

## A PSYCHOLOGICAL STUDY ON PERFORMANCE OF VOLLEYBALL PLAYERS

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### ABSTRACT

*The objective of the study was to investigate the psychological parameters and performance of volleyball players. It focuses to assess on psychological variables i.e perception, attention and vigilance of north Indian Zone University level volleyball players. The purposive sampling techniques were used to select the subjects for the study. The first four position holding teams were considered as winner for the collection of data in both gender groups i.e. (male and female). It was concluded that, the male winner group have significant difference on variable perception and attention but in vigilance female group have significant difference than males.*

**Keywords:** Player, Performance, Parameter and Volley.

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### INTRODUCTION:

Sports psychology is the study of individual or group human dynamics in the context of sports. As its name suggests, it has its starting point both in sports and education. Psychology, as a behavioral science, has made a great contribution to the efforts of coaches, trainers and physical education teachers to improve standards in sports. Sports psychology struggles to carve out its suitable position and to set up an identity in each aspect.

While sport psychology draws from both physical education and psychology it distinguishes significantly from both subjects. For example, physical education emphasizes bodily aspects of movement while sports psychology emphasizes the mental and emotional aspects and unlike psychology, sports psychology is not headed towards curing of mental disease and disorder. Rather its ambition is to enhance the sports performance and developing the self through sports.

Proper knowledge of psychology and its implementations are needed at every step in sports and physical education for providing training and coaching to the sportsmen to attain

maximum performance. The researcher thus undertakes the study on perception, attention and vigilance.

## PERCEPTION

Perception is generally stated as the process by means of which an organism receives and analyses sensory information. In perception the sensation is attached with first response to a stimulus is sensation of the perception is the next response of the organism following a sensation. We receive a stimulus; there is an answer of the sense organ and sensory nerve. The answer first occurs in the form of sensation and then perception.

## ATTENTION

Attention may be stated as: Attention is that activity of the self which joins all substances presented to it into one whole, with reference to the relation which they bear to some intellectual end.

The important characteristic of attention is, therefore, activity directed towards some end. Finally this end is the self. Attention being selective activity of the mind does not draw our attention on all sights and movements in the environment. The aperture of consciousness is its focus or concentration. In analyzing attention, we are analyzing the activities by which the mind develops or realizes itself.

## VIGILANCE

Vigilance has been described in many forms: as performance on monitoring tasks, as attention over extended periods of time, as a state of the organism, a readiness to respond to infrequent low intensity signals occurring and unpredictable temporal intervals; it is needed for

successful performance in a variety of circumstances and jobs. Vigilance tasks are those tasks that are needed for the detection of changes in stimuli presented systematically during long periods of time, when subject has little knowledge of the spatial pattern or temporal sequence of the stimuli.

## OBJECTIVES OF THE STUDY

The present study has the following objectives.

1. To find out the perceptual variations among winner male and female Volleyball players.
2. To find out the attention variations among winner male and female Volleyball players.
3. To find out the vigilance variations among winner male and female Volleyball players.

## HYPOTHESES

This study sought to prove the following assumptions:

1. There would be significant difference among Volleyball winner male and female players on the variable perception.
2. There would be significant difference among Volleyball winner male and female players on the variable attention.

3. There would be significant difference among Volleyball winner male and female players on the variable vigilance.

## LIMITATIONS

Factors such as home environment, interest of subjects, motivation, daily routine and diet cannot be controlled which might serve as limitations of the studies.

Investigator could not have control over the training schedules of Volleyball players which may be counted as another limitation of the study.

## DELIMITATIONS

1. The sample of the Volleyball players for the purpose of the study was drawn from North Indian Universities only.
2. First four position holder Volleyball players of North Indian zone were considered as winners and first round losers were considered as losers.

## PROCEDURE AND METHODOLOGY

### DESIGN OF THE STUDY

The present study was survey type design. It focuses to assess on the psychological variables i.e. perception, attention and vigilance of north Indian zone university level Volleyball players.

### SELECTION OF SUBJECTS

The purposive sampling techniques were used to select the subjects for the study. The players of firstfour position holding teams were considered as winners and the players of the teams losing in the first round were considered as losers for the collection of data in both gender groups i.e. (male and female)

## TOOLS USED FOR COLLECTION OF DATA

For collection of data, the following tests have been selected:

To measure size weight illusion of the subjects SIZE WEIGHT ILLUSION PERCEPTION TEST constructed/developed by Postman, Bruner and Mc Ginnies(1948) and modified by Arguin, Marlin and Patrick (1988) was administered.

To measure span of attention visual of the subjects. SPAN OF ATTENTION-VISUAL TEST constructed/developed by Payne and Davis (1940) and modified by R. Naatanen (1985) was used.

COGNITIVE VIGILANCE TAST (CVT), developed by Mohan J. (1982) was used to measure vigilance of the subjects.

## SAMPLE

The purposive sampling techniques were used to select the subjects for the study. The players of firstfour position holding teams were considered as winners and the players of the teams losing in the first round were considered as losers for the collection of data in both gender groups i.e. (male and female)

## TOOLS USED

1. SIZE WEIGHT ILLUSION PERCEPTION TEST
2. SPAN OF ATTENTION-VISUAL

### 3. COGNITIVE VIGILANCE TAST (CVT)

#### RESULTS AND FINDINGS

The purpose of the study was to study the Psychological variables among Volleyball players. The data thus collected has been statistically organized in various tables. The comparative results of winners and losers, male and female Volleyball players on various variables viz. perception, attention and vigilance have been presented and discussed.

To find out the significance of differences among Winner male and female group on variables of perception, vigilance and attention, 't' test has been used and comparative results have been presented in tables 01, 02 and 03.

Table 01

Mean difference in the scores of perceptions between Winner males and females

STATUS	N	Mean	Std. Deviation	Std. Error Mean	T value	Remarks
Males	40	4.22	1.911	.302	1.015	.313
Females	40	3.83	1.599	.253		

In table 01 are presented, the mean value with SD and the computed 't' value on perception variable. Results of the table 01 show that the winner male group has recorded higher mean value (4.22) as compared to female group mean value (3.83).

The 't' value 1.015 shown in table 01 is found not significant at .05 level of confidence. Shown in figure 01.

Figure 01

Mean scores of Perception Variable of Winner Males and Females

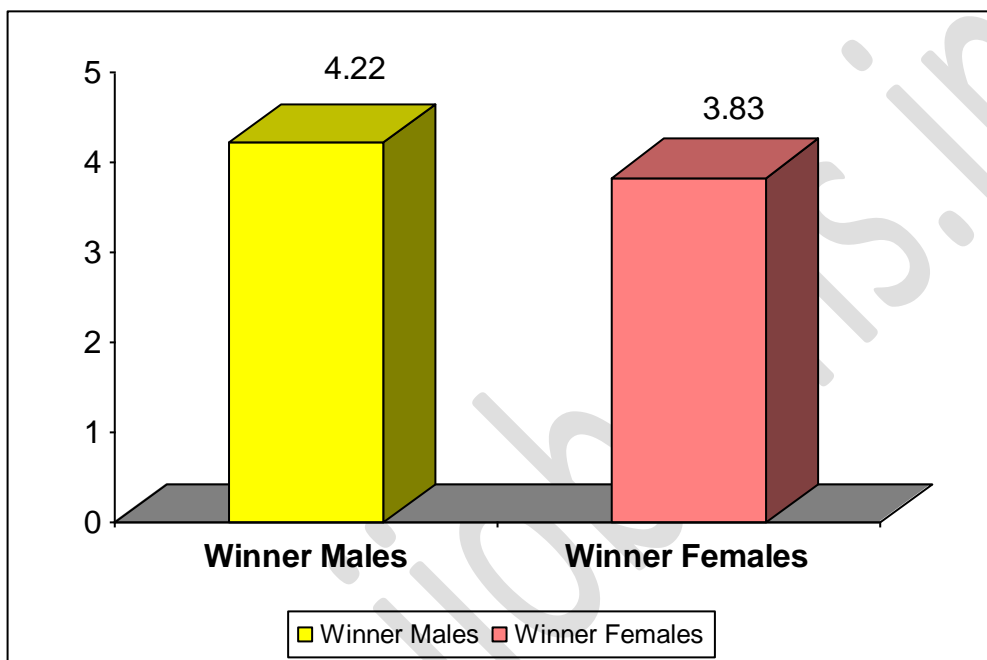


Table 02

Mean difference in the scores of Attention between Winner males and females

STATUS	N	Mean	Std. Deviation	Std. Error Mean	T value	Remarks
Males	40	3.56	1.710	.270	1.409	.163

Females	40	3.08	1.366	.216		
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In table 02 are presented, the mean value with SD and the computed 't' value on attention variable. Results of the table 02 show that the winner male group has recorded higher mean value (3.56) as compared to winner female group mean value (3.08). The 't' value 1.409 shown in table 02 is found not significant at .05 level of confidence. Shown in figure 02.

Figure 02

Mean scores of Attention Variable of Winner Males and

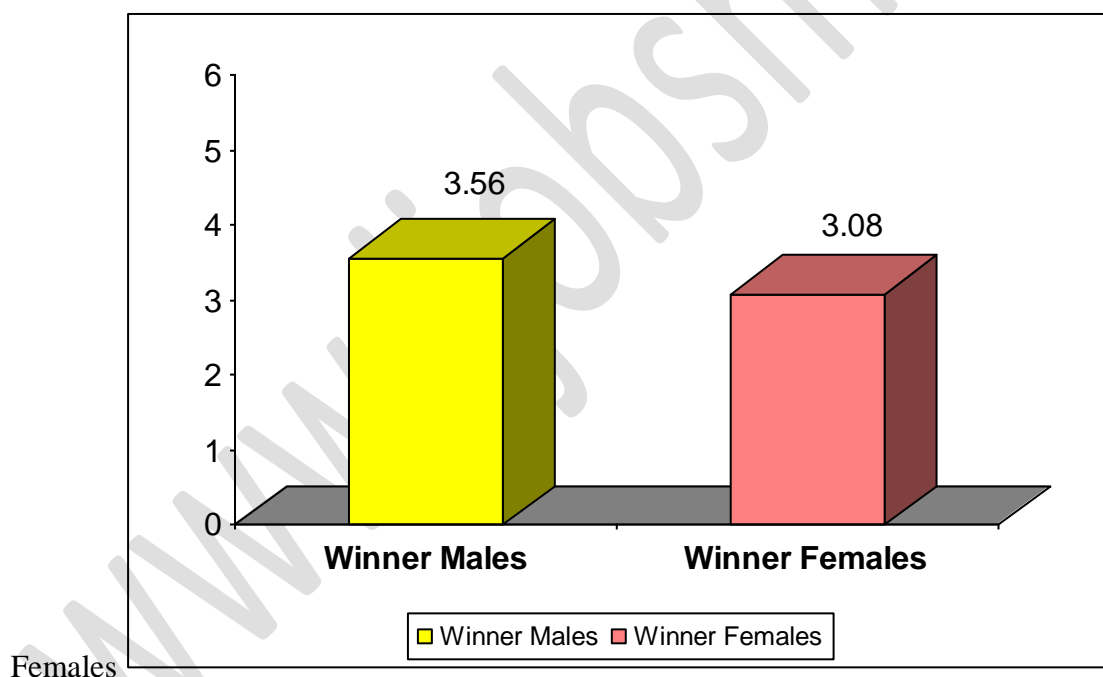


Table 03

Mean difference in the scores of vigilance between Winner males and females

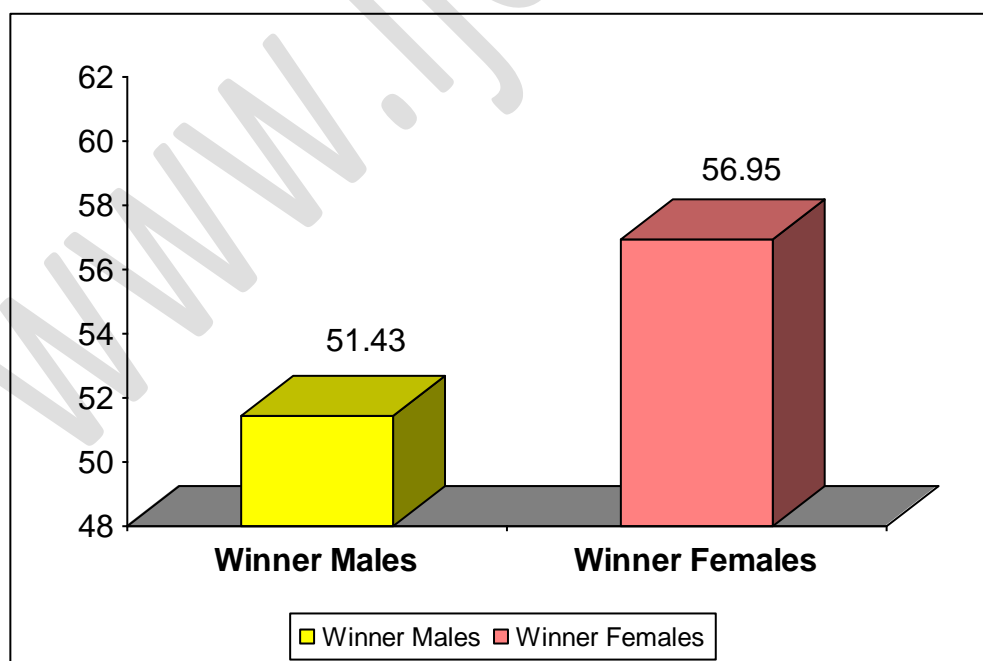


STATUS	N	Mean	Std. Deviation	Std. Error Mean	T value	Remarks
Males	40	51.43	5.611	.887	4.623	.000 sd
Females	40	56.95	5.063	.801		

In table 03, the mean value with SD and the computed 't' value on vigilance variable is presented. Results of the table 03 show that the female group has recorded higher mean value (56.95) as compared to male group mean value (51.43). The 't' value 4.623 has been found statistically significant at .05 level of confidence. Shown in table 03. However, from the results of this table, it can be deduced that female group is having more vigilance than their counterparts i.e. male group. A graphical presentation of the table 03 has been given in figure 03.

Figure 03

Mean scores of Vigilance Variable of Winner Males and Females



## Discussion of Results

### Perception

There has been no significant difference between winner male and female group on perception variable. However, Male group have recorded high mean value as their score than the female group. This is an indicative that male group have the better perception than the female group.

### Attention

There has been no significant difference between Winner male and female group on attention variable. However, Male group have recorded high mean value as their score than the female group. This is an indicative that male group have the better attention than the female group.

### Vigilance

Significant differences were found between the Winner male and female group on the vigilance variable. Female group have found to be significantly edge over the male group and thus found statistically more vigilant than males.

## CONCLUSIONS AND FINDINGS

Keeping in mind the above mentioned factors, we come to the conclusion that proper knowledge of psychology and its implementations are needed at every step in sports and physical education for providing training and coaching to the sportsmen to attain maximum performance. The researcher thus undertakes the study on perception, attention and vigilance.

There has been no significant difference was found between winner male and female group on perception and attention variable. But significant differences were found between the winner male and female group on the vigilance variable. Female winner group have found to be significantly edge over the male winner group and thus found statistically more vigilant than male winners.

References:

1. Arguin, Marlin and Patrick (1988). Parallel processing of two disjunctive targets. Perception and psychophysics. Vol 44(1), pp. 22-30.
2. Brooks, J.E. Bulls, S.j. (2000). Derogation of student's female athlete who consult a sport psychologist on alternative perspective on the negative halo effect. Journal of winner's science and medicine in sport, Vol 4(1), March, 2001, pp.39-47.
3. Crabtree Darryl A., and Antrium. (1988) Guidelines for measuring reaction time. Perception and Motor Skills. Vol. 66(2), pp. 363-370.
4. Francoise DonchampsRiboux, Jean Karl Heinz and Jacques Douchamps (1989). Arousal as tri-dimensional variable: An exploratory study of behavioral changes in rowers following a marathon race. International Journal of sport psychology, Vol. 20, pp. 31-41.
5. Gould. D. Weiss, M. And Weinberg, R. (1982). Psychological characteristics of successful and non-successful big ten wrestlers. International Journal of Sport Psychology, 13:2.
6. Hardy J., Hall, C.R> and Carron, A.V. (2003). "Perception of team cohesion and athletes". Use of Imagery. International Journal of Winners Psychology, 34:151-167.
7. Hodges, N.J. Franks, I.M. (2000). Attention focusing instructions and coordination bias: implications for learning a novel bimanual task. Human movement science 19(6), 843-867.
8. Kathleen J. Hiscock, Merrill and Bergstrom, Canada (1988). Factors influencing ocular motility during the performance of cognitive tasks. Canadian Journal of Psychology, Vol. 42(1). 1-23.

9. Lagrue, G. (1995). Smoking and winners (French). *Cinesiologie*. 34-163, Sept./Oct., pp.185-190.
10. Singh, M., Kour, R., & Kour, A.,. A collaborative diversified investigation of respective responses of sports person coaches and organizations on criminalization of doping. *International Journal of Health Sciences*,6(S3), 11295–11310. <https://doi.org/10.53730/ijhs.v6nS3.8641>
11. Mandeep Singh., Assessment of Vocational Interests of Pahadi & Bakarwal School Students In Relation To Their Gender. *Int J Recent Sci Res*. 9(3), pp. 24817-24819. DOI: <http://dx.doi.org/10.24327/ijrsr.2018.0903.1731>
12. Naatanen, R. (1985). Stimulus processing: Relations in even-related potentials, magnate encephalogram and regional cerebral blood flow. In M.I. Posner and O.S.M. Marin (eds.) *Attention and performance XI* (chapter 19). Hillsdale, NJ:Erlbaum.
13. Nideffer, R.M. (1976a). *The inner athlete: Mind plus muscle for winning*. New York Growell.
14. Saini (2018). A study of Anxiety, Winners Achievement Motivation and Vigilance across gender and levels of performance of team athletes in the age group of 17 to 22 years, Unpublished Ph.D. Thesis, Dep't. Of Physical Education P.U. Chandigarh.