TEENAGERS’ PERSONALITY FEATURES IN RELATION WITH AGE, GENDER AND BODY MASS INDEX

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Abstract
The aim of our performed study was to identify if the age, gender and Body Mass Index (BMI) can modify the personality profiles established by applying Freiburg Personality Inventory in a teenager’s population to a specific age group (15-18 years). As material we used a sample of 2908 teenagers, homogenous and statistical representative. The Freiburg questionnaire was administered individually and anonymously, during 30 minutes. We identified no differences in personality profiles depending on age, and depending on low and high levels of BMI. An easier increased nervousness was identified for girls, not significant statistically different in comparison with the boys. The criticism was also a little increased in girls, still included in the interval for standardized population (4 - 6). The teenagers with BMI between 17 and 25 presented an easier increased nervousness. In conclusion, we did not identified a significant statistically influence of the age, gender and BMI on the personality profiles. These results do not sustain the action of these variables as confounding factors on established profiles to a specific age group (teenage group), despite of the demonstrated action of the age and gender on certain FPI personality features separately.

Keywords: personality profiles, age, gender, body mass index

Introduction
Teenagers’ personality features presents variability and specificity to the gender and age, when we consider them separately. Genetic and environmental factors act together in the personality forming and its developing process (Spain, and Harms, 2014). Body Mass Index (BMI) is a valuable indicator of the teenagers’ physical development. Physical and psychical development processes are parallel and interdependent (Lazarevich, Irigoien-Camachó, and Velázquez-Alva, 2013). The aim of our study was to identify if the age, gender and BMI can modify the personality profiles in a teenager’s population to a specific age group.

Material and Method
The material of our study was statistical representative and homogenous (2908 teenagers, 51.5% girls and 48.5% boys, with age between 15 and 18 years, all from urban areas and included in educational process).

This study was performed in a county from south-west Romania, and it was an observational one. We applied a Freiburg Personality Inventory (FPI) (Fahrenberg, Selg, and Hampel, 1970), standardized for Romanian population to exclude cultural differences (Matesanz and Hampel, 1978), and we informed us about the weight and height of the investigated students. FPI investigates bipolar personality features and consists in 212 items, distributed as follows: nervousness (Nrv) - 34, aggressiveness (Agr) - 26, depression (D) - 8, excitability (Exc) - 20, sociability (Soc) - 28, calm (Clm) - 20, domination (Do) - 20, inhibition (Inh) - 20, sincerity (Suc) - 14, extraversion (Exv) - 24, emotional lability (Lbl) – 24 items. In this study we did not consider masculinity (M). The questionnaire was administered individually and anonymously. Work time was of 30 minutes. The answering proportion was
74.6%. Statistical work was performed with SPSS 16 Program. Body mass index was counted for each student using BMI formula (Keys et colab., 1972). We built personality profiles for each gender, each year of age 15-19 and for students with BMI under 17, BMI 17-25, and BMI over 25. We considered the median value for each group of students when we built personality profiles. Personality features between 4 and 6 are specific for standardised population, between 1 and 3 are decreased, between 7 and 9 are increased as intensity of manifestation.

**Obtained results**

We identified different personality profiles depending on genders (masculine and feminin): the girls were more nervousness (presented somatic symptoms) and had the level of sincerity of the superior size of the interval for standardised population (they were more critical with themselves than boys) (Figure 1). The applied Chi square and Fisher tests did not confirmed these difference is statistically significant.

The personality profiles were the same for different ages of this investigated age group (15-18 years) (Figure 2).

When we considered BMI lower than 17 and BMI greater than 25 we found the same personality profile (Figure 3). For teenagers with BMI between 17 and 25 the personality profile was similar with the entire sample (Figure 4).

Figure 1. Teenagers’ personality profiles depending on gender (feminine and masculine)
Figure 2. Teenagers’ personality profiles depending on age (15, 16, 17, 18 years)

BMI < 17
Figure 3. Teenagers’ personality profiles depending on BMI (BMI < 17, BMI > 25)

BMI > 25

Figure 4. Teenagers’ personality profiles depending on BMI (BMI = 17 - 25)

Discussions
Freiburg Personality Inventory is a questionnaire used in evaluation of bipolar personality features in healthy population and in clinic for diagnosis (Bergemann & Johann, 1987). The shorter forms are preferred in psychiatric hospitals (Fahrenberg, 2004). Nervousness resulted as being the feature that varies in our study and it was increased for entire investigated sample, for BMI between 17 and 25, and it was not changed with the advancing in age. Nervousness was modified by gender, the girls being more nervous (Jeffery et colab., 2014). This difference was not statistically significant (Chi square and Fisher tests). Despite the affirmed influence of age and gender on certain personality features measured
separately by FPI (Fahrenberg, Selg, and Hampel, 1970), for the personality profiles established at a specific age group (15-18 years) we found the same profiles for different ages and we did not find a statistically significant difference between genders. Personality profiles of the students with BMI values situated outside de interval 17-25 presented no statistical significant difference by the profiles of students with BMI situated inside the interval.

Conclusion

We did not identify a significant statistically influence of the age, gender and BMI on the personality profiles investigated by Freiburg Personality Inventory in teenagers’ population aged between 15 and 18 years.

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