COMPARATIVE ANALYSIS OF PERSONALITY TRAITS OF FOOTBALL PLAYERS PLAYING AT DIFFERENT POSITIONS

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ABSTRACT

Identifying psychological skills and traits in sports has become increasingly significant in the context of sports. Numerous studies have determined that player's personality traits and characteristics can influence the skill learning and performance. However, in football, allocation of playing position and success rely on personality traits and other skill set. The foremost purpose of this study was to assess the personality traits of football players playing at different positions (defender, and attacker) and to understand the significant difference amongst these groups. To evaluate the personality traits Cattel 16 PF Questionnaire was used. The study was confined to thirty male football players who had played either in inter-university level or national level of football competitions. One-way ANNOVA was used to analyse the data and to determine the real difference between the groups. Findings of the study revealed that football groups were significantly different in several personality traits. It was recommended that coaches and trainers should evaluate the personality traits of payers before deciding positions and should conduct psychological training and drills to develop personality traits and to enhance performance.

Keywords: Playing positions, football players, Personality traits.

1. Introduction

Personality is defined as the characteristics set of behaviour, cognition and emotion patterns resulting from the influence of biological and environmental factors. Although there is no consensus among researchers about the definition of personality, the theories of personality commonly focus on motivation and how an individual interacts with the environment. (John, Robins, & Pervin, 2010) Personality can be defined as, how a person thinks, feels, and behave. A person's culture and gender both affect the personality of an individual. Environment and biological factors both equally affect personality of an individual. Individual's personality traits play a vital role in sports participation and sports success. (Allen & Laborde, 2014).

Sports psychology is the science that deals with the behaviour of individual and essential in sports context and examining the ABC of psychology felling, action and behavior is relevant (Weinberg & Gould, 2014) in different sports such as individual and team sports and they required a different set of personality. Personality help in achieving postural control and bodily movement which is desired in different positions while executing sports skill (Filipiak & Lubianka, 2020).

Football is one of the most popular sports in the world and rated as highly professional and competitive sports. There are several factors that influence the performance and skill learning in football, yet assessment of players personality characteristics is crucial for identifying talent and to predict the future performance of the players (Musculus & Lobinger, 2018). In recent years, there is greater thrust amongst the researcher to understand and identify the psychological profile of the players. Cattle theory of personality and tool hold an outstanding position for assessment and identification of players (Eysenck, 1984). Cattle has specified the 16 factors to assess personality in a systematic and robust manner. (Cattell & Schuerger, 2003). Personality traits and leadership impact football players performance (Garland & Barry, 1988) and there a strong relationship between sports performance and personality traits was discovered. (Conway, 2016) It was also reported that personality traits are related to the success and failure of team sports players.

Comparison of personality trait of players is rather evident through various research. (Ekmek¸ci & Mi¸coo˘gulları, 2018) found that football player were Superior than hand players in term of confidence, mental toughness and having a lower level of anxiety than hand ball players. It has been stated that in sports different playing position demand

different psychological traits and skills. (Mouloud, 2019).

After investigating the literature, it was observed there was fewer literature available about assessment of the football players personality traits with respect to their playing positions and therefore to fill up this gap the present study was conducted with a research question does football players differs in personality traits with reference to their playing position. The main objective of this study was to assess the personality traits of the players with reference to their playing positions and to find out the significant difference among the three groups of footballs who were playing at different positions such as defender, midfielder, and attacker.

2. Materials and Methods

2.1 Selection of questionnaire

To assess the personality of the players standard questionnaire cattle16pf developed by Raymond B. Cattle was finalized after systematic literature review and in-depth discussion with experts of the filed. This questionnaire was developed on a 10-point Likert scale with 16 personality factors.

2.2 Selection of participants

The sample size for this study was confined to thirty male football players, who were the students at Amity University, Noida, Uttar Pradesh. Selection criteria were kept as at least had participated in inter-university and national levels of competitions in football. The participants were selected through purposive sampling and further divided in three groups, in accordance with the position that they usually play, such as midfielder, attackers, and defender.

2.3 Administration of questionnaire

Prior consent of all participants has been taken before the collection of data. The scholar has administered the questionnaire in person to all participants with a clear statement of the purpose of the study and all the necessary instructions on the questionnaire were directed to the participants in details such as statement of the questions with meaning, options, and choices in the questions and to choose the most appropriate option of their choice and to be fair in their response.

2.4 Statistical procedure

One-way analysis of variance (single factor ANOVA) was employed to comprehend the significant difference between the three groups of football players in sixteen factors of personality and post hoc test was used further if the p values of ANOVA was found to be significant to ascertain the actual difference amongst the group. To test the hypothesis statistically the level of significance was maintained at 0.05 level.

3. Results

Data were analyzed with the help of Microsoft Excel and one-way ANOVA was computed to determine the statistical significance difference between the groups. The researcher defined the null hypothesis of the study as "There will be no significant difference between the groups of football players about all factors of personality traits, whereas the alternative hypothesis was that there will be a significant difference between the groups in personality factors. In the case if P value of the ANOVA was found significant, the LSD post-hoc test was calculated in addition to establish the real difference amongst the groups. The results of the study are present on the following personality factors of football players.

1. Factor A-Cool vs. Warm
2. Factor B- Concrete- thinking vs. Abstract-thinking.
3. Factor C- Affected by feeling vs. Emotionally stable.
4. Factor E- submissive vs. Dominant
5. Factor F -Sober vs. Enthusiastic
6. Factor G- Expedient vs. Conscientious
7. Factor H- Shy vs. Bold
8. Factor I- Tough-Minded vs. Tender minded
9. Factor L -Trusting vs. Suspicious
10. Factor M-Practical Vs Imaginative
11. Factor N -Forthright vs. Shrewd
12. Factor O-Self-assured Vs. Apprehensive
13. Factor Q1 Conservative vs. Experimental
14. Factor Q2 Group oriented vs. self-sufficient.
15. Factor Q3 undisciplined self-conflict vs. following self-image
16. Factor Q4 relaxed vs. tensed.

Table 1: Comparative Analysis of Variance of Personality Traits of Defenders, Midfielders and Attacker (N=30),

Sr. No.	Personality factor	Groups	Mean	S. D	F-ratio	p-value
1	Factor A-Cool vs. Warm	Defenders	4.5	0.9	3.38	0.048*
		Midfielder	6.2	1.22		
		Attacker	4.9	2.1		
2	Factor B- Concrete- thinking vs. Abstract-thinking	Defenders	2.9	1.9	0.15	0.86
		Midfielder	3	1.69		
		Attacker	3.3	1.41		
3	Factor C- Affected by feeling vs. Emotionally stable	Defenders	4.2	1.31	0.29	0.75
		Midfielder	3.9	1.66		
		Attacker	4.4	1.42		
4	Factor E- submissive vs. Dominant	Defenders	4.4	1.4	2.94	0.06
		Midfielder	4.7	1.6		
		Attacker	6.1	1.91		
5	Factor F -Sober vs. Enthusiastic	Defenders	4.1	0.73	0.09	0.90
		Midfielder	4.2	1.22		
		Attacker	4	1.05		
6	Factor G- Expedient vs. Conscientious	Defenders	4.5	0.9	2.53	0.09
		Midfielder	4.4	1.77		
		Attacker	5.6	1.07		
7	Factor H- Shy vs. Bold	Defenders	5.5	0.7	4.98	0.014*
		Midfielder	4.3	1.56		
		Attacker	6.1	1.44		
8	Factor I- Tough-Minded vs. Tender minded	Defenders	5.9	1.1	2.31	0.12
		Midfielder	6.9	0.99		
		Attacker	6.8	1.31		

*Significant at 0.05 level

Table 1 depicts the descriptive statistics mean, standard deviation and analysis of variance among the three groups of footballer's defenders, midfielder, and attackers for the personality factors from A to me. As far as the first personality factor A, which is related to the cool and warn nature, is concerned the groups were found to be significantly different (F=3.38; p<0.049 at 0.05 level).In the case of factor H of the personality that deals with the shy and bold nature of the athletes, there was a statistically significant variance between the groups (F=4.98; p<0.014 at 0.05 level). On the other hand, findings revealed that groups were similar with respect to the other personality traits listed as B, C, E, F, G, and I (factor B, F=0.15; p<0.86, factor C, F=0.29; p<0.75, factor E, F=2.94; p<0.06, factor F, F=0.09; p<0.90, factor G, F=2.53; p<0.09 factor I, F=2.31; p<0.12 at 0.05 level).

Table 2: Comparative Analysis of Variance of Personality Traits of Defenders, Midfielders and Attackers (N=30)

Srno	Personality factor	Groups	Mean	S. D	F-ratio	P value Significance
1	Factor L - Trusting vs. Suspicious	Defenders	6.2	1.39	0.13	0.87
		Midfielder	6	1.4		
		Attackers	6.3	1.05		
2	Factor M- Practical Vs Imaginative	Defenders	5.1	0.87	1.55	0.22
		Midfielder	4.1	1.19		
		Attackers	4.7	1.63		

3	Factor N - Forthright vs. Shrewd	Defenders	7.1	1.44	4.85	0.015*
		Midfielder	8.2	1.54		
		Attackers	6.1	1.52		
4	Factor O-Self-assured Vs. Apprehensive	Defenders	6.1	1.44	3.29	0.052
		Midfielder	7.9	1.1		
		Attackers	6.8	2.04		
5	Factor Q1 Conservative vs. Experimental	Defenders	6	1.69	0.11	0.89
		Midfielder	6	1.41		
		Attacker	5.7	1.76		
6	Factor Q2 Group oriented vs. self-sufficient	Defenders	3.9	1.28	0.71	0.49
		Midfielder	4.7	1.94		
		Attackers	4.5	1.35		
7	Factor Q3 undisciplined self-conflict vs. following self-image	Defenders	6.2	1.31	0.67	0.51
		Midfielder	5.7	1.25		
		Attackers	5.5	1.58		
8	Factor Q4 relaxed vs. tensed	Defenders	5.8	1.93	0.04	0.95
		Midfielder	5.6	1.07		
		Attackers	5.7	1.49		

*Significant at 0.05 level

Table 2 discloses the values of mean, standard deviation, and analysis of variance between the three groups of footballer's defenders, midfielder, and attackers for the personality factors from L to Q4. Based on the value of ANOVA, it can be stated that the three groups were significantly different in the personality factor N that is related to Forthright vs. Shrewd traits of the players ($F=4.85$; $p<0.015$ at 0.05 level). However, an investigation of the results shows there was no significant difference amongst the groups in the personality factors L, M, O, Q1, Q2, Q3, and Q4 (factor L, $F=0.13$; $p<0.87$, factor M, $F=1.55$; $p<0.75$, factor O, $F=3.29$; $p<0.052$, factor Q1, $F=0.11$; $p<0.89$, factor Q2, $F=0.71$; $p<0.49$ factor Q3, $F=0.67$; $p<0.51$.; Q4, $F=0.04$; $p<0.95$ at 0.05 level).

Table 3: LSD Post hoc Test mean difference between Groups.

Factor	Defenders	Midfielders	Attackers	Mean difference	P value
Factor A-Cool vs. Warm	4.5	6.2		-1.7	0.001 *
		6.2	4.9	2.1	0.05
	4.5		4.9	-0.4	0.29
Factor H-Shy vs. Bold	5.5	4.3		1.2	0.02
		4.3	6.1	-1.8	0.007*
	5.5		6.1	-0.6	0.12
Factor N -Forthright vs. Shrewd	7.1	8.2		1.1	0.05
		8.2	6.1	2.1	0.003*
	7.1		6.1	1	0.07

*Significant at critical value 0.016

Table 3 represents the significant difference in means between the groups based on LSD post-hoc test. Based on the values of ANOVA, the three groups were found significant in the personality factors A, H, and N. The significant LSD post-hoc test value ($p=0.001<0.016$ critical value) confirmed that midfielders were having higher personality characteristics (midfielders, mean=6.2; defenders, mean=4.5) of factor A in comparison to defenders however while comparing defenders and attacker both the groups were similar in the characteristic of factor A (defenders, mean=4.5; attacker mean=4.9; $p=0.29>0.016$ critical value). Likewise, based on post-hoc test value there was no significant difference

between the mean value of midfielder and attackers (midfielders, mean=6.2; attacker mean=4.9; p=0.05>0.016 critical value). In case of personality factor H, an examination of post-hoc value discloses that attacker possess more bold personality traits than midfielders (midfielders, mean=4.3; attackers mean=6.1; p=0.07<0.016 critical value). Though the comparison of the defenders and attacker's groups revealed that there was no significant difference between the groups in this personality factor (defenders, mean=5.5; attackers mean=6.1; p=0.12>0.016 critical value). Another finding discloses the defenders and midfielders' group were also similar in personality factor H (defenders, mean=5.5; midfielders, mean=4.3; p=0.02>0.016, critical value). Regarding factor N, which is about forthright and shrewd behaviour of players, midfielders possesses by far greater shrewd characteristics than attackers (midfielders, mean=8.11; attackers mean=6.1; p=0.003<0.016 critical value).However, defenders and attackers were alike in the personality traits of factor N (defenders, mean=7.1; attackers mean=6.1; p=0.07>0.016 critical value) and there was no difference between defender and midfielders in the personality traits of factor N (defender, mean=7.1; midfielders, mean=8.2; p=0.05>0.016 critical value).
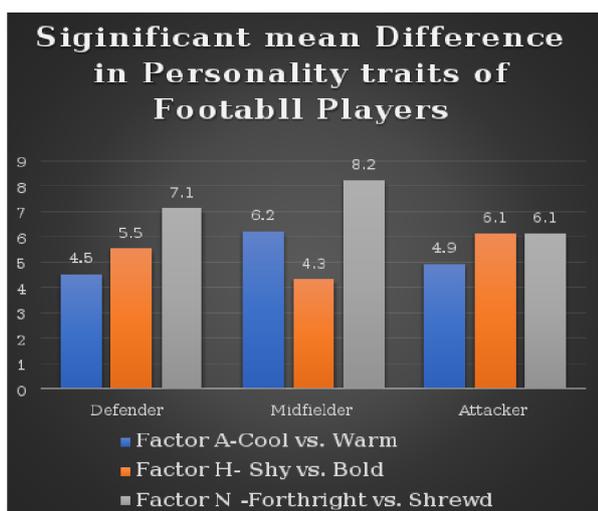

Figure1 Significant mean difference in personality traits of football players

4. Discussion

Assessment of player's personality trait and motor abilities in football, which is one of the highly professional sports, is crucial not only

for the identification but also for the future performance (Nia & Besharat, 2010). The main objective of this study was to positions, and to evaluate the status of various essential personality factors that could influence the Skill learning and tactical performance. Due to multidimension nature a football there is a greater increase in understanding and identifying the psychological characteristics of football players. (Murr, Feichtinger, Larkin,O 'Connor, & H¨oner, 2018). A further study confirm that, personality traits help in predicting the performance of the college-level athletes (Habib, Waris, & Afzal, 2020) and it has been reported in numerous research studies that in sports different playing positions demand different psychological traits and skills. (Mouloud, 2019).

In the present study, based on the results and finding, it can be concluded that groups of football players were significantly different in personality factors, including cool v/s warm, shy v/s bold and forthright v/s shrewd. More precisely midfielders were having warm personality characteristics than defender that is appropriate and suitable for them as they must tackle opponents aggressively. This trait also helps midfielders to have control on the ball and to create better opportunities for the attacker through intelligent moves and passes. Whereas findings revealed that defenders were cool with low scores in these personality traits, was also extremely relevant finding. These traits are essential prerequisites for a defender to achieve success and to withstand any attack in football with composer all the time during the match. These findings conform to the study of (Ekmek¸ci & Mi¸coo˘gulları, 2018) in that study findings concluded that a comparison of personality traits in sports was evident and useful in sports. Thus, the null hypothesis "There will be no difference between the groups of football players in personality "was rejected in this factor. However, none of the others group comparison was significant in factor A.

Further with respect to personality factor shy v/s bold it can be stated that attackers were bolder than midfielders. In fact, when it comes to attacking in soccer it was exceedingly relevant and significant finding because the

attacker should be sharp and smart enough to create innovative and bold tactical moves to penetrate the defending formation of opponents. On the other other hand, low score and shy nature of midfielder indicate either about the lack of psychological training of these players or inappropriate allotment for this position. Therefore, the null hypothesis "There will be no difference between the groups of football players in personality "was rejected in this factor. Several research studies are in line with the findings of present study (Allen & Laborde, 2014, Mouloud, 2019 & Ekmek¸ci & Mi¸coo˘gulları, 2018). Overall, these studies concluded that comparison of football players was beneficial and football players can differ in personality traits while comparing with other groups. Further, no other groups were significantly different in factor H.

In case of personality factor N that deals with forthright and shrewd behavior of players the midfielders possess far greater shrewd behavior than the attacker. The null hypothesis "There will be no difference between the groups of football players in personality "was rejected in this factor. In fact, it is notable that in relation to norms of personality traits (Cattell & Schuerger, 2003), both midfielder and attacker should have the shrewd traits to execute tactics and skills efficiently. Results of the study also concluded that football groups were similar in other personality factors, including B, C, E, F, G, I, L,M O Q1, Q2 , Q3, Q4, .To contrary, findings depict that football groups were having lower score in some factors (B,C,E F, G, M, Q2,) in context to the norm of the cattle 16 PF, which could be because of the lack of psychological training and non-examination of the traits by the coach. Therefore, the null hypothesis "There will be no difference between the groups of football players in personality "was accepted in these factors.

Numerous research studies have established a strong relationship between sports performance and personality traits. According to (Conway, 2016). Personality traits impact the success and failure of team sports players. Thus, coaches should prepare training module while keeping in mind the development of personality traits of footballs players (Filipiak & L- ubianka, 2020). Moreover, (Coetzee, Grobbelaar, & Gird, 2006) conducted a study to understand the psychological skills of successful and non-successful players. It was concluded in this study that psychological skill distinguishes a successful and non-successful player.

5. Recommendations and submissions

Based on the findings and results of the study the following recommendations are suggested

1. Coaches should assess personality traits along with physical fitness and football skill to identify the most suitable players for the games.

2. It is recommended that before allocating the positing for players in football, the Coaches and trainers must understand the psychological profile and traits of the players to find the best fit player for a particular position. This decision could influence the skill learning, training, and overall performance of individuals as well as team.

3. Since it was observed in this study that midfielder, attacker, and defenders were significantly different in terms of three traits and possess low scores in many other traits thus it is strongly recommended that coaches should incorporate psychological interventions and training for the development of desire traits of all players with respect to their specific playing position in football.

4. Based on findings and discussion of the study, it is also suggested that coaches should evaluate the psychological traits of the players in a systematic manner and on regular interval to assess the effectiveness of training.

5. Within the limitation of the study, it is suggested the there is a wider scope of research in this area and a further investigation could be initiated to find out the relationship and influence of specific personality traits on performance, success and failure of football playing at different positions.

6. Similar studies should be concluded in other team sports as well as individual sports to enhance the body of literature in this area.

Acknowledgements

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