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Relationship of the task and ego orientation with competitive anxiety in women volleyball players

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Abstract
The purpose of the study was to find out the relationship of task and ego orientation with competitive anxiety in women volleyball players. For the purpose of the study 40 Female volleyball players age ranging from 20 years-40 years, have been taken as subjects for the present study who had participated in 60th Senior National volleyball Championship held at the Balbeer Singh, Juneja indoor Stadium, Raipur,(CG) from 04th January,2012 to 09th January, 2012, Further, 40% subjects were from Madhya Pradesh, 33.33% of the subjects were from Uttar Pradesh, 13.33% of the subjects were from Delhi, 10% of the subjects were from Chandigarh and 3.33% of the subjects were from CG. Competitive State Anxiety Inventory-(CSAI-2) by Martens *et al*. (1982) was used to find out the state anxiety level of each volleyball player. Somatic anxiety and cognitive anxiety scores were taken together in order to represent overall State anxiety score. Task and Ego Orientation Sport Questionnaire (TEOSQ) by Duda (1992) [2] was used to find out the Task and Ego orientation level of each volleyball player. Sports Competition Anxiety Test (SCAT) Questionnaire by Martens (1977) was used to find out the Trait anxiety of each volleyball player. The result shows that there were significant relationship between task orientation and self-confidence and the value obtained with this relationship was 0.692, indicates that the volleyball players who were Task oriented had higher level of Trait anxiety. As similar to this there were significant relationship between task orientation and somatic anxiety and the value obtained was 0.633, indicates that the Volleyball players who were Task oriented, had higher level of state anxiety. Although there were no significance difference between task orientation and cognitive anxiety and the value obtained with this relationship was 0.927, shows that Volleyball players, who are task oriented, have lower level of trait anxiety. There were no significance difference between ego orientation and self-confidence and the value obtained with this relationship was 0.927, shows that Volleyball players, who are ego oriented, have lower level of Self Confidence. There were also not significant relationship between ego orientation and somatic anxiety, the value of this relationship was 0.525,it defines the Volleyball players who are ego oriented have lower level of state anxiety. There were no significant relationship ego orientation and cognitive anxiety, the value obtained was 0.397, it indicates that Volleyball players who are ego oriented have lower level of trait anxiety. There were not a significant relationship between task orientation and sports competitive anxiety and the value obtained was 0.150, it shows the Volleyball players who are more task oriented have lower sports competitive anxiety. There were not significant relationship between ego orientation and sports competitive anxiety and the value obtained was 0.326, it shows that Volleyball players, who are ego oriented, have lower sports anxiety level but still it is more than task oriented players.

Keywords: soccer specific interval test (SSIT), yo-yo intermittent recovery test level 2, cronbach's alpha, aerobic and anaerobic

Introduction
Sport psychology is an interdisciplinary science that draws on knowledge from the fields of Kinesiology and Psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors.
(http://en.wikipedia.org/wiki/Sport_psychology)
The increased stress of competitions can cause athletes to react both physically and mentally in a manner that can negatively affect their performance abilities. They may become tense, their heart rates race, they break into a cold sweat, they worry about the outcome of the competition, they find it hard to concentrate on the task in hand. Anxiety (also called angst or worry) is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components (Seligman *et al*. 1999). It is the displeasing feeling of fear and concern (Davison 2008). 'State' anxiety is the anxiety state we experience when something causes us to feel appropriately and temporarily anxious and this anxiety then retreats until we feel 'normal' again. Trait anxiety is the 'preset' level of anxiety experienced by an individual who has a tendency to be more anxious; to react less appropriately to anxiety provoking stimuli. The anxiety level experienced by an athlete depends upon varying stress factors such as competition, significance of winning, opponents and personal goals. Even well-trained and experienced athletes encounter stressful situations during a game. The importance lies in understanding how to cope with the internal and external stressors so they do not become the determining factors for success or failure. Two types of anxiety levels exist. The first kind refers to the cognitive aspect. It deals with the mental state affecting performances such as worry concern angst expectations and inner-dialogue. The second type of anxiety addresses the emotional component. It manifests itself through feelings such as nervousness and tension. Anxiety, whether classified as

cognitive or somatic, can negatively affect the outcome of performance. Cognitive anxiety affects the mind of an athlete and consumes his thoughts, thus affecting his ability to perform simple tasks such as free-throws in Volleyball or serving the ball in tennis. Somatic anxiety affects his physical ability to perform by altering his physical state such as increased heart rate or "butterflies in the stomach." In diagnosing the problem, many sports psychologists analyze various personal and outside factors influencing the athlete. Cognitive approaches include shifting the athlete's state of mind from negative to positive
(http://www.ehow.com/facts_5638183_anxiety-sports_.htm)
Competition can cause athletes to react both physically (somatic) and mentally (cognitive) in a manner which can negatively affect their performance abilities. Stress, arousal and anxiety are terms used to describe this condition. (http://www.brianmac.co.uk/companx.htm)
Arousal is general physical and psychological activity. Anxiety is a negative emotional state with feelings of worry, nervousness and apprehension that is associated with the activation of the body. Stress is an imbalance between that demands that someone feels and his or her feelings of capably to meet that demands - when failure of these demands has important consequences. Arousal can affect performance in many ways. There are several theories as to how stress affects performance; such as Drive Theory, Inverted U hypothesis, Individual Zones of Optimal Functioning, Multidimensional Anxiety Theory, Catastrophe Model, Reversal Theory and Anxiety Direction and Intensity.
(http://www.psychologycampus.com/sports-psychology/arousal-anxiety.html)
Self-confidence is the confidence one has in oneself, one's knowledge, and one's abilities. It is the confidence of the type: "I can do this". "I have the ability to do this". Genuine self-confidence is the forerunner of achievements. Self-confidence integrates the powers of mind and body and focuses them towards the goal. Only such a concentrated energy can reach the goal. Self-confidence is the first step to progress, development, achievement and success. Even if you have a lot of abilities and a lot of knowledge, if you do not have Self-confidence you cannot be a success. But, on the contrary, even if you have only average abilities and knowledge, if you have an unfailingly true self-confidence, chances are that you achieve what you want to.
(http://www.psychology4all.com/SelfConf.html)
To improve self-confidence, an athlete can use mental imagery to visualize previous good performance to remind them of the look and feel imagine various scenarios and how they will cope with them. Good goal setting (challenging yet realistic) can bring feelings of success. If athletes can see that they are achieving their short term goals and moving towards their long term goals then confidence grows.
(http://www.brianmac.co.uk/psych.htm#l**)**

Concept of task and Ego

Maeher and Nicholls emphasized that goals determine the meaning of achievement for the individual in that they reflect the purpose of achievement striving and subjective perceptions of success. What is success to one person may not be to another, depending on the goals they pursue, thus, an individual who is "task-involved" is concerned with self-improvement and task mastery and is likely to feel successful when gains in performance and/or mastery come about, irrespective of the achievements of others. In this state of goal involvement, effort and ability are viewed as positively related-that is, more effort leads to perceptions of higher ability. The individual's purpose (goal) is to develop self-referenced competence. Conversely, an individual who is "ego-involved" is concerned with displaying superior ability to others and is likely to feel successful when performing better than members of a reference group. In this goal involvement stat, effort and ability are viewed as inversely related and an individual will feel particularly successful when displaying equal ability but with less effort than others. The individual's purpose is to demonstrate, rather than develop, competence (Nicholls, 1984, 1989) [5].
Nicholls also argued that individuals develop proneness for task and/or ego involvement. Proneness is deemed to represent a fairly stable tendency (if not a personality trait) to define competence in a particular fashion, that is developed via socialization experiences. Using Nicholls' terminology, people can be task oriented (have a tendency toward task involvement states in achievement situations) and/or ego oriented (have a tendency toward ego involvement states in achievement situation).
Building on work in the educational sphere Duda and Nicholls (1992) [2] devised the Task and Ego Orientation in Sport Questionnaire (TEOSQ). Once armed with the TEOSQ, researchers were able to reliably assess individuals' goal orientations in sport, and determine the nature of associations between task/ego orientations and a host of motivational and behavioral indices, thereby elucidating the different meanings and experiences attached to sport.
The key study by Duda, Fox, Biddle, and Armstrong (1992) [8] was one of the first studies to employ the TEOSQ to assess task and ego goal orientations. It also included the measurement of two additional goals- work avoidance and cooperation- which, at that time, had received attention in education but not in sport.
Results confirmed the hypothesized links between task orientation and the belief in the utility of effort in bringing about success in sport, and between ego orientation and the belief in the need for ability. These studies encompassed samples involving different sports, ages of participants, and levels of expertise (Duda & Nicholls, 1992; Dud & White, 1992; Lochbaum & Roberts, 1993; Roberts & Ommundsen, 1996; Roberts, Treasure, & Kavussanu, 1998) [2]. Evidence for the association between task orientation and enhanced enjoyment, satisfaction, and intrinsic motivation also emerged in sport and physical activity contexts (Dorobantu & Biddle, 1997; Duda, *et al*., 1995; Vlachopoulos & Biddle, 1996) [7]. Consequently, theorists and researchers have since argued for the promotion of task orientation in sport settings and proposed that coaches and teachers should try to create a task-involving "climate" that emphasized self-improvement, effort and cooperation among participants. Promoting competition and intra-group rivalry to identify the best in a class or team, and giving praise only to the most able, are examples of behaviors that should be actively discouraged in order to minimize the perception of an ego-involving climate.

Task orientation is characterized by individuals whose actions focus on developing new skills, placing high value on effort, and striving for task mastery based on self-referenced perceptions of ability. Conversely, ego orientation is characterized by individuals who attempt to demonstrate superior ability by outperforming others, thus utilizing a norm-based perception of ability (Duda, 1992; Jagacinski, 1992; Nicholls, 1989; Roberts, 1992) [2, 5]. It is proposed that a task-involved athlete chooses more challenging tasks, experiences greater intrinsic interest in activities, and exerts more effort in difficult tasks. Further, these behaviors continue to be demonstrated by the task-involved athlete even though he or she may report low levels of perceived ability in the task. However, those athletes with a largely ego orientation and low perceived ability are prone to task avoidance, reduced effort, heightened anxiety, concentration disruption, and withdrawal from the activity in the face of failure (Duda, 1988, 198 9; Duda, Chi, & Newton, 1990; Duda, Chi, Newton, Walling, & Catley, 1995; Dweck, 1986; Jagacinski & Nicholls, 1990; White & Zellner, 1996).

Procedure and Methodology

Selection of subjects

For the purpose of the study 40 Female Volleyball players age ranging from 20 years-40 years, have been taken as subjects for the present study who had participated in 60th Senior National volleyball Championship held at the Balbeer Singh,Juneja indoor Stadium, Raipur,(CG) from 04th January,2012 to 09th January, 2012, Further, 40% subjects were from Madhya Pradesh, 33.33% of the subjects were from Uttar Pradesh, 13.33% of the subjects were from Delhi, 10% of the subjects were from Chandigarh and 3.33% of the subjects were from CG.

Tools Used

Competitive State Anxiety Inventory-(CSAI-2) by Martens *et al*. (1982) was used to find out the state anxiety level of each Volleyball player. Somatic anxiety and cognitive anxiety scores were taken together in order to represent overall State anxiety score.

Task and Ego Orientation Sport Questionnaire (TEOSQ) by Duda (1992) [2] was used to find out the Task and Ego orientation level of each Volleyball player.

Sports Competition Anxiety Test (SCAT) Questionnaire by Martens (1977) was used to find out the Trait anxiety of each Volleyball player.

Administration of the test

The subjects were explained the purpose of the investigation and the importance of their contribution as a subject in the study. Further, the subjects were also given information about the area being investigated. Necessary instructions were given to the subjects before the administration of the test. Subjects were assured that their responses would be kept completely confidential, and that they are free not to participate in the study or withdraw at any point of time. Moreover, confidentiality of responses was stressed so that the subject would not camouflage their real feelings. They were also assured that the investigation has no effect on their personal development and hence their whole hearted cooperation will help in understanding the relationship of task and ego orientation to measures of anxiety. After obtaining consent from the players' for the purpose, the questionnaires of anxiety and task and ego orientation was administered.

Scoring

The CSAI-2 was scored by computing a separate total for both the subscales (Anxiety and self-confidence). Anxiety score was calculated as mentioned in the manual. Higher the score greater will be the anxiety. Scoring for Confidence subscale was calculated with the help of manual provided for this purpose. Higher scores indicated greater confidence.

The TESOQ was scored by computing a separate total for both the subscale (task orientation and Ego orientation) Higher the score greater will be the Task orientation and Ego orientation.

The SCAT questionnaire was calculated using the scoring manual for this purpose. Higher the score obtained by a subject indicates greater will be the trait anxiety.

Statistical Procedure

After the collection of the data following statistical applications were employed:

-Product moment Co-relation,

-Detailed descriptive statistics (Mean, Standard Deviation, Minimum and maximum scores on various psychological variables).

Check out for Grammar Mistakes

Results

For the purpose of the study the data collected from national level women Volleyball players on task and ego orientation, competitive anxiety, cognitive anxiety, somatic anxiety and self-confidence were statistically analyzed using the SPSS software.

Table 1: Descriptive statistics of ego orientation, task orientation, competitive anxiety, cognitive anxiety, somatic anxiety & self confidence in women national volleyball players.

	N	Minimum	Maximum	Mean	Std. Deviation
Ego-orientation	40	1.00	4.00	2.8033	.90876
Task orientation	40	2.70	4.70	4.0200	.65832
Sports competitive anxiety	40	13.00	22.00	18.7000	2.42331
Cognitive anxiety	40	14.00	28.00	20.6000	3.47999
Somatic anxiety	40	10.00	22.00	13.9667	3.04544
Self-confidence	40	19.00	33.00	25.4667	4.25671
Valid N (listwise)	40				

The descriptive statistics pertaining to these calculations is presented in Table No. 1 below:

The table 1 above clearly indicates that the mean and standard deviation values for ego orientation were 2.8033 and 0.90876 respectively whereas, for task orientation the values obtained were 4.0200 and 0.65832. The table also indicates the minimum and maximum values of ego orientation were 1.00 and 4.00 respectively whereas, the values for task orientation were 2.70 and 4.70 respectively.

The mean and standard deviation values for Competitive anxiety were 18.70 and 2.42, Cognitive anxiety was 20.60 and 3.47, Somatic anxiety was 13.96 and 3.04 and Self-confidence was 25.46 and 4.25 respectively.

The table also indicates the minimum and maximum values of Competitive anxiety were 13.00 and 22.00, Cognitive anxiety was 14.00 and 28.00, Somatic anxiety was 10.00 and 22.00 and Self-confidence was 19.00 and 33.00 respectively.

To find out relationship between 'task orientation and somatic anxiety, task orientation and cognitive anxiety, ego orientation and self-confidence, ego orientation and somatic anxiety, ego orientation and cognitive anxiety, task orientation and sports competitive anxiety and ego orientation and sports competitive anxiety in national level women Volleyball players the product moment co-relation were calculated and these are presented from table no. - II to table no. – IX:

Table 2: Product moment correlations between task orientation and competitive anxiety

		Task Orientation	Competitive Anxiety
Task Orientation	Pearson Correlation	1	-.150
	Sig. (2-tailed)		.430
	N	40	40

Significant at 0.01 levels (2-tailed).

The table above reflects that the Pearson product moment co-relation between Task orientation and sports competitive anxiety were found to be low and the value obtained were -0.150 which was not significant since the p values obtained were more than 0.05 levels.

Table 3: Product moment Correlations between task orientation and cognitive anxiety

		Task Orientation	Cognitive Anxiety
Task Orientation	Pearson Correlation	1	-.322
	Sig. (2-tailed)		.083
	N	40	40

Significant at 0.01 levels (2-tailed)

The table above reflects that the Pearson product moment co-relation between Task orientation and cognitive anxiety were found to be low and the value obtained were 0.322 which was not significant since the p values obtained were more than 0.05 levels.

Table 4: Product moment correlations between task orientation and somatic anxiety

		Task Orientation	Somatic Anxiety
Task Orientation	Pearson Correlation	1	-.633**
	Sig. (2-tailed)		.000
	N	40	40

**. Significant at 0.01 levels (2-tailed).

Table 4 above clearly indicates that the Pearson product moment co-relation between Task orientation and somatic anxiety were extremely high and the value obtained were 0.633 which was significant since the p values obtained was less than 0.05 levels.

Table 5: Product moment correlations between task orientation and self confidence

		Task Orientation	Self Confidence
Task Orientation	Pearson Correlation	1	.692**
	Sig. (2-tailed)		.000
	N	40	40

**. Significant at 0.01 levels (2-tailed).

Table 5 above clearly indicates that the Pearson product moment co-relation between Task orientation and self-confidence were extremely high and the value obtained were 0.692 which was significant since the p values obtained was less than 0.05 levels.

Table 6: Product moment correlations between ego orientation and competitive anxiety

		Ego Orientation	Competitive Anxiety
Ego Orientation	Pearson Correlation	1	.326
	Sig. (2-tailed)		.079
	N	40	40

Significant at 0.01 levels (2-tailed).

The table above reflects that the Pearson product moment co-relation between Ego orientation and competitive anxiety were found to be low and the value obtained were 0.326 which was not significant since the p values obtained were more than 0.05 levels.

Table 7: Product moment correlations between ego orientation and cognitive anxiety

		Ego Orientation	Cognitive Anxiety
Ego Orientation	Pearson Correlation	1	.397*
	Sig. (2-tailed)		.030
	N	40	40

*. Significant at 0.05 levels (2-tailed).

Table 7 above reflects that the Pearson product moment co-relation between Ego orientation and cognitive anxiety value obtained was 0.397 which was significant since the p values obtained were less than 0.05 levels.

Table 8: Product moment correlations between ego orientation and somatic anxiety

		Ego Orientation	Somatic Anxiety
Ego Orientation	Pearson Correlation	1	.121
	Sig. (2-tailed)		.525
	N	40	40

Significant at 0.01 levels (2-tailed).

The table above reflects that the Pearson product moment co-relation between Ego orientation and somatic anxiety were found to be low and the value obtained were 0.121 which was not significant since the p values obtained were more than 0.05 levels.

Table 9: Product moment correlations between ego orientation and self confidence

		Ego Orientation	Self Confidence
Ego Orientation	Pearson Correlation	1	.017
	Sig. (2-tailed)		.927
	N	40	40

Significant at 0.01 levels (2-tailed).

The table above reflects that the Pearson product moment co-relation between Ego orientation and cognitive anxiety were found to be low and the value obtained were 0.017 which was not significant since the p values obtained were more than 0.05 levels.

Discussion of findings

The present study deals with the Relationship of Task and Ego orientation with competitive anxiety in Women Volleyball players. It is evident that there were significant relationship between task orientation and self-confidence and the value obtained with this relationship was 0.692, this indicates that the Volleyball players who were Task oriented had higher level of Trait anxiety.

As similar to this there were significant relationship between task orientation and somatic anxiety and the value obtained was 0.633, this indicates that the Volleyball players who were Task oriented had higher level of state anxiety. It was also seen that there were no significance difference between task orientation and cognitive anxiety and the value obtained with this relationship was 0.927, shows that Volleyball players, who are task oriented have lower level of trait anxiety. There were no significance difference between ego orientation and self-confidence and the value obtained with this relationship was 0.927, shows that Volleyball players, who are ego oriented have lower level of Self Confidence. There were also not significant relationship between ego orientation and somatic anxiety, the value of this relationship was 0.525, it defines the Volleyball players who are ego oriented have lower level of state anxiety. There were no significant relationship between ego orientation and cognitive anxiety, the value obtained was 0.397, and it indicates that Volleyball players who are ego oriented have lower level of trait anxiety. There were no significant relationship between task orientation and sports competitive anxiety and the value obtained was 0.150, it shows the Volleyball players who are more task oriented have lower sports competitive anxiety. There were no significant relationship between ego orientation and sports competitive anxiety and the value obtained was 0.326, it shows that Volleyball players, who are ego oriented, have lower sports anxiety level but still it is more than task oriented players.

Task orientation is related to the pro social aspects of sport involvement. First, a task orientation is found to be related to the belief that sport facilitates personal development, for example teaching participants to respect authority, self-discipline, and cooperation with others. Beyond character development, a task orientation was also related to the belief that sport fosters a commitment to lifetime health. As Duda (1989) [9, 10] suggests, because a task orientation entails an emphasis on skill mastery and an interest in the activity for its own sake, it should also be expected that a task-oriented individual would stress the "inherent capacity of competitive sport to enhance lifetime physical fitness". In contrast, an ego orientation is related to negative social aspects of sport involvement. Specifically, the higher the level of ego orientation, the greater the view that sport participation is a means to an end, namely acquiring status and providing an opportunity to feel important. One of the fundamental tenets of achievement goal theory is that beliefs about the causes of success are dependent on the achievement goal adopted by an individual (e.g., Ames 1992 a; Nicholls, 1989) [5].

Conclusions

After detailed analysis of data and the results obtained the following conclusion are drawn:-

- It is evident that there were significant relationship between task orientation and self-confidence and the value obtained with this relationship was 0.692, this indicates that the Volleyball players who were Task oriented had higher level of Trait anxiety.
- As similar to this there were significant relationship between task orientation and somatic anxiety and the value obtained was 0.633.This indicates that the Volleyball players who were Task oriented had higher level of state anxiety.
- It was also seen that there were no significance difference between task orientation and cognitive anxiety and the value obtained with this relationship was 0.927, shows that Volleyball players, who are task oriented have lower level of trait anxiety.
- It was also seen that there were no significance difference between ego orientation and self-confidence and the value obtained with this relationship was 0.927, shows that Volleyball players, who are ego oriented have lower level of Self Confidence.
- There were also not significant relationship between ego orientation and somatic anxiety, the value of this relationship was 0.525,It defines the Volleyball players who are ego oriented have lower level of state anxiety.
- There were no significant relationship ego orientation and cognitive anxiety, the value obtained was 0.397, it indicates that Volleyball players who are ego oriented have lower level of trait anxiety.
- There were not a significant relationship between task orientation and sports competitive anxiety and the value obtained was 0.150, it shows the Volleyball players who are more task oriented have lower sports competitive anxiety.
- There were not significant relationship between ego orientation and sports competitive anxiety and the value obtained was 0.326, it shows that Volleyball players, who are ego oriented, have lower sports anxiety level but still it is more than task oriented players.

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