

PERSONALITY TRAITS PREDICT IN SPORTS PERFORMANCE AMONG UNIVERSITY ATHLETES

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Abstract

The present study aims to investigate the personality traits predict in sports performance among university athletes. The sample was comprised of 232 (male=148 and Female = 84), aged between 18 to 30 years (M/SD; 25.11/1.60) of university athletes. The data were gathered from three universities of Punjab, Pakistan through purposive sampling technique. The present research was quantitative in nature and cross-sectional research design was applied. Two research instruments were used to measure the quantify data; Revised NEO personality inventory (NEO-PI-R) and Coach's Ratings Scale. The results of correlation clearly identified that neuroticism personality trait was significantly and negatively correlated with coach ability,, athletic ability, game performance, team playerness, work ethic and overall sports performance among university athletes. While, extraversion, agreeableness, conscientiousness, and openness personality traits were significantly and positively correlated with coach ability, athletic ability, game performance, team playerness, work ethic and overall sports performance among university athletes. Whereas, the results of multiple regression analysis revealed that agreeableness, conscientiousness, and openness were found to be the significant predictors of sports performance.

Keywords: Personality traits, Sports performance, Game performance, University athletes

Introduction

Sports psychology is one of the dynamic field, contributing in every domain of sport and its relevant areas for many years (Gill, Williams, & Reifsteck, 2017). With the advancements in this field an improved set up is formulated as a result most of the teams around the globe have been

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utilizing mental techniques to improve sports performance (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011). The significant aspect of this domain is the predictability of future performance through the possibility of elite players possess certain personality characteristics that make them successful in their field of sport as well as it is also helpful for attributing the successful sportsman characteristics of personality (Teshome, Mengistu, & Beker, 2015).

According to Olson and Hergenbahn (2001), it is based on behavior of an individual which may varies according to situation. Personality varies from person to person because the characteristics of individual as well as demands of the environment also varies. The personality traits possessed by an individual are commonly considered as the individual personalities characteristics that enables them to react within specific situations (Anshel, 2011). These individuals' traits serves as a predictor of an athlete's personality in future events. These assessment traits of personality are measured with the help of standardized tools of psychology (Teshome et al., 2015).

One of the most widely used conceptual framework in personality is the Five Factor Model (FFM) of personality and it conceptualizes the personality with the help of five global constructs: e.g. conscientiousness, agreeableness, neuroticism, extraversion, and openness. All of these traits lies under the concept of Big five model of personality (Costa, Jr, & McCrae, 1992; Costa, & McCrae, 2008). According to Blanco, Hill, and Piedmont (1999) this model is a strong predictor of athlete's performance as well as the dimensions of big five includes agreeableness, neuroticism, extroversion, conscientiousness as well as openness. All of these personality dimensions are linked with individual's different aspects of a personality for instance, emotional stability and individual's ability to stand within aversive situations. The first trait of big five is extraversion, focuses on the extraverted or introverted tendency of human personality such as being assertive, social links and talkative. The second of trait is neuroticism, based on the emotional consistency and the ability to deal with difficult situations effectively such as depression and anxiety. Moreover, conscientiousness is a third dimension deals with the individual's ability to achieve goals as

well as it is also based on individual careful and responsible attitude. Agreeableness is a fourth dimension based on humanity or, in more precise way is based on soft-heartedness, openness of an individual. It also relies on the individual creativity and flexibility of ideas (Mirzaei, Nikbakhsh, & Sharififar, 2013).

More significantly, assessment of personality is also examined within the sports settings as it narrated by successful outcomes. For instance, with the efforts of Tran (2012), the effects of personality traits on the performance of football players which is measured by the Big Five dimensions of conscientiousness and neuroticism as a significant predictor of sports performance. Piedmont (1997) also revealed through regression analysis that conscientiousness as well as neuroticism explained 23% of the variance the coach ratings such as work ethic and athletic ability and conscientiousness with the 8% variance serves as a predictor of game statistics such as in shots and scores.

Sports is the part of physical activity that enables an effective vehicle for all adults to be stable on personal and emotional level (Thivel et al., 2018). Perfectionism as well as over-competitiveness also having strong impact on the athletes sense of self-concept (Apter, 1984). Sports performance is defined by Piedmont in Coach's ratings based on five performance related dimensions: ability of coach such as the ability of player to learn and then apply instructions of coaches, athletic ability it includes players ability of athleticism, team playerness it includes the ability to work with the teammates, game performance based on how performance of a player as well as work ethic based on amount of dedications to the sport (Piedmont et al., 1999).

According to Kovacs (2008) neuroticism as well as conscientiousness having a direct impact on sports performance. Aidman and Schofield (2004) also identified that openness as well as agreeableness are not linked with the athletic performance. Also Piedmont et al. (1999) explained that the ratings done by coaches on their games as well as found that Neuroticism and Conscientiousness dimensions of personality were more significantly related with women soccer players in the college. Moreover, Taylor and Doria (1981) explains that extraversion

has also found significantly related with the athletic performance, more significantly among team players. Some studies also identifies a connection between sports performance as well as conscientiousness (Costa et al., 1992). In general sports performance is positively linked with the five factors of personality traits e.g. conscientiousness, agreeableness, extraversion, and openness to experience. While, neuroticism was negatively correlated with sports performance among athletes, because Adel, Reza, and Farideh (2013) in research revealed that, that athletes with neuroticism personality have low behavioral and emotional stability. It reasons players easily demonstration their aggression, and disappointment also have been deprived performance in the sports. The aim of this current study is to address the athletic performance among university students with the predicting role of personality traits. Secondly, which personality trait is more significant and contributing to enhanced and better sports performance among university athletes?

Hypotheses

- H₁= There would be a significant positive correlation between personality traits (extraversion, conscientiousness, agreeableness, and openness) and sport performance among university athletes.
- H₂= Neuroticism would be negatively correlated with sport performance.
- H₃= Personality traits would be a significant predictor in sport performance among university athletes.

Methodology

Participants

This study was comprised of 232 (male=148 and Female = 84) *aged between 18 to 30 years (M/SD; 25.11/1.60)* of university athletes. The data were gathered from three universities (Riphah International University Faisalabad = 80, University of Sargodha, Sargodha = 72, and Islamia University of Bahawalpur = 80) of Punjab, Pakistan by using purposive sampling technique.

Personality Questionnaires

NEO personality inventory revised (NEO-PI-R) has been used for personality assessment (Costa et al., 1992). With the 50-item IPIP self-report based on five dimensions of big five such as extraversion, neuroticism, openness, agreeableness, as well as conscientiousness. Moreover, based on a 5-point Likert scale (strongly disagree to strongly agree).

Coach's ratings on 5 dimensions of performance-relevant were used for the assessment of ability of a coach, game performance, playerness of a team, athletic ability as well as work ethic. Ratings were based on 1 to 7 Likert scale type (below average to above average). By averaging to the reliability of every rating was helpful and enhanced on each dimension. The effective average reliabilities were 0.71 for coach ability to 0.82 for game performance (Piedmont et al., 1999).

Data Collection

Prior to data collection the permission was taken from the authors to use the instruments in this research. Further, formal permission was also taken from the ethical review committee, Department of Applied Psychology, University of Sargodha. Consent was sought from the participant after explaining the nature and purpose of the study. Rapport was developed with the participants, before administering the questionnaire. They were assured that all of the information would be kept confidential. First of all, the demographic information sheet was given to the participants in order to get information regarding their age, education, and residence. They were acknowledged for their participation and cooperation in the study. The method of the study is descriptive correlational. The data was collected using questionnaires and through field study procedure.

Results

Descriptive statistics were used for describing and categorizing raw data and for measuring Mean, frequency, SD and table drawing. Multiple regression analysis was used for predicting athletes' sport performance. For analyzing data the SPSS software (25.0) was applied.

Table 1 *Respondents Characteristic (N=232)*

Respondent's Characteristics	<i>f (%)</i>	<i>M (SD)</i>
Age		25.11 (1.60)
Gender	Male	148 (63.8)
	Female	84 (36.2)
Education	BS (Hons)/ Master	178 (76.7)
	M. Phil/ M.S	54 (23.3)
Residence	Urban	98 (42.2)
	Rural	134 (57.8)
Sports Game	Cricket	71 (30.6)
	Football	59 (25.4)
	Badminton	40 (17.2)
	Hockey	62 (26.7)

Table 2 *Correlation between Personality Traits and Sports Performance (N=232)*

Variables	1	2	3	4	5	6	7	8
1.Neuroticism	-	-.39**	-.40**	-.45**	-.21**	-.30**	-.33**	-.39**
2.Extraversion		-	.27*	.21*	.35**	.46**	.48**	.49**
3.Agreeableness			-	.37**	.33**	.55**	.55**	.56**
4.Conscientiousness				-	.37**	.55**	.52**	.58**
5.Openness					-	.38**	.41**	.37**
6.Coach Ability						-	.52**	.60**
7.Athletic Ability							-	.53**
8.Game Performance								-
9.Team Playerness								
10.Work Ethic								
11. Overall Sports Performance								

* $p < .05$; ** $p < .01$

The results of table 2 indicates that neuroticism personality trait is significantly and negatively correlated with ability of a coach, ability of an athlete, game performance, team playerness, work ethic as well as

overall sports performance among university athletes. While, extraversion, conscientiousness, openness and agreeableness are significantly and positively correlated with ability of a coach, ability of an athlete, game performance, team playerness, work ethic as well as overall sports performance among university athletes.

Table 3 *Multiple Regression Analysis for Determining the Prediction of Personality Traits in Sports Performance (N=232)*

Variables	Sports Performance			
	R ²	F	B	95% CI
	.47	39.46 **		
Neuroticism			-.13	[-.32, .05]
Extraversion			.07	[-.11, .25]
Agreeableness			.36**	[.17, .54]
Conscientiousness			.33**	[.16, .51]
Openness			.24**	[.11, .38]

** $p < .01$; * $p < .05$

The results of table 3 shows that the complete model explains 47% of the variance in sports performance, with F (5, 226) 39.46, $p < .01$. In this model conscientiousness, agreeableness as well as openness are found to be the significant predictors of sports performance. Its mean that agreeableness, conscientiousness, and openness are significantly influence on sports performance among university athletes.

Discussion

This research aims to investigate personality traits as a predictor in sports performance among university athletes. The results of present research are showing in table 2 for H₁ that reveal extraversion, conscientiousness, openness as well as agreeableness personality traits were significantly and positively correlated with ability of a coach, ability of an athlete, game performance, team playerness, work ethic as well as overall sports performance among university athletes. Most of the previous researches have investigated how different aspects of personality are linked with

performance in a sport (Adel et al., 2013; Rhodes & Smith, 2006). For instance, many researchers examined the relationship of personality traits on sports performance outcomes. Most of them indicate that ranks of football players were positively correlated with traits of agreeableness and conscientiousness (Tran, 2012). Matsumoto, Takeuchi, Nakajima, and Iida (2000) suggest that the trait of conscientiousness might be connected with adherence to training as well as this aspect, consequently, produces less anxiety as well as more confidence in athletes. Other backgrounds with the trait of conscientiousness being the most related to positive outcomes in sports (Poropat, 2009; Rhodes & Smith, 2006). The results of this research are similar with past studies, so the H₁ of current research is retained.

Whereas, the results of this research are showing in table 2 for H₂ that found neuroticism personality trait was significantly and negatively correlated with coach ability, ability of an athlete, game performance, team playerness, work ethic as well as overall sports performance among university athletes. In past study, Teshome et al. (2015) found that emotionality was significantly negatively correlated with performance in sports. Favor (2011) identified similar findings that emotional instability (e.g., neuroticism) negatively linked with athlete's level of coach ability. These preliminary outcomes offer certain level of insight into the personality-coach ability association as well as how directing the athletes that are less neurotic might function for the betterment in a setting of a team. The findings of present study are supported from above cited studies, so the H₂ of this research is retained.

In this research, results reveal for H₃ in table 3 that conclude the overall model explains 47% of the variance in sports performance. Conscientiousness, agreeableness as well as openness are found to be the significant predictors of sports performance. In past study, Singh, Singh, and Singh (2013) found that level of conscientiousness was the predictor of sports performance. In other study the same findings also reported by Piedmont et al. (1999) that the level of conscientiousness significantly impact on sports performance. Meanwhile, some others Western studies have concluded that the other personality trait such as openness, agreeableness, extraversion and neuroticism were not significantly

predictor of sport performance (Salgado 1997; Aidman & Schofield, 2004; Singh et al. 2013). But, interestingly in present research the results indicate that agreeableness and openness are also significant predictors of sports performance. The results of current research are partially significant and also somewhat supported from past studies, so H₃ is partially retained.

Conclusion

It is concluded that extraversion, agreeableness, conscientiousness, and openness personality traits are positively associated with sports performance. University athletes with positive personality traits such as extraversion, agreeableness, conscientiousness, and openness can better perform in sports. Whereas, athletes with emotionally instability (neuroticism) badly achieve sports performance. Additionally, agreeableness, conscientiousness, and openness are found to be an important predictors in sports performance among university athletes.

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