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# The Relationship between Goal Orientation and Competitive Anxiety inIndividual and Team Athletes Fields

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## ABSTRACT

*The purpose of the present research was to study the relationship between goal orientation and competitive anxiety and comparing them in female athlete students engaging in individual and team sports. Using Morgan's table, 120 athletes were randomly selected from the team sports and 80 were selected from the individual sports. The Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda and Nicholls, 1992) and Sport Competition Anxiety Test (SCAT; Martens, 1990)were used for data collection. The results of Spearman's test revealed that only in team sports is there a negative significant relationship between task orientation and competitive anxiety. Moreover, the results of Mann-Whitney U test showed that there is no significant difference between individual and team sports in task orientation and goal orientation and that there is only a significant difference between team and individual sports in competitive anxiety andego orientation with higher competition anxiety in the team athletes and higher ego orientation in the individual athletes ($p \geq 0.05$). Apparently, since the performance of an athlete in team sports depends on the team performance, the role given to the individual may interfere with their inner role and this issue leads to anxiety in the individual.*

**Keywords:** goal-orientation, ego orientation, task-orientation, competitive anxiety.

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## INTRODUCTION

In championship tournaments at any level, athletes inevitably have to respond to physical and mental demands of competitions and when these demands grow more than physiological, behavioral, and mental sources of the athlete, they will lead to pressure on these sources and this leads to so-called anxiety in individual [19]. In fact, one of the variables that are significantly related to athletic performance is competitive anxiety. Competitive anxiety is a type of anxiety created in competitive situations. Martens (1997) relied on Speilberger's notion of trait anxiety

and developed the concept of competitive trait anxiety as a sport-specific construct.He defined competitive trait anxiety as the tendency to perceive competitive situations as threatening and to respond to these situations with feelings of apprehension and tension. Thus, people with a high level of trait anxiety will perceive competitive situations as threatening and will thereby experience higher degrees of anxiety in such situations. But the apprehensive response to specific competitive situations is called competitive state anxiety. This state is generally similar to state anxiety with a difference that the stimulus for anxious response is always a sport situation [1]. Competitive anxiety in turn affects the performance of athletes and the higher the level of this anxiety, the lower will be the performance of athletes [3]. Sport psychologists try to minimize competitive anxiety in athletes by recourse to various methods. It is thus of utmost importance to examine the factors related to anxiety in athletes. It seems that one of these factors is goal orientation. One of the most state-of-the-art approaches in the context of achievement that has received much attention from theorists and researchers alike is the concept of goal orientation. The theory of goal achievement or goal orientation is a cognitive-social theory. The notion of goal in this theory is the individual's cognitive representation of the various goals they set for learning in achievement situations [20].

Goal orientation is characterized by a coherent pattern of individual beliefs that directthe individual to certain situations in various ways, to act in those situations, and finally, to present a response. The basic principle of the theory is that the individual makes an effort to demonstrate their competence and achieve success by using their own criteria or the criteria of the task [20, 13]. Thus, according to the view of Nicholls (1989),there are two types of orientation – ego orientation and task orientation –which are affected by situational goals and are pursued by individuals during competitions [4]. In task orientation, the individual learns and develops skills and thinks about solving a problem or thorough understanding of some issues based on a self-referenced perception of ability. This perception is accompanied by a concern toward the task or task orientation [9]. Demonstration of ability in a task-oriented individual is based on maximum effort. Such a person'sachievement-related behaviors will be adaptable; that is, they will persevere in the face of failure, try to choose challenging tasks, and they experience greater intrinsic interest in the activities. But in ego orientation, individuals' perception of their ability gains importance and they try to demonstrate superior ability in comparison with others and thus they use a norm-based perception of ability.If an individual gets involved in their ego and has a high perception of their ability, they willengage in achievement-related, adaptable behaviors. The possibility of a norm-based demonstration of ability increases in these conditions; thus, the individual will be stimulated to continue their activity and demonstrating their competence to others [11]. Achievement goals in relation to motivation suggest that people try to demonstrate their abilities or competence in achievement situations. An important achievement situation that provides the individual with an opportunity to demonstrate their competence in public is competitive sports [4]. Nicholls (1989) observed that athletes who set their outcome oriented goals on win or loss experience greater anxiety in competitions, for their goals are not in their control. Duda believed that an ego oriented person or an athlete who loses will probably experience anxiety and will be frustrated with their ability [13]. With that said, it seems that goal orientation plays an important role in a person's interpretation and performance during competitive sports and it will affect their anxiety and confidence under such conditions. Jamshidi (2006) showed in his research that goal orientation as one of the components of sport orientation is related to precompetitive anxiety [16], but he did not study the relationship between its

dimensions – i.e. task orientation and ego orientation. Thus, it may be that one of these two orientations will have a greater effect on competitive anxiety. On the other hand, asachievement goals in relation to motivation suggest, people try to demonstrate their abilities or competence in achievement situations [4] and team and individual athletes experience a more varied achievement opportunities (in individual sports only one athlete competes with their opponent, while in team sports two groups of athletes compete with one another). There may be different situations in team and individual sports that affect athletes' perception of success and as a result, their goal orientation.Since goal orientation may be related to competitive anxiety and considering the differences in achievement opportunities in team and individual sports, the question arises whether task orientation and ego orientation have any relationship with competitive anxiety inteam and individual athletes.

Finally, the fact that the result of most research studies suggest a high level of anxiety, in particular among female athletes [6], and the contradictory results of various studies are the reason that necessitate carrying out a research for a more thorough insight into this issue [12, 3, 21].

## MATERIALS AND METHODS

The present research is descriptive-correlational in which the relationship between the orientation variables and competitive anxiety is analyzed in accordance with the research purpose.

### Participants

The participants of the present research are all the female team and individual student athletesin Mazandaran Province with a total number of 270 of which 170 are team athletes (volleyball, handball, futsal, and football) and 100 are individual athletes (table tennis, track and field, badminton, and swimming). The method used for sampling is stratified sampling and the stratification was done based on one of the characteristics of the population, that is, the individual or team nature of the sport. Using Morgan's table, 80 subjects were selected from the individual sports and 120 subjects were selected from the team sports.

### Measurement Tools

TEOSQ questionnaire was used to measure ego orientation and task orientation. This questionnaire was developed by Nicholls and Duda in 1992for measuring goal orientation [7]. Cronbach's alpha was used to determine the reliability of the questionnaire and the value obtained for the variable of ego orientation was $\alpha = 0.64$. SCAT questionnaire was used to measure competitive anxiety. This questionnaire was first applied for measuring athlete's competitive anxiety by Martens. The validity and reliability of this questionnaire were confirmed by Martens (1990) [16, 18]. Cronbach's alpha was calculated to be$\alpha = 0.79$. The validity coefficient of the questionnaire was obtained as 0.94 and 0.91 for competitive anxiety and goal orientation respectively, indicating proper temporal reliability.

### Data Analysis

Descriptive statistics was used in the present research for data description in the form of tables and diagrams. Spearman's correlation coefficient was applied to study the relationship between

the variables and due to the non-normal distribution of data, the non-parametric Mann-Whitney U test was used for testing between-group differences. Statistical testing of research hypotheses was done at $\alpha = 0.05$.

## RESULTS

Based on the type of sport, the samples were organizedinto an individual and a sport group. Accordingly, subjects who engaged in team sports (volleyball, handball, futsal, and basketball) were assigned to the team sports group and those who engaged in individual sports (table tennis, badminton, track and field, and swimming) were assigned to the individual sports group. On the whole, 60% of respondents were team athletes and 40% were individual athletes. The mean age of the athletes was reported to be 16 years in team sports group and 16.1 in individual sportsgroup. The minimum age of athletes was reported to be 13 years in the team sports group and 14 years in the individual sports group while their maximum age was 18 years in both groups. The average athletic experience of the subjects was calculated as 2.9 years in the team sports group and 4 years in the individual sports group. The maximum athletic experience of the subjects was reported to be 7 years in the team sports group and 9 years in the individual sports group. Thus, the subjects in the individual sports group were more experienced than those in the team sports group (table 1).

**Table 1. Descriptive indices (age and athletic experience in years)**

| Variable | Minimum | | Maximum | | Mean | | Standard Deviation | |
|---|---|---|---|---|---|---|---|---|
| | Team | Individual | Team | Individual | Team | Individual | Team | Individual |
| Age | 13 | 14 | 18 | 18 | 16 | 16.17 | 1.10 | 1.10 |
| Experience | 1 | 1 | 7 | 9 | 2.9 | 4 | 1.18 | 1.74 |

The results of Spearman's correlation coefficient showed that there a significant relationship between task orientation and competitive anxiety in the team sports group ($r^2 = 0.04$, $P = 0.01$; figure 1). Moreover, no significant relationship was observed between task orientation and competitive anxiety in the individual sports group ($r^2 = 0.01$, $P = 0.32$; figure 2).

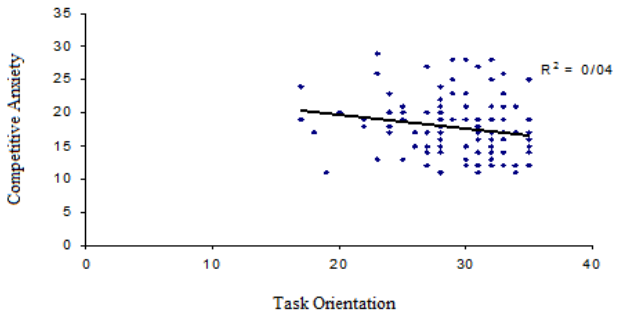


**Figure 1. The relationship between task orientation and competitive anxiety in the team sports group**

No significant relationship was observed between ego orientation and competitive anxiety in the team sports group ($r^2 = 0.01$, $P = 0.11$; figure 3). Moreover, no significant relationship was observed between ego orientation and competitive anxiety in the individual sports group

($r^2 = 0.01$, $P = 0.11$; figure 4).The results also showed that there is no significant relationship between goal orientation and competitive anxiety in the team sports group ($r^2 = 0.0081$, $P = 0.32$) and also no significant relationship was observed between goal orientation and competitive anxiety in the individual sports group ($r^2 = 0.0036$, $P = 0.57$).

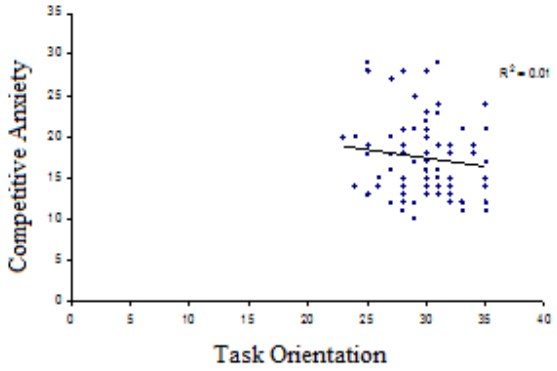


**Figure 2. The relationship between task orientation and competitive anxiety in the individual sports group**

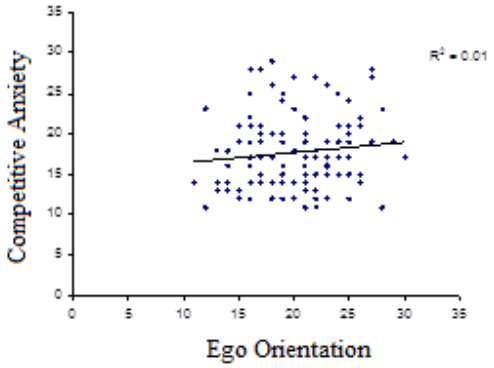


**Figure 3. The relationship between ego orientation and competitive anxiety in the team sports group**

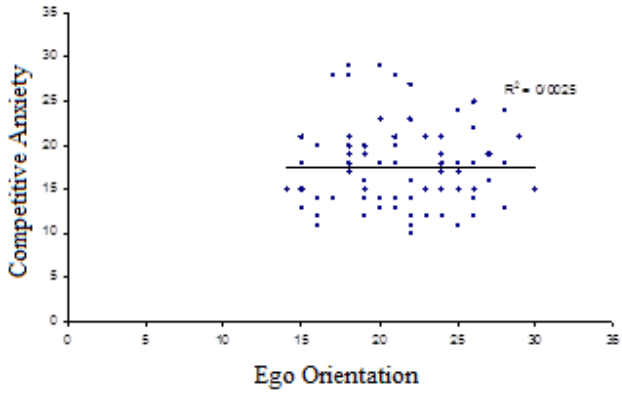


**Figure 4. The relationship between ego orientation and competitive anxiety in the individual sports group**

The results of Mann-Whitney U test ($z = -2.329$, $P = 0.02$) showed that there is a significant difference between the team and individual sports groups in ego orientation. In other words, the

level of ego orientation of the athletes in individual sports group was higher than that of the athletes in the team sports group; yet no significant difference was observed between the individual and team sports groups in the level of task orientation ($z = -0.04$, $P = 0.96$). Further, the results of this test revealed that there is no significant difference between team and individual sports groups in the level of goal orientation ($z = -1.819$, $P = 0.6$); yet a significant difference was observed between these two groups in competitive anxiety ($z = -0.472$, $P = 0.03$); that is, the level of competitive anxiety was higher in the team sports group than the individual sports group.

## DISCUSSION AND CONCLUSION

The results of the present research revealed that the relationship between task orientation of the team athletes and their competitive anxiety is negative marked by decreased competitive anxiety and increased task orientation. This finding is in line with the results of Grossbard et al. (2007) who studied social desirabilityand the relationship between goal orientation and competitive trait anxiety.Of course, their research was carried out on a sample of young men and it points out to the negative relationship between task orientation and competitive anxiety in young men. The difference between the above research and the present research is the gender of respondents. It seems that conducting a research regarding the relationship between goal orientation and competitive anxiety in both genders and comparing the results based on gender differences can provide us with more precise results. This finding is also consistent with the results of Ommundsen et al. (1999) who studied the role of goal orientation and perceived ability in competitive anxiety. They carried out the research on young male and female athletes with an age range of 13-18 years and found that task orientation and perceived competence can be predictors of decrease in anxiety. The results of Ntoumanis and Biddle (1998) who studied the relationship between competitive anxiety, achievement goals, and motivational climates are contrary to the results of the present study. They came to the conclusion that there is no significant relationship between task orientation and competitive anxiety of team athletes.

In the present research, no significant relationship was observed between task orientation and competitive anxiety in the individual sports group. This finding of the research is consistent with the results of Ntoumanis and Biddle (1998) and Grossbard et al. (2007), but the characteristics of the studied group is not similar to the sample of the present research.

Nicholls (1992) is,along with Duda, one of the chief founders of the theory of goal perspectives andachievement motivation. They came to the conclusion that ego oriented athletes experience greater anxiety. Further, Nicholls showed that ego oriented people usually focus on the competitive aspects of an event including winning and scoring; for achieving these goals, the athlete becomes dependent to the ability of others and the opponent and since they set their goals on the basis or win or loss, the goals are not under their control and they will experience greater anxiety. In general, Nicholls and Duda (1992) reported a significant relationship between ego orientation and competitive anxiety of athletes, but the results of the present research were contrary to their results.Moreover, this result is not consistent with the research of Scanlan (1986) who studied fencing athletes and found that ego orientation is at least related to the cognitive part of anxiety and can predict it [13]. Walker (2003) carried out a research on predicting anxiety and task challenge from goal orientation and fear of failure. He asked the athletes to perform the task of throwing the golf ball at two different time intervals and showed

that ego oriented subjects experienced higher somatic tension and anxiety. Further, Grossbard and colleagues found in their research that in both genders, regardless of the team or individual nature of the sport, ego orientation has a significant positive relationship with competitive anxiety. The results of the research of Grossbard and Walker are not consistent with the results of the present research [6, 22].

In the present research, goal orientation ofteam and individual athletes had no significant relationship with their competitive anxiety. This finding is in line with the results of Newton and Walling (1995), Newton and Duda (1995) and Abrahamsen et al. (2008).Newton and Walling (1995) found in their research that goal orientation predicts self-confidence before performance, but it cannot predict state anxiety. Further, Newton and Duda (1995) carried out a research on the effect of goal orientation and performance expectancy on anxiety and found that in tennis, anxiety is not predicted by goal orientation. Abrahamsen et al. (2008) studied male and female elite athletes in individual sports and found that goal orientation cannot predict performance anxiety. Hanrahan and Cerin (2008) compared male and female,team and individual athletes with respect to goal orientation and attributional styles and found a difference between team and individual athletes in ego orientation and showed that individual athletes are more ego oriented which is a similar finding to that of the present research.

Studying the literature, no research was found that had compared the anxiety of female athletes of team and individual sports. It seems that in individual sports, the athlete is more engaged in their own skills and abilities, while in team sports such as volleyball and basketball, they are affected by their team members and their performance will depend on the performance of the group. The role assigned to the athlete in team sports may not correspond to their inner role. Thus, this lack of coordination will lead to uncertainty and anxiety in the individual and will negatively affect their performance, since it is not their original, internalized role. An athlete may become anxious about the judgments of others. Since task orientation is negatively related to competitive anxiety, if in a team sport an athletemeasures their ability or record with respect to their own previous record, they can to some extent decrease anxiety. On the other hand, the results of the research showed that athletes in the individual sports group had lower anxiety. One reason can be the fact that these athletes were more experienced than the athletes in the team sports group. The environment can also lead to anxiety in team sports, for team sports entail a larger number of spectators.

The findings of this research can in the future help researchers predict the interaction between goal orientation (task orientation and ego orientation) and competitive anxiety in female, team and individual athletes. This issue will enable coaches to understand the interaction between these factors in order to control anxiety in athletes and help them in achieving optimal performance.

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