

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

# by

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The purpose of this study was to primarily examine the psychometric properties of the castillan 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, castillan, 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 themself in a particular situation (Weinberg and Gould, 1996). Both intensity and direction of effort in addition to the reasons for prat-

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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 occuring 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; Brodkin 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 selfimprovement 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 goalbelief factor of athletes on achievement in sport (Duda and Nicholls, 1992). Each one of these metabeliefs 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 threefold: 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 Spanish 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 description the detailed of 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; Pensgaard and Roberts, 2003; Roberts et al., 1994), with values  $\alpha$ =0.90,  $\alpha$ =0.72 (subscale task) and  $\alpha$ =0.94,

	Eg	Task			
Items	Boys	Girls	Boys	Girls	
Soy el mejor (I am the best)	0.80**	0.82**	- J -		
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**	

 $\alpha$ =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 (\alpha boys=0.80; \alpha girls=0.81), aptitude ( $\alpha$  boys=0.80;  $\alpha$  girls=0.79) and deception techniques ( $\alpha$ boys=0.81;  $\alpha$  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 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 ( $\alpha$  boys=0.82 y  $\alpha$  girls=0.87) and boredom ( $\alpha$ boys=0.74 y  $\alpha$  girls=0.78) (Castillo et al., 2004).

						Table 2	
Factor loadings (s	standardized	solution) –I	BACSSQ-				
Trans	Eff	ort	Abi	ility	Deceit		
Items	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			0.80**	0.79**			
competition)							
Siempre intenta ganar a los demás (always try			0.73**	0.74**			
to beat others)							
Es un deportista nato ( is born natural athlete)			0.72**	0.70**			
Finge que le cae bien el entrenador (pretend					0.80**	0.77**	
they like the coach)							
Sabe impresionar al entrenador (know how to					0.74**	0.76**	
impress the coach)							

<sup>\*\*</sup>p < 0.01, Variance explained in boys: 62.759 - Variance explained in girls: 58.614

Items	En	joyment	Boredom		
nems	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**	
In el deporte, a menudo sueño despierto en lugar de pensar en lo que estoy haciendo (In sport, I often daydream daydream instead of hinking about what I really do)			0.80**	0.79*	

#### Procedure

Before conducting the study, permission was gained from the Regatta via a written explaination 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* 

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

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  $\chi 2$  and the ratio  $\chi 2/gl$ . 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  $\leq 0.06$  indicate an excellent fit and the values  $\leq 0.08$  show a good fit (Hu and Bentler, 1999). Likewise, the GFI which value has to be  $\geq 0.90$  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  $\geq$ 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  $\leq$ 0.05, considering it an acceptable fit when it is  $\leq$ 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  $\chi 2/gl$ =.12; GFI=0.94; IFI=0.93; CFI=0.91; TLI=0.91; SRMR=0.04; RMSEA=0.05. The correlation between the factors

							rabie 5		
	Co	orrelations an	10ng the subs	cales -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(**)	-		

<sup>\*</sup> *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 (*rboys*=0.31, *rgirls*=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 χ2/gl=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 (rboys=-0.01, rgirls=-0.14), whereas the factors effort and ability (rboys=0.15, rgirls=0.14) and the factors deceit and ability (rboys=0.50, rgirls=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 It shows a good fit to the original model since the results were  $\chi 2/gl=3.07$ ; *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).

Table F

#### 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, 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, 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 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.

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