

## Goal Orientations, Role Conflict and Ambiguity: Predictors of Competitive Anxiety in Athletes

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### ***Abstract***

The purpose of the present study was to investigate the relationships of goal orientations, role conflict and ambiguity to competitive anxiety of athletes. The sample consisted of 224 male volleyball players of Iran Universities. The athletes representing 20 different teams participated in the study. Three instruments were used: Goal Orientations in Sport Questionnaire, Role Conflict and Ambiguity Scales, and Competitive State Anxiety Inventory-2. Role ambiguity, role conflict, and ego orientation had positive and significant correlations with competitive anxiety of athletes, 0.25, 0.26, and 0.24, respectively; while the correlation of task orientation with competitive anxiety was significant and negative, -0.23. The multiple regression analyses showed that role conflict, role ambiguity, ego orientation and task orientation were the best predictors for competitive anxiety.

**Keywords:** goal orientations, role conflict, role ambiguity, competitive anxiety

Since the conception of an interactive model of anxiety distinguishing trait and state symptoms (Spielberger, 1966), considerable understanding of the debilitating effects of anxiety upon sporting performance has been developed. A large contribution has come from the development of sport-specific competitive anxiety theory (Martens, 1977), which states that, in advance of sporting competition, an individual's competitive trait anxiety

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directly affects his perception of threat, subsequently mediating the level of state anxiety experienced (Smith, Smoll & Wiechman, 1998).

The theoretical relationship between competitive anxiety and sporting performance is recognized as one of the most widely debated and researched areas in sport psychology (Woodman & Hardy, 2001). Considerable understanding of this relationship has been achieved through the development of the competitive state anxiety inventory-2 (CSAI-2; Martens, Burton, Vealey, Bump & Smith, 1990) and the subsequent theoretical predictions of multidimensional anxiety theory regarding the relationship between the CSAI-2 sub-components and performance (Martens et al., 1990; Robazza & Bortoli, 2007). However, in spite of these advancements, empirical findings investigating the anxiety–performance relationship have proved somewhat inconsistent, accounting for less variance in performance than expected (Woodman & Hardy, 2001). This has led to the criticism that studies have focused upon the additive rather than the interactive effects of the sub-components of state anxiety upon performance (Hardy, 1990).

Direction of anxiety has also been investigated regarding the situation criticality (Krane, Joyce, & Rafeld, 1994), injury prediction (Smith, Ptacek, Everett, & May, 1995), intervening to reduce levels of coach experienced stress (Smith, Smoll, & Barnett, 1995), influence of affect (Jones, Swain & Harwood, 1996), locus of control beliefs (Ntoumanis & Jones, 1998), trait anxiety as a function of gender and skill (Perry & Williams, 1998), the nature of the sport (Hanton, Jones & Mullen, 2000), competitiveness (Jones & Swain, 1992), performance (Jones, Swain & Hardy, 1993) and goal attainment expectancy (Jones & Hanton, 1996). Hanton, Mellalieu and Hall (2004) identified two causal networks; showing self-confidence to influence the relationship between competitive anxiety intensity and symptom interpretation. In the absence of self-confidence, increases in competitive anxiety intensity were perceived as out of the performers' control and debilitating to performance. Under conditions of high self-confidence, increases in symptoms were reported to lead to positive perceptions of control and facilitative interpretations. O'Brien, Hanton and

Mellalieu (2005) have found that specifically, participants who reported positive expectations of goal achievement and indicated some input into the goal generation process experienced the most facilitative interpretations of cognitive symptoms and greater self-confidence. Robazza and Bortoli (2006) showed that general tendency of rugby players to experience a moderate frequency of anger symptoms and to interpret their symptoms as facilitative rather than debilitating. Regarding the direction of symptoms, cognitive anxiety was a significant predictor of anger, while self-confidence was a significant predictor of anger control.

The observed differences in the selection of sport confidence sources may be partially explained by individual differences in perceptions of success, or more specifically, goal orientations (Magyar & Duda, 2000; Williams, 1994). Goal orientations are dispositional inclinations regarding the evaluation of one's perceptions of ability and success in achievement situations (Nicholls, 1984). The two primary orientations are termed task and ego orientation (Duda and Hall, 2001; Nicholls, 1992; Schunk, 1995).

Central to ego orientation, on the other hand, is the desire to demonstrate one's ability via social comparison. The adaptive patterns that are present with task orientation are also believed to exist in the case of predominantly ego-oriented individuals as long as their perceived confidence for the task is high (Schunk, 1995). Therefore, the sole dependence on normative sources of information may lay the foundation for future achievement-related difficulties, even among the most confident ego-oriented athletes (Duda, 2001; Duda & Hall, 2001).

The mechanism by which goal orientations might influence the development of self-confidence is related to tendencies regarding the type of information and processes employed to judge one's level of ability to perform the task (Magyar and Duda, 2000 and Williams, 1994). Magyar and Duda (2000) found a discernible relationship between injured athletes' dispositional goal orientations and sport confidence sources over the course of rehabilitation. Hatzigeorgiadis (2002) and Robazza and Bortoli (2007) revealed that task orientation was negatively related to thoughts of escape irrespective of game result, whereas ego orientation in a losing situation

was positively related to experiencing such thoughts due to the self-focusing tendencies associated with an ego orientation.

For many individuals, teams provide the social context and psychological space in which their cognitions, emotions and behaviors are embedded (Lewin, 1951). In such an environment, individuals carry out paradox and complex roles, interwoven with those of others, in a highly interdependent fashion (Insko & Schopler, 1987; Newman & Wright, 1999; Sundstroem, Meuse & Futrell, 1990). One perception that has been theorized to be particularly dysfunctional under conditions of high interdependence is role ambiguity and role conflict (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Defined as a lack of clear information associated with a particular role (Kahn et al., 1964), role ambiguity has typically been studied as a perception held by individuals performing generic work roles independently of others (Jackson & Schuler, 1985). However, when interdependence is a fundamental feature of role enactment (e.g. managerial teams, sport teams), role ambiguity should also be examined with regard to interdependent role behaviors (Beauchamp & Bray, 2001).

It was hypothesized that the existence of role ambiguity and role conflict in sport influences competitive anxiety, which in turn results in dysfunctional individual and sport consequences (Rizzo, House and Lirzman, 1970). The results showed that role conflict was related to stress and performance (Kahn & Byosiere, 1992; Fried, Ben-David, Tiegs & Yeverechyahu, 1998). Role conflict is the degree of incongruity of expectations regarding the role occupant's behavior (Rizzo et al., 1970).

Recent research based upon Beauchamp, Bray, Eys and Carron (2003) has found role ambiguity to be associated with a number of cognitive, affective and behavioral indices including personal efficacy (Beauchamp and Bray, 2001; Bray and Brawley, 2002 and Eys and Carron, 2001), task cohesion (Eys & Carron, 2001), satisfaction with ability utilization, strategy, and training/instruction (Eys, Carron, Bray, & Beauchamp, 2003), role performance (Beauchamp and Bray, 2002), as well as pre-competition state anxiety (Eys et al, 2003).

According to Bray, Brawley and Carron (2002), consistent with Bandura (1997), negative relationships observed between role ambiguity and role performance were mediated by competence beliefs. Cerin (2004) revealed that cognitive anxiety intensity, positive affect, proximity to competition and extraversion were significant predictors of cognitive anxiety direction. Beauchamp, Bray, Fielding and Eys (2005) showed that role ambiguity accounted for 20.70% of the total variance in role efficacy on offence and 22.45% on defense. Grossbard, Cumming, Standage, Smith and Smoll (2007) found that ego orientation was positively correlated with all indices of performance anxiety in males and females. Task orientation was negatively associated with all indices of performance anxiety in males but only with concentration disruption in females. Abrahamsen, Roberts and Pensgaard (2008) found that orientations did not predict performance anxiety for either gender; however perceptions of a performance climate predicted performance worry for both genders, and concentration disruption for females. Perceived ability predicted less performance worry for females and males.

The present study attempted to extend or improve upon the previous research in one way. Due to the relative neglect in sport psychology, research is required to examine the relationship of goal orientations, role conflict and role ambiguity with competitive anxiety.

Based upon the previous research, it was hypothesized that (1) significant relationships would be experienced between the goal orientations, role conflict, role ambiguity, and competitive anxiety and (2) The goal orientations, role conflict and role ambiguity, might be good predictors of competitive anxiety.

## **Method**

### **Participants**

Participants were 224 male volleyball players (age range 19–27 years;  $M=22.64$ ,  $SD=2.87$ ) from volleyball clubs in the universities of Iran. Athletes representing 20 different teams participated in the study. The players had an average of 6 years experience playing volleyball. All

players were selected to represent their teams through a coach nomination and selection camp process within their respective provinces.

## **Measures**

### **1. Goal orientations in sport Questionnaire**

The Task and Ego Orientation in Sport Questionnaire (TEOSQ; Duda & Nicholls, 1992) was used to assess dispositional goal orientations. The TEOSQ, a well established instrument in the field of sport-achievement motivation (Duda & Whitehead, 1998), comprises 13 items and two subscales measuring 'task orientation' and 'ego orientation'. Ratings were made on a five-point scale (1=strongly disagree, 5=strongly agree). Internal consistency indices (alpha) were 0.72 and 0.86 for task and ego orientations, respectively. Consistent with previous research using the TEOSQ ( Duda & Whitehead, 1998), in this sample, the observed internal consistency indices using Cronbach's (1951)  $\alpha$  were satisfactory for both task ( $\alpha=0.85$ ) and ego orientations ( $\alpha=0.82$ ).

### **2. Role conflict and ambiguity scales**

Role conflict and ambiguity scales (House, Schuler & Levanoni, 1983) are used to assess Role conflict and role ambiguity. This instrument is a 14-item questionnaire designed to measure role conflict (8 items) and role ambiguity (6 items). Ratings were made on a five-point scale (1=strongly disagree, 5=strongly agree). Internal consistency indices (alpha) were 0.81 and 0.86 for role conflict and role ambiguity respectively.

### **3. The Competitive State Anxiety Inventory -2**

The CSAI-2 (Martens et al., 1990) was used to measure pre-competitive A-state and self-confidence. The CSAI-2 is a 27-item 3-subscale self-report measure of somatic A-state (9 items), cognitive A-state (9 items) and self-confidence (9 items). On a 4-point scale (1 = *not at all*, 4 = *very much so*) respondents rate the intensity of their anxiety experiences prior to competition. Martens et al. (1990) provide a detailed description of the construct validation process surrounding the instrument's development. In

a more recent review of 49 studies that employed the CSAI-2, Burton (1998) reported that internal consistency estimates for the three subscales ranged from 0.76 to 0.91 and concluded that the instrument possesses adequate internal reliability.

### Procedures

The athletes completed three self-report inventories and returned them to the researcher. The study measures were administrated in the following order: Goal orientations in sport Questionnaire, Role conflict and ambiguity scales and the Competitive State Anxiety Inventory-2. Then, the data were analyzed using through Pearson correlation and regression analyses.

### Results

Table 1 presents the means, standard deviations, minima and maxima for all variables used in the analyses.

**Table 1**  
**Means and Standard Deviations of Goal Orientation, Role Ambiguity, Conflict and Competitive Anxiety in the Athletes**

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Role conflict	18.12	4.49	10	36
Role ambiguity	19.38	3.67	11	36
Task orientation	12.99	4.30	4	23
Ego orientation	10.14	2.64	5	18
Somatic	11.64	2.65	5	18
Competitive anxiety	9.64	2.55	4	15
Cognitive	9.64	2.55	4	15
Self-Confidence	8.75	2.48	3	14
Total	29.92	7.52	13	46

The Pearson correlation coefficients of goal orientations, role ambiguity, and conflict with competitive anxiety are presented in Table 2

for athletes. Role ambiguity, role conflict and ego orientation for athletes were correlated positively with competitive anxiety. While , a significant negative correlation was observed between task orientation and competitive anxiety for athletes.

**Table 2**  
**Bivariate Correlations of Goal Orientation, Role Ambiguity and Conflict with Competitive Anxiety for Athletes**

Variable	CSAI-2			
	Somatic	Cognitive	Self-confidence	Total
Role ambiguity	0.26**	0.28**	0.17*	0.25**
Role conflict	0.21**	0.29**	0.20**	0.26**
Ego orientation	0.27**	0.20**	0.18*	0.24**
Task orientation	-0.19*	-0.21**	-0.22**	-0.23**

\* p<0.05      \*\* p<0.01

Since this study aimed at predicting competitive anxiety, the data of variables of role conflict, role ambiguity, task orientation and ego orientation were analyzed using step-wise regression analysis. As shown in Table 3, competitive anxiety is best predicted by role conflict, role ambiguity, task orientation and ego orientation, respectively. The F ratios show the significant relationships between these variables and competitive anxiety (p<0.001).

Multiple correlation coefficients (Rs), their squares R<sup>2</sup>s) and the other related indices of competitive anxiety on role conflict, role ambiguity, task orientation and ego orientation variables were shown in Table 4. It can be concluded that the role conflict accounted for about 7 percent, role ambiguity 5 percent, task orientation 3 percent and ego orientation 6 percent of competitive anxiety variance. It can be said that role conflict is a better predictor as compared to other variables and put together, all these variables explain about 21 percent of the competitive anxiety variance.

**Table 3**  
**Stepwise Multiple Regression Analysis for Predictors of Competitive Anxiety of Athletes**

	<b>Model</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P</b>
Role conflict	Regression	681.97	1	681.97	14.64	0.001
	Residual	9314.73	222	46.57		
Role ambiguity	Regression	1197.51	2	598.75	13.54	0.001
	Residual	8799.23	221	44.22		
Task orientation	Regression	1523.53	3	507.84	11.87	0.001
	Residual	8473.20	220	42.79		
Ego orientation	Regression	2105.50	4	526.37	13.14	0.001
	Residual	7891.24	219	40.06		

**Table 4**  
**Determination Coefficients and Regression Analysis Coefficients of Table 3**

<b>Dependent</b>	<b>Predictors</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>SE</b>	<b>B</b>	<b>β</b>	<b>t</b> <b>(P)</b>
Competitive anxiety	Role conflict	.261	.068	.108	.414	.261	3.83 (.001)
	Role ambiguity	.346	.120	.126	.429	.229	3.42 (.01)
	Task orientation	.390	.152	.160	-.441	-.182	-2.76 (.001)
	Ego orientation	.459	.211	.111	.422	.257	3.81 (.001)

### **Discussion**

The overall purpose of the study was to examine the relationship of goal orientations, role conflict and ambiguity with competitive anxiety of athletes. According to the expectations, task orientation was found to be

negatively related to competitive anxiety. However, it should be noted that the magnitude of the relationship was relatively low. Carver and Scheier (1998) postulate that even when discrepancies between goals and performance are detected, individuals perceiving to have control over the pursued goals and favorable expectancies regarding goal attainment will respond to such discrepancies with increases in effort. Within task orientation, goals are self-referenced and therefore more controllable. As such, when individuals identify discrepancies between goals and performance, it is likely to perceive that greater efforts can bring them closer to their goals. In such cases, competitive anxiety is not experienced. This result is consistent with prior research findings (Martens et al., 1990; Woodman & Hardy, 2001; Jones & Hanton, 1996; Hanton et al, 2004; Robazza & Bortoli, 2007; Grossbard et al, 2007; Abrahamsen, et al, 2008).

As already mentioned, the magnitude of the relationship between task orientation and competitive anxiety was relatively low. One explanation can support this result. There may be occasions when self-referenced goals, despite being more controllable, are not achievable, in which case competitive anxiety might be experienced.

Although other potential competitive anxiety predictors were not assessed in this study, it is possible, if not likely, that factors such as the leadership style of the coach may differentially affect the role perceptions and goal orientations of athletes from different teams. For example, Bandura (1997) suggests that coaches can influence the development and maintenance of personal efficacy by encouraging players to put mistakes behind them, showing confidence in players even after disheartening losses, and adapting team systems to meet with players' particular talents. In short, coaches may differentially elevate or suppress the average level of role-related efficacy amongst members of a team through the very coaching styles/strategies they employ. Future research is encouraged to examine personality predictors of competitive anxiety.

The results also revealed a relationship between ego orientation and competitive anxiety in the athletes ( $P < 0.01$ ). It appeared that ego orientation may increase one's sensitivity to pressure situations and

competitive anxiety. Scheier and Carver (1982) suggested that decreased efforts associated with self-focus under unfavorable conditions are due to mental withdrawal from the performed tasks. Considering Carver and Scheier's control process model, when discrepancies between goal and actual behavior are identified, lack of control over goals will lead to impulses to disengage from further efforts towards goal accomplishment, and such impulses are expressed in the form of competitive anxiety. This result supports the prior research findings (Doda, 2001; Doda & Hull, 2001; Abrahamsen, et al, 2008)

In accordance with the present findings, research in sport settings has shown that when ego orientation prevails, outcome is an important determinant of individuals' and teams' cognitions (Dweck, 1989). For example, Diener and Emmons (1985), in experiments involving cognitive tasks, examined thought content under conditions of success and failure in relation to goal orientation. Under the success condition all participants reported their thoughts to be related to problem-solving strategies. Under the failure condition ego oriented participants engaged in negative self-evaluative cognitions, whereas task oriented participants focused again on problem-solving strategies and instructions to sustain effort and concentration to the task.

From a broader perspective, the present results support the notion that high task orientations are associated with cognitive stability and more motivationally 'adaptive' responses. Furthermore, high ego orientations have been described as more vulnerable and associated to 'maladaptive' responses.

The present results showed that role ambiguity and role conflict are associated with competitive anxiety of athletes. If an athlete is unclear of his or her scope of responsibilities, a coach or consultant should work with the individual athlete to ensure that clarity is obtained in terms of the various role responsibilities she/he is expected to perform. However, given that role ambiguity and role conflict were also found to be predictive of competitive anxiety, a coach or consultant should also seek to intervene with the team as a whole. For example, if athletes are encouraged to

communicate or support each other during a practice or team meeting following a particularly poor performance, this may translate to team members experiencing greater clarity and subsequently greater efficacy in performing their primary role responsibilities in competition. This result is consistent with prior research findings (Bray, 2001; Kahn & Byosiere, 1992; Beauchamp et al, 2003; Beauchamp & Bray, 2001; Eys & Carron, 2001; Cerin, 2004; Beauchamp et al, 2005).

The results also showed that role ambiguity, role conflict and task orientation were the best predictors for competitive anxiety in the athletes. The finding that role ambiguity, role conflict and task orientation accounted for significant variance in competitive anxiety in athletes may have important implications for intervention.

In conclusion, the findings of this study are of interest to both theoretical and applied sport psychologists. Also, the present study provided support for several of the formulated hypotheses. Support was found for the hypothesis that goal orientations, role conflict and ambiguity would predict competitive anxiety.

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