



## Big Five Personality Dimensions of Volleyball Players At Different Levels of Participation

### KEYWORDS

Personality, volleyball players and levels of participation.

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### ABSTRACT

The present study is an endeavor to explore the relationship between personality types and level of participation at different levels of competition of volleyball players and also to find out the comparison of personality type among different level of competitions of volleyball players i.e. district, state, and national level competitions. 300 male volleyball players, comprising the sample of the study, including 100 from district, 100 from state and 100 from National level volleyball competitions with age range from 20 to 30 years were selected through purposive method of sampling from Haryana State. Costa and McCrae's Neo Five Factor inventory for Personality (1985), was administrated to measure the personality. The Pearson's Product Movements Method for correlation and one way ANOVA to find out significant difference among groups were applied for statistical treatment of data by the help of SPSS (11.5) computer software. Analysis of the data has revealed that the big five personality dimensions had significant correlation with state and national level volleyball players except conscientiousness and openness respectively, whereas Neuroticism and Extraversion had significant correlation with district level participants. The groups (District, state and national levels) were differ significantly, players participating at national level competition ( $p < .01$ ) has significantly higher personality dimensions, followed by state level. F ratio of district level players was found to be lowest across group.

### INTRODUCTION:

Men's interest in sports is found in all societies all over the globe. Men's behavior is actuated by several motives. Some people want to seek entertainment from sports, while others try to prove their mettle in the fields. Among major determining psychological factors personality dimensions is responsible for the quality of the participation of the players. Thus, psychology has an important role to play in competitive sports. In this context, Volleyball attracts our attention. Like Cricket, Hockey, Football, Volleyball is not immune to psychological variables. So, in Volleyball competition personality plays their important role. **Acampore (1971)** compared the personality traits among three levels of female field Hockey competitors and found that higher the level of competition the more favorable the score on various personality trait scales of 16 P.F. test. **King et al (1974)** studied the relationship between personal characteristics and athletic involvement. The findings indicate an affinity between personality dimensions and athletic participation.

In the modern world, a sport is becoming a highly specialized competitive area of human activity. Every nation is trying hard to produce sportsmen who could bring laurels home in various competitions at international level. Such honors in sports have already acquired a high prestige-value for participating nations. It is natural; therefore, that improving the standards in the field of sport has become a focal point of attention, study and effort on the part of physical educators, coaches, trainers and research workers almost in all the countries of the world. In this effort, various disciplines like psychology, education, medicine, physical sciences etc., are getting more and more involved. So, we are also trying to analyze the big five personality dimensions level with the most popular volleyball game of Haryana. Keeping in mind the popularity of game and interest of the people the present problem has been framed. In Indian context there were handful of studies conducted in the similar area by sports psychologist, i.e., **Flanagan et al (1958)** reported that girls tend to select activities according to their types of personality. Malumphy found that the girls in her sample who favored individual sports were less anxious, more venturesome and more extroverted than the girls whose specialty was team sports. They were more tough-minded and possessed more 'tough poise' than

the non-participants, but no more tough-minded than the team sports girls. **Kane (1969)** studied 358 college students, men and women, to determine if personality was related to body type (somato-type). He used the A and B forms of Cattell's 16 P.F. questionnaires to measure personality and phenotype each subject according to the procedure described by Parnell. He reported no demonstrable relationship between body type and personality. **Cowell et al (1960)** in their study indicated that boys who do well in physical ability tests are likely to have leadership potentialities to be accepted for close personal contacts by their associates and to be well-adjusted socially.

Accordingly, the purpose of the present research is to study and identify the personality traits of volleyball players at different levels. Considering the limitation of empirical findings in this context, the present research is exploratory relationship studies and compares the personality traits of volleyball players at three different levels of competition without posing any hypothesis.

### MATERIALS AND METHODS:

Three hundred male volleyball players, comprising the sample of the study, including 100 from district, 100 from state and 100 from National level volleyball competitions with age range from 20 to 30 years were selected through purposive method of sampling from Haryana State. Costa and McCrae's Neo Five Factor inventory for Personality (1985), test, was administrated to measure the personality of volleyball players. Karl Pearson's Product Movements Method for correlation and one way ANOVA to find out significant difference among groups were used by the help of SPSS (11.5) computer software.

### Selection of Variables and Tools:

In the present study only personality was studied with the help of Costa and McCrae's Neo Five Factor inventory for Personality (1985). Before administering other relevant tools survey type method was used on all the players fairing well on criteria specified and questionnaires were given to the subjects chosen for the study. There were two variables viz. personality and different level of participation of volleyball players.

Personality of the volleyball players was asserted in the form of big-five factors as measured by Five-Factor Inventory (FFI). The scores on these five traits were analyzed separately.

Big Five personality traits (OCEAN) analyzed the characteristics of volleyball players because each factor consists of a number of more specific traits i.e.,

- (i) **Openness** – “appreciation for art, emotion, adventure, unusual ideas, imagination, curiosity, and variety of experience”.
- (ii) **Conscientiousness** – “a tendency to show self-discipline, act dutifully, and aim for achievement; planned rather than spontaneous behaviour”.
- (iii) **Extraversion** – “energy, positive emotions, surgency, and the tendency to seek stimulation and the company of others”.
- (iv) **Agreeableness** – “a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others”.
- (v) **Neuroticism** – “a tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, or vulnerability; sometimes called emotional instability”.

**RESULTS:**

The findings pertaining to the volleyball player’s personality dimensions at three different levels of participation have been presented below.

**Table-1: Correlation of big five personality dimensions with different levels of participation.**

Big Five Personality Dimensions	District Level Players	State Level Players	National Level Players
Correlation with Neuroticism	0.342**	0.461**	0.533**
Correlation with extraversion	0.140*	0.194**	0.280**
Correlation with openness	0.093	0.239**	0.033
Correlation with agreeableness	0.111	0.121*	0.296**
Correlation with conscientiousness	0.103	0.094	0.426**

\*\* Significant at 0.01 level = .148 (N = 300, df = 298)

\* Significant at 0.05 level = .113

The results in table 1 shows that national level players have positive and significant correlations at .01 level of confidence with big five personality dimensions except openness, whereas correlations of state level volleyball players are positive and significant with all personality dimensions except conscientiousness, however neuroticism and extraversion have positive and significant correlation at .01 and .05 level of confidence respectively with district level participants of volleyball game.

**Table- 2: Summary of ANOVA for big five personality dimensions.**

Big Five Personality Dimensions	Mean	Std. Deviations	Source of Variation	Sum of Squares	df	Mean Square	F	P
Neuroticism	17.46	2.172	Between Groups	402.14	2	201.07	59.22**	.001
			Within Groups	1008.38	297	3.39		
			Total	1410.52	299			
Extraversion	38.62	4.044	Between Groups	400.65	2	200.32	13.26**	.001
			Within Groups	4488.19	297	15.11		
			Total	4888.84	299			
Openness	35.58	2.959	Between Groups	307.95	2	153.97	19.80**	.001
			Within Groups	2309.29	297	7.78		
			Total	2617.24	299			
Agreeableness	25.42	2.787	Between groups	405.79	2	202.89	31.43**	.001
			Within Groups	1917.13	297	6.46		
			Total	2322.92	299			
Conscientiousness	35.95	3.377	Between Groups	1292.29	2	646.14	90.66**	.001
			Within Groups	2116.86	297	7.13		
			Total	3409.15	299			

\*\*Significant at 0.01 level (Table value for df2, 297 at .01 level of significant = 4.67)

It is evident from table-2 that the F ratio of ANOVA for five traits, i.e., Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness appear in table are 59.22, 13.26, 19.80, 31.43 and 90.66 respectively which are significant at .01 probability level. It means we can consider with 99.9% confidence that three different groups of participation really differ in the level of big five factors of personality.

The calculated ‘F’ values of Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness are 59.22, 13.26, 19.80, 31.43 and 90.66 respectively, which are greater than the required table value (4.67) at 0.01 level of confidence. It shows that the groups (District, state and national levels) are differ significantly, players participating at national level competition (p<.01) has significantly higher big five factors of personality, followed by state level. F ratio and significant level for district level players is found to be lowest across group.

**DISCUSSION:**

The findings of the present research showed that the Neuroticism had significant correlation with three levels participation. There also exist significant differences among different level of participations. It suggested that the measurement of neuroticism covers wide variety of characteristics of anxiety, like fear, embarrassment, anger, emotional distress etc. These behavioral characteristics are common things during competitions but the study indicates that their level is higher when one is competing at higher level.

Extraversion dimensions of personality have significant correlation with three different levels of competition, further there exist significant differences among three groups. It indicated that behavioral characteristics of extraverted players, i.e., excitement stimulation, active, assertive and cheerfulness boosts their performance, particularly in team games. It is so because extraverts like to be in groups and gatherings, they like more human interaction being sociable and cooperative. Their cooperativeness obviously leads to better cohesiveness in the team and resultantly higher performance also.

Openness has significant correlation with state level partici-

part, whereas agreeableness has positive and significant relationship with state and national level performer. However, openness and agreeableness personality traits are differ significantly among various levels of participation. It suggests that sports persons who are sensitive to both inner and outer world, have active imagination, aesthetic sensitivity and preference for variety are higher in performance, that is why positive correlation. The positive correlation between agreeable and sports performance further suggests that people who are egocentric and skeptical of others perform relatively higher.

The fifth personality factor conscientiousness correlates significantly higher with the national level of participants. However, there found significant differences among various level of participations. It implies that, who are strong willed; purposeful, determined, punctual and reliable do better in sports also. This way, conscientiousness trait contributes positively to performance in sports. Its implications are important in the selection of sports persons. This trait need to be taken care of, very low scorers on this factor may not do well in sports competitions.

Similar findings were reported by **Gooch, F.Z. (1973)** on high skilled Basketball players and softball women athletes, **Donald, W. (1973)** on wrestlers in state of Utah, **Feigl, F.L. (1974)** on male gymnasts of United State college of south east, **Donald S.H. et. al., (2002)** on Canadian under graduate players and **Aidman E.V. (2007)** on Australian football junior players.

## CONCLUSION:

It has been concluded that the big five personality dimensions had significant correlation with state and national level volleyball players except conscientiousness and openness respectively, whereas Neuroticism and Extraversion had significant correlation with district level participants.

The groups (District, state and national levels) were differ significantly, players participating at national level competition ( $p < .01$ ) has significantly higher personality dimensions, followed by state level. F ratio of district level players was found to be lowest across group.

A perusal of summary of results shows that the big five personality dimensions are highly related to performance in sports and games. Moreover, moderate quality of certain personality traits is essential for sportspersons irrespective of their participation in varied and sometimes opposing sports categories. So along with physical fitness, optimum level of mental health and personality traits should be kept in mind while selecting or putting sportspersons in various sports activities. Furthermore, development of personality characteristics congenial to sports activities to be formed as a part of regular curricular activities for the budding or emerging persons at the adolescent stage.

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