ego oriented. This is greater in boys than in girls and contradictory to the findings of Castillo et al. (2002) and Moreno et al. (2008), where boys were more ego oriented than girls. Likewise in the studies developed by Cervelló et al. (1999b) and Duda and White (1992) with elite athletes, it was found that they could only portray high orientations to both ego and the task. This is because, as pointed out by these authors, even though they consider victory very important and pleasurable, they assume that they achieve as a result of the hard training processes, their continuous personal improvement and the effort that they put into competitions.

As with previous studies (Castillo et al., 2002; Cervelló et al., 1999b), we can confirm that this task orientation is positively related with both enjoyment in the sports practice and with the attribution that success depends on effort. On the contrary, the perception of success oriented towards ego has been related with motivational factors consisting of a not very adaptive motivational pattern. Both female and male young paddlers attribute this to ability, even though boys also attribute it to deceit techniques. These results were similar to the ones found by Castillo et al. (2002). Our results also show that female samples showed a belief that success in sport depends on both ability and deceit. These results are contradictory to the ones found by Cervelló et al. (1999a). These authors found that ego oriented athletes did not have an adaptive motivational pattern based on the social approval and on the belief that success in sport can be obtained from not only the possession of a greater normative ability but was also related with satisfaction, expertise experiences and the belief that effort is a cause for success in sport. These last factors are traditionally related with task orientation and they are noted in the research carried out by Duda and White (1992). In occasions, the fact of showing a state of ego implication in sport does not have to be "not very adaptive", if it is accompanied at the same time by

high levels of task implication (Santos-Rosa et al., 2007). In fact, according to Roberts (2001) the most adaptive motivational patterns within the field of competitive sport are those that are related to high levels of task orientation and moderate levels of ego orientation, as our results reflect. This is because competitive sport constantly relies on social comparison processes among athletes (Santos-Rosa et al., 2007). These findings show, once again, that the individual dispositions are not dichotomous but mutually orthogonal (Balaguer et al., 1996; Nicholls, 1989).

As shown in previous investigations, task oriented athletes, present a greater commitment with the practice. This is because people tend to persevere in those activities that are considered to be fun (Castillo et al., 2002; Cecchini et al., 2004; Cervelló and Santos-Rosa, 2001; Peiró and Sanchís, 2004; Walling et al., 2002). It is also important to remember that task oriented athletes aim to develop new abilities; through self-comparison they view sport practice as an activity that increases their interest to learn, to be honest and to improve their health (Balaguer et al., 2003; Duda, 2001).

In addition, this motivational pattern is regarded as adaptive in situations of failure; athletes respond with an increased effort and a greater persistence in the execution of the activities. These failures are even considered as a tool for learning and an element that aids improvement (Castillo et al., 2002; Castillo et al., 2004; Cervelló et al., 1999a).

Hence, the results of this study indicate that a coach should try to create a climate that focus on the task (Sánchez et al., 2009) and involve their athletes in the analysis of sport failure and success, not only as a way of achieving better sports results, but also so that the sporting experience is lived in full and in satisfactory way (Cervelló et al., 1999a).

Conclusion

To conclude, this study corroborates and extends the findings provided by previous investigations. It confirms that the Castilian versions of the questionnaires are reliable tools that can be applied to the general public and offer validity for other samples of the population than those studied previously. In addition, it was found that there is a motivational pattern that is related to personal goal orientation, where the majority of the paddlers, especially boys, assert being more tasks oriented showing a more adaptive motivational pattern. This

consists of a greater satisfaction with results informing the achievement of mastery experiences, with the belief that effort is the key to the achievement of success in sport. Therefore, task oriented achievement theory could be the basis for more satisfactory and appealing experiences for young people to become more involved in sport.

The current study has also highlighted gender differences in both goal orientations, in the beliefs about the reasons for success in sport and in the intrinsic satisfaction that sport provides them.

Lastly, some limitations to the study must be outlined. As with all survey research, the study

relied upon a convenience sample and there is a possibility of recall errors and social expectation bias. From the total number of 600 paddlers who participated in the regatta only one third of them (209) accepted to answer the questionnaires, thus nonrespondents may have responded differently thus limiting the generalizability of the results.

Due to this aforementioned limitation, the findings from this study should be viewed as preliminary and in need of replication.

Moreover in future research the newer version of the achievement goal questionnaire should be used which includes the approach-avoidance dimensions.

References

- Ames C. Achievement goals, motivational climate, and motivational processes. In Roberts GC, ed., *Motivation in sport and exercise*. Champaign, IL: Human Kinetics; 1992, 161-176.
- Balaguer I, Atienza FL. Principales motivos de los jóvenes para jugar al tenis. *Apuntes, Educación Física y Deportes*. 1994; 31:285-299.
- Balaguer I. *Entrenamiento psicológico del deporte*. Valencia: Albatros; 1994.
- Balaguer I, Atienza FL, Castillo I, Moreno Y, Duda JL. 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; 1997a.
- Balaguer I, Castillo I, Duda JL. Interrelaciones entre el clima motivacional y la cohesión en futbolistas cadetes. *EduPsykhé*. 2003; 2(2):243-258.
- Balaguer I, Castillo I, Tomás I. Análisis de las propiedades psicométricas del cuestionario de orientación al ego y a la tarea en el deporte (TEOSQ) en su traducción al castellano. *Psicológica*. 1996; 17:71-81.
- Balaguer I, Mayo C, Atienza FL. 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; 1997b.
- Bandura A. *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall; 1986.
- Bentler PM. *EQS structural equations program manual*. Encino, CA: Multivariate Software; 1995.
- Bollen KA, Long J. *Testing structural equation models*. Newbury Park, CA: Sage; 1994.
- Brodkin P, Weiss M. Developmental differences in motivation for participating in competitive swimming. *J Sport Exercise Psy*. 1990; 12:248-263.
- Browne M, Cudeck R. Alternative ways of assessing model fit. In Bollen, K, Long, J, eds, *Testing structural equation models*. Thousand Oaks: Sage; 1993, 136-162.
- Carratalá V, García A. Diferencias en las motivaciones y actividades de ocio y tiempo libre entre adolescentes deportistas y no deportistas. *Motricidad. European Journal of Human Movement*. 1999; 5:111-132.
- Carretero-Dios H, Pérez C. Normas para el desarrollo y revisión de estudios instrumentales. *International Journal of Clinical and Health Psychology*. 2005; 5:521-551.
- Carretero-Dios H, Pérez C. Standards for the development and the review of instrumental studies: Considerations about test selection in psychological research. *International Journal of Clinical and Health Psychology*. 2007; 7:863-882.

- Castillo I, Balaguer I, Duda JL. Las orientaciones de meta y los motivos de práctica deportiva en jóvenes deportistas valencianos escolarizados. *Revista de Psicología del Deporte*. 2000; 9(1-2):37-50.
- Castillo I, Balaguer I, Duda JL. Las perspectivas de meta de los adolescentes en el contexto deportivo. *Psicothema*. 2002; 14(2):280-287.
- Castillo I, Balaguer I, Duda JL, García-Merita ML. Factores psicosociales asociados con la participación deportiva en la adolescencia. *Rev Lat Am Psicol*. 2004; 36(3): 505-515.
- Cecchini JA, González C, Montero J. Participación en el deporte, orientación de metas y funcionamiento moral. *Rev Lat Am Psicol*. 2008; 40(3):497-509.
- Cecchini JA, González C, Carmona AM, Contreras O. 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*. 2004; 16(1):104-109.
- Cecchini JA, Méndez A, Muñiz J. 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*. 2003; 72:6-13.
- Cervelló E, Santos-Rosa FJ. 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*. 2000; 9(1-2):51-70.
- Cervelló, E Santos-Rosa FJ. Motivation in Sport: and achievement goal perspective in young Spanish recreational athletes. *Percept Motor Skill*. 2001; 92:527-534.
- Cervelló E. 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*. 1999; 5:35-52.
- Cervelló, E, Calvo R, Ureña A, Martínez M, Guzmán JF. Situational and dispositional predictors of task involvement in Spanish professional female volleyball players. *J Hum Mov Stud*. 2006; 50:47-63.
- Cervelló, E, Escartí A, Balagué G. 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*. 1999a; 8(1):7-21.
- Cervelló E, Escartí, A, Guzmán, JF. Youth sport dropout from the achievement goal theory. *Psicothema*. 2007; 19(1):65-71.
- Cervelló, E, Fuentes JP, Sanz D. 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*. 1999b; 58:73-78.
- Cervelló E, Hutzler, Y Reina, R, Sanz D, Moreno JA. Goal orientations, contextual and situational motivational climate and competition goal involvement in Spanish athletes with cerebral palsy. *Psicothema*. 2005; 17(4):633-638.
- Cervelló E, Moreno JA, Alonso N, Iglesias D. Goal orientations, motivational climate and dispositional flow of high school students engaging in extracurricular involvement in physical activity. *Percept Motor Skill*. 2006; 102:87-92.
- Cervelló E, Santos-Rosa FJ, Jiménez R, Nerea A, García T. Motivación y ansiedad en jugadores de tenis. *Motricidad. European Journal of Human Movement*. 2002; 9:141-161.
- Côté J, Hay J. Children's Involvement in Sport: A Developmental Perspective. In Silva, JM, Stevens, D, eds, *Psychological Foundations of Sport*. Boston, MA: Merrill; 2002, 484-502.
- Cruz J. Factores motivacionales en el deporte infantil y asesoramiento psicológico a entrenadores y padres. In Cruz, J, ed, *Psicología del Deporte*. Madrid: Síntesis; 2001, 147-176.
- Dosil J, *Psicología de la Actividad Física y del Deporte* (2ª edición). Madrid: McGraw-Hill; 2008.
- Duda JL, Nicholls JG. Dimensions of achievement motivation in schoolwork and sport. *J Educ Psychol*. 1992; 84(3):290-299.

- Duda JL, White SA. The relationship of goal perspectives to beliefs about success among elite skiers. *Sport Psychol.* 1992; 6(4):334-343.
- Duda JL. Goals perspectives research in sport: Pushing the boundaries and clarifying some misunderstandings. In Roberts, GC, ed, *Advances in motivation in sport and exercise*. Champaign, IL: Human Kinetics; 2001, 129-182
- Duda JL, Chi L, Newton ML, Walling MD, Catley D. Task and ego orientation and intrinsic motivation in sport. *Int J Sport Psychol.* 1995; 26:40-63.
- Duda JL, Fox KR, Biddle SJH, Armstrong N. Children's achievement goals and beliefs about success in sport. *Brit J Educ Psychol.* 1992; 62(3):313-323.
- Fernández R, Secades R, Terrados N, García E, García JM. Efecto de la hipnosis y la terapia de aceptación y compromiso (ACT) en la mejora de la fuerza física en piragüistas. *International Journal of Clinical and Health Psychology.* 2004; 4(3):481-493.
- García T, Cervelló E, Jiménez R, Iglesias D, Santos-Rosa FJ. La implicación motivacional de jugadores jóvenes de fútbol y su relación con el estado de flow y la satisfacción en competición. *Revista de Psicología del Deporte.* 2005; 14(1):21-42.
- García T, Leo FM, Martín E, Sánchez PA. El compromiso deportivo y su relación con factores disposicionales y situacionales contextuales de la motivación. *Revista Internacional de Ciencias del Deporte.* 2008; 12(4):45-58.
- Gómez M, Ruiz F, García ME, Flores G, Barbero G. Razones que influyen en la inactividad físico-deportiva en la Educación Secundaria Post Obligatoria. *Retos. Nuevas tendencias en Educación Física, Deporte y Recreación.* 2008; 14:80-85.
- Gómez M, Granero A, Baena A. Perceived barriers by university students in the practice of physical activities. *Journal of Sports Science and Medicine.* 2010; 9: 374-381.
- Guivernau M, Duda JL. Psychometric properties of a Spanish versión of The Task and Ego Orientation in Sport Questionnaire (TEOSQ) and Beliefs about the Causes of Success Inventory. *Revista de Psicología del Deporte.* 1994; 5:31-51.
- Hom H, Duda JL, Miller A. Correlates of goal orientations among young athletes. *Pediatr Exerc Sci.* 1993; 5(2):168-176.
- Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling.* 1999; 6:1-55.
- Jackson DN. A sequential system for personality scale development. In Spielberger, CD, ed, *Current topics in clinical and community psychology*. Nueva York: Academic Press; 1970, 61-96.
- Jiménez-Castuera R, Cervelló E, García T, Santos-Rosa FJ, Iglesias D. Estudio de las relaciones entre motivación, práctica deportiva extraescolar y hábitos alimenticios y de descanso en estudiantes de Educación Física. *International Journal of Clinical and Health Psychology.* 2007; 7(2):385-401.
- Jones, CD, Hollenhorst SJ, Perna F, Selin S. Validation of the flow theory in an on-site whitewater kayaking setting. *J Leisure Res.* 2000; 32(2):247-261.
- Jöreskog KG, Sörbom D. *Structural equation modeling with the SIMPLIS command language*. Chicago: Scientific Software International; 1993.
- Kjelsas E, Berit L. Las diferencias de género entre atletas competitivos y su motivación hacia la actividad física. *Eur J Psychiat.* 2003; 17(3):146-160.
- Kline RB. *Principles and practice of structural equation modeling*. New York: Guilford; 1998.
- Lochbaum M, Roberts GC. Goal orientations and perceptions of the sport experience. *J Sport Exercise Psy.* 1993; 15:160-171.
- López C, Márquez S. Motivación en jóvenes practicantes de lucha leonesa. *Revista de Psicología del Deporte.* 2001; 10(1):9-22.

- Mahamud J, Tuero C, Márquez S. Características psicológicas relacionadas con el rendimiento: comparación entre los requerimientos de los entrenadores y la percepción de los deportistas. *Revista de Psicología del Deporte*. 2005; 14(2):237-251.
- Males JR, Kerr JH. Stress, emotion, and performance in elite slalom canoeists. *Sport Psychol*. 1996; 10:17-36.
- Martín-Albo J, Núñez JL, Navarro JG. La evolución motivacional como criterio discriminante de los deportes. *Rev Lat Am Psicol*. 2003; 35(2):139-150.
- Moreno JA, Cervelló E, González-Cutre D. Young athletes' motivational profiles. *Journal of Sports Science and Medicine*. 2007; 6:172-179.
- Moreno JA, Cervelló E, González-Cutre D. Relationships among Goal Orientations, Motivational Climate and Flow in Adolescent Athletes: Differences by Gender. *The Spanish Journal of Psychology*. 2008; 11(1):181-191.
- Moreno JA, López M, Martínez C, Alonso N, González-Cutre D. 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*. 2006; 1(2):13-28.
- Newton M, Duda JL. Elite adolescents athletes achievement goals and beliefs concerning success in tennis. *J Sport Exercise Psy*. 1993; 15:437-448.
- Nicholls JG. Achievement motivation: conceptions of ability, subjective experience, task choice and performance. *Psychol Rev*. 1984; 21:328-346.
- Nicholls JG. *The competitive ethos and democratic education*. Cambridge: Harvard University Press; 1989.
- Ntoumanis N. A self-determination approach to the understanding of motivation in physical education. *Brit J Educ Psychol*. 2001; 71:225-242.
- Nunnally J, Bernstein I. *Teoría Psicométrica*. Madrid: McGraw-Hill; 1995.
- Peiró C, Sanchís JR. Las propiedades psicométricas de la versión inicial del cuestionario de orientación a la tarea y al ego (TEOSQ) adaptado a la Educación Física en su traducción al castellano. *Revista de Psicología del Deporte*. 2004; 13(1):25-39.
- Pensgaard AM, Roberts GC. Achievement goal orientations and the use of coping strategies among Winter Olympians. *Psychology of Sport and Exercise*. 2003; 4:101-116.
- Roberts GC, Balagué G. The development of a social-cognitive scale in motivation. *Seventh World Congress of Sport Psychology*. Singapore, Republic of Singapore; 1989.
- Roberts GC, Balagué G. The development and validation of the Perception of Success Questionnaire. *FEPSAC Congress*. Cologne, Germany; 1991.
- Roberts GC. Motivation in sport an exercise: Conceptual constraints and conceptual convergence. In Roberts, GC, ed, *Motivation in sport and exercise*. Champaign, IL: Human Kinetics; 1992, 3-30.
- Roberts GC. Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational process. In Roberts, GC, ed, *Advances in motivation in sport and exercise*. Champaign, IL: Human kinetics; 2001, 1-50.
- Roberts GC, Hall HK, Jackson SA, Kimiecik JC, Tonymon P. Implicit theories of achievement and the sport experience: Goal perspectives and achievement strategies. *Percept Motor Skill*. 1995; 33:219-224.
- Roberts GC, Treasure DC, Balagué G. Achievement goals in sport: the development and validation of the Perception of Success Questionnaire. *J Sport Sci*. 1998; 16:337-347.
- Roberts GC, Treasure DC, Hall HK. Parental goal orientations and beliefs about the competitive sport experience of their child. *J Appl Soc Psychol*. 1994; 24(7):631-645.

- Ryska TA, Hohensee D, Cooley D, Jones C. Participation motives in predicting sport dropout among Australian youth gymnasts. *North American Journal of Psychology*. 2002; 4(2):199-210.
- Sánchez PA, Leo, FM, Gómez, FR, Sánchez, D, De la Cruz E, García T. Orientaciones de metas y clima motivacionales de los otros significativos en jóvenes de jugadores extremeños de balonmano. *Retos. Nuevas tendencias en Educación Física, Deporte y Recreación*. 2009; 16:22-27.
- Santos-Rosa FJ, García T, Jiménez R, Moya M, Cervelló E. Predicción de la satisfacción con el rendimiento deportivo en jugadores de tenis: efecto de las claves situacionales. *Motricidad. European Journal of Human Movement*. 2007; 18:41-60.
- Scanlan TK, Russell DG, Beals KP, Scanlan LA. Project on elite athlete commitment (PEAK): II. A direct test and expansion of the sport commitment model with elite amateur sportsmen. *J Sport Exercise Psy*. 2003; 25:377-401.
- Scanlan TK, Simons JP, Carpenter PJ, Schmidt GW, Keeler B. The sport commitment model: Measurement development for the youth-sport domain. *J Sport Exercise Psy*. 1993; 15:16-38.
- Stucky-Ropp RC, DiLorenzo TM. Determinants of exercise in children. *Prev Med*. 1993; 22(6):880-889.
- Treasure D, Robert, GC. Cognitive and affective concomitants of task and ego goal orientations during the middle school years. *J Sport Exercise Psy*. 1994; 16:15-28.
- Walling MD, Duda JL, Crawford T. Goal orientations, outcome, and responses to youth competition among high/low perceived ability athletes. *Int J Sport Psychol*. 2002; 37(2):115-122.
- Weinberg, RS, Gould, D. *Fundamentos de psicología del deporte y el ejercicio físico*. Barcelona: Ariel; 1996.
- White, SA, Duda, JL. Dimensions of goals and beliefs among athletes with physical disabilities. *Adapt Phys Act Q*. 1993; 10(2):125-136.

Corresponding author

Francisco Ruiz Juan

Department of Physical Activity and Sport. Faculty of Sports Science. University of Murcia (Spain).

Faculty of Sports Science. University of Murcia

C/ Argentina, s/n.

30720 - Santiago de la Ribera. Murcia. Spain.

Phone: 868 88 86 75

Fax: 868 88 86 72

E-mail: fruizj@um.es