# The Relationship between the Task and Ego Orientations And Coping Strategies Among Universities Athletes

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# Abstract

The present study investigated the relationship between goal orientations (task and ego) and psychological coping skills among University's athletes. Participants were 85 athletes, both male (n= 35) and female (n = 50) aged between 19 and 28 years old who represented one of the largest university in the central of Malaysia in various sports competitions. Participants completed the Task and Ego Orientation in Sport Questionnaire (TEOSQ) to measure goal orientation while psychological coping skills were measured using Athletic Coping Skills Inventory (ACSI) – 28. results showed that there is a moderate relationship between goal orientations and psychological coping skills, with ego orientation showing a stronger relationship than task orientation. Moreover, the results showed that the athletes have both high task (mean=3.97) and fairly high ego orientations (mean=3.71), and there was no significant differences between males and females in goal orientations (p> .05). The results found that ego orientation was significantly correlated with all the six coping skills (p < .01) but task orientation was significantly correlated with only five coping skills (p < .01) as freedom from worry was not significantly correlated with task orientation. The results on the relationship between gender and psychological coping skills found that females were more likely to use concentration and peaking under pressure, whereas male athletes used freedom from worry as their coping responses. The study also found that there is a significant relationship between the athlete's goal orientation and his/her psychological coping skills.

The pressure to perform at high levels in competitive sports has increased in recent years with all the media attention given to sport and the potential earnings available through success, and people who don't cope effectively with the pressure of competitive sport may experience not only a decrease in their ability to perform, but also mental distress and even physical illness (Weinberg & Gould; 2007). Different sports have different sources of stress, and consequently participants require special strategies to cope successfully in their particular field (Kristiansen, Roberts & Abrahamsen, 2007).

In recent years, there has been an increasing interest to study the ability of athletes to cope with stress, especially in competitive sport environments (Hatzigeorgiadis, 2006; Kristiansen, Roberts, & Abrahamsen, 2007; Nicholls & Polman, 2007; Pensgaard, & Roberts, 2003). Lazarus and Folkman (1984) have defined coping as a dynamic process of cognitive and behavioral attempts to deal with internal or external demands which are experienced as taxing or exceeding the individual's resources. Thus, coping can be viewed as an active response comprising both cognitive and behavioral efforts to deal with stress. Weinberg and Gould (2007) has noted that psychological skills (e.g. mental preparation, mental skills, use of routines) are important to effectively cope with psychological (e.g. anxiety, loss of concentration, lack of confidence) and non psychological (e.g., poor housing, injury) stressors. However, a variable that has been found to affect the perception of stress, and which influences the coping strategies, is the achievement goal of the athlete (Pensgaard & Roberts, 2003). Indeed, achievement goal orientation theory has been one of the key motivational theories that have been successfully employed in both education and sport to explain behavior (Nicholls, 1984).

Achievement goal theory assumes that the individual is an intentional, goal directed organism that strives to demonstrate ability or competence in an achievement setting (Kristiansen, Roberts & Abrahamsen, 2007). There are two specific achievement goals identified by achievement goal theorists such as Nicholls (1984), namely task and ego goal orientation. According to Pensgaard and Roberts (2003), when an athlete is task-oriented or generally associated with desirable or adaptive achievement behavior, his or her primary goal will be to demonstrate mastery of the task in hand. That individual's perceptions of ability would be typically self-referenced; that is there would be an interest in learning and self-development, and their focus would on improving and working hard or putting forth maximum effort to the task with little or no concern for the outcome. Previous studies within sport contexts have found that task orientation is a positive predictor of pro-social behaviors (Kavussanu, 2006). For example, Malete's (2006) research found that task orientation and perceived sport ability were important predictors of Botswana youth participation in sports, while Papaionnou, Bebetsos, Theodorakis, Christodoulidis and Kouli (2006) identified that task orientation, intrinsic motivation and perceived athletic competence predicted sport and exercise participation 7 to 14 months later. With specific regard to competitiveness, Pensgaard and Roberts (2003) found that when an athlete is ego oriented, he/she adopts a normative conception of ability and is interested in demonstrating the superiority of his or her ability to others, leading them to conclude that winning and beating others is the major focus of an ego-oriented athlete. In a study by Sit and Lidner (2004), the researchers have reported that high ego orientated youths are likely to be motivated by status only and as such, they reasoned that high ego-oriented youths employed an other-referenced perception of ability, as they desire to outperform others in the comparison process so as to demonstrate their superior ability and attain social standing or mutual recognition.

# The Research Problems

Pensgaard and Roberts (2003) note that some researchers suggest that there is a relationship between achievement goals and responses to stress in sports. They also state that athletes, who are predominantly task-oriented and have internal criteria of determining success, may be better equipped to cope with stress, while athletes who are ego-oriented and have external criteria of success, such as outperforming other competitors, may be especially vulnerable to perceived stress and suffer possible performance decrements. Studies on the relationship between an athlete's achievement goals and responses to stress have revealed that task oriented athletes tend to cope better, have higher levels of self-efficacy and use more problem focused coping strategies; egooriented athletes tend to use emotion-focused coping (Ntoumanis, Biddle & Haddock, 1999; Cumming and Hall; 2004; Kristiansen, Roberts, & Abrahamsen, 2007). The high task/low ego athletes employ more active coping and social emotional support strategies than high task/high ego and low task/low ego athletes (Pensgaard and Roberts, 2003). Therefore, an understanding of the athletes' achievement goal orientation and their mental coping skills may assist the coach to develop proper intervention programs to improve mental coping skills, which may ultimately lead to an enhancement of performance. However, the above research findings are lacking in Malaysia and such research will help to understand more about how coping strategies plays their roles in motivating athletes especially with the university athletes.

# Purpose of the study

In the light of the above findings based on the achievement goal orientation framework and past research, this study aims to investigate the relationship between achievement goal orientations and the psychological coping skills of University's athletes in one of the largest universities in central Malaysia.

Sample

#### Methodology

A total of 85 university athletes (35 males, 50 females) who willing to participate, representing a wide variety of sports (archery, athletics, futsal, handball, netball and rugby) participated in this study. Goal orientations and psychological coping skills were assessed using questionnaires. The age range of the respondents was from 19 to 28 years (M = 21.66, SD = 1.63). The ethnicity of the sample was Malay Malaysians (84.7%); Chinese Malaysians (5.9%) and Indian Malaysians (2.4%), and others (7.1%). The sample of Malay Malaysian is high due to higher percentage of Malay athletes participate in the particular sports(archery, athletics, futsal, handball, netball and rugby) as compare to other ethnic. These athletes were all from university teams and had competed in one or more competitions in the National Inter-Varsity Competitions and/or other events and competitions organized in the country.

#### Procedure

Quantitative data were used to examine possible associations of task and ego orientations and the psychological coping skills of athletes who were participants in this study. A self-report questionnaire was given to the officer in-charge of the various sports events and was distributed to the selected athletes. The researcher explained the purpose and information on the completion of the questionnaire to the officer in-charge to ensure that the athletes completed the questionnaires as required. The officer in-charge then passed the questionnaires on to the participants to complete when they attended training sessions. The completed questionnaires were collected back after one week from the officer in-charge.

#### Instrumentation

The questionnaire was divided into three parts, namely: demographic variables; the Task and Ego Orientation in the Sports Questionnaire; and the athletic coping skills inventory – 28.

#### Demographic variables

The questionnaire also contained items that determined the age, gender and ethnicity of each of the respondents.

# Task and Ego Orientation in Sport Questionnaire (TEOSQ)

The Task and Ego Orientation in Sport Questionnaire (TEOSQ) was used to examine an individual's task and ego orientation in the academic and sport fields (Duda & Nicholls, 1992). The TEOSQ has 13 items which comprise two subscale scores. Each item is preceded by the phrase, "I feel most successful in sport when.....", answered on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Seven items on the TEOSQ reflected a task involvement and six items reflected an ego involvement. The composite score for each subscale was used as the unit of measurement. The range for each participant's degree of task and ego orientation in sports was from 1 (low) to 5 (high). The subscales were found to be internally consistent with alpha levels for task orientation .79 and .89 (Cumming, & Hall, 2004) study and from .79 to .87 respectively (Gano-Overway, Guivernau, Magyar, Waldron, & Ewing, 2005). Therefore, it is shown that the TEOSQ is valid when used within a sports context.

# Athletic Coping Skills Inventory – 28

The Athletic Coping Skills Inventory - 28 (ACSI-28; Smith, Schultz, Smoll, & Placek, 1995) was used to assess the psychological coping skills for each athlete. The ACSI-28 is a selfreport questionnaire developed using exploratory and confirmatory factor analysis. The instrument consisted of a 28-item scale measuring seven classes of sport-specific psychological coping skills including coping with adversity, peaking under pressure, goal setting and mental preparation, concentration; freedom from worry, confidence and achievement motivation, and coachability (Figure 1). Individuals were asked to respond to each statement by indicating how often they experienced different situations using a 4 point scale (e.g., I put a lot of pressure on myself by worrying about how I will perform", 0 = almost never to 3 = almost always). Each subscale consisted of four items that were averaged to provide a subscale range of 0 to 3. Additionally, the scales were then summed to yield a personal coping resource score. The subscales were found to be internally consistent with alpha levels ranging from .62 to .78 and a total (personal coping resources) scale alpha of .86 as reported in Smith, Schutz, Smoll & Ptacek (1995).

# Analysis of Data

All the data were analyzed using the Statistical Package of Social Sciences (SPSS) program software version 13.0. An independent T-test was used to compare the mean between male and female on the achievement goal orientations and mental coping skills score in athletes. The Pearson Product Moment Correlation was used to

Figure 1. Terms and definitions of ACSI-28 psychological coping skills			
Sub-scales	Descriptions		
Coping with Adversity	Remains positive and enthusiastic even when things are going badly; remains calm and controlled; can quickly bounce back from mistakes and setbacks.		
Peaking Under Pressure	Is challenged rather than threatened by pressure situations and performs well under pressure; a clutch performer.		
Goal Setting/			
Mental Preparation	Sets and works towards specific performance goals; plans and mentally prepares him/ herself for competition and clearly has a 'game plan' for the competition.		
Concentration	Not easily distracted; able to focus on the task at hand in both practice and competitive situations, even when adverse or unexpected events occur.		
Freedom from Worry	Does not put pressure on him/herself by worrying about performing poorly or making mistakes; does not worry about what others will think if he/she performs poorly.		
Confidence and			
Achievement Motivation	n Is confident and positively motivated; consistently gives 100% during practice and ompetitions and works hard to improve his/ her skills.		
Coachability	Open to and learns from instruction; accepts constructive criticism without taking it personally or becoming upset.		
Psychological skills	Smith, R. E., and Christensen, D. S. (1995). as predictors of performance and survival in <i>Journal of Sport and Exercise Psychology</i> , 17,		

analyze the relationship between the achievement goal orientations and the mental coping skills score in athletes.

# Results

# Descriptive statistics

399-415.

The Cronbach's alpha coefficients; mean and standard deviations of all the variables are presented in Table 1. As table 1 revealed, the seven subscales of task orientation reported strong internal consistency with .847. In addition, the ego orientation which comprised six items also showed a high internal reliability of .766. In terms of the internal reliability of ACSI - 28, the total of personal coping resource demonstrated the most reliable score of 0.747 (28 items). With regards to the seven ACSI-28 subscales, six of the subscales were found to be internally consistent with alpha coefficient above 0.5. Unfortunately, the coachability subscale internal consistency was not acceptable (alpha = -.039) and will not be included for further analysis. In general, the participants were highly task oriented and were also perceived to have a fairly high ego orientation as evidenced by the high mean scores (see Table 2). For the ACSI – 28, the athlete's most frequently used coping skills is the coping with adversity skill (M = 2.08, SD =

# Table 1. Descriptive statistics and reliability coefficient for goal orientation and coping skills for UPM athletes (n=85)

	Mean	SD	
Task Orientation	3.97	.60	.847
Ego Orientation	3.71	.58	.766
ASCI – 28			
Coping with adversity	2.08	.46	.578
Peaking under pressure	1.94	.53	.634
Goal setting	2.02	.56	.715
Concentration	1.98	.48	.584
Freedom from worry	1.12	.60	.744
Confidence	2.03	.50	.654
Coachability			039
Total of personal coping resource	1.85	.27	.747

Note: Task orientation and ego orientation were measured on 5-point scales ranging 1 to 5; all other variables were measured on four-point scales ranging from 0 to 3

.46) and the least frequently used is the freedom from worry (M = 1.12, SD = .60).

# Means differences between ACSI – 28 scales and gender

Table 2 showed that there were significant differences in the three subscales of ASCI – 28 between males and females, which were concentrated with t (83) = -2.702, p = .008, freedom from worry with t (83) = 2.618, p = .011, and peaking under pressure with t (83) = -2.153, p = .034. Also, the independent T – test results showed that there were no significant differences found between gender with goal setting (p > .05), coping with adversity (p > .05), confidence (p > .05) and total personal coping resources (p > .05). In addition, the results showed that there were no significant differences between males and females on the task orientation (p > .05), and ego orientation (p > .05).

Table 2. Independent-sample t-test Results on ACSI-28           scales according to Gender				
ACSI – 28 Scale	t	Р		
Peaking under pressure	-2.153	.034*		
Concentration	-2.702	.008**		
Freedom from worry	2.618	.011*		
*p < .05, **p < .01				

Quantitative relationship between task orientation and coping skills

As illustrated in Table 3, Pearson product-moment correlations revealed weak to moderate correlations among the achievement goal orientations and ACSI – 28 subscales. The five subscales of coping skills (coping with adversity, peaking under pressure, goal setting, concentration and confidence) and the total of personal coping resources were positively correlated and were significant with both task and ego orientations (p < .01). Freedom from worry was found to be negatively correlated and was significant with ego orientation only.

Table 3. Coping strategies correlated with achievement goal orientation				
ACSI – 28	Task orientation	Ego orientation		
Coping with adversity	.34**	.46**		
Peaking under pressure	.28**	.52**		
Goal setting	.38**	.53**		
Concentration	.23**	.36**		
Freedom from worry	20	34**		
Confidence	.42**	.47**		
Total coping resource	.39**	.54**		
** p < .01.				

# Discussion

This study attempted to examine the relationship between achievement goal orientations and athletes' coping skills. The results of the study showed that athletes have comparatively higher task orientation profiles and there are no gender differences on achievement goal orientations. These findings, notwithstanding, the study also found that there are some gender differences in the coping skills among the athletes and that there are significant positive relationships between certain coping skills and achievement goal orientations. The results of this study showed that the university athletes in question had high task (M = 3.97) and fairly high ego orientations (M = 3.71). The goal orientation profile of the athletes showed a similar goal orientation profile as those Malaysian National and International level athletes who took part in a study by Omar-Fauzee and Abdul Razak (2005).

Thus, the results of this study showed that the means of the Malaysian athletes' achievement goal orientations are both high, which means that the athletes were high task oriented (M = 4.14) and fairly highly ego oriented (M = 3.49). Omar-Fauzee and Abdul Razak (2005) attributed the higher task orientation scores to systematic training and access to the National Sport Institute facilities. Likewise, the athletes in this study could have also benefited from the training programs and accessibility to university sport facilities, which could have encouraged them to focus on developing their competencies in their respective sports field. In another study on British university athletes, Ntoumanis et al (1999) also found that participants were notably high in task orientation (M = 4.17) and to a lesser extent in ego orientation (M = 3.21). These authors pointed out that individuals with a higher task orientation are usually associated with adaptive cognitive and behavioral outcomes, and emphasis on self-referenced goals such as individual improvement. They concluded that the downplay of social comparison will help task oriented individuals view stressful situations as relatively controllable. Previous studies (e.g. Pensgaard & Roberts 2003; Cumming & Hall, 2004; Kristiansen, Roberts, & Abrahamsen, 2007) have also shown that task oriented athletes tend to cope better.

The present study also compared whether there was any gender difference in the athlete's achievement orientation. The results showed that there was no gender difference in the athletes' achievement goal orientation. This conclusion is different from previous studies which had found that there were gender differences in the achievement goal orientation. In studies by Ntoumanis (2001); Thorkildsen and Nicholls (1998), it was found that males were significantly higher in ego orientation; the explanation for such findings is that males may be more preoccupied with recognition and the acquisition of status and power. However, Bouffard, Boisvert, Vezeau and Larouche (1995) found that women scored higher than men in task orientation. Therefore further research is needed to explain the inconsistencies in these results and clarify whether there are indeed gender differences in goal orientations among athletes.

The results of the present study also showed that there were some gender differences on the coping skills among the athletes. Females scored higher than males on the subscales of "peaking under pressure" and "concentration". However, male athletes scored higher on "freedom from worry" than their female counterparts. These results lend some cautious support to a study by Tamres, Janicki and Helgeson (2002) which found that females reported greater use of coping behaviors compared to men. In their study, which used meta-analysis procedures to examine recent studies of sex differences on coping, it was reported that out of 17 coping behaviors being investigated, 11 coping behaviors were found to be statistical significantly for females compared to males. The results of the study showed that females engage more in behaviors that involved the contemplation or expression of feelings to others (seeking emotional support) and the self (rumination, positive self-talk). However, Tamres, et al., (2002) noted that the mean effect sizes of all the 11 coping behaviors were quite small, and concluded that studies on gender differences in coping have not yet been established decisively, particularly because the literature on coping is complex when it comes to evaluating such differences.

Results of the present study on relationship between task orientation and coping skills showed that there were significant low positive relationships between task orientation and the subscales of "confidence", "goal setting" and "coping with adversity". These findings suggest that high task oriented athletes indicated that they have confidence in their ability through consistently working hard during practices and competitions, and set and work towards specific performance goals for themselves, and they are able to cope with adversity by remaining positive and enthusiastic even when things are not going as planned. These findings are in accord with past studies (e.g. Theodosiou & Papaioannou, 2006; Papaionnou et al., 2006; Sit & Lidner, 2004) which have also shown that task oriented individuals are intrinsically motivated, focus on selfreferenced criteria such as personal improvement and learning in order to determine their competence.

When ego orientation is correlated with coping skills, the results of the present study showed that there were moderate and positive relationships with the coping skills of "goal setting", "peaking under pressure" and "confidence". These findings indicate that ego-oriented athletes mentally prepare themselves by setting game plans for competitions, perform well during competitions as they feel challenged rather than threatened by pressure situation, and are confident as they consistently give their best during practice sessions or in a competitive environment. This is in line with studies (e.g. Theodosiou & Papaioannou, 2006; Papaionnou et al., 2006; Sit &Lidner, 2004) which have also shown that ego oriented individuals are more extrinsically motivated and tend to use normative criteria when comparing their abilities with others.

#### **Conclusions and Recommendations**

In conclusion, the present study found that there is some relationship between the achievement goals and coping skills of Malaysian athletes. However, these findings also suggest that further research in this area is likely to assist sport psychologists and coaches in developing a more thorough understanding of the achievement goal orientations of Malaysian athletes and those interventions can undoubtedly play a key role in motivating them to cope better in competitive settings. The findings from the present study also suggest that it would be desirable for future research to consider larger sample sizes with a more diverse ethnic and gender mix of athletes for better generalizability of research results.

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