Comparative study of psychological traits amongst tennis players

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Abstract
To achieve competitive edge in tennis, which is an individual game, it requires amalgamation of physical, physiological, technical and psychological factors. Competitive anxiety and achievement motivation are considered to be important psychological traits which help in better sports performance. The present study was conducted to assess and compare the psychological trait of forty women tennis players of North Zone and Inter zone level. The participants of the study were selected purposively from the women’s players who participated in the North Zone and Inter Zone tennis women’s championship held on 6-9 Jan and 14-18 Jan, 2015 respectively at Amity University, Noida, U.P. Sports Competitive Anxiety Questionnaire (SCAT) and Sports Achievement Motivation Questionnaire (SMAT) developed and standardized by Dr M. L, Kamlesh was used to collect the data. Findings of the study revealed that Inter Zone Women’s tennis players, who were also ranked in All India Tennis Association ranking have high level of achievement motivation and lower level of sports competitive anxiety when compared with North zone women’s Tennis players. Finding supported to the fact that the high level of achievement motivation and optimum level of anxiety is an important prerequisite to perform well in Sports competition.

Keywords: Tennis, sports Achievement motivation, Sports competitive Anxiety.

1. Introduction
Tennis is an individual and one of the popular sports which can be played individually against single opponent or between the team of two players. Tennis is an Olympic sport which is played at all level of society and ages. Tennis players used racquet that is strung with cord and the purpose is to strike the ball over the net in to the opponent court. Tennis is a recreation as well as competitive sports. In tennis there are various Types of competition e.g. Junior, Men’s, women’s, senior circuit, wheel chair Tennis etc., which has further bifurcated into singles and doubles format. Performance in tennis requires amalgamation of physical, physiological, Technical, environment and Psychological factors.

In sports completions win or loss depends on how the players performs on a particular day If the physical ability and the skills of the opponents are equal winners is usually decided by better mental skill. Psychological skills are considered to be one of the most important factors for success. Several tennis coaches felt that the knowledge of the sports psychology can improve the performance of tennis players (D. Gould and R. S. Weinberg, 2003) [2]. Anxiety and motivation are important psychological factors which are essential to achieve high level of sports performance. Anxiety is a negative emotional state characterized by apprehension and arousal of body. Anxiety has two component, Trait and state anxiety which play a vital role in performance. High level of anxiety before or during the match can lead to nervousness and muscle inactiveness which ultimately affect performance, where as optimum level of anxiety helps in better performance (Richard Cox, 2011) [5]. Motivation is another factor which is very important in sports performance. Achievement motivation drives a player to perform well for success which is visible inform of persistence and consistent effort. There are numerous studies in sports which have highlighted the role and importance of psychological traits. Even many researchers have justified the Importance of psychological traits in Sports performance. In India very few researches have been conducted to assess and compare the anxiety and achievement motivation of tennis players.
2. Material and Methods
The purpose of the study was to assess and compare the Psychological traits of the North zone and Inter zone women’s tennis players.

2.1 Objective of the study
After reviewing the literature the following objective were selected for the study
1. To assess the achievement motivation level of the North zone and inter zone University level women’s tennis players.
2. To Compare the achievement motivation level of the North zone and inter zone University level women’s tennis players.
3. To assess and compare the Sports competitive anxiety of the North zone and inter zone University level women’s tennis players.

2.2 Selection of variables
Based on the literary evidences the following variables were selected for the study
- Achievement motivation
- Sports competition anxiety

2.3 Selection of the tool
Standardized questionnaire on Achievement motivation and Sports competition Anxiety (SCAT and SMAT) developed by Dr. M. L. Kamlesh was selected to collect the data.

2.4 Selection of participants
Forty women’s tennis players purposively selected for the study from all the participants of the North zone and Inter Zone women’s Tennis Championship held at Amity University, Uttar Pradesh in January, 2015. Specifically 20 players from the north zone Women’s tennis championship, 2015 who did not qualify for the Inter zone tennis tournament and 20 players who participated in Inter zone women’s tennis championship, 2015.

2.5 Data collection
Questionnaire was administrated to the participants during the North zone tennis women’s championship and Inter zone women’s championship which was held on 6-9 January 2015 and14-18 January, 2015 respectively at Amity University, Noida. The SCAT questionnaire was served to the participant prior to their matches.

2.6 Statistical Technique
To statistically analyze the data mean, standard deviation and ‘t’ test were used. The level of significance was kept at 0.05 level.

3. Result and Discussion
Data was analyze with the help of mean, standard deviation and ‘t’ Test. The results of the study have been presented in the following tables.

3.1 Results

Table 1: Comparison of Achievement Motivation between North Zone and Inter Zone Women’s Tennis Players

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>df</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Zone women Tennis Players</td>
<td>20</td>
<td>25.7</td>
<td>0.94</td>
<td>38</td>
<td>2.64</td>
</tr>
<tr>
<td>Inter Zone women Tennis Players</td>
<td>20</td>
<td>31.85</td>
<td>0.86</td>
<td>38</td>
<td>*</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level ‘t’ 38= (2.03)

Table 1 revealed that the mean and standard deviation score of the north zone women’s tennis players were 27.5 and 0.94 respectively. Whereas the mean and standard deviation score of the Inter zone women’s tennis players were 31.85 and 0.84 respectively. Findings of the study revealed that the value ‘t’ test was 2.64 which was higher than the required tabulated value of 2.63 at 0.05 level for 38 degree of freedom. The significant value of ‘t’ test indicated that Inter Zone Women’s tennis players have higher level of Achievement motivation than North Zone women’s Tennis players.

Table 2: Comparison of Sports competitive anxiety between North Zone and Inter Zone Women’s Tennis Players

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>df</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>North zone women Tennis Players</td>
<td>20</td>
<td>28.5</td>
<td>0.98</td>
<td>38</td>
<td>3.87</td>
</tr>
<tr>
<td>Inter zone women Tennis Players</td>
<td>20</td>
<td>18.67</td>
<td>0.67</td>
<td>38</td>
<td>*</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level ‘t’ 38=(2.03)

Table 2 revealed that the mean and standard deviation score of the north zone women’s tennis players were 28.5 and 0.98 respectively. Whereas the mean and standard deviation score of the Inter zone women’s tennis players were 18.67 and 0.67 respectively. Findings of the study revealed value of ‘t’ test was, 3.87 which was higher than the required tabulated value of 2.63 at 0.05 level for 38 degree of freedom. On the basis of the statistically significant value of ‘t’ test it was concluded that Inter Zone Women’s tennis players have Lower level of sports competition anxiety than North zone women’s Tennis players.
4. Discussion
Sports achievement motivation is considered to be one of the important prerequisites to perform well in sports competition. Findings of the present study revealed that as per the norms of the questionnaire the north zone women’s tennis players have moderate level of Sports achievement motivation and inter zone women’s tennis players have high level of Sports Achievement motivation. Moreover the inter zone players had higher national All India tennis Association ranking and they were playing more number of completion at national and international level and it was obvious that their motivation level was high. These findings are in line with the study of Awashes Subba, 2014 [1]. Pitor Unierzyski, 2003 [6] conducted a study on 138 tennis players to assess the achievement motivation level. The findings of the study revealed that one group which has reached at international level and higher ranking had higher achievement motivation level than the group which has not achieved international level and ranking. It was also concluded in the study that achievement motivation is one of the important factors in tennis performance. As far as anxiety is concerned it is a negative emotional state characterized by nervousness, worry and apprehension and associated with activation or arousal of body (Nobelt and Gifford, 2002). Anxiety has two components one is thought component e.g. worry and apprehension called cognitive anxiety and another one is somatic anxiety which is the degree of physical activation perceived. In the present study findings revealed that as per the norms of the questionnaire the north zone women’s tennis players have high level of sports competition anxiety and inter zone players have lower level of Sports competition anxiety. Tery Pecy and et al., 1996 [7] conducted a study on performance and sports anxiety. The findings of the study revealed that player who were winner and also have more match experience have lower sports competition anxiety than the loser and less experienced players. It was concluded that the ability to cope up with anxiety and pressure is integral part of sports performance. It supported the fact in the present study the Inter zone players have played more number of competitions and spend more time in training in comparison to the north zone players.

5. Conclusions
Within the limitation of the study and on the basis of the findings and discussion following conclusion are drawn.
1. Inter zone women’s tennis players have higher level of Sports achievement motivation
2. North zone women’s tennis players have moderate level of sports achievement motivation.
3. Inter zone women tennis players have lower level of Sports competition anxiety.
4. North zone women’s tennis players have high level of Sports competition anxiety.

6. Recommendations
On the basis of the findings of the study and discussion it is recommended that psychological traits such as sports competition anxiety and sports achievement motivation are important prerequisite in sports and competitions. Coaches, trainer and physical education teachers should include these factors while training and developing the sports persons.

7. References
3. Davis Matthew E. An examination of motivation, goal achievement and sports commitment difference in youth team and individual tennis population http://libres.uncg.edu/uncg/f/davis_uncg_0154m_10950.pdf, 10th April, 2015.