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The personality profile of ultimate frisbee players based on gender

Abstract

The aim of the study was to try to determine the personality of the ultimate frisbee players. The following hypothesis was accepted for verification: the personality profile of the ultimate frisbee players is similar to the profile of players practicing the same sport. The subjects of the cognitive experiment were people training ultimate frisbee (N = 60), including thirty men (n = 30) and thirty women (n = 30). The research was conducted using the NEO-FFI questionnaire. It has been shown that the personality profile of ultimate frisbee players differs in the scale of neuroticism. Women had a higher level of neuroticism than men. And the sten interpretation of the results showed that people training ultimate frisbee regardless of gender are characterized by average personality indicators.

Keywords: sport psychology, personality, NEO-FFI, ultimate frisbee, gender

Introduction

Human personality is one of the most complex issues that we can encounter in the literature. It covers such areas as: factors, features, biological, hereditary, social, cultural, civilization and psychological properties. All these elements affect the unit's pattern. These aspects make a human being distinguishable from another human being. Among the many studies that have been carried out by sport psychologists, it is worth highlighting the personality analysis of athletes. It shows how to improve the way in which we select and assign players to specific sports departments. Based on the conducted research, it can be stated that a player who represents a specific sport discipline and the way in which he / she conducts his / her training session will be conditioned by specific personality traits. An analysis of personality variables was also carried out in terms of the player's sporting level and related achievements in both the national and global arena. They searched for factors that could show the probability of achieving victory and allow for improving the training cycle that would affect personality parameters (Piepiora, 2015, 2019; Piepiora, Piepiora, 2015; Piepiora, Witkowski, 2018; Piepiora, Kaśków, 2019; Piepiora, Petecka, 2020;

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Piepiora et al., 2015, 2016a, 2016b, 2017a, 2017b, 2017c, 2017d, 2017e, 2018a, 2018b, 2019a, 2019b, 2019c, 2019d).

An important factor in further research is the relationship between personality and gender as well as new sport disciplines. This article addresses this dependency in the ultimate frisbee discipline. Currently, it is one of the fastest growing sports. This sport is new both in Poland and in the world, but its phenomenon still brings together an ever wider group of people on every continent. More and more people of all ages and both sexes abandon their hobbies and fully engage in the newly learned disc game. Dynamic, attention-grabbing actions dominate football pitches around the world, which attracts more viewers and contenders for constantly emerging teams.

Ultimate frisbee is a sport that uses a flying disc. It is a team-based and contactless game, so any attempts to pull the disc, push during the run or during the fight for positions are prohibited. There are no referees in ultimate frisbee, and players judge themselves by paying attention to the offense committed during the game. Each player is obliged to comply with the "spirit of the game" code and must know the rules of the game, be fair, objective, truthful, present their opinion briefly and clearly, allow opponents to speak, resolve disputes as quickly as possible, addressing themselves respectfully, report consistently throughout the match, report violations only if it has had a significant impact on the game. Ultimate frisbee can be played on three surfaces: grass, beach and hall, and in three divisions: women, men and mixed. The match is played by seven-man (in the case of playing on the grass) or five-man (when the match takes place on the beach or hall) teams whose task is to score a point by catching the disk by one of the players in the opponent's point zone. The game takes place on a rectangular pitch, which consists of two point zones located at the ends of the pitch, and a playing field. The player who holds the disc cannot run with him, but can pass it to any player in any direction within 10 seconds, which is measured by the defender standing by the player with the disc. When the defender wants to start counting, he says "stalling". During hall or beach matches, the "stall count" is reduced to 8 seconds. The moment the disk hits the car, it is taken over by the opponent's team by air capturing or calculation, or falls to the ground, the attacking team's disk is lost, and the opposing team gets a chance to score a point. There can be only one defender next to the player who owns the disk, and the distance between his body and the opponent's body must not be less than the diameter of the disk. Other defenders who do not count the time the thrower holds the disc cannot stand closer than 3 m. Player changes are allowed at any time during the match (WFDF, 2017).

Material and method

The aim of the study was to try to determine the personality of the ultimate frisbee players. The following hypothesis was accepted for verification: the personality profile of the ultimate frisbee players is similar to the profile of players practicing the same sport. The subjects of the cognitive experiment were Ultimate Frisbee trainers (N = 60), including thirty men (n = 30) and thirty women (n = 30). All subjects were

between 20 and 29 years old: the average age of men is 24.6 years and the average age of women is 25.3 years. The criterion for selection of samples is sport experience, current competitor license, impeccable trainer feedback, documented sporting achievements.

The cognitive experiment was carried out using the NEO-FFI questionnaire to diagnose personality traits included in the popular five-factor model, known as the "Big Five" model. The items in the questionnaire are 60 self-descriptive statements, the truthfulness of which in relation to themselves was rated by the respondents on a five-point scale: 1 - "definitely not"; 2 - "rather not"; 3 - "I have no opinion"; 4 - "rather yes"; 5 - "definitely yes". These positions are created by 5 measuring scales marked with abbreviations created from the first letters of the English names of factors: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism, of which the most popular are OCEAN, CANOE or NEOAC. In the Polish adaptation of the NEO-FFI questionnaire, as well as for the needs of this study, the acronym NEOAC was adopted, i.e. the following order of scales: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness (Costa Jr., McCrae, 2007). The structure of neuroticism consists of anxiety, aggressive hostility, depression, impulsiveness, hypersensitivity, shyness and reflects emotional adjustment and the opposite emotional image, i.e. a tendency to experience negative emotions and susceptibility to psychological stress. The extroversion indicator was captured by sociability, cordiality, assertiveness, activity, sensation seeking, positive emotionality understood as the quality and quantity of social interactions, the level of activity, energy, as well as the ability to experience positive emotions. The scale of openness to experience includes imagination, aesthetics, feelings, action, ideas, and values that indicate a tendency to positively evaluate life experiences, tolerance to novelty and cognitive curiosity. A marker of agreeableness creates trust, straightforwardness, altruism, concession, modesty, and tendency to become temperate, describing the attitude towards other people, positive and negative, manifested in altruism and opposition. And the scale of conscientiousness includes competences, a tendency to order, duty, commitment to achievement, self-discipline, prudence, which reflects the degree of organization, perseverance and motivation of the individual in goal-oriented activities (Jarmuż, Lach, 2007). The NEO-FFI questionnaire is internally compliant. Accuracy was demonstrated on the basis of research on the relationship between the results of the questionnaire and the evaluations of the subjects made by observers, the heritability of the measured features and their correlation with other personality and temperament dimensions. Factor relevance was also verified. The NEO-FFI questionnaire has sten norms for 5 age groups (15-19, 20-29, 30-39, 40-49, 50-80), developed separately for men and women based on a survey of 2041 people. The results allow a full description of the personality of the respondents and forecast their adaptability to the professional environment. Sten results 1 to 3 should be considered low, 4 to 6 sten as average, and 7 to 10 sten as high (McCrae, Costa Jr., 2003).

In order to test the hypothesis, statistical analyzes were performed using Statistica version 13.1. It was used to analyze basic descriptive statistics and Student's t-tests. The level of significance was $p = 0.05$. The study was conducted in March 2019. The project received a positive opinion of the Senate Committee on Ethics of

Scientific Research at the University of Physical Education in Wrocław, issue 20/2019.

Results

Table 1 summarizes the results obtained from male and female samples. The analysis of the Student's t-test shows that only on the scale of neuroticism was a statistically significant difference between men and women training Ultimate Frisbee. This is illustrated in Figure 1. Then the results were converted into sten norms and presented in Table 2. Sten results in all scales were at an average level.

Table 1. Summary of results

	average men	average women	t	df	p	SD M	SD K	quotient F	P variances
neuroticism	21,63	23,33	-3,23	58	0,002	4,5	4,35	1,06	0,05
ekstroversion	28,83	28,83	0	58	1	3,43	4,74	1,91	0,08
openess to experience	23,5	23,06	0,41	58	0,68	4,8	3,12	2,36	0,02
agreeablness	26,86	28,06	-1,19	58	0,23	3,74	4,02	1,15	0,7
contienstiousne	28,3	27,53	0,62	58	0,53	5,97	3,7	2,59	0,01

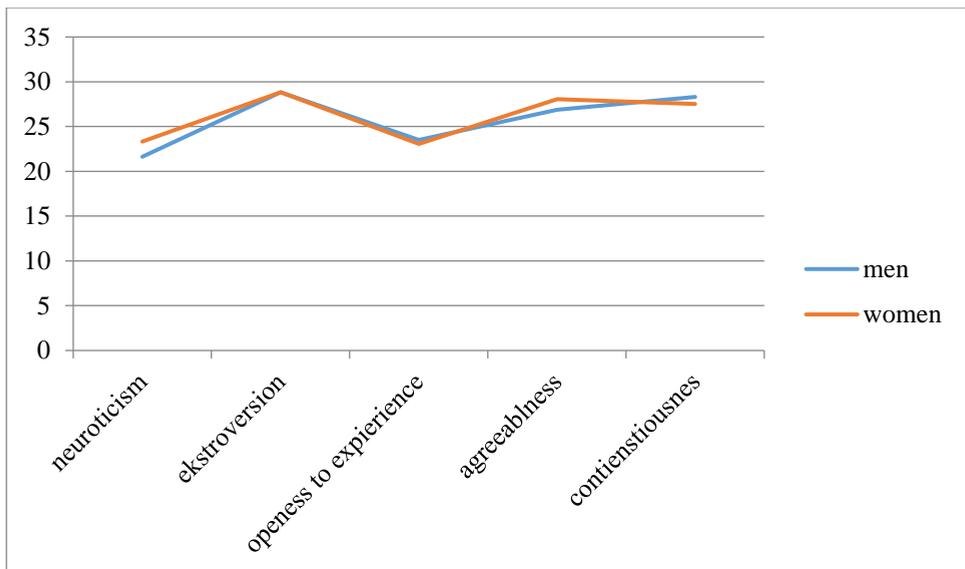


Figure 1. Results visualization

Table 2. Summary of sten results

	average men	average women
neuroticism	5,87	5,2
ekstrowersja	6	5,7
openness to experience	3,96	3,56
agreeableness	4,9	4,96
conscientiousness	5,3	4,63

Discussion

Ultimate frisbee is currently one of the fastest-growing sports. Despite the relatively short history in the sports arena, it claims to be a kind of sport phenomenon. Due to its simple form, interesting rules and the atmosphere of friendship and respect that accompanies it, this discipline attracts players of all nationalities, ages and both sexes. Our research results show that practitioners of ultimate frisbee present an average level of personality. The only difference was in the raw results on the neuroticism scale. This is justified because women have a greater tendency than men to experience negative emotions and susceptibility to psychological stress (Piepiora, Petecka, 2020). There are differences in the involvement of women in competitive sport, which are largely a consequence of the stereotyping of gender-related roles. Stereotyping affects the behavior of parents, and thus the beliefs of young athletes of both sexes. The differences between the sexes relate, among other things, to the types of sports most often played, the level of perceptive anxiety and competence, but the relationships between motivational variables and beliefs are similar for both sexes. The lack of gender differences in this respect is characteristic for athletes who play at a high level (Abrahamsen et al., 2008; LeUnes, 2008; McCarthy et al., 2008; Stockel et al., 2010; Łuszczynska, 2011).

Conclusion

The personality profile of ultimate frisbee players differs in the scale of neuroticism. Women showed a higher level of neuroticism than men. And the sten interpretation of the results showed that people training ultimate frisbee regardless of gender are characterized by average personality indicators.

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