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ORIGINAL

GOAL ORIENTATIONS, SATISFACTION, BELIEFS IN SPORT SUCCESS AND MOTIVATIONAL CLIMATE IN SWIMMERS

ORIENTACIONES DE META, SATISFACCIÓN, CREENCIAS DE ÉXITO Y CLIMA MOTIVACIONAL EN NADADORES

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RESUMEN

En el presente estudio se plantearon varios objetivos; comprobar las relaciones existentes entre las orientaciones de meta, la satisfacción, las creencias sobre las causas del éxito en el deporte y el clima motivacional percibido en nadadores; examinar el efecto que tiene la orientación de meta en las diferentes dimensiones analizadas; y, por último, predecir la orientación de meta. La muestra estuvo compuesta por 163 nadadores. Los instrumentos utilizados fueron las versiones validadas al castellano del TEOSQ, SSI, BACSSQ y PMCSQ-2. Se realizaron tres tipos de análisis estadísticos: análisis de

correlaciones bivariadas, análisis multivariante (MANOVA 2x2) y análisis de regresión lineal múltiple multivariado por pasos. Los resultados mostraron que la capacidad y el aburrimiento son variables predictoras de la orientación de meta hacia el ego, mientras que el esfuerzo y la diversión lo son de las orientaciones de meta hacia la tarea.

PALABRAS CLAVE: deporte, motivación, natación, entrenador, diversión.

ABSTRACT

The present study had several objectives; to check the relationships between goal orientations, satisfaction, beliefs about the causes of success in sport and motivational climate perceived in swimmers; to examine the effect of goal orientation in different dimensions analyzed, and finally to predict goal orientation. The sample consisted of 163 swimmers. The instruments used were validated to Castilian versions of TEOSQ, SSI, BACSSQ and PMCSQ-2. There were three types of statistical analyzes: bivariate correlation analysis, multivariate analysis (MANOVA 2x2) and multiple linear regression analysis stepwise multivariate. The results showed that capacity and boredom are predictors of goal orientation towards the ego, while effort and fun are the goal orientations to the task.

KEYWORDS: sport, motivation, swimming, coach, fun.

1. INTRODUCTION

Currently, it is still important to approach the possible reasons that prompt the practice and give up of physical and sports activities (Castillo, Balaguer, and Duda, 2000; Gómez-López, Granero-Gallegos and Extremera Baena, 2010; Granero-Gallegos, Baena-Extremera, Gómez-López, and Abrales, 2014). Among the most popular motivational theories nowadays, we must highlight the achievement goal theory (Ames, 1984; Dweck, 1986; Nicholls, 1989), in which two target prospects are distinguished: ego orientation and task orientation. According to Nicholls (1984), task-oriented subjects tend to judge their level of capacity based on a process of comparison with themselves, while those who show an ego orientation demonstrate whether they are competent or not by comparing themselves with other athletes.

In order to measure the dispositional orientations "Cuestionario de Orientación al Ego y a la Tarea en el Deporte (Guivernau and Duda, 1994; Balaguer, Castillo and Thomas, 1996)" is used, Spanish version of "Ego and Task Orientation in Sport Questionnaire (Duda, 1989, 1992)". There are a large number of researches which have proved to be valid and reliable in terms of sport (Baric and Horga, 2006; Castillo, Balaguer, and Duda, 2002; Castillo, Balaguer, Duda, and García-Merita, 2004, Castillo et al, 2010; Hanrahan and Cerin, 2009; López-Walle, Balaguer, Meliá, Castillo, and Tristan, 2011; Stuntz and Weiss, 2009).

These goal orientations to which we have referred above are good to predict certain motivational variables such as beliefs about the causes of success in sport (Castillo et al, 2004; Duda, Fox, Biddle and Armstrong, 1992; Moreno, Cervello, and González-Tatty, 2007) and the intrinsic satisfaction or fun of practising sport (Castillo et al, 2004; Cecchini, Gonzalez Carmona, and Contreras, 2004; Cervello, Escartí and Balague, 1999), which is defined as the degree of amusement or boredom that subjects experience when practicing an activity.

Researches show that athletes with a goal orientation toward the task think that mastery and success in sport is achieved through effort and cooperation, while those who have a goal-oriented ego believe that success in sport depends on the abilities of the athlete, the carrying out of a minor effort and even by the use of deception techniques (Castillo et al 2002; Castillo et al, 2004; Duda, 1992); i.e. the use of any kind of unsportsmanlike action that may help to overcome the contrary.

In order to measure the athletes perceptions on how you can achieve success in sport "Inventario de las creencias sobre las causas de éxito en el deporte (Balaguer, Mayo, and Atienza, 1997; Castillo, Balaguer, and Duda, 2002)" is used, which is the Spanish version of "Beliefs About the Causes of Sport Success Questionnaire" (Duda, Fox, Biddle and Armstrong, 1992; Duda and Nicholls, 1992). There are many previous studies that have proved to be valid and reliable in the field of sports science within the Spanish context (Abraldes, Gómez-López, Granero-Gallegos and Rodríguez-Suárez, 2013; Castillo et al, 2002; Ruiz-Juan, Gomez-Lopez, Pappous, Alacid, and Flores, 2010).

On the other hand, task-goal oriented athletes generally tend to have fun when practising sport (Duda and Nicholls, 1992; Duda, Fox, Biddle, & Armstrong, 1992; Duda, 2001, Smith, Balaguer, and Duda., 2001, Castillo et al, 2002) and feel more enthusiasm for the task they are going to develop which means that they have a greater commitment as well as it reduces the chances of quitting of practising sport (Tutte, Blasco, and Cruz, 2010). On the other hand, ego-oriented athletes participate less enthusiastically and become bored with sport; i.e. They do not consider fun an important element in the carrying out of the sport, which can cause even the abandonment of the practice in those athletes with low ability, who question his own ability or find little difficulties (Castillo et al, 2000; Castillo et al, 2002; Cecchini et al, 2004; Walling, Duda and Crawford, 2002).

This satisfaction in sport is a determinant in the abandonment or increase level of physical sports practise, proof of this is that fun is one of the reasons given among young people as a condition for physical and sports practise (Castillo and practices Balaguer, 2001). This degree of fun within the sport practise is measured by the "Cuestionario de Satisfacción Intrínseca en el Deporte" (Balaguer, Atienza, Castillo, Moreno, and Duda, 1997), Spanish version of "Sport Satisfaction Instrument" (Duda and Nicholls, 1992). Several studies have proved to be valid and reliable in the field of physical and sports practise (Abraldes et al., 2013; Castillo et al., 2002; Castillo et al., 2004; Cervello et al., 1999; Ruiz-Juan et al., 2010).

Similarly, it is interesting to highlight that goal orientations also interact with the motivational climate (Moreno et al., 2007), determining the involvement of the athlete. This motivational climate is generated by parents, relatives, friends, coaches, etc., and may differ depending on the established success criteria, as it is task-oriented (mastery climate) where what matters is the effort and personal improvement, or ego-oriented (execution climate) where the important thing is to win and prove their ability (Nicholls, 1989). Motivational mastery climates enhance psychological well-being of athletes through improved confidence, self-esteem and decreased anxiety, while also favor sports performance (Balaguer, Duda, Atienza, and May, 2002; Duda, 2001; Pensgaard and Roberts, 2000). On the other hand the execution climate produces a lower psychological well-being, increased anxiety concerning the performance and lower satisfaction with the sporty atmosphere (Balaguer, Duda, and Crespo, 1999, Garcia-Mas et al, 2011; Pensgaard and Roberts, 2000).

In order to measure the perceived motivational climate the "Cuestionario de Clima Motivacional Percibido en el Deporte" (Balaguer, Givernau, Duda, and Crespo, 1997), Spanish version of "Perceived Motivational Climate in Sport Questionnaire" (Newton, Duda, and Yin, 2000) is used. Different studies within the sporting context have proved to be valid and reliable (Lopez-Walle, Balaguer, Castillo, and Tristan, 2011; Moreno, Cervello, and González-Tatty, 2010; Torregrosa et al, 2011; Tutte et al., 2010)

Finally, the purpose of this study was threefold: first, to check the relationship between goal orientations, satisfaction, beliefs about the causes of success in swimming and perceived motivational climate; second, to examine the effect of goal orientation on different analyzed dimensions and, thirdly, predicting the dispositional goal orientation of swimmers.

This study is relevant because, on one hand, the sport in which it is performed since swimming is an individual and minority mode and there is little research about it, and on the other hand, the importance for coaches of being able to predict goal orientations of athletes, increasing and enriching existing information by means of this.

2. MATERIAL AND METHODS

2.1. Sample

This study involved a total of 163 swimmers, from cadet to senior from different clubs. All swimmers compete in national championships and trained a minimum of five weekly sessions. In Table 1, it can be observed the characteristics of the sample.

Table 1. Sample Characteristics (n), percentage (%), age (years) and standard deviation (\pm SD) in different categories of the study.

| Sample | Deviation | Categorías | | | | |
|--------|---------------|------------------|------------------|------------------|------------------|------------------|
| | | Cadet | Youth | Junior | Senior | Total |
| Men | n (%) | 3 (3,26%) | 25 (27,17%) | 26 (28,26%) | 38 (41,30%) | 92 (100%) |
| | Edad \pm SD | 13,68 \pm 0,75 | 15,71 \pm 0,82 | 17,64 \pm 0,48 | 23,37 \pm 3,07 | 18,80 \pm 4,32 |
| Women | n (%) | 2 (2,81%) | 34 (47,89%) | 18 (25,35%) | 17 (23,94%) | 71 (100%) |
| | Edad \pm SD | 13,91 \pm 0,26 | 15,51 \pm 1,23 | 17,71 \pm 0,55 | 23,15 \pm 3,64 | 17,61 \pm 3,55 |
| Total | n (%) | 5 (3,07%) | 59 (36,20%) | 44 (26,99%) | 55 (33,74%) | 163 (100%) |
| | Edad \pm SD | 13,82 \pm 0,52 | 15,62 \pm 1,02 | 17,68 \pm 0,52 | 23,23 \pm 3,46 | 18,23 \pm 4,02 |

2.2 Instruments

Cuestionario de Orientación al Ego y a la Tarea en el Deporte (Task and Ego Orientation in Sport Questionnaire, TEOSQ; Duda, 1989, 1992). The Spanish version (Balaguer et al, 1996; Guivernau and Duda, 1994) is used. This version consists of 13 items and assesses the tendency of people towards ego orientation (6 items) and task orientation (7 items) within the sporting context. Responses were collected on a scale of polytomous items with score range from *strongly disagree* (1) to *strongly agree* (5). In the present study the internal consistency of *ego orientation* subscale was Cronbach's alpha (α) = 0.88 and *task orientation*, α = 0.73.

Cuestionario de Satisfacción en el Deporte (Sport Satisfaction Instrument, SSI; Duda y Nicholls, 1992). The Spanish version used in other studies was used (Balaguer et al, 1997; Castillo et al., 2002, Castillo et al., 2004). The original questionnaire consists of eight items divided into two scales that measure *satisfaction/Fun* (5 items) and *Boredom* (3 items) in sport practise. In the instructions subjects are asked to indicate the degree of agreement with the items that reflect criteria for fun or boredom, collecting responses on a scale of polytomous items with a score range from *strongly disagree* (1) to *strongly agree* (5). In the present study the internal consistency of the subscale *satisfaction/fun* was α = 0.80 and *boredom*, α = .66.

Inventario de las creencias sobre las causas del éxito en el Deporte (Beliefs About the Causes of Sport Success Questionnaire, BACSSQ; Duda et al., 1992; Duda y Nicholls, 1992). The Spanish version of the inventory (Balaguer et al., 1997; Castillo et al., 2002) was used, consisting of 18 items measuring the subjects' beliefs about whether the *Effort* (9 items), *Capacity* (4 items) and the use of *deception techniques* (5 items) enable success in sport. Subjects answered on a scale of polytomous items with score range from strongly disagree (1) to strongly agree (5). In the present study the internal consistency of effort subscale was α = 0.87 and capacity, α = 0.80.

Cuestionario de Clima Motivacional Percibido en el Deporte (Perceived Motivational Climate in Sport Questionnaire, PMCSQ-2; Newton et al., 2000). The Spanish version of this instrument (Balaguer et al., 1997) is used, consisting of 29 items divided into two dimensions that measure the climate of involvement in the ego (14 items), called Execution, and climate of involvement

in the task (15 items), called Master. Responses were collected on a scale of polytomous items with score range from *strongly disagree* (1) to *strongly agree* (5). In the present study the internal consistency of the master subscale was $\alpha = 0.87$, and execution $\alpha = 0.87$.

2.3 Procedure

Several swimming clubs were asked for permission by a letter in which the objectives of the research and the data collection procedure were explained next to a copy of the instrument. The clubs gave their consent to the research. The questionnaire was managed by the researchers prior to training of the different teams, using any annexed room to the training area or on the steps of the facilities. All athletes were informed of the purpose of the study and the absolute confidentiality of responses and data management it implied. They all participated voluntarily. As there were no right or wrong answers, they were asked to reply with utmost sincerity and honesty. It took two months to collect all the data, located on the second third of the season 2012/2013.

2.4 Data analysis

The item analysis, homogeneity, correlation between the subscales (Pearson coefficient), internal consistency of each subscale (Cronbach's alpha), multivariate analysis (MANOVA 2x2) and canonical correlations were carried out using SPSS 17.0. The factor structure of each instrument was evaluated with confirmatory factor analysis (CFA) carried out with LISREL 8.80.

2.5 Propiedades psicométricas de los instrumentos

As the underlying structures of each instrument have been consistently identified in the literature, an AFC was performed to assess the factor structure of each scale. The estimation method "*weighted least squares*" (WLS) for ordinal variables from the LISREL 8.80 software (Jöreskog and Sörbom, 1993) was used. As input for the data analysis, the polychoric correlations matrix and the asymptotic covariance matrix were used. Also, it is important to indicate that the existence of latent variables was assumed according to the original instruments described in the corresponding section.

Following the recommendations against the use of a single measure of overall model fit (Bentler, 2007; Miles and Shevlin, 2007), each model was evaluated with a combination of absolute and relative indices of adjustment. The p value associated with the chi-square statistic (χ^2) was used among absolute indices. The ratio between χ^2 and degrees of freedom (df) (χ^2/df) is a heuristic that is used to reduce the sensitivity of χ^2 to the sample size. In a perfect model its value would be 1.0; ratios below 2.0 are considered as indicators of a very good fit of the model (Tabachnik and Fidell, 2007), while values < 5.0 are considered acceptable (Hu & Bentler, 1999).

In addition, we calculated the GFI (*goodness of fit index*), whose value must be equal to or greater than 0.90 so the fit of a model can be considered minimally

acceptable, although authors like Hooper, Coughlan and Mullen (2008) considered values ≥ 0.95 for a better fit. Among the relative indices, NFI (*normative fit index*), NNFI (*non-normative fit index*) and CFI (*comparative fit index*) were used. In incremental indices is considered that values ≥ 0.95 indicate a good fit (Hu and Bentler, 1999). Authors such as Kline (2005) recommend the use of RMSEA (*mean square error of approximation*) and, according to Hu and Bentler (1999) a value ≤ 0.06 indicate a good fit. The estimated parameters are considered significant when the value associated with the value t is greater than 1.96 ($p < 0.05$) (Table 2).

Table 2. Indices of fit of the models.

| Scales | χ^2 | gl | P | χ^2/gl | GFI | NFI | NNFI | CFI | RMSEA |
|---------|----------|------|-------|-------------|------|------|------|------|-------|
| TEOSQ | 78,27 | 64 | 0,000 | 1,99 | 0,98 | 0,97 | 0,97 | 0,98 | 0,04 |
| SSI | 44,99 | 19 | 0,001 | 2,37 | 0,97 | 0,96 | 0,97 | 0,97 | 0,06 |
| BACSSQ | 154,11 | 74 | 0,000 | 2,08 | 0,95 | 0,95 | 0,96 | 0,96 | 0,04 |
| PMCSQ-2 | 683,80 | 378 | 0,000 | 1,69 | 0,98 | 0,99 | 0,98 | 0,99 | 0,04 |

This data set forth in Table 2 are adjusted to the established parameters, so the models proposed can be accepted as good (Hu and Bentler, 1999). Also, each model under review presents the minimum requirements to ensure the convergent validity of the model (Hair, Black, Babin, and Anderson, 2009): high and statistically significant standardized factor loadings ($t\text{-value} > 1.96$)

3. RESULTS

3.1 Descriptive and correlation analysis

The descriptive statistics of the variables are shown in Table 3. The average score of task orientation ($A = 3.95$) is clearly higher than ego orientation ($A = 2.68$). According to the satisfaction scale, *fun* ($A = 4.22$) achieved a better average than *boredom* ($A = 2.53$). Regarding the perceived beliefs of success, *effort* ($A = 4.10$) is the most valued, followed by *ability* ($A = 3.21$), while *deception* had the lowest score ($M = 2.19$). Finally, on the scale of perceived motivational climate, *mastery* ($A = 4.07$) has an average well above *execution* ($A = 2.99$) among swimmers.

Table 3. Average (A), standard deviation (SD), alpha coefficients (α) and correlation of the subscales Goal Orientation, Satisfaction, Beliefs about the causes of success and Perceived Motivational Climate

| Subescalas | A | SD | I | II | III | IV | V | VI | VII | VIII | IX |
|-----------------------|------|------|---|------|--------|--------|--------|--------|--------|--------|--------|
| <i>I. Ego</i> | 2,68 | 1,00 | - | 0,10 | -0,26* | 0,45** | 0,38** | -0,15 | 0,40** | -0,22* | 0,32** |
| <i>II. Task</i> | 3,95 | ,50 | | - | 0,53** | -0,20 | -0,19 | 0,59** | -0,17 | 0,36** | 0,06 |
| <i>III. Fun</i> | 4,22 | ,63 | | | - | -0,16 | -0,06 | 0,42** | -0,04 | 0,44** | -0,00 |
| <i>IV. Boredom</i> | 2,53 | ,95 | | | | - | 0,55** | -0,18 | 0,27** | -0,06 | 0,12 |
| <i>V. Effort</i> | 4,10 | ,69 | | | | | - | -0,12 | 0,44** | -0,19 | 0,39** |
| <i>VI. Capacity</i> | 3,21 | ,95 | | | | | | - | -0,22* | 0,48** | -0,09 |
| <i>VII. Deception</i> | 2,19 | 1,17 | | | | | | | - | -0,10 | 0,56** |
| <i>VIII. Mastery</i> | 4,07 | ,55 | | | | | | | | - | -0,23* |
| <i>IX. Execution</i> | 2,99 | ,70 | | | | | | | | | - |

* $p < 0,05$; ** $p < 0,01$

In order to test the relationships between different constructs, an analysis of bivariate correlations presented in Table 3 was carried out. In general, a significant and positive correlation between *ego* and *boredom* ($r = 0.45$) and the use of *deception techniques* ($r = 0.40$) is observed; Also, we must also note the positive correlation between *ego* and *effort* ($r = 0.38$) and *execution* ($r = 0.32$). On the other hand the correlation, albeit minor, is negative between *ego* and *fun* ($r = -0.26$) and between *ego* and *mastery* ($r = -0.22$). *Fun* ($r = 0.53$) and ability ($r = .59$) are the dimensions that most highly correlate with *task*. *Mastery* is presented positively and significantly correlated with *fun* ($r = 0.44$) and *capacity* ($r = 0.48$). Finally it is important to highlight the correlation between *execution* and the use of *deception techniques* ($r = 0.56$).

3.2 Comparison between groups

To examine the effect of goal orientation on the different dimensions of this study competitors were classified into four groups based on the division by the median by the Task and Ego subscales. Those who scored above the median on ego orientation subscale were categorized as high ego group ($n = 35$ males, $n = 18$ women); participants who scored below the median on this subscale were categorized as low ego group ($n = 18$ males, $n = 34$ women). Likewise, those who scored above the median on the subscale of task orientation were categorized as high task group ($n = 34$ males, $n = 29$ women); also those who scored below the median were categorized as the low-task group ($n = 19$ males, $n = 23$ women). MANOVA 2x2 was performed with the two levels of ego orientation (high-low) and the two levels of task orientation (high-low) as independent variables and dimensions of satisfaction, success beliefs and coach motivational climate as dependent variables. MANOVA results showed that the multivariate interaction effect Mastery x execution in goal orientation dimensions, satisfaction and beliefs of the causes of success, was not significant (Wilks' Lambda $F_{(7, 52)} = 109$; $p = 0.382$). However, the analysis revealed a significant multivariate main effect for ego orientation (Wilks' Lambda = 0.73, $F_{(7, 52)} = 2.65$, $p = 0.017$) and for task orientation (Lambda Wilks = 0.64,

$F_{(7, 52)} = 4.20, p < 0.001$). The following univariate analysis indicated that subjects with higher ego orientation showed a greater capacity but also a higher level of boredom. Moreover, univariate analysis also revealed that swimmers who perceived a higher orientation task had fun and went above and beyond and perceived a motivational climate from their coach more oriented towards mastery (Table 4).

Table 4. Univariate Effect of Goal Orientation in the dimensions of satisfaction, beliefs about the causes of success and perceived motivational climate. Average (A) according to levels of ego and task.

| Subscales | Ego level | | Task level | | | | | |
|------------------|-----------|---------|------------|-------|----------|---------|-------|-------|
| | High (A) | Low (A) | F | p | High (A) | Low (A) | F | p |
| <i>Fun</i> | 4,02 | 4,25 | 2,83 | 0,098 | 4,46 | 3,81 | 22,05 | 0,000 |
| <i>Boredom</i> | 2,73 | 2,31 | 3,88 | 0,044 | 2,34 | 2,72 | 2,83 | 0,098 |
| <i>Effort</i> | 3,96 | 4,28 | 5,29 | 0,025 | 4,36 | 3,87 | 11,96 | 0,001 |
| <i>Capacity</i> | 3,47 | 2,93 | 5,47 | 0,023 | 3,12 | 3,28 | 0,05 | 0,482 |
| <i>Deception</i> | 2,22 | 1,77 | 2,57 | 0,114 | 1,87 | 2,12 | 0,77 | 0,383 |
| <i>Mastery</i> | 3,88 | 4,21 | 8,47 | 0,005 | 4,21 | 3,88 | 8,17 | 0,006 |
| <i>Execution</i> | 2,87 | 2,97 | ,36 | 0,551 | 2,89 | 2,95 | 0,19 | 0,666 |

Note. The mean difference is significant at the 0.05 level

3.3 Multiple linear regression analysis

In order to examine the importance of the different dimensions involved in this study to predict a behavior of swimmers oriented to the ego and task, a multivariate linear regression analysis was carried out by steps taking the mean score of goal orientation toward ego and toward the task as the criterion variable and taking as predictor variables each of the satisfaction, beliefs about the causes of success and perceived motivational climate subscales.

As indicated by Hair, Anderson, Tatham, and Black (1999), this method of variables extraction allows proper consideration of the contribution of each predictor variable to the regression model and eliminates from the regression equation those independent variables that do not suppose a significant contribution. This allows us to judge the contribution of each variable, as it was the last introduced, regardless of the time of its introduction (Castro and Galindo, 2000). Furthermore, considering the high number of independent variables used in this study and included in the education regression, we chose this method of extraction variables.

In addition to the normal rates of the data (Kolmogorov-Smirnov test confirmed the normal distribution of the sample, Z between .68 and .97, $p > .12$), we assessed the index of tolerance and independence of variables included in the regression equation. The tolerance index showed values between 0.71 and 1.00 and the variance inflation factor (VIF) showed values between 1.00 and 1.40, so these values indicate that the probability of error derived from possible collinearity is discarded (Gil, 2003; Hair et al., 1999.). Also, the Durbin-Watson statistic of 1.72 is obtained, which allows us to affirm the independence of the data (Gil, 2003).

Table 5 shows the results of linear regression analysis by steps, taking in first place ego orientation as a dependent variable. The total explained variance reaches 29%. In the first step the importance of capacity as a predictor of ego in swimmers ($\beta = 0.49$, $p < 0.001$) is evident, with 18% of the total variance explained. In the second step, reaching 29% of the total explained variance, boredom ($\beta = 0.32$, $p = 0.013$) is included as a predictor variable, in a positive and meaningful way.

When the dependent variable is the task orientation, the total explained variance reaches 50%. In the first step, it highlights the importance of fun for swimmers, given the positive and significant coefficient prediction ($\beta = 0.51$, $p < 0.001$) in the dispositional orientation towards task, and the percentage of total variance explained reached (39%). In the second step the effort is introduced as a predictor of task orientation ($\beta = 0.31$, $p < 0.001$), reaching 50% of the total explained variance (Table 5).

Table 5. Multiple linear regression by steps. Correlations, standardized beta weights (β), and total variance explained (R^2) for each step. Dependent variable: goal orientation

| Variable | F | β | R^2 | T | p |
|---------------|-------|---------|-------|------|-------|
| Ego | | | | | |
| Step 1 | | | | | |
| Capacity | 14,88 | 0,49 | 0,18 | 3,86 | 0,000 |
| Step 2 | | | | | |
| Capacity | 11,30 | 0,42 | 0,29 | 3,31 | 0,002 |
| Boredom | | 0,32 | | 2,55 | 0,013 |
| Tarea | | | | | |
| Step 1 | | | | | |
| Fun | 42,04 | 0,51 | 0,39 | 6,48 | 0,000 |
| Step 2 | | | | | |
| Fun | 32,57 | 0,38 | 0,50 | 4,75 | 0,000 |
| Effort | | 0,31 | | 3,81 | 0,000 |

Note. p is significant at $p < 0.05$

4. DISCUSSION

Responding to the first and second of the objectives proposed in the study, the results show that the task orientation in swimmers is clearly superior to the ego orientation, as also occurs in other studies such as those by Cervello and Santos Rosa (2000), García-Gimeno and More (2008) and Abrales et al. (2013).

It is confirmed that ego and task orientation significantly influences the satisfaction experienced by athletes. In these results, the fun got a score much higher than boredom, just as in other studies, such as Castillo et al. (2002), Castillo et al. (2004) and Abrales et al. (2013).

It is important to highlight that in the present study significant relationships were found only between ego and fun (negative in this case) and between ego and boredom (positive in this case), in sports. Instead, Azofeifa and Vargas (2007) obtained positive correlations between ego orientation and fun, a fact that in this study could not substantiate. Meanwhile, Duda and Nicholls (1992) obtained significant positive correlations between goal orientation to the task and satisfaction or fun, and negative with respect to boredom. With regard to boredom, we found a significant relationship between high ego and the higher levels of boredom, coinciding with the results of Castillo et al. (2004). Also positive correlations between ego and deception techniques, effort and execution have been found. However, the fun and ability are the dimensions that correlate with higher task. Thus, the results are similar to those found by Ruiz-Juan et al. (2010) with a sample of elite canoeists and recently published by Abrales et al. (2013) with a sample of lifesaving sport practitioners.

In terms of beliefs about the causes of success in swimming, the results show that effort is the most valued, followed by ability and deception, which confirms the results found by Castillo et al. (2002) and Abrales et al. (2013). It is reflected in the results that athletes who perceived a higher level of task orientation strove more and perceived a motivational climate from their coach more oriented to mastery, as in the study carried out by Zahariadis and Biddle (2000), and fun or enjoyment, coinciding with Azofeifa and Vargas (2007).

Likewise, the relationship between high dispositional task orientation and fun and effort is proved. This aspect is reinforced when it became clear the importance, especially of fun, in predicting a positive orientation from the athlete toward the task. These results are in line with those found by Castillo et al. (2004) and Abrales et al. (2013). Furthermore, it is shown that athletes with high ego orientation have a higher perception of their own ability, coinciding with Castillo et al. (2000).

The results show that athletes perceived a motivational climate oriented to mastery higher than one oriented to execution, coinciding with previous studies (Moreno, Cano, Gonzalez-Tatty, Cervello, and Ruiz., 2009; Sanchez et al., 2009; Sánchez-Oliva, Leo Sanchez, Amado, and García-Calvo, 2010; Torregrosa, Sousa, Viladrich, Villamaría, and Cruz, 2008) that showed a similar trend. Therefore and according to the results, we can observe how a coach can check performance and victory goals with his athletes and not guide and schedule his training sessions under an execution oriented motivational climate.

Finally, to address the third objective, we must emphasize that capability and boredom appear as predictors of goal orientation towards the ego, while effort and fun are predictors of goal orientations toward the task.

5. CONCLUSION

Goal orientation toward task, fun and satisfaction with the practice of swimming and believe that success is achieved through the effort carried out in training and competitions prevails among the analyzed swimmers. It is confirmed that

goal orientation toward the task is positively related with fun, effort and perception of a mastery motivational climate, while goal orientation towards the ego does to capacity, boredom, the use of deception techniques and the execution motivational climate. Swimmers with a high ego orientation showed a greater capacity, but also greater boredom, while those with a high task orientation, had fun and went above and beyond, and perceived a motivational climate oriented to mastery.

Furthermore, capacity as a way to achieve sporting success and boredom are predictors of goal orientation towards the ego, while effort and fun are predictors of goal orientations to the task.

Finally we should highlight that this study has some limitations that can be improved in future studies, such as the failure to include variables relating to the athlete himself such as his level of performance and his competitive level or those variables that can affect him such as training characteristics and leadership styles that the coach carries out.

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