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# **REVIEW ARTICLE**

# **Goal Orientation in Lifesaving Athletes**

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#### Abstract:

## Background:

The aims of this papers are two: 1) To study goal orientation in Lifesaving practitioners and 2) to analyze the differences in goal orientation depending of variables? such as sex, age and sport specialty.

#### Method:

Participants were 136 specialists swimmers in Rescue and Lifesaving, from youth (from 15 to 16 years) to junior (from 17 to 18 years) category. The Perception of Success Questionnaire (POSQ) was used to ask the objective of this research; also an internal consistency analysis of the instrument and a descriptive analysis of all variables were performed. A t-test for independent samples was used to confirm differences between groups.

#### Result

The significance level was set at  $p \le .05$ . In general, the results showed dispositional at task-orientation. Gender differences were found in pool and beach specialists but none between the age categories. The results show strong sport motivation that favours sport for pleasure minimizing demotivation and dropout.

Keywords: Motivation, Questionnaire, Sport, Age categories, Athletes, Orientation.

# 1. INTRODUCTION

Lifesaving is a very demanding sport of different modalities. Spanish Lifesaving is one of the sports with more international sporting successes, what has led to a daily increase in the number of practitioners [1]. The rising amount of sportspeople and clubs managing its practice allow, among other, the athletes' psychological and social progress [2].

It is known that sport activity from early ages helps create social and healthy habits, able to generate values and motivations in the athlete valuable for sport practice [3, 4]. There are several studies on this minority sport modality highlighting enjoyment as the main reason for its practice [1, 5]. This promotes sport commitment, interest and enjoyment for the sport itself [6]. However, it should be noted that studies show an increase in the dropout rates in adolescence leading to lower physical activity levels [7, 8]. At this age, young people lose their interest and motivation about the physical activities and sports [9, 10]; thus becoming a problem since during this period, habits and behaviour strengthen that are fundamental for sport's consolidation and promotion [11] or, conversely, for dropout [12].

Thus, motivation is presented as a key factor for the analysis of sports' actuality. Therefore, how the athlete's social, environmental and individual variables interact must be confirmed [13]. A social-cognitive approach to the study of goal perspectives [14] would help us understand the reasons behind the choice between playing a sport or giving up.

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This Achievement Goal theory aims to analyze the dispositional and environmental factors involved in the athlete's achievement motivation [15], understanding sport as an achievement-demanding context where practitioners try to meet a goal, and where the demonstration of skills becomes greatly important [14, 16].

According to this theory, there are two dispositional goal orientations that rise due to social influence, reflecting the criteria by which athletes judge their own mastery level and define success or defeat in sports practice. This way, the athlete becomes task-oriented when his/her goal is learning, and judges his/her own skills by means of a self-comparison process, that is, success will be conditioned by his/her personal improvement and mastery of the task, with the perception of the ability being self-referential and dependent on the personal progress. However, when the athlete is ego-oriented, the goal is competitiveness and his mastery level is judged by using others as a reference and success will depend on the subjective assessment of this comparison [17]. This provision relates to overcoming rivals and show greater capacity [16, 18, 19] even with the use of deceptive techniques to achieve a higher social status [18]. The problem in these athletes usually comes with the first personal failures, showing a decline in their motivational level towards sports [20].

It was initially thought that goal orientations were bipolar [21], however they have been proved to be orthogonal [22]. This means that an athlete may reflect orientations that are both either low or high or one low and the other one high or vice versa, meaning that one type of orientation is not acquired at the expense of the other [23]. Studies have shown that athletes with high levels in both types of orientation are gifted with the best combinations for the practice of sports [23].

Therefore, the increasing number of athletes involved in lifesaving, the successes obtained by Spain at an international level and the few specific studies about this sport encouraged us to study these athletes' motivation from the Achievement Goal theory. It must be highlighted that the diversity of tests, the relationship with the changing environment and the specificity of the materials used during their practice can generate different motivations in athletes. Therefore, the main goals of our research were: 1) to study goal orientation in Lifesaving practitioners and 2) analyse the differences existing in goal orientations depending on the gender, category (age) and sport specialty variables.

#### 2. METHOD

## 2.1. Sample

Participants were 136 swimmers specialists in Rescue and Lifesaving, from youth (from 15 to 16 years) to junior (from 17 to 18 years) category. The sample was mean age 16.57±1.14 made up of 60 men (17.09±1.13 yeas),) and 76 women (16.15±0.97 years) from all the participant clubs of Lifesaving Championships in Spain.

#### 2.2. Instruments

Perception of Success Questionnaire (POSQ) [22, 24, 25]. The scale measures the dispositional orientation of achievement tasks within the sports performance context. We used the Spanish version [18], which has 12 items, six on the dispositional implication on the task and the remaining six on the ego. 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 1 (strongly disagree) to 5 (strongly agree).

Previous studies showed the exploratory and confirmatory validity of the factorial structure in two subscales, and its reliability in the field of sport and physical activity focusing on competitive sports [18, 26 - 30], with values  $\alpha = .90$  to  $\alpha = .72$  (task subscale) and  $\alpha = .94$  to  $\alpha = .73$  (ego subscale). In the present study, Cronbach's alpha reliability results show high internal consistency of the subscales for both, dispositional Ego orientation ( $\alpha > .75$ ), and Task orientation ( $\alpha > .73$ ).

# 2.3. Statistical Analysis

An internal consistency analysis of the instrument was performed to check reliability on both subscales. We proceeded to a descriptive analysis of the study variables. To analyze the differences between groups, a t-test for independent samples was conducted. The between-subscales analysis was performed using a t-test for repeated measures. Statistically significant differences were found for 95% ( $p \le 0.05$ ) reliability.

## 3. RESULTS

#### 3.1. Psychometric Properties of the Instruments

The internal consistency analysis of the POSQ has resulted to be satisfactory for both the subscale Ego ( $\alpha > .75$ ) and the Task ( $\alpha_{male} > .71$  and  $\alpha_{female} > .76$ ), like the Task ( $\alpha > .73$ ) ( $\alpha_{male} > .73$  and  $\alpha_{female} > .74$ ). In the analysis, none of the items were eliminated since they complied with the established requirements, with an *eigenvalue* > 1 and a minimal correlation between variable superior to a .45 [31]. The homogeneity analysis suggests that there are no overlaps of items between the two theoretical dimensions. The model that has been put into practice predicts the existence of two latent variables: dispositional goal orientation towards the ego (Ego) and dispositional goal orientation towards the task (Task). This underlies the 12 items and provides an account of the covariance observed between them.

## 3.2. Descriptive Analysis

Table 1 shows the descriptive analysis of each of the variables in the investigation. With respect to measures, from the perception of success, higher scores can be observed on *Task* orientation than on *Ego* orientation.

Table 1. Mean (M), Standard Deviation (SD) and Coefficient Cronbanch (α) Gender in the Subscales of POSQ questionnaire.

Subscales of Questionnaire	M	DT	α
Perception of Success			
Ego	19,55	4,87	0,751
Task	22,85	4,02	0,733

#### 3.3. Inferential Statistical between Subscales

Table 2 shows the inferential analysis of each of the variables in the investigation.

Table 2. Mean (M), Standard Deviation (SD) and Coefficient Cronbach (α) Gender in the Subscales of POSQ questionnaire by Different Variables. Statistical Differences from (\*) Subscales and (†) Between Ego and Task by Different Subscales.

Subscales of Questionnaire	Ego	Task	
Gender			
Men	21,52±4,32* <sup>†</sup>	24,12±3,95*	
Women	18,07±4,72 <sup>†</sup>	21,87±3,84	
Level			
Youth	19,12±5,05 <sup>†</sup>	22,42±3,95	
Junior	20,18±4,55 <sup>†</sup>	23,49±4,08	
Speciality competition			
Pool	20,54±4,76* <sup>†</sup>	24,11±3,42*	
Beach	18,14±4,57 <sup>†</sup>	21,52±3,73	
Total			
Total sample	19,55±4,87 <sup>†</sup>	22,85±4,02	

#### 4. DISCUSSION

Regarding the first targets set by this research, the results show that Lifesaving practitioners are more task-oriented than ego-oriented, therefore their goal would be learning. Other studies [9, 32, 33] confirmed higher task orientation in young athletes; these results were encouraging for sports commitment since an athlete with a task-oriented motivational disposition judges his/her ability level through a self-comparison process, showing a self-referential perception of success [18].

Thus, our results are in line with those of Abraldes et collaborators [5] confirming that the athletes' sporting success can be attributed to the effort they make. Different studies [19, 34 - 36] describe these athletes as very persistent, highly committed and devoted to training, being the ones who enjoy themselves with the practice of sports.

Giving answer to the second objective, the results show significant differences in variables gender and specialty not in categories. In relation to the variable gender, the results confirm that task and ego orientations are higher in men than in women. Our results agree with other studies [36 - 38] stating that both orientation levels are higher in men, a fact that according to Dunn and collaborators [39] means that they have the best of combinations for sports practice.

Regarding gender, our results show that men are more ego-oriented than women agreeing with other studies [5, 40, 41] that claim that gender is an achievement goal orientations' predictor and moderator in the relationship between participation level and attributional style [42].

When gender was analyzed, the data confirmed task-factor prevalence for both boys and girls. In this sense, lifesaving sportsmen showed higher task orientation than women. This result makes us think that ego-oriented sportsmen more enjoy the sports practice and have a better and more frequent perception of success [43, 44].

Regarding the sports specialty, the results show statistically significant differences between pool and beach specialists. Pool specialists showed the highest task orientation values. In this sense, the existence of a mark (chrono) can be the determining factor to justify the results since these athletes see their commitment and dedication to training reflected in a mark, compared to the variable characteristics of beach competition environments. Pool specialists show data that are similar to those of Brodkin and Weiss' study [45] on swimmers. This paper highlights the importance of effort and results with regard to the self. However, in an open water competition, several are the factors that can condition the results (wind, waves, water courses, interaction with other athletes, *etc.*) here, then, are the differences found.

The analysis of the age-related category variable was not significantly different. These results do not agree with those found by Brodkin and Weiss [45] and Strenberg, Grieve and Glass [46], who linked social recognition factors with younger athletes, in contrast with the oldest ones leading to factors such as relation with others, health improvement and learning new abilities. Our results may be due to the reduced age difference between the categories. For this reason, the results show that between the two demographic variables analyzed, genre significantly emphasizes perception orientation of the sporting success, being stronger than age in relation to ego orientation.

Considering the results, assuming sports as an important context where social comparison processes are performed, we tested how task orientation is present in lifesaving athletes. These results favor an engaging and positive experience, avoiding demotivation and early dropout.

Finally, it is important to highlight the limitations of the analyzed sample represented in terms of generalization of the results. Athletes competing at national level were analyzed for this study; it would, therefore, be necessary to expand the sample for future research. Even though, we still believe these results are good indicators of the athletic population and a preliminary baseline study on this minority sport.

## **CONCLUSION**

The analysis of the Achievement Goal Theory in lifesaving young athletes allowed us to conclude that dispositional task orientation is the most frequent in these athletes. Male athletes show higher values in both orientations than women. These same results were also found in relation to pool and beach specialists. No statistical differences were found in the analysis performed of categories. These results show a strong sports motivation, mainly in male and pool specialists, which favors enjoyment for sport, minimizes demotivation and therefore sports dropout.

## CONSENT FOR PUBLICATION

Not applicable.

# CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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Decleared none.

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