Comparative study of anxiety level between elite & sub-
elite volleyball players of Nagpur University (2015-
2017)

Sonali S Bandre and Dr. Vijay B Datarkar

Abstract

The main purpose of this study is to present forth the visions on comparison of anxiety between elite &
sub-elite volleyball players of Nagpur University. This study explores anxiety comparison of elite and
sub-elite volleyball players. This research study is qualitative and execute by the technique of descriptive
& inferential statistics. The self-administered questionnaire has been used for data collection which is
based on five point Likert scale. From research it has been observed that there is no difference between
anxiety of elite & sub-elite volleyball players. This research study concludes that anxiety of elite and sub-
elite volleyball players is similar.

Keywords: anxiety, volleyball, elite, sub-elite

1. Introduction

Every year around 700 female players played volleyball in intercollegiate tournament
organised by RTM Nagpur University and approximately 18 players are selected in team of
RTM Nagpur University. Every year this team represents RTM Nagpur University in West
Zone competition and further All India Inter University Competition organised by Association
of Indian Universities. In India Volleyball was introduced by Y. M. C. A, college of physical
education, Madras (Chennai, Tamilnadu) during the year 1900 and taken initiative in
popularizing the game in India. Therefore researcher sensed a necessity to have a deep vision
on variables related with volleyball players. Now a days in the field of sports; trainers,
coaches, players not only emphasis on physical fitness and game skill but also on mental skills,
because there is need of certain level of mental skill to give better performance and enhance
the performance. Anxiety plays important role in the path of performance. It should be neither
high nor low; it should be at optimum level for good performance. A short summary of related
research studies carried out in different fields of sports are as follows.

1.1 Literature Review

(Raglin J. S. 2005) [9] J S Raglin & M J Morri reported that athletes in the team sport of
volleyball exhibit considerable variation in optimal precompetition anxiety in accordance with
ZOF theory. As posited by ZOF theory, the athletes were able to predict anxiety before a
difficult match accurately and were more likely to have anxiety levels with ZOF.

sports performance founded that Relationships among cognitive anxiety, somatic anxiety, self-
confidence, and performance appeared weak. Exploratory modeling showed that self-
confidence displayed the strongest and most consistent relationship with performance.

(Kristjan Kais, 2004) [6] This study supports that direction of anxiety responses must be taken
into consideration when examining anxiety-performance association in sport.

(Hossein S. 2012) [5] While comparing competitive State Anxiety among Elite and Non-Elite
Badminton Players in Iran & results that somatic anxiety and self-confidence among elite and
non-elite badminton players in Iran is same, but level of somatic anxiety and training
experience of elite and non-elite badminton players in Iran is different.
According to this report there is positive relationship of Mental Skills and Anxiety between Successful teams of men cricket at Delhi Intercollegiate level and negative relationship of mental skills & anxiety of unsuccessful team of men cricket at Delhi Intercollegiate level. And also reports that mental skill & anxiety level of successful teams of men cricket at Delhi differ from successful teams of men cricket at Delhi. (Mahendra K. S. 2012) [8] Compares competitive anxiety level of tribal female Kho-Kho players at different levels of achievement and states that competitive anxiety level of tribal female Kho-Kho players is different at different levels of achievement.

1.2 Objectives of Study
1. To examine anxiety of elite volleyball players of Nagpur University.
2. To examine anxiety of sub-elite volleyball players of Nagpur University.
3. To compare anxiety of elite & sub-elite volleyball players of Nagpur University.

1.3 Hypothesis of Study
There is no significant difference between anxiety of elite & sub-elite volleyball players of Nagpur University.

1.4 Significance of Study
1. The study will be helpful to understand the difference in anxiety of elite and sub-elite volleyball players.
2. The study will be enlightened the importance of anxiety for performance.
3. The finding may prove helpful to the physical educators, coaches, trainers and players to prepare their training schedule for better performance.

1.5 Delimitations
1. The study was delimited to the female volleyball players of intercollegiate level and interuniversity level of Nagpur University.
2. The study was delimited in the age group of 18-28 years.
3. The study was delimited to 54 female elite volleyball players.
4. The study was delimited to 340 female sub-elite volleyball players.
5. The study was delimited to anxiety.

1.6 Limitations
1. The daily routine life and voluntary participation in other physical activities by the subjects which was not under control of researcher.
2. There was no control over their habits, diet and motivation.
3. There was no control over environmental factors.

2. Research Method
Descriptive & inferential research design has been used for this study. The research study based on qualitative research technique. Researcher adopted survey method for approaching target respondent.

2.1 Sample Design
The target population for this study was all female volleyball players of Nagpur University who have played during 2015-2017. The target population for elite group was approximately 54 and for sub-elite group were approximately 2280. The researcher had taken all elite players as sample for one group i.e. a sample of 54 elite volleyball players and sample of 340 sub-elite volleyball players. For sub-elite players cluster was formed on the basis of year of batches of players. Three clusters starting from 2015 to 2017 have been formed and samples were drawn from clusters proportionately.

2.2 Data Collection
The researcher had used self-administered questionnaire to collect primary data. For data collection questionnaire has been designed.

2.3 Analysis of Data
A bar graph has been prepared to check the anxiety level of female elite & sub-elite volleyball players of Nagpur University.

<table>
<thead>
<tr>
<th>Table 1: Mean of the Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

As it is evident from bar graph there seems very small difference between anxiety level of female elite & sub-elite volleyball players of Nagpur University.

2.4 Testing of Hypothesis
Null Hypothesis: There is no significant difference between anxiety of elite & sub-elite volleyball players of Nagpur University.

H₀: µ = 0

Alternate Hypothesis: There is significant difference between anxiety of elite & sub-elite volleyball players of Nagpur University.

H₁: µ ≠ 0

The researcher wish to compare anxiety of elite and sub-elite female volleyball players. Therefore computing t-Test: Two Sample Assuming Equal Variances will be a suitable measure. To check whether there is significant difference between variance of elite & sub-elite group F-Test will be used. For this following is null & alternate hypothesis.

Null Hypothesis: There is no significant difference between variance of elite & sub-elite group.

Alternate Hypothesis: There is significant difference between variance of elite & sub-elite group.
Table 2: Result of F Test

<table>
<thead>
<tr>
<th>Computing F-Test</th>
<th>Sub-Elite Group</th>
<th>Elite Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>31.429</td>
<td>33.592</td>
</tr>
<tr>
<td>Variance</td>
<td>16.027</td>
<td>14.510</td>
</tr>
<tr>
<td>Observations</td>
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<td>54</td>
</tr>
<tr>
<td>DF</td>
<td>339</td>
<td>53</td>
</tr>
<tr>
<td>F</td>
<td>1.104</td>
<td></td>
</tr>
<tr>
<td>P(F&lt;=f) one-tail</td>
<td>0.337</td>
<td></td>
</tr>
<tr>
<td>F Critical one-tail</td>
<td>1.449</td>
<td></td>
</tr>
</tbody>
</table>

As p-value (0.33)>0.05, Null hypothesis is accepted i.e. variance of both groups were same.

Now check the difference between calculated mean of both groups is significant or not by t-Test: Two Sample Assuming Equal Variances.

Table 3: Result of Hypothesis Testing

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Since t-critical two-tail (1.96) > T Statistics (-3.71) & p-value (0.000235) < α/2 (0.025), therefore null hypothesis rejected.

3. Interpretation

There is significant difference between anxiety of elite & sub-elite volleyball players of Nagpur University at 0.05 significance level.

4. Conclusion

It has been founded that there is significant difference between anxiety of elite & sub-elite volleyball players of Nagpur University. It is concluded by this research study that anxiety of female elite volleyball player is differ from anxiety of female sub-elite volleyball player.

5. References