

Achievement Goal Orientation as a Psychological Predictor for Sports Anxiety and Self Esteem in Competitive Athletes

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ABSTRACT

An athlete's success and well-being are heavily influenced by achievement goal orientation, sports anxiety, and self-esteem. This study aims to investigate the interrelationships between these 3 psychological variables. Correlational research is employed with a sample of 160 competitive male team-sport athletes (Kabaddi, Hockey, Football, Volleyball, and Basketball) aged 18 to 24 years, from Guru Nanak Dev University. Standardized tools which are administered are the Sport Competition Anxiety, the Task and Ego Orientation in Sport Questionnaire, and the Rosenberg Self-Esteem Scale. Results reveal a highly significant negative correlation between global self-esteem and sports anxiety. Athletes who tend to be ego-oriented, they have high level of anxiety whereas athletes who tend to be task-oriented, they have low level of anxiety. The study reveals that high self-esteem and a task-oriented mindset significantly protect against competitive sports anxiety, whereas an ego-driven approach leaves athletes highly vulnerable to competitive anxiety.

Keywords: Achievement Goal Orientation, Sport Anxiety, Self-Esteem

In competitive sports, athletes' performance and well-being are shaped not only by physical ability but also by important psychological factors such as achievement goal orientation, self-esteem, and sports anxiety. Achievement goal orientation refers to how athletes define success in sport. According to Achievement Goal Theory (Nicholls, 1984, 1989), athletes generally adopt either a task orientation, where success is based on personal improvement, effort, and mastery, or an ego orientation, where success is based on outperforming others. Task orientation is often linked with adaptive outcomes such as persistence, confidence, and enjoyment, whereas ego orientation is more often associated with fear of failure, pressure, and anxiety.

Sports anxiety refers to the stress athletes experience in competitive situations, including worry, nervousness, and physical tension. Based on Martens et al.'s multidimensional theory, sports anxiety includes cognitive anxiety (worry), somatic anxiety (physical symptoms), and self-confidence. High anxiety can negatively affect concentration, confidence, and performance. In contrast, self-esteem, based on Rosenberg's theory, reflects an athlete's overall sense of self-worth and confidence. Athletes with higher self-esteem tend to cope better with pressure, regulate emotions effectively, and show greater resilience, while low self-esteem is often linked with self-doubt and higher competitive anxiety.

These three variables are closely connected. Athletes with a task-oriented approach are more likely to develop stable self-esteem and experience lower sports anxiety because they focus on growth and self-improvement. In contrast, ego-oriented athletes often base their self-worth on winning and external comparison, making them more vulnerable to anxiety and reduced self-esteem under pressure. Thus, self-esteem may help explain how achievement goal orientation influences sports anxiety in competitive athletes.

Previous studies support these relationships. Newton and Duda (1993) found that task orientation was associated with greater enjoyment and perceived competence, while ego orientation was linked with less adaptive emotional outcomes. Morris and Kavussanu (2008) reported that task-oriented athletes showed healthier psychological profiles, whereas ego-oriented athletes experienced higher competitive anxiety. Similarly, Castellanos et al. (2015) found that task-focused motivational climates were linked with more positive psychological outcomes, while ego-focused climates were associated with greater cognitive anxiety and negative self-perceptions.

Aims and Objectives

The aim of this study is to examine the relationship between achievement goal orientation, sports anxiety, and self-esteem in competitive sports.

- To identify the relationship between achievement goal orientation and sport anxiety in competitive athletes.
- To find the correlation between achievement goal orientation and self-esteem in competitive sport.

Hypothesis of the study

- **H1:** There will be a significant difference between goal orientation, self-esteem, and sport anxiety.
- **H0:** There will be no significant difference between goal orientation, self-esteem, and sport anxiety.

Method

Sample Size

The research utilizes a quantitative, survey-based correlational study. The sample consists of 160 male athletes actively participating in competitive team sports (Kabaddi, Hockey, Football, Volleyball, and Basketball) collected from Guru Nanak Dev University, Amritsar, Punjab. The sample size is statistically justified using G*Power software (version 3.1.9.4). The parameters for the power analysis are set with an Effect Size = 0.15, Level of Significance = 0.05, and Power of Test = 0.95.

Ethical Clearance

The study was approved by the Institutional Ethics Committee (number 3956 /HG), dated: (18/06/2025) of Guru Nanak Dev University, Amritsar, Punjab.

Inclusion Criteria

- Athletes participating fall within the age category of 18 to 24 years.
- Athletes possess a minimum of 1-year of experience in their respective sport and have played at least at the district competitive level.

Exclusion Criteria

- Athletes participating in individual sports are excluded.
- Athletes who are currently undergoing any professional psychological consultation are excluded to prevent baseline psychological biases.

Instruments

- **Sport Competition Anxiety Test (SCAT):** Developed by Rainer Martens in 1977, this 15-item self-report questionnaire measures psychological and physiological symptoms associated with competitive anxiety. Higher scores suggest greater levels of competitive anxiety.
- **Task and Ego Orientation in Sport Questionnaire (TEOSQ):** Developed by Joan L. Duda and John G. Nicholls, this 12-item tool measures task orientation and ego orientation using a 5-point Likert scale.
- **Rosenberg Self-Esteem Scale (RSES):** Developed by Morris Rosenberg in 1965, this 10-item scale evaluates an individual's overall self-worth using a 4-point Likert scale. Higher scores indicate greater self-esteem.

Study Design

Correlational Research has been employed to assess the degree to which these psychological variables co-occur and interact.

Procedure

Athletes have been provided with an information sheet and their voluntary informed consent is collected. The three scales are administered in a controlled setting with a structured 30-minute interval implemented after the completion of each questionnaire to prevent mental fatigue. The order of administration is SCAT, followed by TEOSQ, and concluding with RSES.

RESULTS

The purpose of this study is to examine the relationship between achievement goal orientation, sports anxiety, and self-esteem.

Table 1 Overall Descriptive Statistics (N=160)

Variables	Mean
Age	20.9
SCAT	18.6
RSES	21.3
TEOSQ (Ego)	25.7
TEOSQ (Task)	23.8

Table 1 indicates that the sample possesses a moderate level of competitive anxiety ($M = 18.6$) and a relatively stable and positive sense of self-worth ($M = 21.3$). Athletes exhibited a slightly higher mean score in ego orientation ($M = 25.7$) compared to task orientation ($M = 23.8$).

Table 2 Breakdown of Sample Size by Sport

Sport	Age (Mean ± SD)	SCAT (Mean ± SD)	RSES (Mean ± SD)	TEOSQ Ego (Mean ± SD)	TEOSQ Task (Mean ± SD)
Basketball (n=56)	21.1 ± 1.81	19.8 ± 4.11	20.4 ± 3.65	25.4 ± 3.55	23.2 ± 4.14
Football (n=52)	20.5 ± 1.92	18.1 ± 2.82	22.2 ± 3.00	25.6 ± 5.06	23.1 ± 5.41
Handball (n=20)	21.8 ± 0.77	17.8 ± 3.24	21.4 ± 2.38	24.8 ± 3.24	25.3 ± 3.24
Hockey (n=32)	20.9 ± 1.56	18.0 ± 3.37	21.3 ± 3.91	27.0 ± 5.66	25.0 ± 3.36

Basketball players reported the highest mean sports anxiety and the lowest mean self-esteem, while Handball players displayed the lowest mean competitive anxiety and the highest task orientation. Football athletes exhibited the highest mean self-esteem scores, and Hockey players demonstrated the highest ego orientation scores.

Table 3 Pearson's Correlation Matrix

Variables	SCAT	RSES	TEOSQ (Ego)	TEOSQ (Task)
SCAT	—			
RSES	-.645 ($p < .001$)	—		
TEOSQ (Ego)	.261 ($p < .001$)	-.128 ($p = .106$)	—	
TEOSQ (Task)	-.202 ($p = .010$)	.119 ($p = .133$)	-.238 ($p = .002$)	—

Table 3 reveals a strong, highly significant negative correlation between sports anxiety and self-esteem ($r = -0.645, p < .001$). A significant positive correlation was observed between ego orientation and sports anxiety ($r = 0.261, p < .001$), while task orientation demonstrated a significant negative correlation with sports anxiety ($r = -0.202, p = .010$). Ego orientation and task orientation were inversely related ($r = -0.238, p = .002$). The relationships between goal orientations and global self-esteem did not reach statistical significance.

DISCUSSION

The most prominent finding of the present study is the strong and highly significant negative correlation between sports anxiety and self-esteem, indicating that athletes with higher global self-esteem tend to experience lower levels of competitive sports anxiety. This finding supports the theoretical view that self-esteem serves as a key psychological resource in helping athletes manage competitive stress and pressure. Athletes with stronger self-worth are generally more confident in their abilities, less vulnerable to self-doubt, and better equipped to regulate emotional responses during performance situations. In contrast, athletes with lower self-esteem appear more susceptible to the physiological tension, cognitive worry, and reduced concentration typically associated with competitive anxiety. These findings are consistent with earlier research by Sonstroem and Morgan (1989), who emphasized that self-esteem acts as a protective psychological factor in sport, and with the findings of Bowker et al. (2003), who reported that athletes with stronger perceived self-worth demonstrated lower anxiety and greater emotional stability in competitive environments. Similarly, Martens et al. (1990) found that cognitive sport anxiety was consistently and negatively associated with athletes' confidence and self-perception, reinforcing the inverse relationship observed in the present study.

Another important finding reveal a significant positive correlation between ego orientation and sports anxiety. Athletes high in ego orientation define success through normative comparison, social recognition, and outperforming others. Because their sense of competence is dependent on external validation and uncontrollable outcomes such as opponents' performance, they are more likely to experience worry, fear of failure, and performance pressure. This result is in line with Achievement Goal Theory (Nicholls, 1989), which proposes that ego-oriented individuals are more vulnerable to maladaptive psychological outcomes when perceived competence is threatened. The present finding is supported by Duda and Nicholls (1992), who found that athletes with stronger ego orientation were more likely to report heightened tension and competitive stress, particularly in evaluative environments. Similarly, White and Zellner (1996) reported that athletes driven by ego involvement were more prone to anxiety because their focus on social comparison increased fear of underperformance and failure. These findings collectively suggest that an ego-dominant motivational climate may intensify performance-related stress and undermine psychological stability in competitive athletes.

In contrast, task orientation demonstrated a significant negative correlation with sports anxiety, suggesting that athletes who emphasize personal improvement, skill mastery, and effort experience lower levels of competitive anxiety. This finding reinforces the adaptive role of task orientation in sport, as athletes with a mastery-focused mindset tend to evaluate success based on self-referenced standards rather than external comparison. Because these athletes focus on controllable aspects of performance such as effort, learning, and execution, they are less likely to interpret competition as threatening and more likely to perceive it as a challenge for growth. This result aligns with the work of Duda (1989), who found that task-oriented athletes showed greater enjoyment, persistence, and emotional control in sport settings. It is also supported by Ntoumanis and Biddle (1998), who reported that task orientation was associated with lower anxiety and more adaptive coping responses among competitive athletes. In a similar vein, Roberts et al. (2007) noted that task-oriented athletes generally experience more intrinsic motivation, greater resilience, and lower performance-related stress due to their

emphasis on mastery and self-improvement. The present findings therefore strengthen the argument that task orientation functions as a psychological buffer against competitive anxiety.

CONCLUSION

The aim of this study is to examine the relationship between achievement goal orientation, sports anxiety, and self-esteem in competitive sports. Based on the statistical evidence, we can reject the Null Hypothesis (H₀) and accept the Alternative Hypothesis (H₁), concluding that there is a significant relationship between goal orientation, self-esteem, and sport anxiety. High global self-esteem and a task-oriented goal approach are strong protective factors that significantly reduce an athlete's susceptibility to competitive sports anxiety, whereas an ego-oriented goal approach significantly heightens vulnerability to competitive stress.

Limitations and future directions

- The study utilized a cross-sectional design conducted at a single point in time, which limits the ability to infer strict causality.
- The data collection relied entirely on self-report questionnaires, which can introduce inherent biases such as social desirability.
- The sample is restricted to male team-sport athletes aged 18-24 from a specific university, limiting generalizability to individual sports, older professional athletes, or younger populations.
- Future studies should adopt longitudinal designs to track athletes over a competitive season to establish causal relationships.
- Future research should expand demographics to include youth and elite athletes, and directly compare team sport athletes with individual sport athletes.
- Integrating qualitative interviews would allow researchers to explore why athletes adopt specific goal orientations and how they personally experience the intersection of self-esteem and anxiety.

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