Comparison of Anxiety between Male Medalist and Non-Medalist University Tennis Players

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Abstract

The study was designed to compare the anxiety level between the medalist and non-medalist Tennis players. The subjects (N=30) Tennis players from different Universities , who had participated in All India Inter University Tennis Tournament 2009-2010 held at Guru Jambheshwar University, Hissar. It was hypothesized that there would be no significant difference of anxiety among medalist and non-medalist male Tennis players. The anxiety level of the subjects was obtained by administering self evaluation state & trait anxiety inventory questionnaire. The score was obtained by using the key as suggested by C.D Spielberger, Charles D.; Gorsuch, R.L.; Lushene, R.; Vagg, P.R.; Jacobs, G.A. (1970). The anxiety among the groups was compared by the two sample t-test at 0 .05 level of significance. The statistical analysis of data revealed that medalist and non-medalist male Tennis players had significant difference in relation with state anxiety, as the calculated t value 2.41 was found more than tabulated t value 1.70 for state anxiety. Whereas, calculated t value 1.448 for trait anxiety was found lesser than tabulated t value 1.70 to be insignificant at 0.05 level of significance. The study will be helpful in the self assessment of the medalist and non-medalist male Tennis players and also helpful for coaches, players, tennis experts and psychologists to provide guidelines to the male Tennis players about problems related with Anxiety and its effect on the performance.

Introduction:

Anxiety is one of the most interesting and important areas of focus in sports psychology and has continued to attract great research interest (Weiss & Gill, 2005). A variety of studies have focused on anxiety experiences and characteristics of athletes, coaches and referees (e.g. Kelly, et.al, 1999; Guillen & Bara, 2004). Further knowledge is needed about the relationship between anxiety characteristics and elite sports performance. Some researchers have argued that low trait anxiety is necessary for sports success. On the other hand, other researchers have proposed that athletes tend to display lower anxiety over time as a consequence of experience (Petlichkoff & Weinberg, 1984). Questionnaires also exist relative to the relationship of anxiety and performance with regard to the nature of sports, i.e. individual or team sport (Kirkby & Liu,1999) the sex of athlete (Alansari & Lorimer,2006; Ridgers et.al ,2007), the position played on team , the amount of experience in the sports and the ability of athlete as it relates to anxiety outcomes. Previous research has examined the impact of anxiety on sports performance, and although these findings are somewhat equivocal, several studies have shown elite sportsmen to have lower pre-competition anxiety than their less successful peers. Olympic gymnastic qualifiers (Mahoney & Avener, 1997), college golfers (Weinberg & Genuchi, 1980), and national wrestling team qualifiers (Highlen & Bennet, 1997) all demonstrated lower pre-competition anxiety scores than their less successful competitors.

Although the preceding studies have made a valuable contribution to understanding the relationship between anxiety and performance, there are limitations to merely examining a single absolute level of anxiety. As early as 1978, Landers suggested that absolute levels of anxiety may not be as important a factor in performance as patterns of change.

In a study by Higher and Benett (1983), divers and wrestlers of different skill levels could be distinguishly different in their anxiety patterns. Successful divers and wrestlers experienced higher anxiety one hour prior to competition, yet reported much lower arousal levels at competition time compared to less successful divers and wrestlers. With both sports, the arousal level reported immediately prior to competition was more critical to performance outcome than the arousal level one hour prior to competition. Applied sports psychology is approaching a time in which pre-competition anxiety may be accurately assessed and effectively regulated on an individualized basis, thereby enhancing athlete's working mental state and performance .While the predominant anxiety performance theory of the 1980s,the inverted U hypothesis ,has largely failed to substantiate itself (Krane,1994;Weinberg 1990), recently developed intra-individual paradigm, the individual zone of optimal functioning theory (IZOF;Han in 1980,1986) has proven promising (Raglin & Turner,1993;Weinberg,1990). It is useful to differentiate anxiety from related concepts such as emotion of fear (Smith & Crabbe, 2000). Fear is a brief reaction to a threatening stimulus. Anxiety represents a longer lasting, broader reaction to a greater range of stimuli than those induced fear. In contrast to fear, anxiety often occurs in the absence of an obvious external stimulus and is generated in association with substantial cognitive process. Several related, yet distinct concepts have been employed in attempts to describe and understanding anxiety. The most well established of these is the distinction between state and trait anxiety. Trait anxiety is personality characteristic describing how prone an individual is to experiencing episodes of anxiety. State anxiety refers to moment to moment variations in the intensity of an individual's thoughts and feelings of apprehension. State and trait anxiety interact in a predictable way. In general, individuals characterized by high trait anxiety perceive a greater number of situations as threatening, more frequently exhibit periods of elevated sate anxiety and have a more potent anxiety reaction to a given situation compared to people characterized by average or low trait anxiety (Spielberger, Garsurch, Lushene, Vagg & Jacobs, 1983). Wiggins (1996) reported gender difference investigating anxiety across time , with females reporting higher cognitive anxiety intensity 24 hours prior to competition, but found no anxiety directions differences. Therefore, the purpose of this paper was to compare the anxiety (state &trait) between medalist and non-medalist male Tennis players.

Material and Methods:

The subjects were 30 male Tennis players belonging to different universities from all four zones, who had secured 1st, 2nd and 3rd position (Medalist) and who had not secured any position (Non-medalist) in All India Inter University Tennis Tournament. This study used the (STAI) developed by Spielberger 'et al., (1970) to assess pre-competition anxiety (sate &trait).The STAI is a sports specific, self evaluating inventory containing two subscales, state and trait anxiety. It is comprised of 40 items, with 20 items in each of the 2 subscales. In responding to state anxiety scale ,subjects were instructed to indicate

how they generally feel by rating the frequency of their feeling of anxiety on the following four point scale; (1) Not at all (2) Somewhat (3) Moderately so (4) Very much so. In responding to the trait anxiety scale, subjects were instructed to indicate how they generally feel by rating the frequency of their feelings of anxiety on the following four points scale; (1) Almost never (2) Sometimes (3) Often (4) Almost always. The questionnaire contains a number of statements from 1 to 20 which are related to state anxiety and indicated how one feels right now, that is at this moment. The statements from 21 to 40 assess the level of trait anxiety person's level of anxiety on permanent basis as indicated by personality trait indicate how a person generally feels.

The scoring weights for anxiety absent items are reversed i.e.; responses marked 1, 2, 3 & 4 are scored 4, 3, 2 & 1 respectively. The anxiety absent items for which scoring weights are reversed are:

Sate anxiety: 1, 2, 5, 8, 10, 11, 15, 16, 19 & 20

Trait anxiety: 21, 23, 26, 27, 30, 33, 34, 36 & 39

To obtain scores for the state and trait anxiety scales. Simply add the weighted scores for the inventory items that make up each scale, taking into accounts that fact, that the scores are reversed for the above items. Scores for both the state and trait anxiety scales can vary from a minimum of 20 to a maximum of 80. For state anxiety the average norm is 36.17 ± 10.96 and for trait anxiety it is 36.15 ± 9.53. The reliability quotients as given in this manual of Spielberger's State and Trait Anxiety Inventory are presented in table-1.

Table-1

RELIABILITY QUOTIENTS OF STATE AND TRAIT ANXIETY

S. No.	Variable	Test	Reliability Quotients
1.	State Anxiety	Self Evaluation Questionnaire (STAI)	0.93
2.	Trait Anxiety	Self Evaluation Questionnaire (STAI)	0.92

The data was collected one hour before the competition from all the male participants of each team. The self evaluation (STAI) questionnaire was distributed among the players and instructed them to fill-up the questionnaire without taking the helps of others and then it was analyzed those who secured 1st, 2nd & 3rd position (Medalist) and who did not

secure any position (Non-medalist) in the All India Inter University Tennis Tournament 2009-2010, held at Guru Jambheshwar University, Hissar.

Findings

To find out significant difference of anxiety (state & trait) between medalist and non-medalist male Tennis players, t-test was employed at 0.05 level of significance. The statistical analysis of data related to state anxiety is given below:-

Table-2

COMPARISION OF STATE ANXIETY BETWEEN MEDALISTS AND NON-MEDALISTS

Group Compared	Mean	S.D	Calculated't'	Tabulated't'
Medalist	45.81	9.86	2.14	1.70
Non -medalist	37.81	9.89		

d.f (28) at .05 levels

The above table-2 showed that there was significant difference between medalist & non-medalist male tennis players in state anxiety. As calculated t value 2.41 was found higher than tabulated t value 1.70 required to be significant at 0.05 level of significance.

Figure-1. Shows the state anxiety of medalist & non-medalist tennis players.

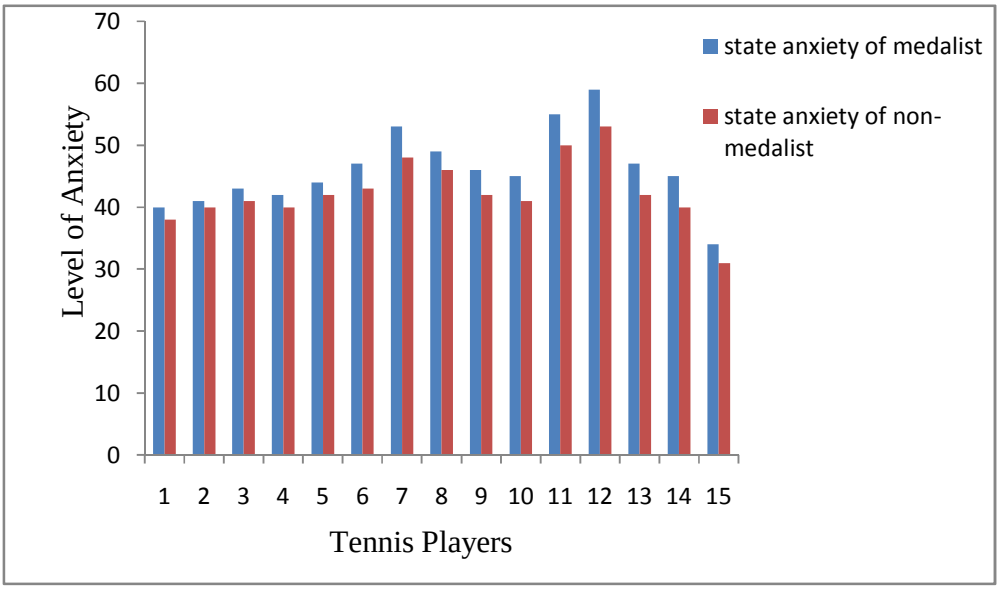


Table-3

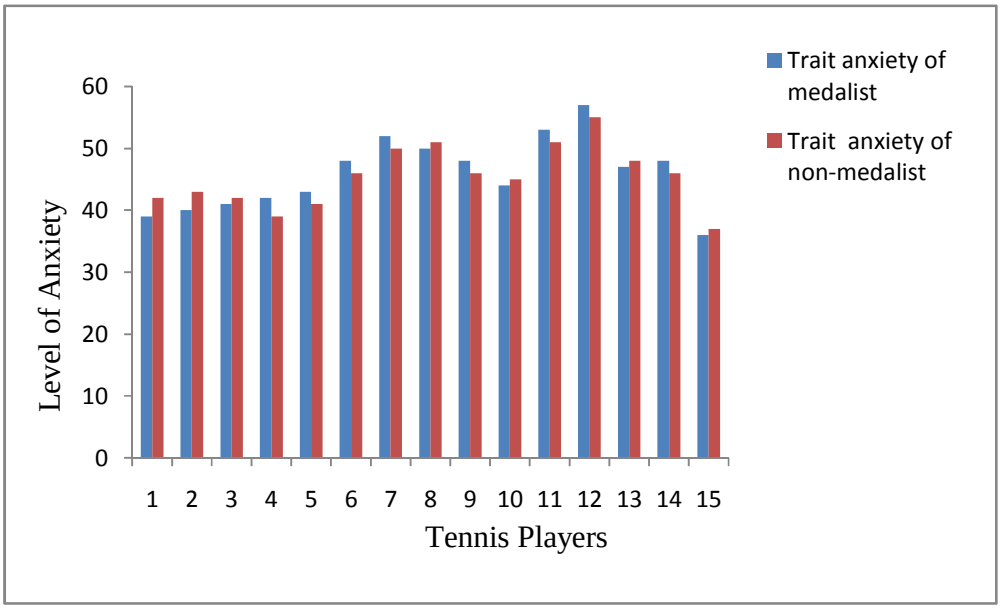
COMPARISION OF TRAIT ANXIETY BETWEEN MEDALISTS AND NON-MEDALISTS

Group Compared	Mean	S.D	Calculated't'	Tabulated't'
Medalist	42.19	6.77	1.448	1.70
Non -medalist	44.63	6.89		

d.f (28) at .05 levels

The above table-3 showed that there was no-significant difference between medalist & non-medalist male tennis players in trait anxiety. As calculated t-value 1.448 was found lesser than tabulated t-value 1.70 required to be insignificant at 0.05 level of significance.

Figure-2. Shows the trait anxiety of medalist & non-medalist tennis players.



Discussion

The finding of the study showed that there was significant difference between medalist and non-medalist male tennis players in their state anxiety level, that the anxiety level of the medalists is more than that of the non-medalists. The finding of this study is in agreement with reported by Higher and Benett (1983), Showed divers and wrestlers of different skill levels could be distinguishly different in their state anxiety patterns. Whereas, there was no-significant difference between medalist and non-medalist male tennis players in their trait anxiety level. The trait anxiety level of the medalists is lesser than that of the non-medalists. The Finding of the study is in consonance with findings of

Debnath & Gurdyal (1986), showed that no significant difference was found in trait anxiety of female cyclist and gymnast of national coaching camp. This was attributed to the fact that the level of practice & training, level of performance in the competition, psychological state and stability are different in the medalist and non-medalist male tennis players which differ them psychologically. Medalists had high expectations of performance by coaches, peer group and society may cause high level of state anxiety. These results can be helpful to develop psychological training program for male tennis players to get success in the competition.

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