Summary

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PhD dissertation topic: "Gender differences in the broad autism phenotype. The construction of the female phenotype".

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Summary:

Introduction: The aim of the study is to precisely identify gender differences and to create a description of the phenotype of autism in women, both in the cognitive, emotional, and social context. Autism spectrum disorders are manifested primarily by deficits in social communication and the presence of rigid patterns of behavior. Recently, the issue of the predominance of male over female population in the diagnosed population has been raised. Over the years, the gender ratio has started to decline, which is the subject of more and more research that is focusing more on girls and women with ASD. Many of the available diagnostic tools have been constructed with the participation of boys' overrepresentation, often with a diagnosis of ASD, which may make them insensitive to symptoms representative of girls. Looking at the way boys and girls with ASD differ in terms of cognitive function levels, psychopathological symptoms, emotional skills, social skills, and a sensory profile will result in a unique phenotype being identified.

<u>Method:</u> The study involved 198 teenagers who, together with their parents, were subjected to the questionnaire and task procedures. Each of the children completed a set of three questionnaires measuring their features of autism spectrum disorders, the level of response to sensory stimuli, social and emotional competences, and general mental functioning. Parents, on

the other hand, were asked to complete questionnaires assessing their children's social skills and their level of emotional functioning. The analyzes were carried out taking into account the possible influence of the studied group and gender.

Results: The aim of this study was to examine the intensity of autism spectrum disorder (ASD) related traits, the occurrence of psychopathological symptoms, and difficulties in cognitive, emotional, and social functioning among adolescents. Special attention was paid to gender differences and the presence of autistic traits, with the goal of creating a construct that describes the female autism phenotype. The results confirm significant differences in ASD trait manifestation, overall functioning, and socio-emotional difficulties between girls and boys with Broad Autism Phenotype (BAP), as well as compared to adolescents without BAP. However, these differences were less pronounced between gender groups within BAP, though they generally correlated with variations in the intensity of ASD traits. Analyses based on the ASRS and AQ scales showed that adolescents with BAP exhibit a higher intensity of ASD traits compared to the non-BAP group, with imagination being the most distinguishing trait between genders. The analysis of psychopathological problems revealed significant differences between BAP and non-BAP groups, with girls with BAP showing a lower level of externalizing problems. Findings related to cognitive functioning showed no significant differences in the overall level of intelligence between genders in the BAP group, but differences were identified in the area of long-term memory, where girls with BAP achieved higher scores. Adolescents with BAP were characterized by a lower intelligence quotient and a lower level of social competencies compared to the non-BAP group. Both girls and boys with BAP experienced greater sensory difficulties, with boys showing significantly higher sensory hypersensitivity, and girls having more problems with sensory under-responsiveness. Moreover, the study indicates the need for further development of diagnostic tools that are better adapted to identifying ASD traits in women, as well as limitations related to the methods used, such as potential distortions in results caused by the lengthy research process or lack of control over the phenomenon of masking ASD traits. As a result, this study makes a significant contribution to understanding the psychopathological profile characteristic of women with ASD traits and underscores the importance of considering gender in ASD diagnosis and therapy. The findings are crucial for the development of effective therapeutic interventions and support for individuals with ASD, taking into account the diversity and complexity of trait presentation depending on gender.