



A Comparative Study of Stress among Volleyball and Handball Players of Chandrapur District of Maharashtra

Shailendra Deochand Giripunje

Director of Physical Education

Chintamani Mahavidyalaya,

Pombhurna, Dist- Chandrapur (MS)

E-mail address of corresponding author: giripunjeshailendra@gmail.com

1.0 Introduction

Stress is often associated with the perception of threat, with resulting anxiety discomfort, emotional tension, and difficulty in adjustment. Although most of the people of a society feel some sort of stress all the time, the sportspersons, however, regularly feel tremendous pressure in competition, which is largely influenced by their level of aspiration. According to Lewin's theory, after an experience with success, there is usually an increase in the aspiration level and, in the event of failure, it is the opposite that is decrease. If players do not reach to their goal, there is a target discrepancy, which players experiencing frustration or deprivation. The stressors that affect players can be divided into real, but also potential. While real stressors really threaten and disrupt the quality of life of players, potential stressors are related to the ability to imagine a stressor in such quality and intensity that they induce the same physiological response as a real stressor.

Also, the worries and fear of failure elicit a physiological response from the body to the fact that a stressor is present at a given moment. The many aspects of stress are widely known, however, their effect on the performance of players is reported to vary significantly. For example, the different type of sport presents different level of competition and generates varied level of stress amongst the players participating or performing in it. Also, the individual or team games profusely affect the psychological status of the players as the responsibility of performance is either lies on the players shoulder or shred amongst the team members. It has been reported that in team sports like volleyball and handball, higher levels of cognitive and somatic anxiety are associated with disruption concentration. The games like volleyball and handball are quite popular in India and a large section of population is interested in excelling in these games. Though the physical infrastructure is an important attribute that influences the performance of players, the psychological aspect is also equally important, which unfortunately is not given due importance in past research projects. In view of the above, this study was conducted to know

and thereafter compare the level of stress among volleyball and handball players of Chandrapur District of Maharashtra.

2.0 Methodology

In the present study, a careful collection of facts was undertaken by the researcher to ensure the validity of the facts. The data for all the variables was recorded from more than one respondent.

2.1 Study Area

The study area for the present study was Chandrapur District of Maharashtra.

2.2 Research Design

The study was conducted using a descriptive (cross sectional) research design. Descriptive research designs was used as it helps to provide answers to the questions of who, what, when, where, and how associated with a particular research problem.

2.3 Universe and population of the Study

The the present investigation a geographical region comprising of complete Chandrapur District formed the universe of the study while all the volleyball and handball players of this region formed the population of this study.

2.4 Sampling method and sample size

The sampling was done by following random sampling method. In this study, data was collected from a total of 300 sportspersons (150 volleyball players and 150 handball players) of Vidarbha region of Maharashtra.

2.5 Data collection

For the purpose of data collection, survey methodology was used in present study. The data pertaining to the sources of stress among volleyball and handball players was collected by using a self made standardized structured questionnaire. Prior to collection of data the reliability and validity of the questionnaire was established by conducting a pilot study.

2.6 Secondary Data Collection

The data pertaining to the sources of stress among volleyball and handball players was collected from the research articles, books, reports, and other relevant internet sources.

2.7 Statistical Analysis and Significance Level

The data characteristics such as Mean, Standard deviation etc. were determined. 'Z' test of two means was used for performing the comparative assessment of the data. The significance level was chosen to be 0.05 (or equivalently, 5%).

3.0 Analysis and Interpretation

3.1 Source of Stress – Guilt Proneness

Table 1: Comparison of the guilt proneness among volleyball and handball players

Players	N	Mean	SD	Min	Max	MD	Z Value	p
Volleyball players	150	15.2	±1.3	8	16	3.1	2.523	<0.05
Handball players	150	12.1	±1.5	10	14			

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum;
Z: Z Statistic; P: Probability

Above **Table 1** presents results of comparative assessment of source of stress (guilt proneness factor) among volleyball and handball players of the study area i.e. Chandrapur District of Maharashtra. The mean test score of guilt proneness factor of volleyball players was 15.2 ± 1.3 , while that of handball players was 12.1 ± 1.5 .

3.2 Source of Stress – Maturity Factor

Table 2: Comparison of maturity among volleyball and handball players

Players	N	Mean	SD	Min	Max	MD	Z Value	p
Volleyball players	150	8.2	±1.4	7	9	-1.1	-0.627	Not Significant
Handball players	150	9.3	±1.2	8	10			

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum;
Z: Z Statistic; p: Probability

Table 2 presents results of comparative assessment of source of stress (maturity factor) among volleyball and handball players of the study area i.e. Chandrapur District of Maharashtra. The mean test score of maturity factor of volleyball players was 8.2 ± 1.4 , while that of handball players was 9.3 ± 1.2 .

3.3 Source of Stress – Self-sufficiency factor

Table 3: Comparison of Self-sufficiency among volleyball and handball players

Players	N	Mean	SD	Min	Max	MD	Z Value	p
Volleyball players	150	10.7	±2.2	9	11	-4.4	-2.429	<0.05
Handball players	150	15.1	±1.5	12	17			

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum;
Z: Z Statistic; p: Probability

Table 3 presents results of comparative assessment of source of stress (self-sufficiency factor) among volleyball and handball players of the study area i.e. Chandrapur District of Maharashtra. The mean test score of self-sufficiency factor of volleyball players was 10.7 ± 2.2 , while that of handball players was 15.1 ± 1.5 .

3.4 Source of Stress – Suspiciousness factor

Table 4: Comparison of suspiciousness factor among volleyball and handball players

Players	N	Mean	SD	Min	Max	MD	Z Value	p
Volleyball players	150	4.4	±1.0	3	6	-2.2	-2.357	<0.05
Handball players	150	6.6	±1.1	5	8			

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum;

Z: Z Statistic; p: Probability

Table 4 presents results of comparative assessment of source of stress (suspiciousness factor) among volleyball and handball players of the study area i.e. Chandrapur District of Maharashtra. The mean test score of suspiciousness factor of volleyball players was 4.4 ± 1.0 , while that of handball players was 6.6 ± 1.1 .

3.5 Source of Stress – Tension factor

Table 5: Comparison of tension among volleyball and handball players

Players	N	Mean	SD	Min	Max	MD	Z Value	p
Volleyball players	150	9.5	±1.2	7	11	-3.7	-2.183	<0.05
Handball players	150	13.2	±1.5	11	15			

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum;

Z: Z Statistic; p: Probability

Table 5 presents results of comparative assessment of source of stress (tension factor) among volleyball and handball players of the study area i.e. Chandrapur District of Maharashtra. The mean test score of tension factor of volleyball players was 9.5 ± 1.2 , while that of handball players was 13.2 ± 1.5 .

4.0 Conclusions

4.1 Source of Stress – Guilt Proneness

- The comparative assessment showed that there is significant ($p < 0.05$) difference in the level of guilt proneness as a source of stress among volleyball and handball players. Specifically, the guilt proneness was high among volleyball players.

4.2 Source of Stress – Maturity Factor

- The comparative assessment showed that there is no significant difference in the level of maturity factor as a source of stress among volleyball and handball players.

4.3 Source of Stress – Self-sufficiency factor

- The comparative assessment showed that there is significant ($p < 0.05$) difference in the level of self-sufficiency as a source of stress among volleyball and handball players. Specifically, the self-sufficiency was high among handball players.

4.4 Source of Stress – Suspiciousness factor

- The comparative assessment showed that there is significant ($p < 0.05$) difference in the level of suspiciousness as a source of stress among volleyball and handball players. Specifically, the suspiciousness was high among handball players.

4.5 Source of Stress – Tension factor

- The comparative assessment showed that there is significant ($p < 0.05$) difference in the level of tension as a source of stress among volleyball and handball players. Specifically, the tension was high among handball players.

5.0 References

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