



# Mental Skills between High and Low Performing Volleyball Players: An Analysis

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## Abstract

*The present study was conducted to analyze the mental skills level between high and low performing volleyball players of schools, colleges and clubs. The total two hundred and forty (N=240) volleyball players was taken as subjects to analyze the mental skills. Mental skills questionnaire prepared by Hardy and Nelson (1996) was administered to record the response of school, college and club level volleyball players. The t-test was applied to find out the significant difference between high and low performing volleyball players. Further ANOVA was applied to see the significant difference among high performing school, college and club level volleyball players. The significant level was set at 0.05 level of confidence. Findings of this study showed that t-values 5.36, 2.93 and 5.00 between high and low performing school, college and club level volleyball players found significant in favour of high performing volleyball players. These results clearly support that high performing players having higher mental skills level. The results of ANOVA reveals that there is a insignificant difference exist between high performing school, college and club level volleyball players.*

**Keywords:** Mental skills, volleyball, performance, players.

## Introduction

Volleyball game is relatively played in small area at high intensity in short bursts as compare to other ball games. It is an excellent team sport and widely accepted as a highly competitive sport. The speed of powerfully spiked ball in the game of volleyball is about 45 meters per second which is much faster than the movement of ball is most of other games<sup>1</sup>. The performance of volleyball teams depends upon strong relationship between physical and psychological skills of players. The psychological preparation is planned and carried out with the aim of enabling the sportsman to be in an optimum psychic state at the time of competition so that he can achieve the maximum possible performance<sup>2</sup>. During a volleyball match intense psychological pressure situations would occur. The structure of the sport of volleyball shows that it is a very emotional sport and creates psychological difficult and huge problems for athlete's self-control<sup>3</sup>. Mental aspects effect the athlete's performance in Competition, the body is already trained in strength, endurance and skills. The mind is source of our success or failure<sup>4</sup>. Mental skills are internal capabilities that help athletes to control their mind efficiently and consistently as they execute sports related goals. The use of mental skills such as goal setting, imagery, relaxation, and self-talk are important areas in the field of sport psychology<sup>5,6</sup>. Mental skills training involve applying techniques and strategies designed to teach or enhance mental skills that facilitate performance and a positive approach to sport competition<sup>7</sup>. Mental skills training provide the methods and techniques not only to develop skills such as concentration

and positive body language, but also to foster personal characteristics such as self-esteem and positive competitive skills and behaviour. Mental skills technique helps athletes to adjust their action, thoughts, feeling and physical sensations in order to improve their games. Mental skills training involve several interrelated activities and any of these activities may be used alone and however, the most successful outcomes are achieved when all are combined. Mental skills components of sports performance is given very less attention as compared to physical skills. It is accepted that, when players are equal on technical, tactical and physical levels, the one having the strongest mental level will succeed. Players learn and develop many skills based on information and training provided by their coaches. While acknowledging the importance of mental skills in volleyball game that researchers of this study attempted to analyze the mental skills between high and low performing volleyball players of schools, colleges and clubs.

## Methodology

**Sample:** The total two hundred and forty (N=240) volleyball players was taken as subjects to analyze the mental skills between high and low performing volleyball players. Out of total sample, eighty (N=80) school level and eighty (N=80) club level are selected as subjects. Further forty (N=40) each from school, college and club levels were divided into high performing and low performing groups. The first three position holder from school state (U-19) championship, inter-college championships of Guru Nanak Dev University, Amritsar; Punjab University, Chandigarh; Punjabi University, Patiala

and senior state Championship were considered as high performing players. Those who only participated in said championship were considered as low performing volleyball players.

**Tools:** Mental skills questionnaire prepared by Hardy and Nelson<sup>8</sup> was administered to record the response of school, college and club level volleyball players. The scores was distributed and calculated as per key of test.

**Statistical Analysis:** The descriptive statistics was used to calculate the Mean and S.D. values of high and low performing school, college and club level volleyball players with the help of S.P.S.S. The t-test was applied to find out the significant difference between high and low performing volleyball players. Further ANOVA was applied to see the significant difference among high performing school, college and club level volleyball players. The significant level was set at 0.05 level of confidence.

## Results and Discussion

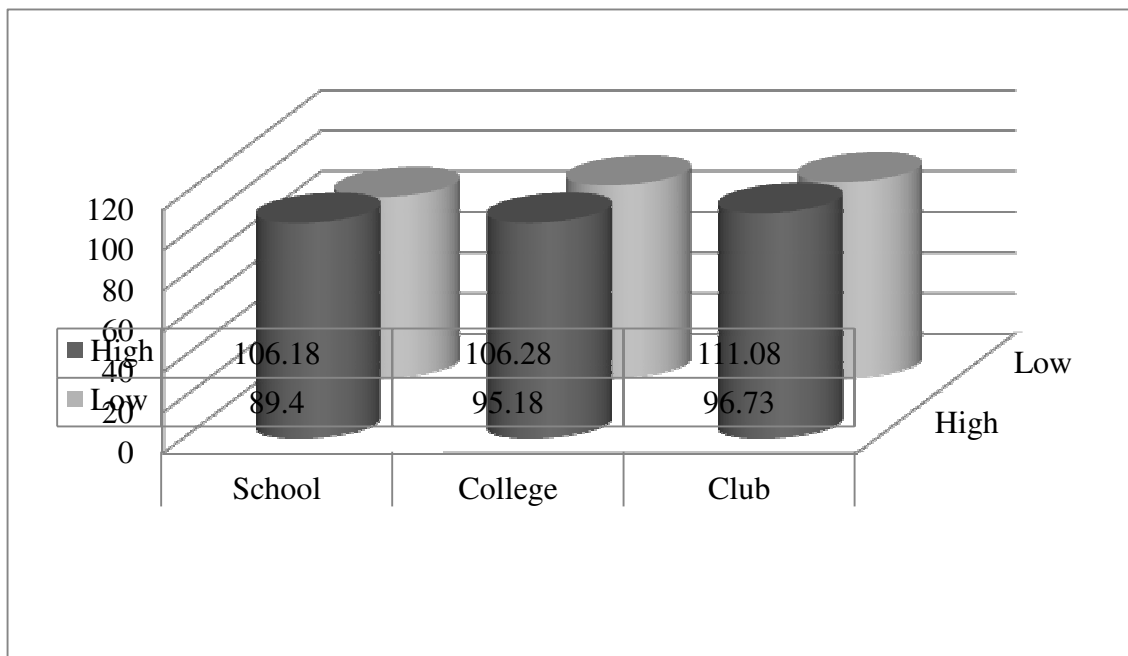
**Results:** Mean, S.D., t-values and ANOVA values are presented in tables and Interpretations are given accordingly. Mean comparison of high and low performing players have also presented through graphical representations.

Table-1 shows that mean value of school level high performing players is 106.18 with S.D. 15.58 and mean value of school level low performing volleyball players is 89.40 with S.D. 12.19. The t-value 5.36 is found highly significant in favour of high performing school volleyball players. The mean value of college level high performing players is 106.28 with S.D. 21.67 and mean value of school level low performing volleyball players is 95.18 with S.D. 10.22. The t-value 2.93 is found significant in favour of high performing college volleyball players. The mean value of club level high performing players is 111.08 with S.D. 13.49 and mean value of school level low performing volleyball players is 96.73 with S.D. 12.09. The t-value 5.00 is found highly significant in favour of high performing club level volleyball players.

**Table-1**  
**Mean S.D. and t-Values of Mental Skills of High and Low Performing Volleyball Players**

Level of Participation	Subjects	Performance Groups	Mean	S.D.	M.D.	t-value	P-value
School	N=40	High	106.18	15.58	16.77	5.36*	0.00
	N=40	Low	89.40	12.19			
College	N=40	High	106.28	21.67	11.10	2.93*	0.00
	N=40	Low	95.18	10.22			
Club	N=40	High	111.08	13.49	14.35	5.00*	0.00
	N=40	Low	96.73	12.09			

\*Significant at 0.05 level.



**Figure-1**  
**Graphical Comparison of Mental Skills of High and Low Performing Volleyball Players**

**Table-2**  
**Analysis of Variance of Mental Skills among High Performing School, College and Club Level Volleyballs Players**

Groups	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	627.467	2	313.733	1.052	.353
Within Groups	34892.525	117	298.227		
Total	35519.992	119			

It can be seen from table-2 that insignificant difference was found with regard to emotional maturity of high performing school, college and club level volleyball players as the P-value (Sig.) 0.353 was found higher than 0.05 level of significance ( $p > 0.05$ )

**Discussion:** Findings of this study showed that t-values 5.36, 2.93 and 5.00 between high and low performing school, college and club level volleyball players found significant in favour of high performing players. These results clearly support that high performing players having higher mental skills level. High performance of volleyball players in respective championships may be due to high level of mental skills. Previous studies conducted by Rose<sup>9</sup> Concluded that mental training of athlete's increases physical preparation and performance for sports competition. Thelwel and Greenless<sup>10</sup> indicated that mental skills package is effective in enhancing all participants' competitive performance and usage of mental skills from baseline to intervention phases. They emphasized that usage of mental skills played positive role in competitive endurance. Thapa<sup>11</sup> found significant differences exist among university level and college level football players with regard to mental skills. He commented that high mental skills scoring may be the reason of high performance. Singh and Dureja (2011) also found that open skill players are significant better in mental skills as compared to close skill players. Samela et al. (2009) observed that selected Iranian athletes for Asian games have higher mental skills scores as compare to non-selected athletes. The results of ANOVA reveals that there is a insignificant difference exist between high performing school, college and club level volleyball players. Finally it is observed that high and low performing players differ significantly with regard to mental skills. On other hand high performing volleyball players of school, college and club did not differ significantly. According to this study mental skills played important role for high performance. The application of mental skills training need to introduced from school, college and club levels.

**Conclusion**

It is concluded that high performing volleyball players of schools, colleges and clubs are significantly better mental skills level as compare to low performing volleyball players. These findings indicated that mental skills may the reason of high performance in volleyball game. Whereas school, college and

club level high performing players did not differ significantly among each others.

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