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PERSONALITY CHARACTERISTIC OF BASKETBALL, VOLLEYBALL AND HANDBALL PLAYERS: A SPECIAL REFERENCE TO VIDARBHA REGION OF MAHARASHTRA

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ABSTRACT

Almost every day we describe and assess the personalities of the people around us. Whether we realize it or not, these daily musings on how and why people behave as they do are similar to what personality psychologists do. While our informal assessments of personality tend to focus more on individuals, personality psychologists instead use conceptions of personality that can apply to everyone. Personality research has led to the development of a number of theories that help explain how and why certain personality traits develop. Personality is one of the broader



dimensions in the study of human behaviour. Personality is a set of relatively enduring behavioural responses that characterize how a person reacts to the environment. It is the way someone behaves over a long period and in a variety of situations. On the basis of study results, it is concluded that the volleyball players, handball players and basketball players have above average performance on the self-concept factor of personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the self-concept level of the University level Basketball, Volleyball and Handball players. On the basis of study results, it is concluded that the volleyball players, handball players and basketball players have above average performance on the mental toughness factor of personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the mental toughness level of the University level Basketball, Volleyball and Handball .In view of study results, it is concluded that the basketball players have average performance while volleyball and handball players have above average performance on the emotional stability factor of personality dimension. The study is based on primary probe, covering two districts e.g. Nagpur and Wardha districts of Vidarbha region of Maharashtra. A total of 300 (100 each players of basketball, Volleyball and handball games) players belonging to age group 18 to 25 years were selected for data collection. A reliable and valid questionnaire was used to assess the sports personality traits of the basketball, volleyball and handball players. Based on psychological aspects and the sports personality traits, and with the discussion of experts and scholar's own understanding, the variables were selected for the purpose of the study were -Sociability Level, Dominance Level, Extroversion Level, Conventionality Level, Self-Concept Level, Mental Toughness Level, Emotional Stability Level

KEY WORDS: Personality, behavior, performance, psychology, individual, aspect, sports.

OBJECTIVES OF THE STUDY

To study the personality characteristic of basketball, volleyball and handball players.

To study the correlation between personality and sports performance of basketball, volleyball and handball players.

METHODOLOGY

The study is based on primary probe, covering two districts e.g. Nagpur and Wardha districts of Vidarbha region of Maharastra. A total of 300 (100 each players of basketball, Volleyball and handball games) players belonging to age group 18 to 25 years were selected for data collection. A reliable and valid questionnaire was used to assess the sports personality traits of the basketball, volleyball and handball players. Based on psychological aspects and the sports personality traits, and with the discussion of experts and scholar's own understanding, the variables were selected for the purpose of the study were -Sociability Level, Dominance Level, Extroversion Level, Conventionality Level, Self-Concept Level, Mental Toughness Level, Emotional Stability Level

MEASUREMENT TOOL

Sports Specific Personality Test developed by Agya Jit Singh & H. S. Cheema was used for generating the necessary data. This test consists 100 statements into seven dimensions like—I. Sociability, II. Dominance, III. Extroversion, IV. Conventionality, V. Self-concept, VI. Mental Toughness and VII. Emotional Stability. It is standardized on Individuals with age range 18 to 25 years.)

REVIEW OF LITERATURE

Thorland et al (1981) 1. The most frequent differences within either the male or female Junior Olympic samples involved the performers in throwing events (shot put, discus, and javelin), who were taller, heavier, fatter, and of unique somatotype when compared to all or most other competitors. Additional structural differences, generally of a lesser magnitude, also existed between other groups of Junior Olympians. Differences in body composition characteristics were also noted when Junior Olympians were compared with other adolescent athletes or non-athletes.

Toriola et al., (1985)² The findings indicated that the nonathletes (3.5) were significantly more endomorphic (P < 0.05) than the soccer players (2.5) and sprinters (2.4). The sprinters (3.6) and basketball players (3.7) had markedly higher ectomorphic ratings (P < 0.05) as compared with the hockey players (2.0). The mesomorphic component did not differentiate the groups. The differences observed among the groups which could be attributed to genetic and environmental influences reflect the variability in the morphological characteristics of athletes and nonathletes.

Chaouachi et al (2005) ³ in this study examined the association between dominant somatotype and the effect on aerobic capacity variables of individualized aerobic interval training.. There were significant differences among groups post-training: the Meso-ecto and the Meso groups showed the greatest improvements in aerobic capacity. The significant somatotype-aerobic training interaction suggests different trainability with intermittent and individualised aerobic training according to somatotype.

Pilli (2010)⁴ compared the anthropometric and physical variables among kho-kho and hand ball players of Andhra Pradesh School Games teams. To achieve this purpose of the study, 40 male players of kho-kho and hand ball were selected as subjects from Andhra Pradesh State School Games teams. e. The

Thorland, W. G., Johnson, G. O., Fagot, T.G., Tharp, G.D and Hammer, R.W. (1981). Body composition and somatotype characteristics of junior Olympic athletes, Med Sci Sports Exerc, 13(5), pp. 332-338.

Toriola, L., Salokun, S.O and Mathur, D.N.(1985). Somatotype Characteristics of Male Sprinters, Basketball, Soccer, and Field Hockey Players, Int J Sports Med, 06(6), pp. 344-346.

Chaouachi, M., Chaouachi, A., Chamari, K., Chtara, M., Fek, Y., Amri, M and Trudeau, F. (2005). Effects of dominant somatotype on aerobic capacity trainability, Br J Sports Med, 39, pp. 954-959.

Pilli, R. (2010). Comparison of anthropometric and physical variables among kho-kho and handball players of Andhra Pradesh School Games teams, British Journal of Sports Medicine, 44(1)

result of the study shows that hand ball players were better in six variables such as explosive strength, muscular endurance, height, weight, body fat,

Clanak (2012)⁵ This research is focused on the psychological characteristics of handball goalkeepers, specifically with regard to aggression, anxiety, reaction times, fluid intelligence and concentration. More and less successful goalkeepers were compared in these characteristics. Forty-six participants were included – 23 of them were more successful and 23 less successful, according to an expert evaluation. The more successful goalkeepers were also significantly older. The data was collected in 2010 and 2011. Several significant differences between both groups were found – the less successful goalkeepers had a faster simple reaction time and made fewer mistakes when reacting to simple stimuli. They were also quicker in response times to simple visual orientation stimuli and seemed to lose less time when reacting to different stimuli.

Rousanoglou et al., (2014)⁶ The purpose of the study was to identify the playing level (Under 16: U16, Under 18: U18 and Under 20: U20) and the playing position (Goalkeepers, Backs, Wings, Pivots, Centers) differences of elite junior handball players expressed in the anthropometric and physical fitness characteristics. The anthropometric differences among playing positions may indicate the advantageous characteristics that the respective position demands, whereas the absence of playing position differences in physical fitness characteristics may indicate training specificity issues that must be addressed cautiously. The anthropometric and physical fitness differences between playing levels may be attributed to developmental maturation and the progressive increase of training intensity.

Moss et al., $(2015)^7$ In order to maximise the potential for success, developing nations need to produce superior systems to identify and develop talent, which requires comprehensive and up-to-date values on elite players. This study examined the anthropometric and physical characteristics of youth female team handball players (16.07 \pm 1.30 years) in non-elite (n = 47), elite (n = 37) and top-elite players (n = 29). The findings reveal that non-elite players compare unfavourably to top-elite international European players in many anthropometric and performance characteristics, and differ in a few characteristics compared to elite European club team players. This study is useful for emerging team handball nations in improving talent identification processes.

Torres-Luque et al., (2016)⁸ Although there are studies on physical and physiological characteristics of handball player, few that process different ages in the same study. It is concluded that there are differences between age groups, which between them include anthropometric characteristics (eg taller players more mesomorphic and less FFM), greater jumping ability in different variants is around 22- 24% for adulthood; while power makes around 30%. It increased over time flexibility stands; and a sub-maximal heart rate more efficient along age. These studies contribute to a better understanding by the coaches of the evolution of the physical and physiological characteristics in a specialty such as handball.

Nara (2017)⁹ The present study was an attempt to find out the difference in physical fitness level between basketball and football players. The sample for this study consisted of 150 subjects each belonging

Clanak, I.Z.(2012). Psychological Characteristics of Slovene Handball Goalkeepers, *Kinesiology*, 44(2), pp. 209-217.

Rousanoglou, E.N., Noutsos, K. S and Bayios, I.A.(2014). Playing level and playing position differences of anthropometric and physical fitness characteristics in elite junior handball players, *The Journal of Sports Medicine and Physical Fitness*, 54(5), pp. 611-621.

Moss, S.L., McWhannell, N., Michalsik, L.B and Twist, C.(2015). Anthropometric and physical performance characteristics of top-elite, elite and non-elite youth female team handball players, *Journal of Sports Sciences*, 33(17), pp. 1780-1789.

Torres-Luque, G., Calahorro-Cañada, F and Nikolaidis, P.T.(2016). Age-related differences in physical and physiological characteristics in male handball players, *Arch Med Deporte*, 33(5), pp. 318-324.

Nara, K.(2017). A study of physical fitness between basketball and football players of Haryana, *International Journal of Physiology, Nutrition and Physical Education*, 2(1), pp. 01-04.

to Basketball and football from Haryana, who had represented their schools and colleges in various state level tournaments were selected as the subjects for the study. The Criterion measures from AAPHER Physical fitness test have been chosen for this study. Mean, Standard deviation and 't' Test were used to analyse the data Findings of the study revealed that: (i) Football players was found better in 50-yard dash than basketball players; (ii) Basketball players are much better in Standing Broad Jump than football players; (iii) there is no significant difference in Pull-Ups between Basketball and football players; (iv) Football players were found better in Shuttle-run than basketball players; (v) There is no significant difference in Sit-ups of Basketball and football players and (vi) Football players were found better in six hundred yard run than basketball players.

INTRODUCTION

Almost every day we describe and assess the personalities of the people around us. Whether we realize it or not, these daily musings on how and why people behave as they do are similar to what personality psychologists do. While our informal assessments of personality tend to focus more on individuals, personality psychologists instead use conceptions of personality that can apply to everyone. Personality research has led to the development of a number of theories that help explain how and why certain personality traits develop. Personality is one of the broader dimensions in the study of human behaviour. Personality is a set of relatively enduring behavioural responses that characterize how a person reacts to the environment. It is the way someone behaves over a long period and in a variety of situations. Personality characterizes individuals as they appear in most circumstances i.e. cautious or impulsive, shy or friendly. Personality is to encompass both personality and neuro-psychological characteristics of an individual which govern his behaviour. For instance neuro-muscular or psychological behaviour is basically contingent on visual or auditory stimuli. shold measures of varied sense organs.

DISCUSSION AND CONCLUSION

While analyzing Sociability factor of University level basketball, volleyball and handball players it can be inferred from the table- 1 that the mean sociability factor score of the Basketball players is 56±5.2 (with overall variation between 52 and 59). Furthermore, the mean sociability factor score of the Volleyball players is 56±3.6 (with overall variation between 53 and 60). In addition to this, the results regarding mean sociability factor score of Handball players is 48±6.8 (with overall variation between 42 and 54). Specifically, the results revealed that the Basketball and Volleyball players have above average performance while Handball players have average performance on the sociability factor of personality dimension. Furthermore, the comparative assessment showed that there is significant (P<0.05) difference in the sociability level of the University level Basketball, Volleyball and Handball players.

Table -1 Sociability factor of University level basketball, volleyball and handball players

Game	N	Mean	SD	Sociability level	Min	Max	F ratio	Р
Basketball	100	56	±5.2	Above average performance	52	59	2.346	<0.05
Volleyball	100	56	±3.6	Above average performance	53	60		
Handball	100	48	±6.8	Average performance	42	54		

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability Source: Primary probe.

Table -2 presents results pertaining to the dominance factor of the University level Basketball, Volleyball and Handball players. The results indicated that the mean dominance factor score of the Basketball players is 46±4.2 (with overall variation between 40 and 49). Furthermore, the mean dominance factor score of the Volleyball players is 37±2.9 (with overall variation between 33 and 45). In addition to this, the results regarding mean dominance factor score of Handball players is 45±4.1 (with overall variation

between 38 and 51). Specifically, the results revealed that the Basketball and handball players have above average performance while volleyball players have average performance on the dominance factor of personality dimension. Furthermore, the comparative assessment showed that there is significant (P<0.05) difference in the dominance level of the University level Basketball, Volleyball and Handball players.

Table -2

Dominance factor of University level basketball, volleyball and handball players

Game	N	Mean	SD	Dominance Level	Min	Max	F ratio	Р	
Basketball	100	46	±4.2	Above average performance	40	49	2.419	<0.05	
Volleyball	100	37	±2.9	Average performance	33	45			
Handball	100	45	±4.1	Above average performance	38	51			

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability

Source: Primary probe.

Table-3
Extroversion factor of University level basketball, volleyball and handball players

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Game	N	Mean	SD	Extroversion Level	Min	Max	F ratio	P
Basketball	100	39	±3.3	Inferior performance	35	42	2.037	<0.05
Volleyball	100	47	±2.4	Above average performance	42	50		
Handball	100	41	±2.8	Average performance	35	46		

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability Source: Primary probe.

Results pertaining to the extroversion factor of the University level Basketball, Volleyball and Handball players as indicated in table -3., the results indicated that the mean extroversion factor score of the Basketball players is 39±3.3 (with overall variation between 35 and 42). Furthermore, the mean extroversion factor score of the Volleyball players is 47±2.4 (with overall variation between 42 and 50). In addition to this, the results regarding mean extroversion factor score of Handball players is 41±2.8 (with overall variation between 35 and 46). Specifically, the results revealed that the volleyball players have above average performance; handball players have average performance while basketball players have inferior performance on the extroversion factor of personality dimension. Furthermore, the comparative assessment showed that there is significant (P<0.05) difference in the extroversion level of the University level Basketball, Volleyball and Handball players.

Table -4
Conventionality factor of University level basketball, volleyball and handball players

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Game	N	Mean	SD	Conventionality Level	Min	Max	F ratio	Р	
Basketball	100	42	±3.2	Average performance	38	45	2.913	<0.05	
Volleyball	100	46	±2.6	Above average performance	42	49			
Handball	100	37	±2.7	Inferior performance	32	42			

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability Source: Primary probe.

Table-4 presents results pertaining to the conventionality factor of the University level Basketball, Volleyball and Handball players. The results indicated that the mean conventionality factor score of the Basketball players is 42±3.2 (with overall variation between 38 and 45). Furthermore, the mean conventionality factor score of the Volleyball players is 46±2.6 (with overall variation between 42 and 49). In

addition to this, the results regarding mean conventionality factor score of Handball players is 37±2.7 (with overall variation between 32 and 42). Specifically, the results revealed that the volleyball players have above average performance; handball players have inferior performance while basketball players have average performance on the conventionality factor of personality dimension. Furthermore, the comparative assessment showed that there is significant (P<0.05) difference in the conventionality level of the University level Basketball, Volleyball and Handball players.

Table -5:
Self-Concept factor of University level basketball, volleyball and handball players

Game	N	Mean	SD	Self-Concept Level		Min	Max	F ratio	Р
Basketball	100	46	±2.9	Above	average	42	50	1.219	NS
				performance					
Volleyball	100	47	±3.4	Above	average	43	49		
				performance					
Handball	100	45	±3.6	Above	average	42	48		
				performance					

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability; NS: Not Significant Source: Primary probe.

Table -5 presents results pertaining to the self-concept factor of the University level Basketball, Volleyball and Handball players. The results indicated that the mean self-concept factor score of the Basketball players is 46±2.9 (with overall variation between 42 and 50). Furthermore, the mean self-concept factor score of the Volleyball players is 47±3.4 (with overall variation between 43 and 49). In addition to this, the results regarding mean self-concept factor score of Handball players is 45±3.6 (with overall variation between 42 and 48). Specifically, the results revealed that the volleyball players, handball players and basketball players have above average performance on the self-concept factor of personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the self-concept level of the University level Basketball, Volleyball and Handball players.

Table -6
Mental Toughness factor of University level basketball, volleyball and handball players

Game	N	Mean	SD	Mental Toughness Level		Min	Max	F ratio	Р
Basketball	100	45	±4.1	Above performance	average	40	48	0.894	NS
Volleyball	100	44	±3.2	Above performance	average	41	49		
Handball	100	43	±3.6	Above performance	average	40	49		

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability; NS: Not Significant Source: Primary probe.

Table -6 presents results pertaining to the mental toughness factor of the University level Basketball, Volleyball and Handball players. The results indicated that the mean mental toughness factor score of the Basketball players is 45±4.1 (with overall variation between 40 and 48). Furthermore, the mean mental toughness factor score of the Volleyball players is 44±3.2 (with overall variation between 41 and 49). In addition to this, the results regarding mean mental toughness factor score of Handball players is 43±3.6 (with overall variation between 40 and 49). Specifically, the results revealed that the volleyball players, handball players and basketball players have above average performance on the mental toughness factor of

personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the mental toughness level of the University level Basketball, Volleyball and Handball players.

Table -7
Emotional Stability factor of University level basketball, volleyball and handball players

Game	N	Mean	SD	Emotional	Stability	Min	Max	F ratio	Р
				Level					
Basketball	100	38	±2.6	Average perf	formance	35	43	2.314	<0.05
Volleyball	100	43	±2.5	Above	average	39	47		
				performance	j				
Handball	100	44	±2.3	Above	average	40	48		
				performance	<u>)</u>				

N: Sample Size; SD: Standard deviation; Min: Minimum; Max: Maximum; P: Probability Source: Primary probe.

Table -7 presents results pertaining to the emotional stability factor of the University level Basketball, Volleyball and Handball players. The results indicated that the mean emotional stability factor score of the Basketball players is 38±2.6 (with overall variation between 35 and 43). Furthermore, the mean emotional stability factor score of the Volleyball players is 43±2.5 (with overall variation between 39 and 47). In addition to this, the results regarding mean emotional stability factor score of Handball players is 44±2.3 (with overall variation between 40 and 48). Specifically, the results revealed that the basketball players have average performance while volleyball and handball players have above average performance on the emotional stability factor of personality dimension. Furthermore, the comparative assessment showed that there is significant (P<0.05) difference in the mental toughness level of the University level Basketball, Volleyball and Handball players.

CONCLUSION

On the basis of study results, it is concluded that the volleyball players, handball players and basketball players have above average performance on the self-concept factor of personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the self-concept level of the University level Basketball, Volleyball and Handball players. On the basis of study results, it is concluded that the volleyball players, handball players and basketball players have above average performance on the mental toughness factor of personality dimension. Furthermore, the comparative assessment showed that there is no significant difference in the mental toughness level of the University level Basketball, Volleyball and Handball .In view of study results, it is concluded that the basketball players have average performance while volleyball and handball players have above average performance on the emotional stability factor of personality dimension .

REFERENCES:

Chaouachi, M., Chaouachi, A., Chamari, K., Chtara, M., Fek,i Y., Amri, M and Trudeau, F.(2005). Effects of dominant somatotype on aerobic capacity trainability, *Br J Sports Med*, 39.

Clanak, I.Z. (2012). Psychological Characteristics of Slovene Handball Goalkeepers, Kinesiology, 44(2).

Moss, S.L., McWhannell, N., Michalsik, L.B and Twist, C. (2016). Anthropometric and physical performance characteristics of top-elite, elite and non-elite youth female team handball players, *Journal of Sports Sciences*, 33(17).

Nara, K.(2017). A study of physical fitness between basketball and football players of Haryana, *International Journal of Physiology, Nutrition and Physical Education*, 2(1).

Rousanoglou, E.N., Noutsos, K. S and Bayios, I.A.(2014). Playing level and playing position differences of anthropometric and physical fitness characteristics in elite junior handball players, *The Journal of Sports Medicine and Physical Fitness*, 54(5).

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- Thorland, W. G., Johnson, G. O., Fagot, T.G., Tharp, G.D and Hammer, R.W.(1981). Body composition and somatotype characteristics of junior Olympic athletes, *Med Sci Sports Exerc*, 13(5).
- Toriola, L., Salokun, S.O and Mathur, D.N.(1985). Somatotype Characteristics of Male Sprinters, Basketball, Soccer, and Field Hockey Players, *Int J Sports Med*, 06(6).
- Torres-Luque, G., Calahorro-Cañada, F and Nikolaidis, P.T.(2016). Age-related differences in physical and physiological characteristics in male handball players, *Arch Med Deporte*, 33(5).