Remzija Šetić [1,2]

CONTRIBUTION OF INDIVIDUAL PSYCHOLOGICAL CHARACTERISTICS TO SUCCESS IN FOOTBALL

[1] *Public Health Centre of Sarajevo Canton, Centre for Mental Health, Stari Grad Sarajevo*
[2] *Sarajevo Football Club*

Abstract

Based on the theoretical analysis and the present findings of the research on psychological factors that contribute to the successful implementation, we have designed this research project in order to integrate the knowledge of the Five-Factor Personality Model (Mc-Crae and Costa, 1992), which is the starting point for the Hypothetical model of success in team sports (Mlačić and associates, 2010), and self-efficacy (Bandura, 1986) and the locus of control (Rotter, 1971), which are important determinants of individual characteristics of sportsmen and their contribution to successful sport. Therefore, the aim of this research is to test the contribution of individual psychological features (neuroticism, extraversion, agreeableness, openness to experience, conscientiousness, self-efficiency, locus of control and length of football training as one of the experience traits), in explaining the success of football players. The research involved 165 football players from six football clubs in Bosnia and Herzegovina.

For the evaluation of the predictor variables it is used a questionnaire on general data of footballers; The NEO-PI R (Coste and McCrae, 1992) was used for the examination of Five Personality Factors, and the Scale of self-efficacy of footballers was used to examine self-efficiency in football (Šamija and Bosnar, 2010) while the Scale of externality was used to examine the locus of control (Bezinović, 1990). The assessment of the performance of footballers operating through the Scale for the assessment of technical-tactical and social competencies of football players- STTSKT (Šetić, Kolenović-Đapo, Talović, 2017) has conducted 14 trainers. In order to check the contribution of the predictor variables of individual psychological characteristics in predicting the individual success of footballers (STTSKT), we conducted a process of hierarchical multiple regression. According to logical and content characteristics, we have introduced the predicate variables into the two blocks; in the first block there is a personality trait of the Five-Factor model, and in the second block is self-efficacy, locus of control and experience. The individual characteristics of the dimension of the personality of the Five-Factor model explained 6.6% of the STTSKT variance, and after we included the perceived self-efficacy, locus of control and experience in the second step, the model explains 13.3% of the total variance. The model as a whole with both blocks of individual features is significant F (8.136) = 2.597, p <0.01. Of all predictive personality variables, only perceived self-efficacy significantly contributes to predicting success in football (β = 0.251; p <0.05).

Key words: **psychological traits, football, success**

Introduction

The laic approach that physical features have the only one and key role in sports achievement has been contested by numerous empirical findings that have offered solid conclusions on the importance of psychological factors in sports achievement. However, many finds a partial contribution, explains the personality additions, or some cognitive, group aspects, or are oriented on the environmental impact. That's why researchers have focused their attention on looking for answers in an interaction model. Thus, Carron (1975) and Bowers (1973) emphasized the importance of the interaction between the personality and the specific situation. The interaction model is not a personality theory, but a model that assumes a complex relationship between personality, environment, and sports achievement. This model suggests that the degree to which a personality trait will have an impact on achievement depends on the interaction between the person (personality) and the situation (environment). According to the interaction model (Cox, 2005), physical and motor skills explain about 64% of the factors contributing to the achievement of sportsmen, while the remaining parts of the contribution to success refer to personality factors, the environment / situation, and the person's interaction and situation. If we only take into account the personality, according to this model,

10% to 15% of sports achievement is explained by personality factors. Also, the same percentage explained the personality and situation interaction, as well as the situation per se. Thus, in the interaction model, a clear distinction is made between the personality traits as relatively permanent dispositions and psychological states that depend on the situation in which the person is.

Based on numerous research results, Baker and Horton (2004, according to Cox, 2005) concluded that psychological factors are consistent predictors of sport success, but also report that research into the psychological traits of top sportsmen results in ambiguous findings. A later finding (Baker and Horton, 2004) shows that it is unjustifiable for all sports to be equal. Namely, in spite of some unique characteristics of top sportsmen (such as commitment), they differ in each other in specific characteristics closely related to the requirements of the sport they are dealing with. In fact, according to Cox (2005) most researchers report that personality is a predictor of success in sports, but not strong. However, no matter how much a personality was a weak predictor, or as much as a personality difference in sportsmen was small, in such top sport, very small advantages could be crucial. In a situation where most of the top sportsmen have very similar morphological, motor and functional abilities, and all of them are subjected to top-level training, it is precisely the differences in personality that can prove crucial (Bosnar and Balent, 2009).

Considering that our research was conducted with football players, before we explain the personality designs, we need to say something about football, especially the specifics of success in football.

According to the structural complexity in the classification of sports, football belongs to complex sports activities. This implies various technical performances in the conditions of mutual cooperation between all team members within the planned tactical framework. Success in football requires a great number of abilities, qualities and knowledge, and the most important are the anthropological characteristics (health status, morphological characteristics, motor and cognitive abilities), specific abilities and knowledge of football players (technical abilities, specific motor skills, tactical skills and knowledge, theoretical knowledge as well as characteristics important for social adaptation) and situational efficiency and results in the competition (Dujmović, 2000). The modern football game consists of four stages of the game and the associated sub-phases (Bašić, Barišić, Jozak and Dizdar, 2015), namely: the phase of attack, the phase of defense, the transition from defense to attack (the transition to the winning ball), the transition from defense attacks (transition after a lost ball). Success in football is reflected in the technical and tactical performance of each individual player, regardless of the position in the team, within the four stages of the football game. For each of the stages of the game, certain technical-tactical requirements match the performance of players in performing tasks within the four stages of the football game. Lately, there has been an increasing interest in researchers seeking to gather data on the individual technical performance of players. Franks and McGarry (1996) have established with the provision of such data on individual technical performance and the formation of player profiles could change gaming behavior and promote successful performance. Among the rare works in this field, the estimates of the performance of football players, the authors Šetić, Kolenović-Đapo, Talović (2017) conducted a survey aimed at checking the validity and reliability of Scale for Measuring Tactical and Technical Competences in Football Players (STTSK). The research involved 166 players (N = 81 senior and 85 juniors) from several clubs of the Premier League of Bosnia and Herzegovina. The analysis of the main components points to the existence of four factors, which in total explain 78.78% of the variance of the specific competence skills of football players. According the grouping of particles, the authors called the first factor *an attacking tactical-technical competences* (NTTK); other *defense-tactical competencies* (OTK), third *technical competences* (TK), and the fourth factor are called *social competences* (SK). The high value of the internal reliability coefficient for the full scale α = .986 and subscales: attack tactical technical competences α = .970, for defensive tactical competences α = .982, for the subscale of technical competence in the duel α = .943, while for the subscale of social competence is α = .970. The authors evaluated the criterion validity of the STTSK on the basis of the correlation with the measure of self efficiency among football players. The obtained are moderate to the low correlation between self-efficiency and three measures of competence skills. Consequently, only the correlation between self-efficiency and the subscale of technical competence has not been established. The results point to the conclusion that the STTSK scale has satisfactory metric characteristics and can be used as a measure of specific competences of football players.

There is a great deal of research that attempts to illuminate the contribution of various psychological characteristics of success in sport. A small number of those is trying to unify and conceive in one place a large number of psychological factors that contribute to sports success. In the writing of Mlačić, Trninić and Kardum (2010) they conceptualized the hypothetical model in which they tried to include a higher number of individual and group characteristics important for sport achievement in team sports. Gathering insights from the psychology of sports, especially the results of the research in the relation of personality characteristics and sports performance, Mlacic and associates (2010) in addition to the features that are covered by the Five Factor model, they included cognitive and social aspects of the personality. Thus, the model describes 17 specific features of top sportsman in team sports that are presumed to affect the competitive performance of players and teams. In the first column of the proposed model, there are "sources of personal behavior management", i.e. the locus of control, by which, is the generalized expectation of the determinants of life events (rewards and punishments). In the second column, a sportsman "self-concept" is described, which is operationalized through self-efficiency, which affects the

behavior of players in the game, to all other psychosocial determinants of competitive performance and the actual quality of players. The third column contains "motivational factors" (dedication, competitiveness, and motivation for achievement). These three variables are covered by a factor of conscientiousness from the Five-Factor personality model. The fourth column of features included in this model are "specific personality traits responsible for successful response in high competitive pressure conditions", such as personality strength, readiness to contact, optimism and attribute style, ways of dealing with stress. Considering the last-mentioned way of dealing with stress, and if we recall the dimensions of the neuroticism of a Five-Factor model of personality that distinguishes adapted or emotional stability from incompatibility and neuroticism. On the basis of the above, we could conclude that the dimension of neuroticism of the Five-Factor model of the personality Costa and McCrae (1992) partially encompasses this aspect of the set model. The next set of specific features are "features that are responsible for coordinated and teamwork of the players in the team" and the achievement of the common goals of the game, such as tactical discipline, tactical responsibility and co-operation. In the Five-Factor model of Costa and McCrae (1992) self-discipline and responsibility is one of the phases of conscientiousness. In the end, the next "block" of the assumed model constitutes "specific features for successfully solving the situation in the game". The model envisages that these latent variable manifests itself through the following abilities: understanding of the game, creativity, ambidexterity, playing or competing experience, player's adaptability.

As we can see, the presented model includes a series of personal characteristics that not only apply to an individual, but also to the characteristics of group action. Although the Hypothetical model of the sportsman's performance model is much wider than the five major models, the basic determinant of this approach is the Five-Factor model of personality, which is the basis of this research, and in this reason, we will say a word about the concepts that are included in the research. Thus, in our research, as a theoretical rational explanation of personality traits, we use the Five-Factor personality model (McCrae and Costa, 1995). According to the theoretical, research and practical significance, this model has become the dominant paradigm in the personality psychology of the last few decades. The Five-Factor personality model assumes the existence of five basic dimensions that lie at the basis of personality traits. These dimensions are: (1) Neuroticism (N) is a personality factor that distinguishes adaptation or emotional stability from incompatibility and emotional instability. The narrow aspect of this domain are: anxiety, hostility, depression, social discomfort, impulsivity, and vulnerability. (2) Extroversion (E) is a factor of interpersonal character. This domain includes warmth, compassion, assertiveness, activity, quest for excitement and positive emotions. (3) Openness (O) includes active imagination, esthetic sensitivity, imperceptiveness, preference of diversity, intellectual curiosity, and independence of thought. This factor

includes openness to fantasy, esthetics, feelings, actions, ideas, and values.
(4) Agreeableness (A) is the dimension of interpersonal relationships, and in the narrower aspect of this domain belong: trust, sincerity, altruism, indulgence, modesty and gentle nature. (5) Conscientiousness (C) is the ability of self-control in terms of disciplined pursuit toward goals and strict adherence to one's own principles. The narrower aspects are competence, order, sense of duty, achievement, self-discipline.
In addition to the Five-Factor model, this research includes perceived self-efficiency. According to Bandura (1986), in his socio-cognitive approach, self - efficiency is a fundamental aspect of achievement. Self-efficiency is a synonym with the belief of an individual in his competence and success in a task. Competence for carrying out certain activities, in this case within sports or more precisely football, may involve different factors. In addition to a number of factors, for an efficient and successful doing of a particular task, it is also important that the individual asserts that a particular task will be successfully accomplished. A person with a high perception of self-efficacy enters the competitive situation with enthusiasm and self-confidence. The degree of self-efficacy an individual possesses determinates the approach or avoidance of the achievement situation. In competing circumstances, the greater the level of self-efficacy, these are better achievements and lower emotional excitement (Bandura, 1986). The construction of self-efficiency and self-confidence are not the same, but there is a clear similarity between these two constructs. Self-efficacy does not include the skills that an individual has, but an assessment of what can be done with the abilities he possesses. Self-efficacy can be considered situational-specific self-confidence (Feltz, 1988).
In addition to the Five-Factor model and the self-efficacy in the research, the locus of control is also find rather interesting. The control of the locus belongs to the concept of attribution or attribution style, or attribution of causation of behavior. Locus control studies began in the mid-fifties of the twentieth century when psychologist Julian Rotter developed the theory of social learning. Rotter has worked within the traditional theory of learning, which emphasizes that people learn for support. Rotter expanded these ideas and claimed that learning depends on the degree to which a person attaches importance to some concrete support. Apart from the fact that people differ in terms of corroboration, people differ also in view of their expectations of corroboration. Some people expect that certain behavior will result in a corroboration, that is, they manifest a tendency to control life outcomes. Expectation of the corroboration refers to characteristics that differ among individuals. Rotter emphasized that the expectations of a person on corroboration are stable in a number of different situations, which he called generalized expectations (Rotter, 1971). Generalized expectations that happens beyond one's control are referred to as an external locus of control. On the other hand, the internal locus of control is the generalized expectation that supporting events are under the control of

a person, and that everyone is responsible for important outcomes in their own lives. People with a high internal locus of control believe that the outcomes depend largely on their own efforts, while people with an external locus of control believe that the outcomes depend on forces beyond their personal control.

On the basis of theoretical analysis and previous findings of the research of psychological factors that contribute to successful implementation, we have designed this research project in a way to integrate the knowledge of the five-factor personality model (McCrae and Costa, 1999), which is the starting point for the Hypothetical model of success in team sports (Mlačić et al., 2010), and self-efficacy (Bandura, 1986) and the locus of control (Rotter, 1971), which are important determinants of individual characteristics of sportsman and their contribution to sports' success. The aim of this research is to test the contribution of individual characteristics (neuroticism, extraversion, agreeableness, openness, conscientiousness, self-efficacy, locus of control and duration of training of football - as one of the determinants of experience) in explaining the success of football players. We expect that certain individual characteristics (primarily neuroticism, extraversion and conscientiousness from the Five-Factor personality model - Kovac, 2008 according to Tran, 2012; Barrick and Mount, 1991; Webbe and Ochs, 2007), and self-efficacy (Cox, 2005; Mlačić and associates. , 2010; Tresure, Monson, Lox, 1996; Kane, Marks, Zaccaro, Blair, 1996; Heazlewood and Burke, 2011), locus of control (Mlacic and associates, 2010) and duration of football training (Mlačić et al., 2010) contribute to the explanation of successful individual performance of football players.

METHOD

Sample
The research involved 165 football players from six football clubs of the Premier League of Bosnia and Herzegovina, three teams (N = 81) competing in the Premier League of B&H (FC Željezničar from Sarajevo, FC Radnik from Bijeljina and FC Krupa from Krupa on Vrbas) and four teams (N = 84) competing in the Youth League of the Junior League (FC Željezničar from Sarajevo, FC Sarajevo from Sarajevo, FC Sloboda from Tuzla and FC Mladost from Doboj near Kakanj). The research involved football players of all positions in the team, except goalkeepers. The average age of the respondents is 21.14 ± 4.91, while the average age of the seniors is 25.15 ± 4.21 and the junior is 17.23 ± 0.49. The assessment of STTSKT was carried out by trainers of the above teams, a total of 14 trainers.

Measuring instruments
Several self-assessment measures have been used in the research. In addition to self-evaluation, the performance of footballers for each element of the football game was evaluated by trainers. Predictor variables included in the measuring instruments we used are neuroticism, extraver-

sion, openness, agreeableness, conscientiousness, self-efficacy, locus of control, experience, while the criterion variable is individual successful performance (operationalized by technical-tactical and social competencies of football players - STTSKT).

Questionnaire on General Football Information
The General Football Questionnaire (UOPN) questionnaire is specifically designed for this research. The questionnaire included personal information about the football player, the selection to which he belongs, age, length of football training, position in the team, previous injuries. From this questionnaire, important information is the total length of playing football as one of the characteristics assuming football experience. Concerning the complexity in defining that experience, we have operationalized the experience according to the definition of Petz (1992), which states that "the experience is the comprehension acquired in everyday life in direct contact with reality." Experience differs from knowledge. Knowledge is systematized, arranged and logically distributed according to scientific criteria. Experience has no characteristic of objective scientific organization; it is different in each individual. Football experience in each individual is different and can be partly determined by the length of football time, that is, the length of training football from childhood to the period when football is played professionally. We start with the assumption that each football player had the opportunity to gain a greater experience in the football game with the length of the football experience. In particular, we used the variable of experience to operate the length of football training.

Questionnaire for testing a five-factor personality model
For the examination of personality Five Factors, we used the NEO PI-R questionnaire of Costa and McCrae (1992). Knežević, Džamonja, Ignjatovic and Đurić-Jocić (2004) conducted the translation and empirical check of this questionnaire. Language adaptation for the territory of Bosnia and Herzegovina was done by Kolenović- Đapo (2005). The questionnaire examines five basic factors (dimension): Neuroticism, Extroversion, Openness, Agreeableness and Conscientiousness. The NEO PI-R questionnaire has 240 particles; each factor has eight subscales or aspects while each of it has eight particles. The respondent expresses his answers on a five-step scale of Likert's type. Reliability of the scale of the NEO PI-R questionnaire is high and the coefficient of internal reliability for the subscale of neuroticism is α = 0.92, for the subscale of extraversion is α = 0.89, for the subscale of openness α = 0.87, for the subscale of agreeableness α = 0.86, and for the subscale of conscientiousness α = 0.90 Knezevic et al., 2004). In our research, the following coefficients of internal reliability were obtained: neuroticism α = 0.837, extraversion α = 0.722, openness α = 0.477, cooperation α = 0.775 and conscientiousness α = 0.850.
Scale for estimating footballer' self-efficiency
The self-efficacy of footballers was measured by the Scale to assess the football's self-efficacy (SPSN) by Šamija and

Bosnar (2010). The scale contains 21 claims on which footballers respond to a five-step Likert-type scale. The results are formed as a simple linear combination estimating each of the particles, and a larger overall result on the scale reflects a higher level of self-efficacy in football. The authors report a satisfactory coefficient of internal reliability of the scale α = 0.841. In our research, the reliability coefficient is α = 0.989.

Scale of externality
The scale of externality (LOK - Bezinović, 1990) is a one-dimensional scale, which is in line with Rotter's (1971) construct of the locus of control. It consists of ten claims whose content determines a fatalistic orientation in which only fate, predestination, happiness, and coincidence determine what will happen to the individual, or what the outcomes of his behavior will be. Respondents assess claims on a five-step Likert type scale, and the overall score is formed by a linear combination of estimates on all particles. The high score reflects the external orientation. The coefficient of internal reliability in previous studies was α = 0.815, while in our research a reliability coefficient α = 0.823 was obtained.

Scale of technical - tactical and social competencies of football players
For the individual performance assessment, the Scale for assessment of technical-tactical and social competences with football players was used - assessment of trainers (STTSKT) (Šetić, Kolenović-Đapo and Talović, 2016). The assessment was carried out on a seven-level scale of Likert type, from 1 (poor performance) to 7 (excellent performance). The total result is formed as a simple linear combination estimating particles (42 particles), where the higher result means greater success. On a sample of 165 players the coefficient of internal reliability for the entire scale was α = 0.983. The degree of agreement between the assessor was checked by calculating the alpha coefficient where the value for the whole sample α = 0.975 was obtained. The resulting coefficient indicates a high matching index.

Procedure
The research was conducted in the period from August to November 2016. During August, a preliminary measuring was conducted and after several interventions in measuring instruments, a targeted research was conducted in the period from September to November 2016. Before the start of the research, the authorization of the Football Association of Bosnia and Herzegovina on the conduct of the research was obtained. The scale for the assessment of the self-efficacy of footballers (Šamija and Bosnar, 2010) was previously licensed for the application as a measuring instrument by the authors. Also, the adapted version of the NEO PI-R (Kolenović- Đapo, 2005) was approved by the author of the questionnaire adjustment. Although the time to fill in the questionnaires and the scale was not limited, the participants took an average of 40 minutes to work.

SPSS 21 was used to process the obtained data in accordance with the set goal of the research.

RESULTS

In order to check the contribution of the predictor variables of individual psychological features (neuroticism, extraversion, agreeableness, openness to experience, conscientiousness, self-efficiency, locus of control and experience), in the prediction of the individual success of footballers (STTSKT), we conducted the process of hierarchical multiple regression. According to logical and content characteristics, we have introduced the predicate variables into two blocks, where the first block features the personality of the Five Factor model, and in the second block, self-efficacy, locus of control and experience. Preliminary analyzes showed that the assumptions of normality, linearity, multi-co linearity and homogeneity of variance were not distorted. In the first step, as we have already said, individual features of the personality dimension of the five-factor personality model have been introduced to explain 6.6% of the STTSKT variance. Having in the second step included perceived self-efficacy, locus control and experience, the model explains 13.3% of the total variance. The model as a whole with both blocks of individual features is significant $F_{(8.136)} = 2.597$, $p < 0.01$. Of all predictive personality variables, only perceived self-efficacy significantly contributes to predicting success in football (= 0.251; $p < 0.05$). In Table 1 we present the values of the obtained coefficients for each of the individual characteristics in explaining the variance of individual success in football (STTSKT).

The results obtained confirm the earlier assumptions of several authors (Kane et al., 1996; Bandura, 1997; Cox, 2005; Mlačić and associates, 2010) that self-efficacy is a significant factor in explaining the success of sportsmen. In addition to this, we can conclude that other individual psychological traits from the set model (neuroticism, extraversion, openness, agreeableness, locus of control and experience) have not proved to be significant in explaining individual performance in football operated with the help of STTSKT.

Furthermore, by inspecting the correlation matrix we can see that the low to moderate correlation between conscientiousness and neuroticism was found at the univariat level, $r = - .429$ ($p < 0.01$); then extraversion and openness, $r = .370$ ($p < 0.01$); conscientiousness and self-efficacy, $r = .314$ ($p < 0.01$); neuroticism and agreeableness, $r = - .263$ ($p < 0.01$); extraversion and conscientiousness, $r = .258$ ($p < 0.01$); neuroticism and self-efficacy, $r = - .253$ ($p < 0.01$) ,; agreeableness and conscientiousness, $r = .246$ ($p < 0.01$); experience and agreeableness, $r = .247$ ($p < 0.01$). The above leads us to conclude that with our sample more conscientious football players are more emotionally stable, and conscientiousness is positively related to perceived self-efficacy. Furthermore, people with lower neuroticism (emotionally more stable) consider themselves self-efficient individuals. We can observe that those with more experience have demonstrated a greater

Table 1. Results of hierarchical regression analysis for the contribution of predictor variables in predicting individual success criteria.

Model B	Non- Standardized Coefficient		Standardized Coefficient	T	p
		Stan.mistake	Beta		
	246.759	67.541		3.653	.000
NEUROTISM	-.290	.180	-.150	-1.616	.108
EKSTRAVERSION	-.156	.222	-.064	-.705	.482
OPPENESS	-.255	.225	-.101	-1.133	.259
AGREEBLENESS	-.087	.196	-.039	-.446	.656
CONSCIENTIOUSNESS	.329	.191	.163	1.725	.087
	208.819	68.546		3.046	.003
NEUROTICISM	-.203	.179	-.105	-1.134	.259
EXTRAVERSION	-.105	.220	-.043	-.477	.634
OPENESS	-.297	.225	-.118	-1.318	.190
AGREEBLENESS	-.140	.197	-.062	-.709	.479
	.195	.191	.097	1.019	.310
SELFEFFICIENCY	.616	.209	**.251**	2.948	**.004**
LOCUS OF CONTROL	-.161	.379	-.036	-.426	.671
EXPERIENCE	.727	.534	.115	1.361	.176

degree of co-operation. Regarding the interrelations within the dimensions of the Five Factor model, respondents who achieve greater extraction are more open, but more conscientious, and those who are more cooperative achieve a greater result of conscientiousness. We also note that those who achieve higher values of neuroticism are less cooperative. Of course, we cannot draw full conclusions from this, because this relation could lead in the other direction. The relations of the predictor variables and criteria show a statistically significant connection between the variables of neuroticism, conscientiousness and self-efficacy with the criterion (individual success), namely: conscientiousness and success r = .181 (p <0.01) indicating that there is a connection of greater conscientiousness and better success is consistent with previous findings by Kovac (2008). Then, neuroticism and success, r = -.187 (p <0.01), indicating the association of lower values of neuroticism and higher performance, which is also in line with Kovac's earlier findings (2008). Also, between self-efficacy and successfulness, r = .295 (p <0.01), where it was established that higher perceived self-efficacy contributes to greater football performance, which is in line with previously stated findings by Kane and associates (1996) Bandura (1997), Cox, (2005), Mlačić and associates (2010). Furthermore, the relationship between cooperation and openness did not achieve a significant correlation with success, which is in line with the earlier findings of Aidman and Schoifels (2004). It is interesting that no significant connection between extraversion and success was found in previous findings of Kovac (2004), Webe and Ochs (2007).

So, previously mentioned, we partly confirmed our expectations that certain individual features, primarily neuroticism and conscientiousness from the Five-Factor personality model, are linked to the sport performance. The obtained connectivity values are low, however, the relations obtained should be considered, regardless of the fact that the same importance of these relations is not repeated in the application of more complex statistical procedures (hierarchical linear regression), which is probably the result of the characteristic of the sample. Such results can have value in practical work with sportsmen, as well as in the creation of future research.

DISCUSSION

Success in sports is an indispensable subject of dealing with sports psychologists. The basic characteristic of sport is competition, and given these high demands, the goal is for us is at least to partly clarify the extent to which individual psychological features contribute to achieving success in football. In addition to numerous theoretical models attempting to answer the question of the relationship between personality characteristics and sport achievements, we find Morgan (1980, according to Bosnar and Balent, 2009), whose work optimistically assumes that a personality explains 20% of the achievements in sports, which was encountered by numerous criticisms of other authors who considered that the role of the personality was minor, and that priority was given to "motor skills, functional abilities, and quality of training" (Bosnar and Balent, 2009, p. 11). However, there are many empirical findings that show that personality traits have a significant share in sports achievement. So called reconciliation, according to the authors Bosnar and Balent (2009), was achieved by consensus that in the conditions when the optimal conditions are met, according to the abilities and well-designed

and quality training, the characteristics of the sportsmen personality play an important role in the sport achievement. In fact, then it is justifiable to investigate individual differences among sportsmen. In our research, personality traits have not proved to be an important predictor of individual performance in football. We can assume that one of the reasons why the basic personality characteristics have no longer proved to be significant is that between the clubs of the Premier League of B&H there are great differences in the conditions of training and competition. Namely, they would expect the personality characteristics to have a greater impact on sports achievement in equal conditions of training and competition.

So, as we stated the main goal in our research was to examine the contribution of individual psychological traits to individual success in football (STTSKT), and we conducted a hierarchical multiple regression, in the way that we introduced in the first step the individual characteristics of the dimensions of the personality of the Five Factor model that explained 6.6 % Individual Performance Criteria (STTSKT). After we introduced the variables of perceived self-efficacy, locus of control and experience in the second step, the percentage explanation of the variance increased to 13.3%. The model as a whole with both blocks of individual characteristics is statistically significant. However, among all predictor variables, only self-efficacy is statistically significant in contributing to predicting success in football ($\beta = .251$; $p < 0.05$).

The results obtained indicate that certain individual features are an important predictor in football, but not so powerful. In that sense, our research has provided some important information. The partial findings of the analyzes offered resulted in the perceived self-efficacy of footballers as the only significant predictor of individual success in football, which is in line with our expectations and the findings of other research (Bandura, 1986; Treasure, 1996; Kane,1996) it is confirmed that self-efficacy directly contributes to success in various sports, and in this research, a greater perception of self-efficacy in football has a significant predictor effect on individual performance in football. We can assume that this result was obtained partly because of the method of measurement since the instruments used in the research were adapted to the specifics of football. In fact, perceived self-efficacy in football was measured, not self-efficacy as a general feature. Other instruments were measures of general personality traits.

Finally, it is important to emphasize the methodological limitations of work. First of all, our research is a correlation type, and we come with conclusions on cause-and-effect relations. Furthermore, research on football players is demanding, not only for technical reasons, but also because of large number of different factors that affect sports achievement. Although we focused specifically on personality variables, we have seen that the overall contribution of these variables is modest toward stronger arguments to the raised problem issue. It is obvious that future research should focus on other variables such as attention and intelligence (from a set of cognitive variables), affec-

tive components, methods of dealing with frustration situations, and contextual variables. Furthermore, under this condition, it is difficult to examine the effects of situational factors that have a definite effect on sports achievement on such a large and specific sample. As far as the research itself is concerned, the respondents generally approached the instrumentation with interest. However, consideration should be given to the fact that this way of collecting data for respondents from the world of football is not common. Most of them first encountered this kind of task that lasted for a long time and required the investing of significant concentration in order to accomplish the task. It must be taken into the consideration the fact that it is possible to have a lesser understanding of some of the contents of the instruments, especially the possibility that the respondents differed in different ways about the importance of a precise answer to individual content. In general, the reliability of measurements depends to a large extent on the respondents' current mood, which is difficult to control.

After all, we can say with certainty that this work has a special significance because it is one of the few works that has covered a significant number of psychological factors that can affect the success of football. Especially, as far as we know so far in Bosnia and Herzegovina, this or similar research on the population of footballers has not been conducted.

Summarizing the above, we conclude that from the individual psychological features the contribution to technical-tactical and social competences in football has self-efficacy. However, by looking at the correlations between the predictor variables and the criteria, we conclude that in addition to self-efficacy, individual characteristics, primarily neuroticism and conscientiousness from the Five-Factor personality model, have a significant connection with the success in football. We are aware that the obtained values of connectivity are low, but the relations obtained should be considered because they can be useful in practical work with football players and in conceiving future research.

CONCLUSION

On the basis of the obtained results of the research of the contribution of individual psychological traits to the success of football conducted on a group of 165 footballers in Bosnia and Herzegovina, we can conclude that the individual characteristics of the dimensions of the personality of the Five Factor model explained 6.6% of the individual performance criteria (STTSKT), and after we introduced the variables into the model perceived self-efficacy, locus of control and experience in the second step, the percentage explanation of the variance increased to 13.3%. The model with both blocks of individual characteristics is statistically significant. However, from all individual psychological features, perceived self-efficacy ($\beta = .251$; $p < 0.05$) showed a direct and significant predictive impact on the individual performance of footballers, thus confirming the current research findings on the importance of perceived self-efficacy in sports. Of all the personality traits of the

Five Factor model, no dimension has proved to be significant for explaining individual performance in football. Also, the individual psychological traits, the locus of control and the length of the training of football (experience) have not proved to be significant in the prediction of the individual performance of football players.

References

Bandura, A (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ:Prentice hill.

Barrick, M.R.; Mount, M.K. (1991). The Big Five personality dimensions: A metaanalysis. *Personnel Psychology*, *44*, 1-26.

Bašić, D., Barišić, V., Jozak, R. i Dizdar, D. (2015). *Notacijska analiza nogometnih utakmica*. Zagreb: Leonardo media.

Bosnar, K. i Balent, B. (2009). *Uvod u psihologiju sporta*. Zagreb: Kineziološki fakultet.

Bowers, K.S. (1973). Situationalism in psychology: An analysis and a critique. *Psychological Review, 80*.

Carron, A.V. (1975). Personality and athletics: A review, In B.S. Rushall (Ed), *The status of psychomotor learning and sport psychology research.* Dartmouth, Nova Scotia: Sport Science Associates.

Costa P.T., Jr., & McCrae, R.R. (1992). *NEO PI-R. Professional Manual*. Psychological Assessment Resources, Inc.

Costa P.T., Jr., & McCrae, R.R. (1995). Domains and Facets: Hierarchical Personality Assessment Using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, *64*(1), 21-50.

Cox, R.H. (2005). *Psihologija sporta.* Jastrebarsko::Naklada Slap.

Dujmović, P. (2000). Škola *nogometa*. Zagreb, Zagrebački nogometni savez.

Feltz, D. (1988). Self-confidence and sports performance. *Exercise and Sport Sciences Reviews*, 1988; 16, 423-457.

Heazlewood, I; Burke, S. (2011) Self-efficacy and its relationship to selected sport psychological constructs in the prediction of performance in ironman triathlon, Journal *of Human Sport & Exercise* ISSN 1988-5202 , vol.6; issue 2.

Kane, T.D.; Marks, M.A.; Zaccaro, S.J; Blair, V. (1996). Self-efficacy, personal goals, and wrestlers 'self-regulation. *Journal of Sport and Exercise Psychology*, *18*: 36–48.

Knežević, G.; Ignjatović-Džamonja, T.; Đurić-Jočić, D. (2004). *Neo PI-R, primena i interpretacija*, Centar za primenjenu psihologiju, Beograd.

Kolenović-Đapo, J. (2005). *Smisao za humor i struktura ličnosti: Neobjavljena doktorska disertacija*, Filozofski fakultet u Sarajevu.

Mlačić, B.; Trninić, S.; Kardum, I. (2010) Hipotetski model specifičnih osobina vrhunskih sportaša u momčadskim sportskim igrama, *Social Research Journal for General Social Issues* (Društvena istraživanja Časopis za opća društvena pitanja), 3 /, pages: 463485, on www.ceeol.com

Petz, B. (1992). Psihologijski rječnik. *Prosvjeta Zagreb*.

Rotter, J.B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, *26*, 443 – 452.

Šamija, K; Bosnar, K. (2010). *Konstrukcija skale za procjenu samoefikasnosti kod nogometaša, Neobjavljeni diplomski rad.* Kioneziološki fakultet Zagreb.

Šetić, R; Kolenović-Đapo,J; Talović, M (2017) Validation study of the tactical-technical and social competencies of football players scale, *Sportski logos, 28-29*; 11-19.

Talović, M., Fiorentini, F, Sporiš, G, Jelešković, E., Ujević, B., Jovanović, M. (2011). *Notacijska analiza u nogometu*, Fakultet sporta i tjelesnog odgoja, Sarajevo

Tran, X. (2012). Football Scores on the Big Five Personality Factors across 50 States in the U.S. *J Sports Med Doping Stud* 2:117. doi:10.4172/2161-0673.1000117.

Treasure, D. C.; Monson, J.; Lox, C. L. (1996). Relationship between self-efficacy, wrestling performance, and affect prior to competition. *The Sport Psychologist*, Vol *10*(1), 73-83.

Webbe, F.M.; Ochs, S.R. (2007). Personality traits relate to heading frequency in male soccer players. *Human Kinetics Journals*. Vol.1 (4). 379 – 389.

Corresponding author:
Remzija Šetić
Public Health Centre of Sarajevo Canton, Centre for Mental Health, Stari Grad Sarajevo
Vrazova 11, 71000 Sarajevo, BiH
E-mail: rsetic@yahoo.com