

## Personality and subjective assessment of body weight of tennis players

Paweł Piepiora\*, Magdalena Superson, Juliusz Migasiewicz

University School of Physical Education in Wrocław

**\*Corresponding autor:** Paweł Piepiora, University School of Physical Education in Wrocław, Faculty of Sport Sciences, Chair of Sport Didactics, I. J. Paderewskiego 35 street, Multifunctional Sports Hall room 73, 51-612 Wrocław, Poland, phone: +48 605 39 54 32, e-mail: [pawel.piepiora@awf.wroc.pl](mailto:pawel.piepiora@awf.wroc.pl)

### Summary

**Aim.** The aim of the study was to check the relationship between individual personality traits and the subjective assessment of the weight of tennis players. **Material and methods.** Personality assessment was performed using the NEO-FFI questionnaire, subjective assessment of body weight was made using a questionnaire. 15 tennis players aged 19.13 years  $\pm$  2.97 participated in the tests. **Results.** The research showed that all tennis players are characterized by low levels of neuroticism, average level of extraversion, average level of openness to experience, low level of agreeableness and high level of conscientiousness. The study showed the lack of connection between the level of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness and the subjective assessment of the weight of tennis players. **Conclusions.** Tennis players are a very uniform group in terms of personality, which may indicate the specificity of the discipline, which in a specific way affects the formation of personality. The lack of connection between personality and body weight may result from a small sample of the tested female players.

**Key words:** sport psychology, psychodietetics, dietetics, body mass, tennis

The authors declare that the test procedures comply with ethical standards. There are no conflicts of interest between the authors.

## **Introduction**

Personality is defined as a coherent pattern of behaviors characteristic of an individual. The most common and formalized concept that captures personality in the category of features is currently the five-factor personality model (NEO-FFI) presented by Costa and McCrae [1]. It includes five factors: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. Each scale had 10 items [2, 3]. The results located within 1-3 items are treated as low, 4-6 medium, 7-10 items as high. Currently, the "Big Five" model is considered the most precise in the assessment of personality [4-13].

## **Aim**

The aim of the work was to perform personality assessment in five scales (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness) and subjective body weight assessment of tennis players.

## **Research questions**

1. What is the level of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness of tennis players tested?
2. Is there a relationship between the level of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness, and the subjective assessment of body weight in the tennis players under investigation?

## **Material and methods**

The personality assessment was made on five scales (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness) using the NEO-FFI questionnaire. The assessment of subjective body mass was made using a questionnaire. Each of the respondents also completed the Social Approval Questionnaire (KAS) in order to verify the sincerity of the answers provided.

15 tennis players participated in the research, aged 19,13 years  $\pm$  2.97. The research was carried out in Poland, in June 2016 in Gliwice during the Polish Tennis Championships. Statistical analysis was performed using the Statistica 13.1 program. Using it, a chi-square conformity test was performed. The significance level of 0.05 was assumed.

## **Results**

Correlations of the results obtained in the NEO-FFI tests against KAS are not significant. Data are not dependent on KAS, they are not exposed to social approval. The research showed that all tested female players are characterized by low level of neuroticism, average level of extraversion, average level of openness to experience, low level of agreeableness and high level of conscientiousness.

In the questionnaire of the questionnaire, 11 contestants rated their body weight as an appropriate one, the athlete assessed her body weight as too high, but without affecting the sports form, 2 female athletes assessed their body weight too high, at the same time recognizing that they have a problem maintaining optimal in their assessment body weight, 1 athlete assessed her body weight too low at the same time recognizing that she has a problem with maintaining optimal weight in her assessment.

<b>Sten / Body mass assessment</b>	<b>Appropriate body weight (n)</b>	<b>Too high, but without affecting the sport form (n)</b>	<b>Too high, but a problem with optimal maintenance (n)</b>	<b>Too low, but a problem with optimal maintenance (n)</b>
<b>Neuroticism 1-3</b>	11	1	2	1
<b>Neuroticism 4-6</b>	0	0	0	0
<b>Neuroticism 7-10</b>	0	0	0	0
<b>Extroversion 1-3</b>	11	1	2	1
<b>Extroversion 4-6</b>	0	0	0	0
<b>Extroversion 7-10</b>	0	0	0	0
<b>Openness to experience 1-3</b>	11	1	2	1
<b>Openness to experience 4-6</b>	0	0	0	0
<b>Openness to experience 7-10</b>	0	0	0	0
<b>Agreeableness 1-3</b>	11	1	2	1
<b>Agreeableness 4-6</b>	0	0	0	0
<b>Agreeableness 7-10</b>	0	0	0	0
<b>Conscientiousness 1-3</b>	11	1	2	1
<b>Conscientiousness 4-6</b>	0	0	0	0
<b>Conscientiousness 7-10</b>	0	0	0	0

Table 1. Summary of individual personality traits with subjective body weight assessment.

The theoretical value has been checked in the chi square distribution tables. At the intersection of degrees of freedom and level of significance. Theoretical value is 0.00.

$$df = (3-1) * (4-1) = 6$$

Theoretical value 12.59 is greater than the calculated one. Hence, there is no statistically significant relationship between variables.

## Conclusions

1. Tennis players constitute a very homogeneous group in terms of personality, which may indicate the specificity of the discipline, which in a specific way affects the formation of personality.
2. The conducted study showed the lack of connection between the level of neuroticism, extraversion, openness to experience, agreeableness and conscientiousness, and subjective assessment of body weight, which may result from a small sample of the tested female players.

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