

DOI: <https://doi.org/10.56663/rop.v14i1.86>

## Gender differences in the personality traits of children with mild intellectual disability- educational and psychological implications

Sabina Stan<sup>1</sup>  
Florin Emil Verza<sup>2</sup>  
Marilena Bratu<sup>3</sup>

### Abstract

The organization of the personality of children with intellectual disabilities and the identification of the ways in which this determines gender differences in behavior, in general, and in educational behavior, led the research approach. 66 children at puberty aged between 11-14 years old and diagnosed with mild intellectual disability participated in the study, being gender differentiated in two equal research groups. The results indicated significant differences according to gender regarding the traits - Succorance (need for help), Deviation (deviant behavior, behavior problems) and Neuroticism. The results of the research guide the educational interventions at the family and school level, but also the psychotherapeutic interventions regarding the decrease of the personality decompensation risk in the case of the child with mild intellectual disability.

**Keywords:** personality traits, personality disorders, intellectual disability, gender differences in education, special education

### Introduction

The need for more in-depth knowledge of mental functionality in its relationship with childhood personality traits in the perspective of creating a complex conceptual model for understanding disorders, as well as appropriate intervention measures, with early applicability it is emphasized in the specialized literature and represents a concern for researchers (Fortunato & Speranza, 2018). Also, the individualization of the educational process concerns specific educational needs and a good knowledge of them, personal cognitive abilities, the characteristics of attention and motivation in learning. All this can be found in accurate psychological evaluations and in supporting educators in understanding the results and, subsequently, using them, maximally, in the concrete educational process. At the same time, educational individualization does not exclude gender differences or differences related to the characteristics of the social and cultural environment to which these children belong. Thus, the role of study results on these criteria increases. The school environment becomes the scene that allows the manifestation of psychological and personality characteristics, with their effects, more or less positive for educational results, autonomy and general development of people with intellectual disabilities. In intellectual disability, exclusion, difficult social participation, failure and social rejection are more frequently experienced compared to other disabilities and to people without disabilities. The lack

---

<sup>1</sup> Lecturer PhD, University of Bucharest, Faculty of Psychology and Educational Science, Romania

<sup>2</sup> Professor PhD, University of Bucharest, Faculty of Psychology and Educational Science, Romania

<sup>3</sup> Associate Professor PhD, University of Bucharest, Faculty of Psychology and Educational Science, Romania

Corresponding Author: Marilena Bratu

Email: marilena.bratu@unibuc.ro

of support in overcoming these impediments can lead to depressive disorders (Roy et al., 2015). The same authors emphasize the role of early life experiences and the quality of stimulation from early childhood in the evolution of adult life.

The incidence of personality disorders in intellectual disability and the interest in this subject from researchers has increased recently, in the sense of the necessary measures to be implemented and supporting the increase in the quality of life of people with intellectual disability and their families. From a social point of view, communities, schools, society as a whole, demand appropriate behavior and valid social participation, under the conditions of respect for the rights of all people, without exception.

Studies have shown that a series of personality traits have a stronger genetic, hereditary or neurobiological root, which leads to their stability. Gardini and the collaborators (2009) talk about Novelty Seeking, Harm Avoidance, Reward Dependence and Persistence as being part of this category.

In a study on personality traits development in children with mild intellectual disability at puberty, Verza (1988) emphasizes the central place occupied by suggestibility and anxiety, as well as their role as mediators of the effects of educational- remedial interventions. Thus, the following personality traits are emphasized by reporting on the level of the two mentioned central traits.

Highly suggestible children show high levels of anxiety, frequently feel frustration, restlessness, hyperactivity, have feelings of inferiority, are easily irritable, troublesome, with negative attitudes towards the activity in the sense of unjustified expectation of support, easily influenced and easily placing themselves in risk situations under negative pressures and influences. Non-suggestible children are characterized by apathy, passivity, inertia, poor involvement in tasks and disinterest in their completion and results, very low academic motivation, poor awareness of their own possibilities, they are disorganized, rigid in thinking and unstable, with reduced verbal skills. Suggestible children show high academic motivation, good internalization of tasks and interest in performance, are sociable, seek contact with the group, are affectionate and oriented towards collaboration, have good verbal skills and school results, at least, at the level of the minimum accepted criteria, being able to exceed anxious and frustrated states relatively easily. The anxiety felt by these children must be related to specific internal conditions, as well as external ones - the family and school environment, and the perception of situations and anxiogenic factors must be related to the maturation of the personality as a whole (Verza, 1988).

Examining the evolution of the personality of children with intellectual disabilities, the effect of the educational climate is analyzed from the perspective of valuing social and behavioral autonomy, being shown as personality traits: apathy, indifference, social withdrawal, poor participation, low responsibility, accentuation of rigidity and stereotype, acting according to a model that brings with it behavioral predictability, imitation, obedience, weak initiative, reduced behavioral flexibility (Popovici, 1999).

The main personality developments in the puberty stage relate to progress and behavioral expressions of the following elements: self-awareness, cognition and complex intellectual activity, morality, social rules, interrelationships, behavior adjustment, personal autonomy, reduction of family protection, perseverance, decision-making, the emergence of the bases of the skills required for the efficient management of one's own life (Verza & Verza, 2017). Thus, the postpubertal stage is characterized by a good development and stabilization of personality traits that give the child uniqueness. Behavioral manifestations are related to the concrete situation and the rigidity of reactions and the interrelation is weak, consistent with poverty of character (Bratu, 2014). The

plasticity of character and its strength are affected by intellectual disability, imposing educational needs that will aim to develop positive character traits such as consistency, tenacity, diligence, simplicity, modesty, resistance to negative pressures.

## Method

The study aims to highlight the gender differences, evident at the level of personality traits, in the case of children at puberty (11-14 years old) with mild intellectual disability in the inclusive school.

The questions that guided the course of the study were:

- I. Do gender differences in mild intellectual disability regarding personality traits manifest themselves from puberty?
  
- II. What are the personality traits that are not marked by gender differences in the case of children at puberty with mild intellectual disability?
  
- III. What are the educational implications of gender differences? How can they be objectified in the individualization of the educational process for the children in the research group?
  
- IV. How can the results of the study be put in relation to the current concerns regarding personality disorders on the background of intellectual disability?

The elements related to research ethics were carefully supported by providing comprehensive information to both children and parents regarding how the data they will provide to the researchers will be used, as well as the significance of the entire process in which they agreed to participate, voluntarily. Both the testing with the chosen psychological instrument, as well as the collection of the other important data in the interpretation and reporting of the research results, such as the degree of disability, the age at which the diagnosis was established, the age and gender of the participants, the type of schooling were carried out with the fulfillment of the conditions required by the psychology assessment and conducting research in psychology. Personality testing was done individually.

The non-verbal quality of the items included in the test had both a role in increasing the level of understanding of the items, as well as in stimulating participation through attractiveness. The children showed interest in the items, but also in their interpretation and the test results. The challenges in completing the items concerned the large number of items and the difficulty of maintaining attention throughout the testing, but, above all, the manner of providing the answer. The tool involves the use of a 7-step Likert scale in recording the answers, so 7 possible answer options, indicating a crescendo or a nuance in the intensity of the reaction. The answers were recorded by the evaluator on the specific answer sheet to avoid possible recording errors. To ensure the veracity of the answers, additional examples and exercises were used to those contained in the instrument. The psychological assessment of personality in the case of intellectual disability involves a series of challenges due to the complexity of personality as a construct and the type of instrument that allows a valid assessment, assuming verbal items, with complex language, difficult to conceptualize, aspects also identified by other researchers in studies that followed the adaptation

of some personality assessment tools in order to use them for people with intellectual disabilities (Lindsay et al., 2007).

The variables measured and analyzed comparatively on the gender criterion are constituted by the specific personality traits in the assessment of which the Nonverbal Personality Questionnaire (Paunonen et al., 2004) tool was used. Later, since this possibility exists, a process of alternative scoring of the research data was carried out in the five personality factors corresponding to the Big Five Theory. All the variables resulting from the two measurements and scoring processes are presented in Table 1.

**Table 1. Personality traits assessed by use of the Nonverbal Personality Questionnaire**

Personality traits	Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientiousness
	Social recognition	Affiliation	Autonomy	Nurturance	Impulsivity
	Succorance	Exhibition	Thrill-Seeking	Aggression	Achievement
		Play	Sentience	Dominance	Endurance
			Understanding		Order
					Impulsivity

From the previously mentioned considerations regarding the participants' cognitive abilities, the Nonverbal Personality Questionnaire (Paunonen et al., 2004) was used to measure personality, more specifically personality traits. The instrument is composed of 136 non-verbal tasks that ensure the measurement of 16 personality traits, also containing, according to the rigors of research in psychology, a validity scale (Paunonen et al., 2005).

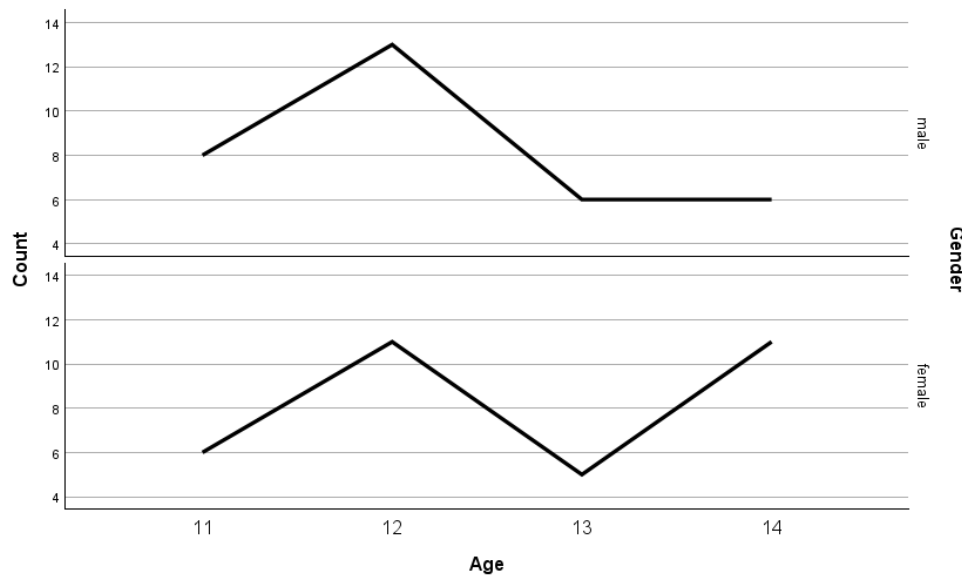
The items are represented by comics, black and white, containing several characters, including a character with whom the respondent identifies. It is necessary for him/ her to analyze the situation and offer as an answer, on a 7-step scale, how likely he would behave similarly to this character. The tool is based on the theory of needs formulated by Henry Murray (Murray, 1938 apud Paunonen et al., 2005) which stipulates that "human motivation for certain behaviors, as well as human personality, as a general and coherent expression for the respective behaviors are expressions and direct manifestations of human needs" (p. 14).

According to this theory, human behavior is motivated by an internal imbalance (Murray, 1938 apud Paunonen et al., 2005). Consequently, Murray indicated a number of 27 needs. The Romanian adaptation of the instrument was carried out by Dragoș Iliescu, Mihaela Minulescu, Cătălin Nedelcea (2004), proving its psychometric qualities.

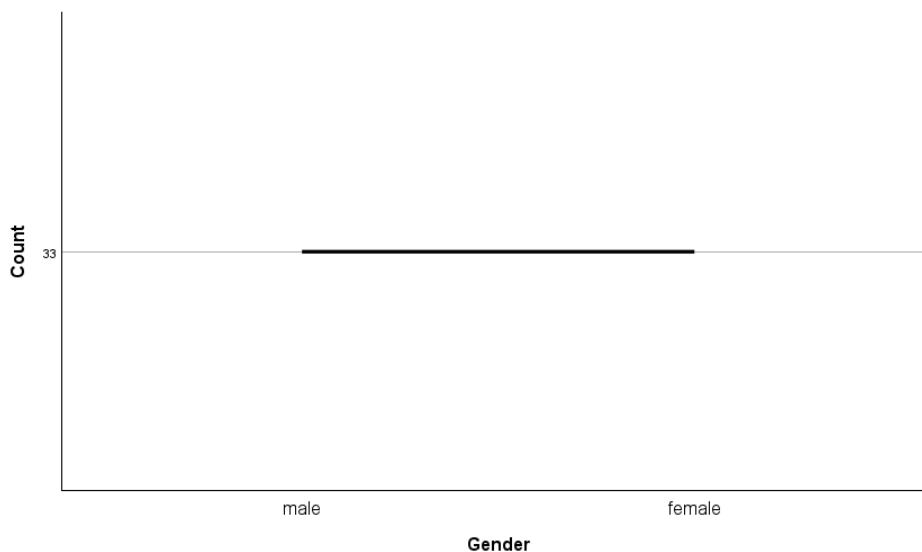
The research group consisted of a number of 66 children aged between 11-14 years old (Figure 1. and Table 2). All participating children have mild intellectual disabilities and benefit from adapted educational activities within the inclusive school, based on the school and professional orientation certificate issued by qualified institutions. They were all diagnosed with

mild intellectual disability during their preschool years or at the beginning of primary school. Half of the participants are female and half are male.

**Figure 1. Distribution of participants by gender and age**



**Figure 2. Distribution of participants by gender**



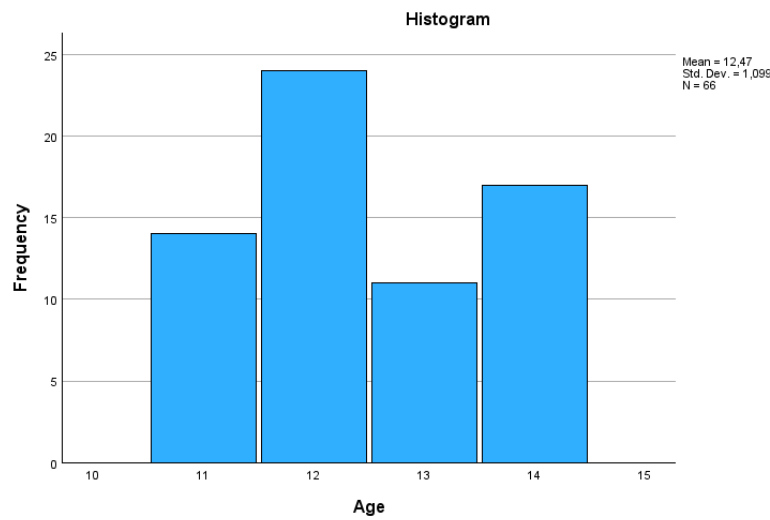
14 of the participants are 11 years old, 24 are 12 years old, 11 are 13 years old, respectively 17 are 14 years old (Table 3.)

**Table 3. Distribution of participants by age and gender**

Age	Gender		Total number of participants	
	Male	Female		
11	8	6	14	21,2
12	13	11	24	36,4
13	6	5	11	16,7

Age	Gender		Total number of participants	
	Male	Female		
14	6	11	17	25,8

**Figure 3. Distribution of participants by age**



Considering the data presented in Table 3. and Figure 3., the participants' average age is 12.47 (SD=1.09). In the two research groups differentiated by gender, the average ages of the participants are 12.6 (SD=1.14) in the girls' group, respectively 12.3 (SD=1.04) in the boys' group.

### Findings and discussion

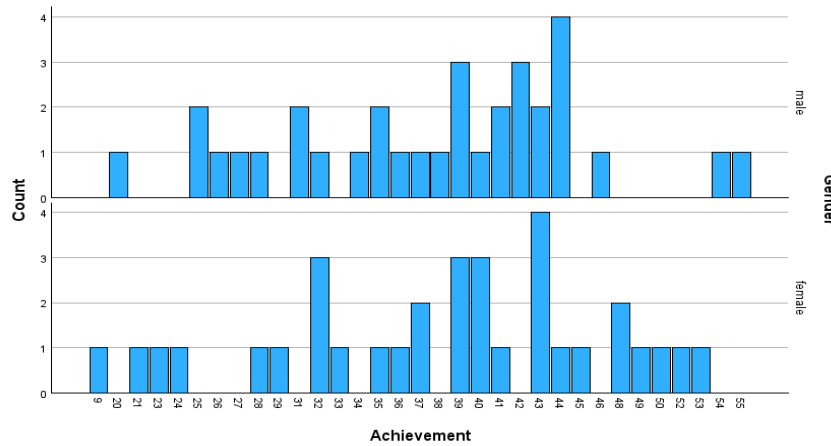
Specific statistical procedures were chosen for the analysis of the collected data. Thus, averages and standard deviations were calculated for each individual variable. The shape of the data distribution was analyzed. The results of these statistical analyzes are, further, distinctive presented, for each measured variable (personality trait), separately for the research group composed of girls, respectively the research group composed of boys.

The first personality trait measured is Achievement. According to the test manual (Paunonen et al., 2004), this trait involves the human need for success, achievements, victories, to get what you propose and is closely related to the motivation to achieve, so to overcome obstacles and reach the desired results. Therefore, there are people with high motivation for achievement, respectively people with low motivation for achievement, the difference between them consists in the level of competitiveness, the difficulty of the tasks involved, persistence and perseverance in accomplishing the task, even if unexpected obstacles appear. The motivation is predominantly intrinsic and aspirations regarding school results and career orientation are also high. The authors also emphasize the link between high achievement motivation and the motivation to avoid failure and anxiety, fear of failure, the desire to surpass oneself and the allocation of time and energy to school/ professional tasks or activities that ensure school/ professional success.

Figure 4. illustrates the distribution of scores on this scale at the level of the two groups. At the level of the two groups, the averages were close. Girls had a total mean score of 37.79,

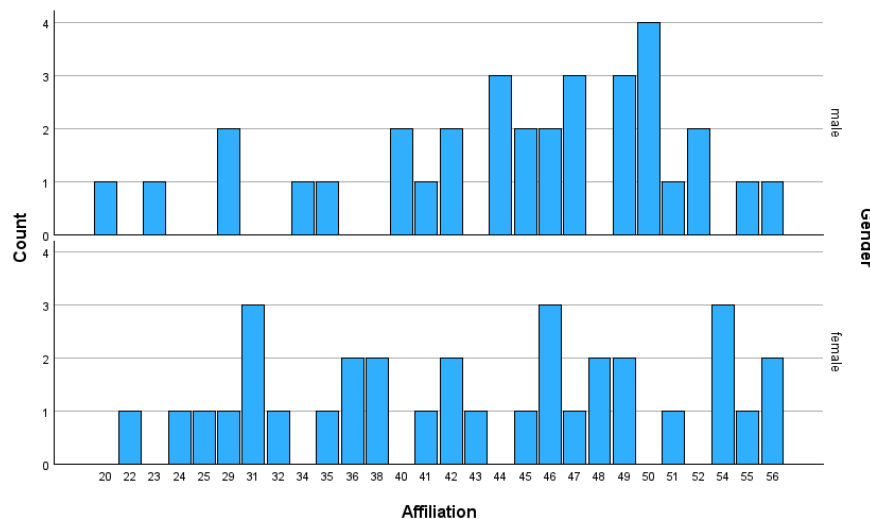
SD=9.64 compared to 37.64, SD=8.04 in the case of boys. However, the minimum values obtained are 9 in the case of girls, respectively 20 in the case of boys. The low scores obtained for this variable indicate difficulties in following the goal and in persevering in complex tasks or in the achievement of which barriers appear, orientation towards easy tasks.

**Figure 4. Distribution of scores for the variable Achievement**



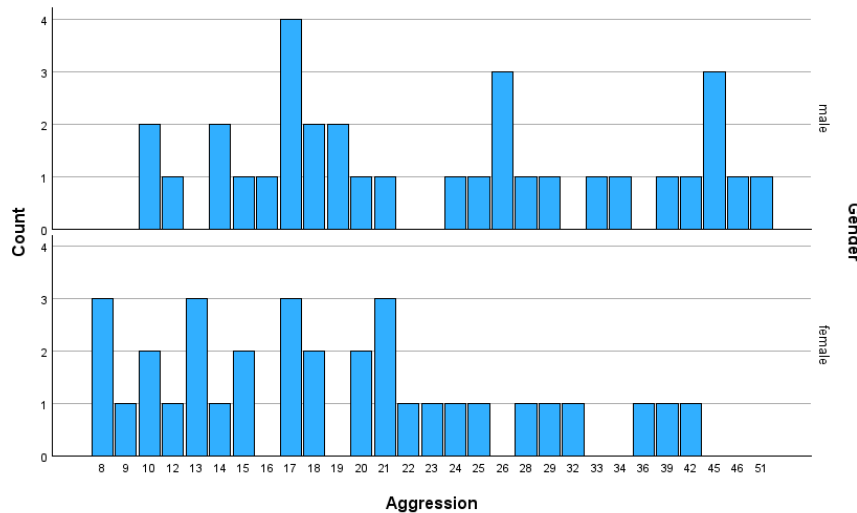
**Figure 5. Distribution of scores for the variable Affiliation**

The distribution of scores for the personality trait Affiliation is presented in Figure 5., separately for the female group, respectively for the male group. For the first mentioned group M=41.82, SD=9.88, respectively M=43.73, SD=8.64, the minimum value is 20, and the maximum value is 56.



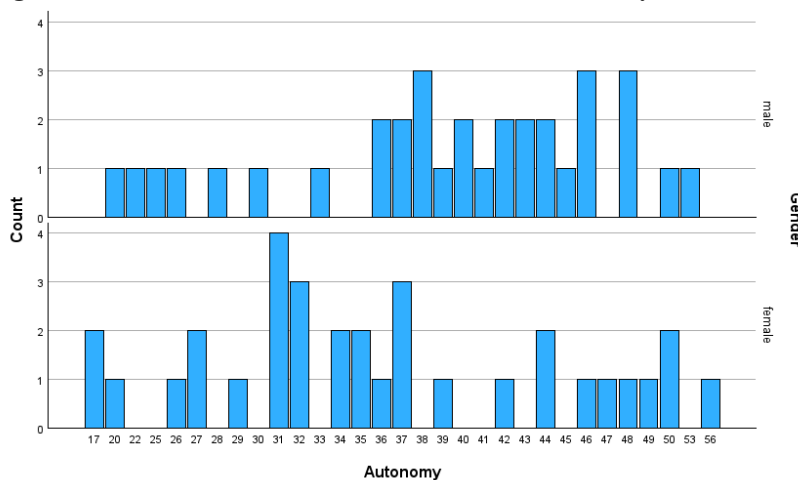
High scores of the variable indicate the desire for belonging and interrelationship, participation and appreciation of the company of others, and, on the contrary, low scores solitary attitude and the lack of desire to belong to a group, the preference for spending time alone.

**Figure 6. Distribution of scores for the variable Aggression**



Aggressiveness as a personality trait indicates the presence and involvement in aggressive behaviors, from the category of verbal and physical aggression as a reaction to stress, anger or negative emotional states and low behavioral self-regulation capabilities. Boys obtained higher scores, compared to girls,  $M=25.39$ ,  $SD=11.83$ ,  $M=19.33$ ,  $SD=8.86$ , as shown in Figure 6.

**Figure 7. Distribution of scores for the variable Autonomy**



In the case of Autonomy personality trait, the scores obtained are-  $M=39.15$ ,  $SD=8.15$ , for boys, respectively  $M=35.85$ ,  $SD=9.59$  for girls. Autonomy, in case of high scores, is associated with lack of conformity and ignorance of social norms.

Graphs of the distribution of scores obtained by the participants from the two compared groups can be analyzed in Appendix 1. Also, the descriptive statistics for the measured variables can be analyzed comparatively in Table 4.

**Table 4. Descriptive statistics - measured personality traits**

	Girls		Boys	
	M (1)	SD	M (2)	SD
Dominance	35.12	9.72	34.09	9.5
Endurance	35.12	9.37	34.45	10.02
Exhibition	32,97	9.88	33.85	9.88
Thrill-Seeking	28.03	10.4	33.67	11.66

Impulsivity	27.45	8.26	30.39	7.96
Nurturance	44.27	8.99	41.82	7.99
Order	38.82	7.77	39.61	7.8
Play	31.64	10.34	36.33	9.94
Sentience	43.18	9.49	42.76	7.43
Social Recognition	37.79	10.25	42.48	8.6
Succorance	34.36	11.09	34.03	7.39
Understanding	40	9.84	40.42	8.53
Deviation	17.61	8.45	22.36	11.71
Neuroticism	72.15	18.68	76.52	12.2
Extraversion	106.42	24.73	113.91	22.21
Openness to experience	147.06	31.58	156	26.18
Aggreableness	101.82	13.82	94.33	16.91
Conscientiousness	140.27	22.05	137.3	18.63

Dominance, as a personality trait, implies, for low scores, following the directives of others and avoiding leadership roles, lack of desire to be a leader, and difficulties in expressing opinions (M1=35.12, SD= 9.72; M2=34.09, SD=9.5) (Appendix 1). For Endurance low scores, we note the tendency to give up easily when faced with obstacles or difficult, unforeseen problems and avoiding tasks that require sustained or difficult work (M1=35.12, SD=9.37; M2=34.45, SD=10.02). Regarding Exhibition, people with low scores prefer to get lost in the crowd, avoid being the center of attention, avoid situations and behaviors that might attract the attention of others (M1=32.97; SD=9.88; M2=33.85, SD=9.88). Thrill-Seeking refers for low scores, avoiding activities and behaviors that could be risky or dangerous (M1=8.03, SD=10.4, M2=33.67, SD=11.66). For high scores, Impulsivity trait refers to reacting quickly to any situation, without much thought or prior planning (M1=27.45, SD=8.26; M2=30.39, SD=7.96). Nurturance high scores highlight enjoyment in helping children, animals, or those around them (M1=44.27, SD=8.99; M2=41.82, SD=7.99). For low scores, Order conveys a lack of concern for cleanliness and organization, the person works and lives in disorganized environments (M1=38.82, SD=7.77; M2=39.61, SD=7.8). Play, for high scores is about seeking pleasure and light activities, such as games and sports, and enjoys jokes and pranks (M1=31.64, SD=10.34; M2=36.33, SD=9.94). Engagement in activities that excite the senses, such as the taste of food, the smell of flowers, the sound of music, etc. define high scores for Sentience (M1=43.18, SD=9.49; M2=42.76, SD=7.43). Social Recognition low scores demonstrate that the person is not concerned with gaining social recognition, is not motivated to impress others or demonstrate high social status (M1=37.79, SD=10.25; M2=42.48, SD=8.6). Low scores of Succorance indicate that the person does not rely on other people for help, advice, or sympathy, prefers to solve his own problems (M1=34.36, SD=11.09; M2=34.03, SD=7.39). The person is not inclined to engage in academic activities or reading in case of low scores of Understanding (M1= 40, SD=9.84; M2=40.42, SD=8.53). Also, low scores for Deviation, indicates no socially deviant behaviors, he/ she is conventional, common, integrated into the norm (M1=17.61, SD=8.45; M2=22.36, SD=11.71).

The independent samples t-test was used to compare the personality traits of children at puberty with mild intellectual disability by gender. Although the descriptive statistics used showed differences between the averages obtained by boys and girls respectively, the use of the t test indicated statistically significant differences only regarding three of the personality traits- Succorance, Deviation, Neuroticism (as Social recognition and Succorance). Statistical indicators can be seen in Table 5.

**Table 5. Testing the differences regarding personality traits according to gender**

	t	df	p	Mean difference	Cohen's d
Succorance	-0.144	64	0.013	-0.333	-0.035
Deviation	1.892	64	0.037	4.758	0.466
Neuroticism	1.123	64	0.017	4.364	0.277

Although with a very small effect size, the t-test showed differences between girls and boys regarding Succorance in the sense that girls show higher levels of this personality trait, compared to boys.

For the Deviation variable, boys show higher levels compared to girls, with a medium effect size. For the Neuroticism variable, boys show higher levels compared to girls, the effect size being small.

The specialized literature highlights the lack of need for feedback, the avoidance of asking for help and the weak involvement of those with intellectual disabilities in solving learning/ life situations and in solving problems, in general, along with the weakness of the will and the fragile nature of motivation. The research data, for all the measured variables, were of a high degree of heterogeneity, as an imprint of the uniqueness of personality and interindividual differences, thus, for the Succorance variable, the scores ranged between 8 and 54, in the case of girls, respectively with scores between 20 and 51 in the group of boys (Figure 8). Behavioral deviations and behaviors with a low degree of social acceptance were found to be more frequent in the case of boys. Individual scores obtained were high in both comparison groups as an indicator of developmental characteristics in puberty, with marked desires to express uniqueness and attraction to breaking rules and norms. Regarding the Deviation variable, scores in the boys' group ranged between 8 and 47, with values between 6 and 38 in the female group (Figure 9). Regarding Neuroticism, scores in the girls' group ranged between 28 and 110, and 41 and 106, respectively, in the boys' group (Figure 10).

**Figure 8. Distribution of Succorance personality trait scores according to gender**

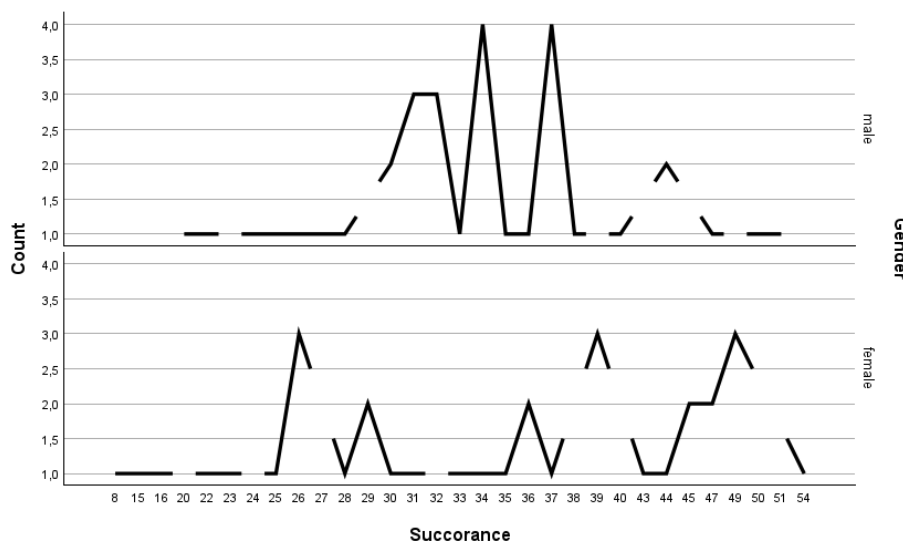


Figure 9. Distribution of Deviation personality trait scores according to gender

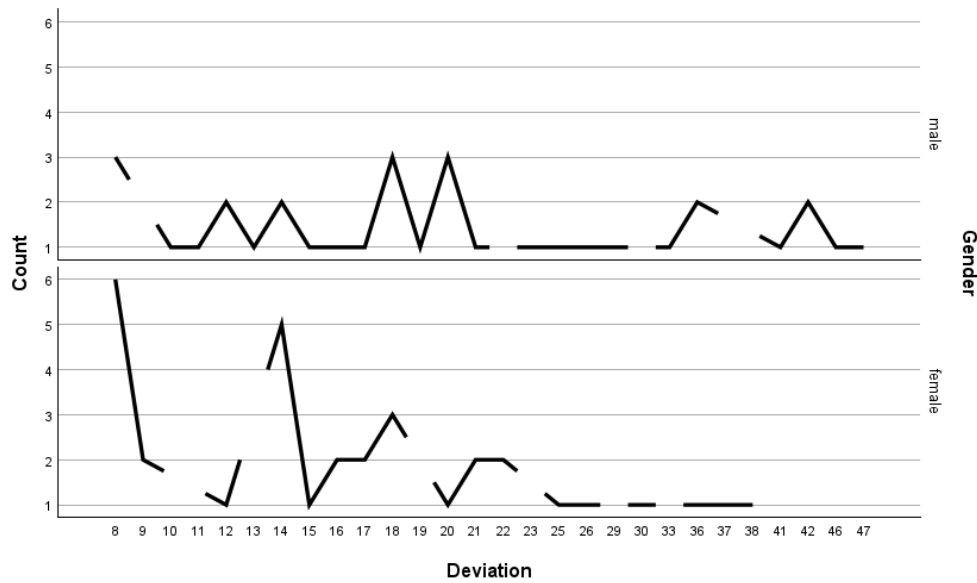
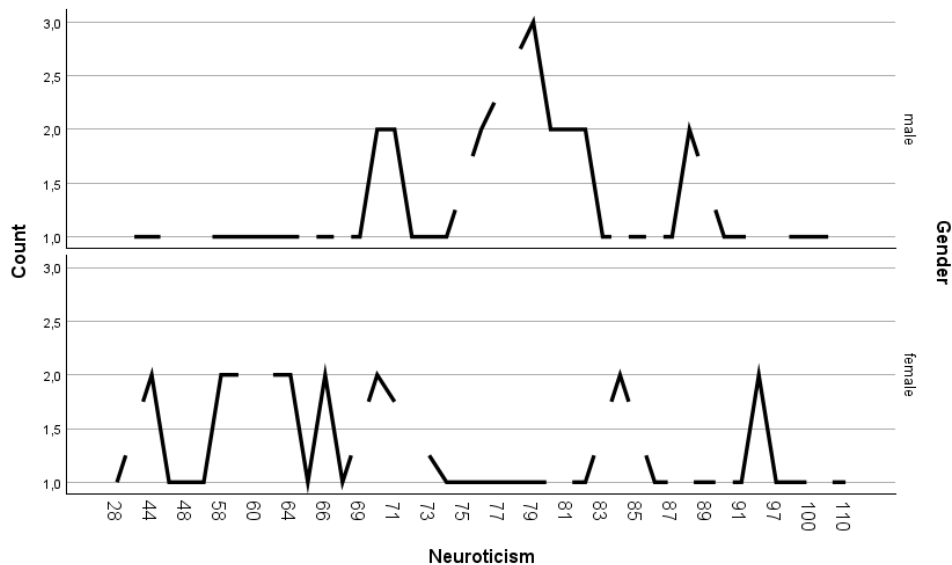


Figure 10. Distribution of Neuroticism personality trait scores according to gender



## Conclusion

The questions that guided the research process have found answers, some more evident and consistent with the results of other studies or theories in the specialized literature, others involve new explorations, on more consistent samples, with dedicated tools. Gender differences in mild intellectual disability regarding personality traits manifest themselves from puberty. The research protocols and recording of responses demonstrated a strong individualization in the personality structure at this age and category of children, with strong interindividual differences, which led to a great variability of the research data. Regarding the second question- What are the personality traits that are not marked by gender differences in the case of children at puberty with mild intellectual disability?-, the list of these traits includes: Dominance, Endurance, Exhibition, Thrill-Seeking, Impulsivity, Nurturance, Order, Play, Sentience, Social Recognition, Understanding, and regarding the alternative scoring in the Big Five: Extraversion, Openness to experience, Agreeableness, Conscientiousness.

Girls have a greater need for help than boys, an aspect that has also been noted in the case of girls without intellectual disabilities, and which is, also, inoculated by the more significant education and protection of girls compared to boys. Boys present more behavioral problems compared to girls and specific deviant behaviors in intellectual disability are stipulated in the specialized literature (Ageranioti- Bélanger et al., 2012). Boys present a higher level of neuroticism compared to girls - an aspect that can be explained by the higher level of deviant behaviors. Few studies address the personality issues of children with intellectual disabilities, although the concern for their quality education and the development of their potential is strongly expressed. Gacek and Smoleń (2024) do not identify significant differences in personality structure between the two compared groups of students with and without intellectual disabilities, equalized from the cognitive point of view. Inter-gender differences in temperament of children with intellectual disabilities have been identified (Nazim & Khalid, 2018), with a focus on negative affectivity. Inter-gender differences in adolescents without disabilities were highlighted, and the factor of social affiliation and socio-educational level of parents was also explored (Kumari et al., 2019).

The third question was- What are the educational implications of gender differences? How can they be objectified in the individualization of the educational process for the children in the research group? The results obtained are consistent with the elements already evident in the specialized literature regarding educational and remedial directions in mild intellectual disability. The management of inappropriate behaviors, the development of self-regulation, the increase of time spent on school tasks and internal academic motivation, along with individualized educational support, the management of note-taking and the actual teaching of the contents within the school activities and the dynamics of the lessons, with reinforcements and rewards, encouragement, support in dosing the effort, overcoming the difficulties that arise, constitute, effective strategies in supporting these children throughout the school flow and beyond, towards occupational autonomy and social management of their own lives.

How can the results of the study be put in relation to the current concerns regarding personality disorders on the background of intellectual disability? was the last question. The differences highlighted between genders regarding the level of neuroticism, with higher levels in the group of boys at this age, require further explorations, on more comprehensive samples, in order to identify the elements that lead to the appearance of personality disorders based on intellectual disability. Factors with intrafamilial and school action, together with temperamental elements and personal uniqueness, describe different and difficult to capture ways of evolution that may require, on the part of researchers interested in this subject, a longitudinal approach to these aspects, with specific interventions to reduce socially unacceptable behaviors and measuring their effects.

## Reference

- Ageranioti-Bélanger, S., Brunet, S., D'Anjou, G., Tellier, G., Boivin, J., & Gauthier, M. (2012). Behaviour disorders in children with an intellectual disability. *Paediatrics Child Health*, 17(2):84-8. doi: 10.1093/pch/17.2.84.
- Bratu, M. (2014). *Psihopedagogia deficienților de intelect. [Psychopedagogy of the intellectually disabled]*. București: Editura Universității din București.
- Fortunato, A., Speranza, A. M. (2018). Personality traits and disorders in childhood: Clinical evaluation and diagnosis. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, 15(4), 222–235.
- Gardini, S., Cloninger, C. R., & Venneri, A. (2009). Individual differences in personality traits reflect structural variance in specific brain regions. *Brain Research Bulletin*, 79(5), 265-270.
- Gacek, M., & Smoleń, T. (2024). Personality characteristics attributed to people with intellectual disability. *Current Issues in Personality Psychology*, 13 (3):194-201.

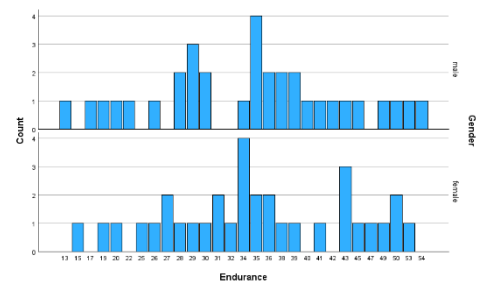
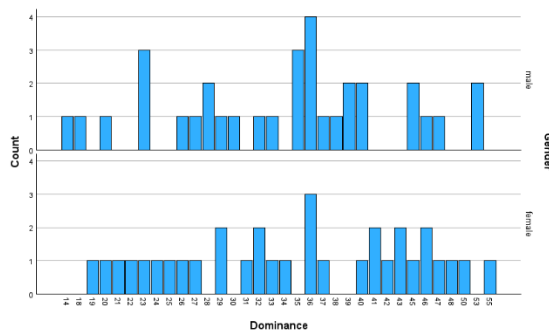
- Kumari, A., Singh, R., Mehra, M., & Mishra, A. K. (2019). Does Being A Boy or Girl Matters for Personality Development? Study of Personality of Adolescents from Different Social Classes across Gender. *Int. J. Curr. Microbiol. App. Sci*, 8(7), 122-131.
- Lindsay, W. R., Rzepecka, H., & Law, J. (2007). An exploratory study into the use of the five factor model of personality with individuals with intellectual disabilities. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 14(6), 428-437.
- Nazim, A., & Khalid, R. (2018). Psychosocial Correlates of Temperament in Children with Intellectual Disabilities. *International Journal of Social Sciences & Educational Studies*, 5(2), 31-41.
- Popovici, D.V. (1999). *Elemente de psihopedagogia integrării. [Elements of integration psychopedagogy]* București: Editura Pro Humanitate.
- Roy, M., Retzer, A., Sikabofori, T. (2015). Personality development and intellectual disability. *Current Opinion in Psychiatry*. 28(1): 35-9. doi: 10.1097/YCO.0000000000000118.
- Verza, E. (1998). *Psihopedagogie specială. [Special psychopedagogy]*. București: Editura Didactică și Pedagogică.
- Verza, E., & Verza, F. E. (2017). *Psihologia copilului. Ediția I. [Child Psychology. First Edition]*. București: Editura Trei.

### Acknowledgments

Our thanks go to the test publisher Test Central for supporting the research project by offering academic license and the online electronic scoring of the NPQ instrument.

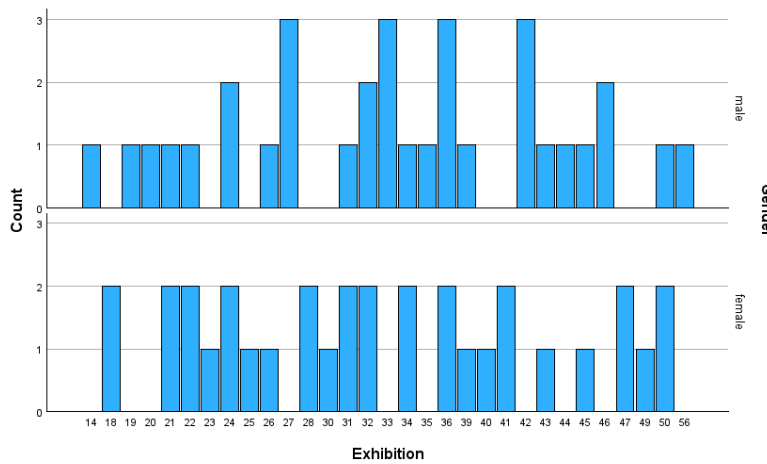
### Appendix 1. Distribution of scores according to gender for the measured personality traits

#### Distribution of scores for the variable Dominance

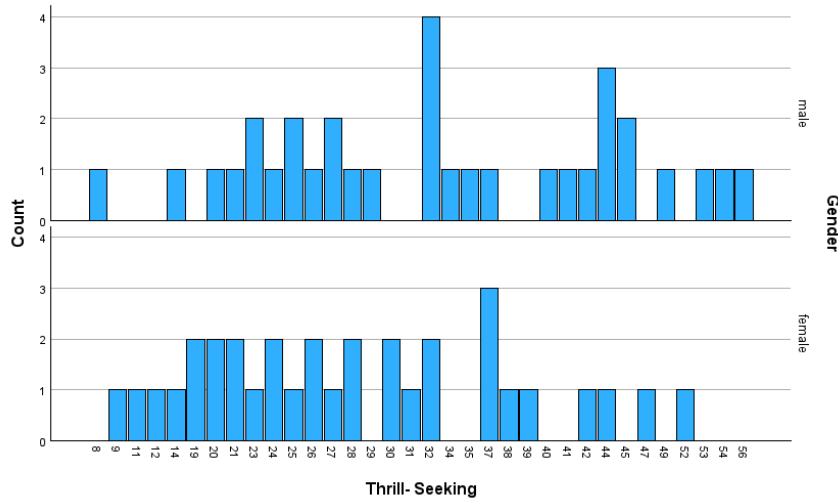


#### Distribution of scores for the variable Endurance

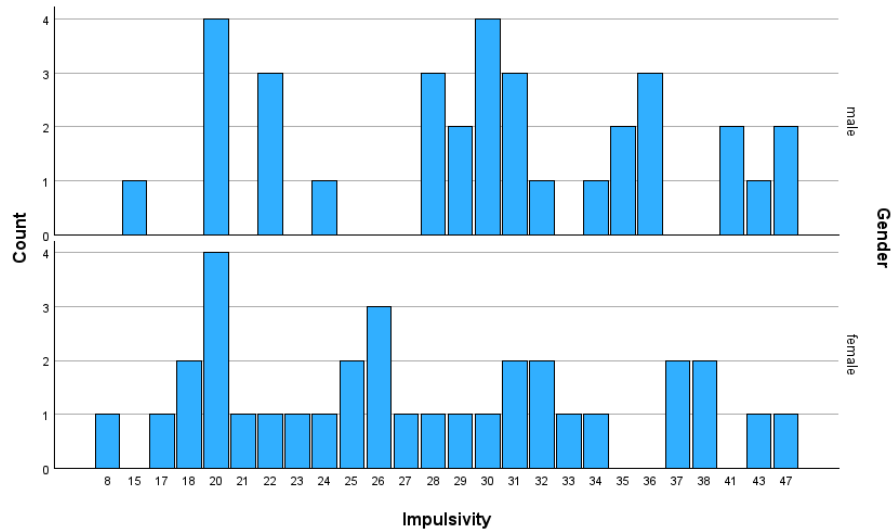
#### Distribution of scores for the variable Exhibition



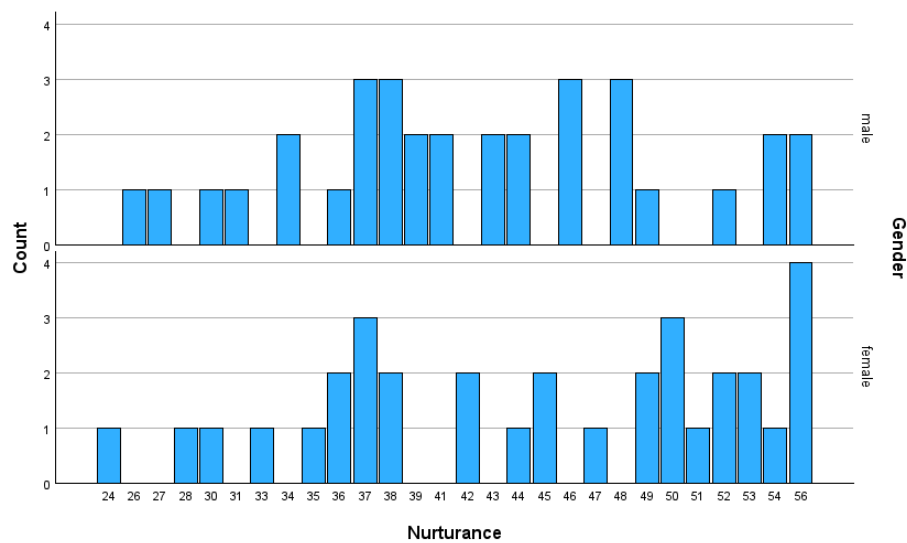
#### Distribution of scores for the variable Thrill- Seeking



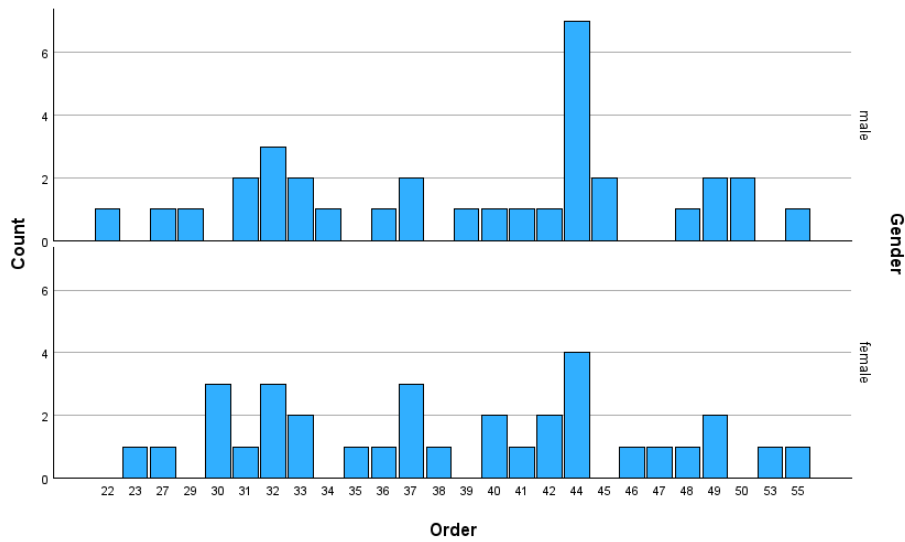
Distribution of scores for the variable Impulsivity



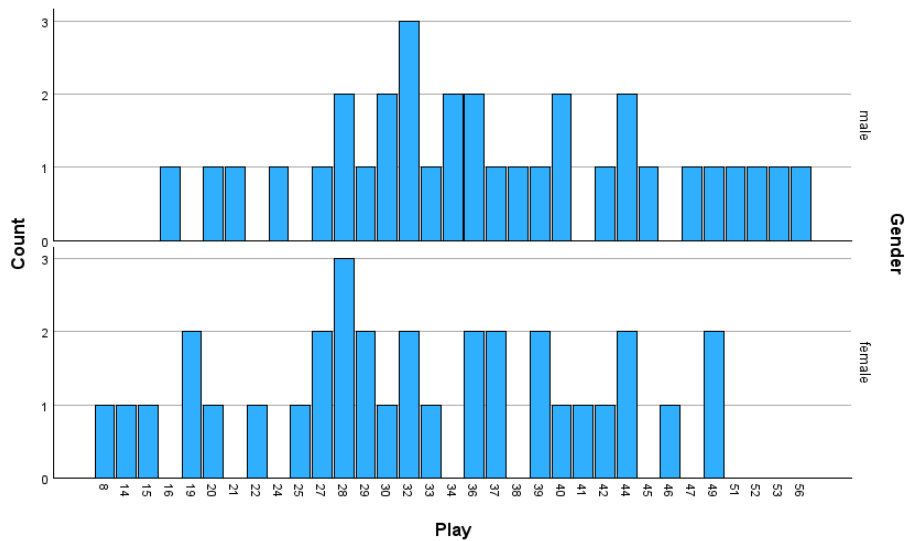
Distribution of scores for the variable Nurture



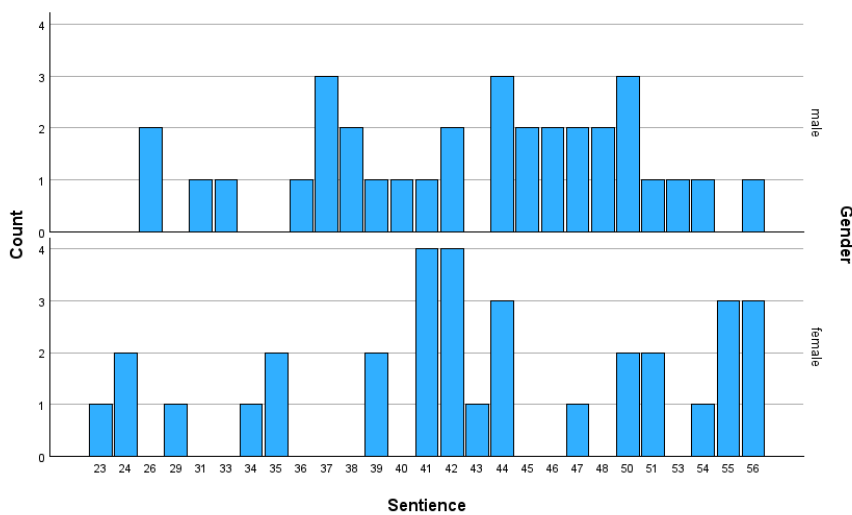
Distribution of scores for the variable Order



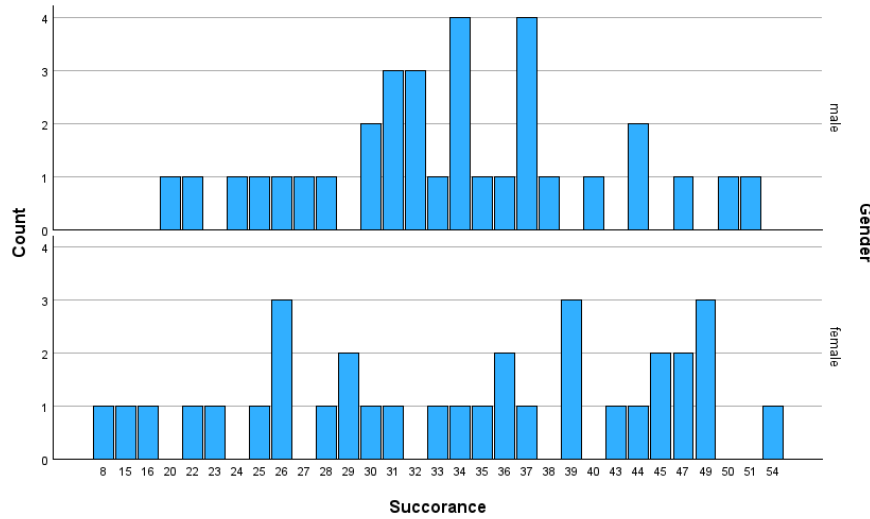
Distribution of scores for the variable Play



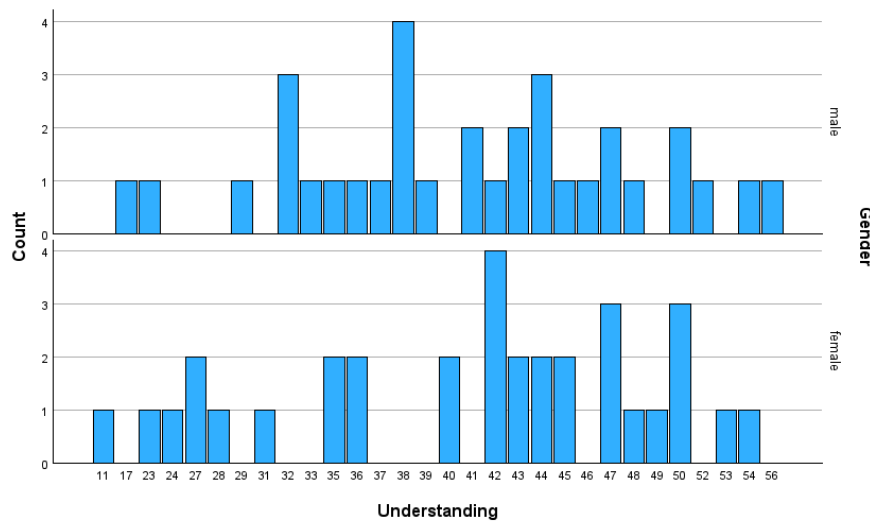
Distribution of scores for the variable Sentence



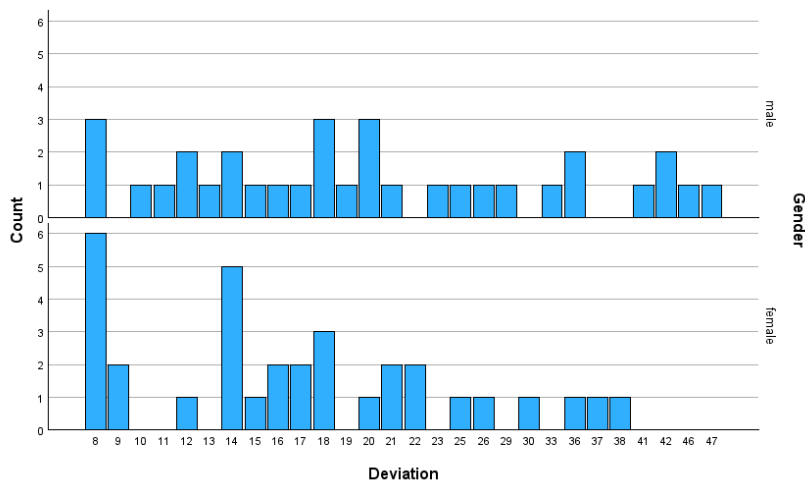
Distribution of scores for the variable Succorance



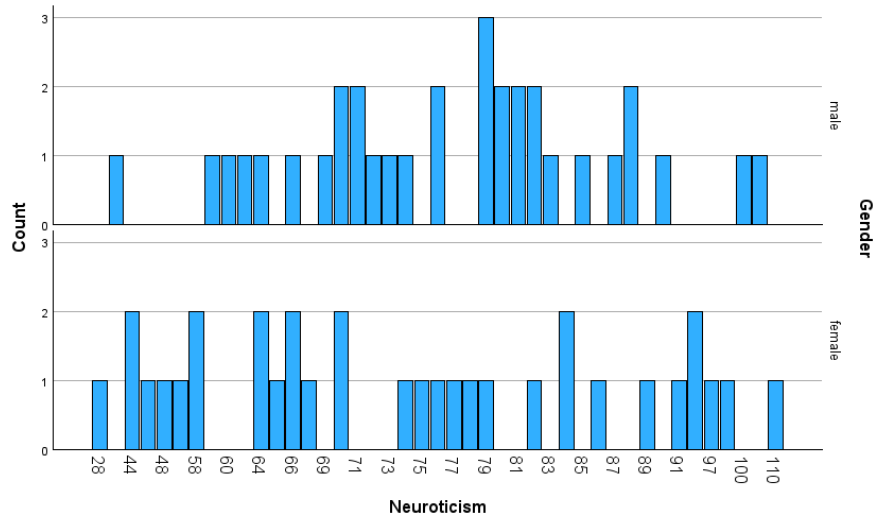
Distribution of scores for the variable Understanding



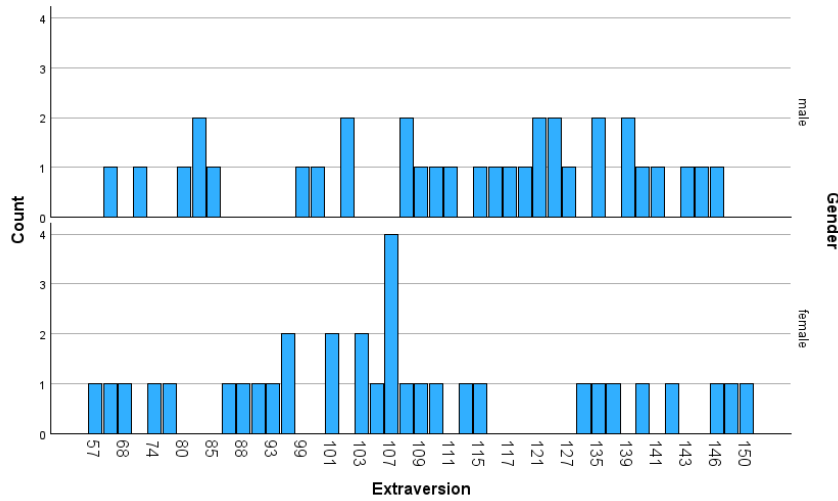
Distribution of scores for the variable Deviation



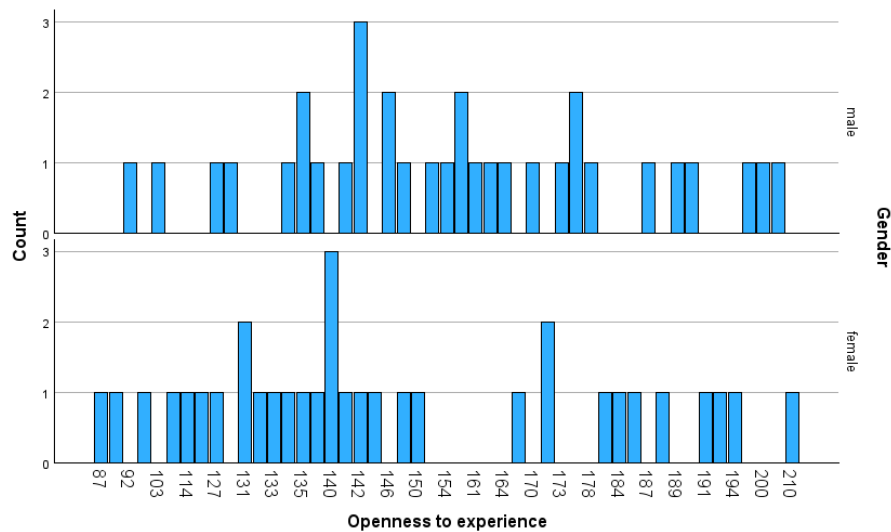
Distribution of scores for the variable Neuroticism



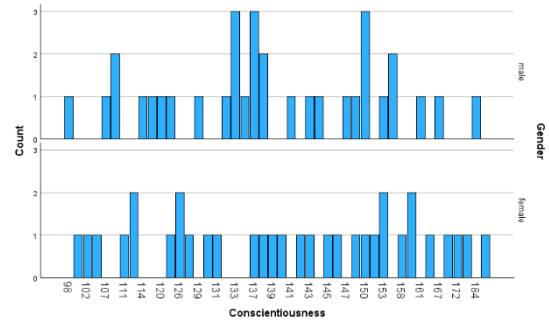
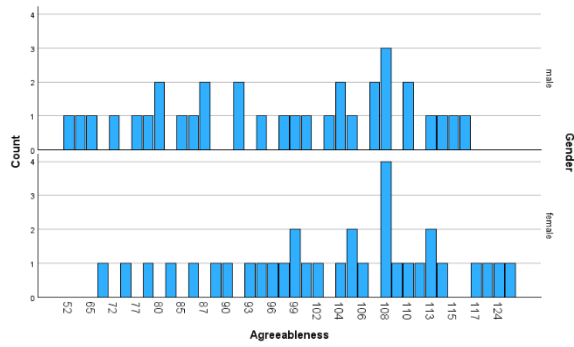
Distribution of scores for the variable Extraversion



Distribution of scores for the variable Openness to experience



Distribution of scores for the variable Agreeableness



Distribution of scores for the variable Conscientiousness