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# The relationship between personality traits and sport performance

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#### ABSTRACT

This article was aimed to investigate the relationship between personality traits with sport performance. The method of the study is descriptive correlational. The data was collected using questionnaires and through field study procedure. The population of the study consisted of 229 non elite football and futsal players in the 2010-2011 season in Ardebil city. The sample size was equated with the population. Personality was assessed using the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) and athlete's performance was assessed by coach's rating (Piedmont et al., 1999). The stepwise regression analysis indicated that from among personality components only Conscientiousness have positive significant correlation with sport performance. The result, also, indicated that conscientiousness was the sole predictor of sport performance.

Keywords: Personality traits, sport performance, non elite

# INTRODUCTION

Sport psychology researchers have been interested in how athletes' psychological and characteristics influence performance. From this point, it is clear that psychological characteristics differ between more and less effective athletes and teams. Moreover, the ability to mentally prepare is considered a key component of such differences [1]. The importance of personality as a predictor for behavior performance has been recognized in psychology [2]. Researchers have recently reported the significant effects of personality on sports [3]. When athletes participate in competitive sport, their underlying personality characteristics inevitably contribute to how they behave. Personality has been defined as "psychological qualities that contribute to an individual's enduring and distinctive patterns of feeling, thinking and behaving" [4].

A consensus has emerged among trait theorists regarding a five-factor model of personality [5, 6]. There are many personality tests in existence, but a commonly accepted empirical model in the social sciences is called the Big-Five, or equivalently the Five-Factor Model (FFM) [7]. Blanco, Hill, and Piedmont [8] found that the five-factor model of personality could be used to make predictions about the player's performance in sports. The five-factor model of personality is a very useful tool in assessing individual differences [9].

The dimensions of big five model include extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience [10]. These dimensions of personality are associated with different aspects of an individual's personality traits such as being assertive, emotional stability, and a person's tendency to experience distress. The first of the big five, extraversion, deals with an individual's tendency toward being either extraverted or introverted and, therefore, whether a person is talkative, assertive, sociable, or not. The second dimension, neuroticism, reveals an individuals' emotional stability and their tendency to experience distress and to be able to effectively handle, emotionally, any such stressful situation. Anxiety, depression and worry are often associated with this dimension of personality. Extraversion and neuroticism are often referred to as the "big two." Third is conscientiousness, which deals with an individual's will to achieve goals and their dependability. This dimension can also be used to describe

a person as careful, responsible and thorough. The fourth of the big five is agreeableness. It describes a person's humanity, or, in other words, their emotional support or hostility, caring, and nurturance or a lack there of. Behaviorally, the fourth factor describes a person as being good-natured, courteous, soft-hearted, tolerant, or not. The last of the big five is openness, or, more specifically, openness to experiences. This is related to an individual's creativity and divergent thinking. It also describes whether or not a person is open to new feelings and ideas, flexible, or willing to use their imagination [9].

Sport psychologists have conducted significant research in regard to sports performance and the five-factor model of personality. Singh and Manoj [9] found that the personality factor neuroticism was significantly positively correlated with wrestling performance as well as the personality factor neuroticism was a significant positive predictor of wrestling performance in male university level players. Kovacs [11] reported that conscientiousness and neuroticism have a direct correlation to athletic performance. Aidman and Schofield [3] reported that agreeableness and openness are not correlated with sport performance. Piedmont et al [8] examined the coaches' ratings on their games and found that personality dimensions of Neuroticism and Conscientiousness were significantly related to athletic performance among women college soccer players. Taylor & Doria [12] extraversion has been found to predict sport performance, particularly in team athletes.

Some studies have specifically examined the role of the Big Five in predicting academic performance [13]. Studies have also indicated a positive relationship between conscientiousness and job performance [14, 15].

Little contemporary research has explored the effects of the five personality traits on football and futsal, although football and futsal are one of the key sports in the Iran. This research attempted to explore the influence of football players' personality traits on their performance. The purpose of was to examine the relationship between personality traits and sport performance among football and futsal players.

### MATERIALS AND METHODS

# **Participant**

The population of the study consisted of 229 non elite football and futsal players in the 2010-2011 season in Ardebil city. The sample size was equated with the population.

#### Measures

Personality was assessed using the NEO- Five Factor Inventory (NEO-FFI) [5]. This 60-item self-report measure assesses five personality dimensions of extraversion, neuroticism, openness, agreeableness, and conscientiousness. Participants were required to indicate, on a 5-point Likert scale (strongly disagree, disagree, neutral, agree, strongly agree), whether the statement was true of them. In this research, Cronbach's Alpha showed the values of 0.88 for Neuroticism, 0.85 for Extraversion, 0.78 for Openness, 0.84 for Agreeableness and 0.92 for Conscientiousness.

The other instrument was Coach's ratings (Piedmont et al., 1999). Each player was rated by both the Head and Assistant coaches on 5 performance-relevant dimensions: coachability, athletic ability, game performance, team playerness and work ethic. Ratings were based on 1(below average) to 7 (above average) Likert scale. The coach's ratings on each dimension were averaged to enhance the reliability of each rating. The effective reliabilities of these averaged ratings ranged from 0.71 for coachability to 0.82 for game performance [16].

# Methods

The method of the study is descriptive correlational. The data was collected using questionnaires and through field study procedure. Descriptive statistics were used for describing and categorizing raw data and for measuring Mean, frequency, SD and table drawing. Stepwise regression was used for predicting athletes' sport performance. For analyzing data the SPSS software was applied and 93% of confidence level was considered.

### RESULTS AND DISCUSSION

The results showed that players with mentioned Demographic information in below (Table1). The results also showed that from among personality components only Conscientiousness have positive significant correlation with players performance (r=0/18). Studying impact of personality traits on sport performance has much importance. Therefore, a coache based on this trait, can appoint their players to appropriate position. This article was aimed to studying impact of personality traits on sport performance. Personality traits consisted of five dimensions (extraversion, neuroticism, openness, agreeableness, and conscientiousness).

Table 1: Demographic information of players							
Charac	teristics	Frequency	Percentage				
	Between 18-21	71	31				
Age	Between 22-25	124	54.15				
	Between 26-29	34	14.85				
	Between 3-5	140	61.14				
Playing history	Between 6-8	80	34.93				
	More than 9 year	9	3.93				
	Diploma	107	46.72				
Academic degree	Associate degree	109	47.60				
	BA/BSc	13	5.68				
Total		229	100				

Table 2: Correlation coefficient of personality traits and performance									
Variable	M	SD	1	2	3	4	5	6	
Neuroticism	21.55	6.01	1						
Extraversion	26.43	7.46	0.31**	1					
Openness	24.72	5.11	0.22**	0.45**	1				
Agreeableness	23.62	4.52	0.27**	0.40**	0.33**	1			
Conscientiousness	26.75	7.05	0.13*	0.42**	0.48**	0.38**	1		
Overall performance	21.74	4.97	-0.00	0.11	0.08	0.05	0.18**	1	
**. P<0/01 *P<0/05									

Table 3: Multiple regression between personality traits with performance										
	R	$\mathbb{R}^2$	Adjusted R <sup>2</sup>	F (df)	NEO-FFI	В	β	t	Sig	Partial Correlation
Overall performance 0.18			0.03	*7.65 (1,227)	N		-0.03	-0.40	0.69	-0.03
					Е		0.05	0.66	0.51	0.04
	0.19	8 0.03			О		-0.01	-0.13	0.89	-0.01
	0.16				A		-0.02	-0.29	0.77	-0.02
					C	0.13	0.18	2.77	0.01	
					C	0.13	0.18	2.77	0.01	
*.P<0/05										

The present study finds revealed that only consciousness have significant positive correlation with football and futsal players' performance. This finding indicates that athlete with high discipline, responsibility; achievement motivation and goal orientation have high performance in the game. But, athletes with neuroticism characteristics such as anxiety, depression, aggression, angry and selfishness have low emotional and behavioral stability. It causes players easily show their angry, aggression and failure and have been poor performance in the game. Extraversion athletes, also, due to characteristics such as sensation seeking, risk taking, distractibility could not control their emotions. In this regard, these athletes to motivating oneself and feelings of pleasure and satisfy their curiosity, show emotional behaviors and it will be reduce their athletic performance. Openness to experience is characterized by flexibility, creativity, acceptance of other people's ideas, attitudes and rules. The findings of this study indicate that there was not significant relationship between openness with athlete's performance. It seems that non elite population could be one of the reasons. Other personality dimension that had not the relationship with athlete's performance was agreeableness. It means that athletes have not been good relationship with teammates and they more focuses on their needs than teammates. The present findings are consistent with the findings of Allameh et al. [15], Kovacs [11], Piedmont et al. [8], Salgado [14], Aidman and Schofield [3]. Also, the result of this study is no consistent with the findings of Singh and Manoj [9], Taylor & Doria [12]. It seems that differences between team sport and individual sport and also differences in population could be possible reasons.

#### **CONCLUSION**

The result of this study indicates that identifying personality traits of players is very important. Because coaches by identifying players' traits could be use them in best times and suitable positions. Also, by knowing players personality traits the coaches are able to control them during the games.

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