



## INTERNALIZED AND EXTERNALIZED BEHAVIORAL PROBLEMS IN YOUNG ADOLESCENTS WITH REGARD TO GENDER

*Original scientific paper*

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Received: 2022/2/8

Accepted: 2022/4/10

### ABSTRACT

*The aim of this paper is to determine the differences between externalized and internalized behavioral problems in the population of young adolescents in the city of Tuzla on eight different scales of syndromes (anxiety/depression, reticence, physical difficulties, aggression, rules violation, social problems, thinking problems, and attention problems). The paper starts from the assumption that there are differences between younger adolescents with internalized and externalized behavioral problems with regard to gender in such a way that externalized problems will be more frequent in male adolescents and internalized behavioral problems in female adolescents. The sample of respondents in this study consists of 587 young adolescents of both genders. The research was conducted in fifteen primary schools in the city of Tuzla. The Achenbach dimensional classification of behavioral disorders was used for assessment (Achenbach & Rescorla, 2001). The results show higher scores for internalized behavioral problems. Female adolescents had statistically significantly higher scores on the Anxiety/Depression, Somatic Problems, and Thought Problems subscales.*

**Keywords:** internalized and externalized problems, gender, elementary school students.

### INTRODUCTION

Adolescence is a period of human development that is associated with numerous changes in behavior, cognitive, emotional and ideological spheres. These changes occur and at the same time often coexist with intense self-searching, emotional instability, persistent issues such as e.g. Who am I? Where am I going? It is a period in which new challenges arise and new research begins, as well as conflicts and misunderstandings in the family (Lubenko, 2009). Adolescence is a period of increased risk for the development of externalized behavioral problems and related disorders (Steinberg, 2008). The results of longitudinal research show the long-term consequences of child and adolescent problem behaviors (especially externalized problems) that include a wide range of social maladaptive behaviors later in adulthood, including addictions,

disrupted family relationships, criminal activities, and many others (Henderson et al., 2008).

#### **Prevalence of internalized and externalized behavioral problems**

The phenomenology of behavioral disorders in adolescents is almost impossible to enumerate, because it depends on the norms of the environment, the extent and intensity of the phenomenon and the subjective assessment of assessors. The symptomatology is very different. These are behaviors that are considered unusual for the environment and which are assumed to be detrimental to the further development of the minor's personality or the environment in which such behavior manifests itself (Basic, Koller-Trbovic, & Uzelac, 2004).

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Furthermore, a juvenile who exhibits such behavior, or his/her environment, needs to be provided with some protection, but such phenomenology of behavior does not mean a violation of criminal law, although it is etiologically associated with delinquent behavior. Risky behaviors of young people, as well as behavioral problems can be observed with regard to their phenomenology, but also through intensity, i.e. risk/danger (Basic, Koller-Trbovic, & Uzelac, 2004).

In modern dimensional systems, the division into externalized and internalized behavioral problems has been accepted (Achenbach & Rescorla, 2001), and it is Achenbach's dimensional classification of behavioral disorders that we have chosen in this paper. Dimensional classification systems assume that behavior is not dichotomized but continuous. Achenbach and his colleagues identified a total of eight syndromes that presuppose a set of symptoms of emotional, social, and behavioral problems. Using factor and cluster analysis, patterns of grouping symptoms or forms of problematic behavior were observed, and based on that, the following syndromes were identified: Anxiety-Depression, Recitence-Depression, Somatic Complaints, Social Problems, Thinking Problems, Attention Problems, Rule Violation Behavior, and Aggressive Behavior.

Achenbach and Rescorla (2001) point out that when sorting out the syndrome, on the one hand, they singled out anxiety-depression, recitence-depression and somatic complaints, and while on the other hand, they singled out rules-violating behavior and aggressive behavior. They have placed social problems, thinking problems and attention problems in the middle, i.e. they are at the transition between internalized and externalized behaviors and do not belong to either group, i.e. factor analysis shows that they belong equally to internalized and externalized behaviors. Internalized syndromes refer to problems with oneself such as anxiety, depression, somatic complaints without a clear medical cause, and recitence from social contacts. Mood disorders and anxiety are often referred to as internalized disorders, because they result in emotional anxiety and depression. During adolescence, when self-awareness grows and social pressure becomes more important, the lack of social incentives is responsible for increasing feelings of social isolation, helplessness and depression (Heiman, 2001, according to Brojcin & Glumbic, 2012). Early adolescence is the period during which the risk of developing depressive disorders increases (Oland & Shaw, 2005). Many depressive symptoms are related to the way we see ourselves and our understanding of ourselves (Kovacs & Devlin, 1998).

Externalized syndromes refer to conflicts with others and their expectations, i.e. externalized behaviors refer to those types of behaviors that are directed towards the outside world, and there are two externalized syndromes: aggressive behavior and rules violation behavior. Aggressive behaviors cover a wide range of behaviors. Aggression is a behavior intentionally aimed at harming others (Parke & Slaby, 1983, according to Matthys & Lochman, 2010).

In essence, both internalized and externalized behavioral problems are viewed through the prism of the outcomes of interactions between adolescents' risk characteristics and risk factors in their environment, of which the most important are: family risk factor, school risk factor, and peer risk factor.

Epidemiological studies point out that internalized problems, primarily anxiety and depression, are a major public health problem present in 20% of children in the community (Sawyer et al., 2011). Stephens et al., (1999, according to Basic, 2009), state a high prevalence of mental health problems in the youth population (20-30%), and many of them have experience of multiple problems. The Center for Disease Control and Prevention (2000), in a study aimed at assessing the level of risk of mental disorders in young people, states that 28% of young people in high school have the feeling of hopelessness, 19% try to commit suicide, and 8% commit suicide. According to Werner & Silbereisen (2003) two groups of behavioral disorders in adolescents are the result of cluster analysis, which singled out two behavioral clusters. The first includes fights, disobedience, outbursts of anger, destructiveness, non-cooperation, insolence and restlessness and is called aggressive behavior with less socialization or just aggressive behavior. The second cluster includes bad company and environment, running away from home and school, stealing, loyalty to bad company, lying and setting fire, and is called socialized aggression. Research shows that in Western civilization, approximately 10% of children and young people may have depressive disorder, 2 to 9% of children show specific phobias, and 2 to 5% of children have clinically significant anxiety symptoms (Oatley & Jenkins, 2003).

### **Differences in the manifestation of internalized and externalized problems in relation to gender**

Externalized forms of behavioral disorders are more common in younger male adolescents, while internalized problems are more common in younger female adolescents (Moylan et al., 2011). Extensive research on externalized (behavioral) and internalized (emotional) behavioral disorders in adolescents aged 6–16 years was conducted by a large group of authors (Rescorla et al., 2007) in as many as 31 countries on a sample of 55,508 children and adolescents. Based on the testimonies of parents whose children are included in the sample, the mentioned group of authors found that female adolescents have higher overall scores in all countries than male adolescents when it comes to internalized behavioral disorders, while male adolescents predominate with externalized behavioral disorders in all countries included in the sample. It is important to note that an additional analysis in which they divided the age into two groups (the first group aged 6-11 and the second group aged 12-16) found that younger female adolescents do not show internalized behavioral disorders significantly more (only in some countries) in relation to younger male adolescents

aged 6-11 - this difference is only significant at the age of 12-16 (10 out of 27 countries). When it comes to externalized behavioral disorders, the situation is the opposite. Male adolescents outperform adolescent girls in 19 of the 28 countries, while in only 5 of the 27 countries with regard to the age group (12-16 years). Covariance of externalized and internalized behavioral disorders is also more common in male respondents (Loeber & Keenan, 1994, according to Oland & Shaw, 2005), and they score higher on features of oppositional defiance disorder and hyperactivity (Miller et al., 1997, according to Stormont, 2002).

Scientific findings consistently show gender differences in adolescent internalized and externalized problems. Adolescent boys are at the forefront of aggressive and rule-violating behaviors (Achenbach et al., 1991; Bongers et al, 2004, Bongers et al, 2008; Caron, 2006), while adolescent girls show a higher level and higher prevalence of internalized problems such as depression and anxiety disorders (Achenbach et al., 1991).

Research on gender differences in the prevalence of internalized and externalized difficulties is consistent and states that internalized problems are more common in female adolescents and externalized problems in male adolescents (Macuka & Smojver-Azic, 2012; Macuka, Smojver-Azic, & Buric, 2012; Macuka & Jurkin, 2014; Ricijas, Krajcer, & Bouillet, 2010). In the Poljak and Begic (2016) study, the prevalence of anxiety problems in children ranges from 10% to 20%. They are represented in both genders, although they are more common in girls after the age of six.

### The problem and aim of research

The developmental outcomes of adolescence can greatly affect the further maturation and functioning of a young person. Adolescence is a period with an increased risk for emotional and behavioral problems. The period of adolescence is a time when appropriate pedagogical procedures and preventive measures can influence the direction of such models of behavior towards socially appropriate forms. However, there is a justified concern that adolescents by entering into risky behaviors impair their further psychosocial development, so it is necessary to start various preventive actions as early as possible in order to orient young people towards positive social values.

The aim of this paper is to determine the differences between externalized and internalized behavioral problems in the population of young adolescents in the city of Tuzla on eight different scales of syndromes (anxiety/depression, recitence, physical difficulties, aggression, rules violation, social problems, thinking problems and attention problems).

The paper starts from the assumption that there are differences between younger adolescents with internalized and externalized behavioral problems with regard to gender, in such a way that externalized problems will be more frequent in male adolescents and internalized behavioral problems in female adolescents.

## METHODS

### Sample of respondents

The sample of respondents in this study consists of 587 young adolescents of both genders. Male adolescents (303) and female adolescents (294) are fairly evenly represented in the sample. The research was realized in fifteen elementary schools in the area of the city of Tuzla, so that two classes from each school were included, one in the seventh and one in the eighth grade. The sample is intentional (only seventh and eighth grades), and within it, classes are chosen randomly. Table 1 shows the structure of the sample according to the school that the respondents attend. Of the total number of respondents, 5.8% attend Elementary School „Centar“, 6.3% attend Elementary School „Jala“, 9.2% attend Elementary School „Sjenjak“, 6.8% attend Elementary School „Slavinovici“, 7.8% attend Elementary School „Simin Han“, 7.0% attend Elementary School „Brcanska Malta“, 6.3% attend Elementary School „Pazar“, 7.8% attend Elementary School „Kreka“, 4.8% attend Elementary School „Bukinje“, 7.0% attend Elementary School „Tusanj“, 7.3 % attend Elementary School „Miladije“, 5.1% attend Elementary School „Solina“, 6.3 % attend Elementary School „Pasci“, 6.5% attend Elementary School „Husino“ and 6.0% attend Elementary School „Mramor“.

Table 1. Distribution of respondents according to the elementary school they attend

| School            | N   | %     |
|-------------------|-----|-------|
| ES Centar         | 34  | 5.8   |
| ES Jala           | 37  | 6.3   |
| ES Sjenjak        | 54  | 9.2   |
| ES Slavinovici    | 40  | 6.8   |
| ES Simin Han      | 46  | 7.8   |
| ES Brcanska Malta | 41  | 7.0   |
| ES Pazar          | 37  | 6.3   |
| ES Kreka          | 46  | 7.8   |
| ES Bukinje        | 28  | 4.8   |
| ES Tušanj         | 41  | 7.0   |
| ES Miladije       | 43  | 7.3   |
| ES Solina         | 30  | 5.1   |
| ES Pasci          | 37  | 6.3   |
| ES Husino         | 38  | 6.5   |
| ES Mramor         | 35  | 6.0   |
| Total             | 587 | 100.0 |

The sample of this research consists of seventh and eighth grade elementary school students. Table 2 shows the structure of the sample with respect to the class they attend. Of the total sample, 50.9% respondents attend the seventh grade and 49.1% respondents attend the eighth grade.

Table 2. Distribution of respondents in relation to the class they attend

| Grade           | N   | %    |
|-----------------|-----|------|
| 7 <sup>th</sup> | 299 | 50.9 |
| 8 <sup>th</sup> | 288 | 49.1 |

Table 3. Distribution of respondents in relation to gender

| Age   | Gender |       |      |       | Total |        |
|-------|--------|-------|------|-------|-------|--------|
|       | Female |       | Male |       |       |        |
|       | N      | %     | N    | %     | N     | %      |
| Total | 284    | 48.38 | 303  | 51.90 | 587   | 100.00 |

### Method of data collection and measuring instrument

Data were collected in the second semester of 2017/2018, more precisely from February to June 2018, after the research was approved by the Ministry of Science, Culture and Sports of Tuzla Canton, as well as the directors of elementary schools in which the research was conducted. The prevalence and manifestations of externalized problems in the adolescent population were examined using the Achenbach integrated assessment system, the version for adolescent self-assessment (ASEBA Youth Self-Report - YRS, Achenbach, 2007). The instrument measures adaptive functioning, i.e. competencies and maladaptive functioning, i.e. behavioral, emotional and social problems at the age of 11 to 18. The instrument contains eight syndrome-specific scales that measure problems with a tendency to associate, namely: Anxiety-Depression, Recitence-Depression, Somatic Complaints, Social Problems, Thinking Problems, Attention Problems, Rule Violation Behavior, and Aggressive Behavior. The syndromes are grouped into externalized and internalized. Externalized syndromes refer to conflicts with other people and their expectations and include rules violation behavior and aggressive behavior (examples of claims: "I violate the rules at home, at school, etc.", "I often tease others"). Internalized syndromes refer to individual-centered psychological difficulties and overly controlled behaviors, including Anxiety/Depression, Recitence/Depression, and Somatic Complaints (examples of claims: "I am recitent, I try to stay away", I am sad or depressed). Behavior is assessed on 112 claims, and on a three-point scale. The task of the respondents was to answer each of these 112 statements in the questionnaire with 0 - not true, 1 - sometimes or partially true, or 2 - completely true. Higher scores imply a higher prevalence of behavioral problems.

### Reliability of measuring instruments and metric verification of scales

The reliability of the YSR measurement scale was evaluated using the Cronbach alpha coefficient. The value of this coefficient for the entire YSR scale is .93, which indicates a high level of reliability, i.e. the internal consistency of this instrument. Our results support the homogeneity of syndrome Anxiety/Depression, Recitence/Depression, Somatic Complaints, Social Problems, Attention Problems, Thinking Problems, Rules Violation Behavior, and Aggressive Behavior. A similar value was obtained in other studies, e.g.

The Cronbach's alpha coefficient of internal consistency on a sample of 459 children and adolescents aged 12 to 18 is .96 (Achenbach, 1991). Broberg et al. (2001) on a sample of 2522 adolescents aged 13-18 also received a high alpha coefficient ( $\alpha > .70$ ). Although the psychometric properties of the YSR scale have generally been shown to be adequate, some studies have shown low levels of reliability (Cronbach's alpha) for some scales (Achenbach, 1991; Jessor, 1998; Kvernmo & Heyerdahl, 1998).

The latent space of the scale, that we used in this study to operationalize and measure behavioral disorders, was examined using factor analysis.

All statistical prerequisites (KMO sample adequacy measure = .869; Bartlett sphericity test  $\chi^2 = 25299.006$ ;  $p < .000$ ) were met to perform YSR factor analysis. The coefficient of internal consistency of all factors is satisfactory. The method of analysis of the main components of YSR led to the following results. Based on the Guttman-Kaiser criterion of retaining factors with an intrinsic value above 1, 32 factors are distinguished. Based on the Scree chart, 4 factors stand out, while based on the content, two stand out. Therefore, the results point to a two-dimensional solution that explains 20.509% of the variance and those results are shown in Table 4.

The first factor is most saturated with items related to adolescents' problems with others ("I violate the rules of behavior at home, at school and elsewhere"; "I argue a lot", "I hang out with problematic children") (Table 5), and the second factor is most saturated with items related to problems with oneself or within oneself ("I like to be fair to others", "I like to be relaxed in life", "I am afraid of some situations, places outside of school")(Table 6). Accordingly, the first factor can be called externalized problems, while the second factor can be called internalized problems.

Table 4. YSR analysis factor results

|  | Factor 1 | Factor 2 |
|--|----------|----------|
|  | .60      | .64      |
|  | .57      | .53      |
|  | .56      | .56      |
|  | .54      | .61      |
|  | .53      | .58      |
|  | .53      | .56      |
|  | .53      | .52      |
|  | .52      |          |
|  | .52      |          |
|  | .52      |          |
|  | .52      |          |
|  | .50      |          |
|  | .50      |          |
|  | .50      |          |

Table 5. The structure of the first factor

| The structure of the first factor                        |     |
|--|-----|
| I feel dizzy or light-headed.                            | .60 |
| I violate the rules at home, at school and elsewhere.    | .57 |
| I swear and say other bad words.                         | .56 |
| I am disobedient at school.                              | .54 |
| I am disobedient to my parents.                          | .53 |
| I am nervous or tense.                                   | .53 |
| I often tease others.                                    | .53 |
| I hang out with troublesome children.                    | .52 |
| I argue a lot.   | .52 |
| I'm destroying my personal items.                        | .52 |
| I'm deliberately trying to hurt myself or kill myself.   | .52 |
| I physically attack other people.                        | .50 |
| I do some things that other people find weird. Describe: | .50 |
| I can't sit still.                                       | .50 |

Table 6. The structure of the second factor

| The structure of the second factor                        |     |
|---|-----|
| I like to be fair to others.                              | .64 |
| I am overly scared or tense.                              | .53 |
| I feel tired for no apparent reason.                      | .56 |
| I try to help others when I can.                          | .61 |
| I enjoy a good joke.                                      | .58 |
| I like to be relaxed in life.                             | .56 |
| I am afraid of some situations, places outside of school. | .52 |

After exploratory factor analysis, we examined the two-dimensional structure of YSR by confirmatory factor analysis. The values of the model fitting indicators are  $\chi^2 = 12.083$ ,  $df = 4$ ,  $p = .017$ ; NFI = .989; CFI = .992; RMSEA = .059.

High values of the NFI and CFI indicators indicate a good fit of the model as well as the RMSEA indicator which is in an acceptable range. Based on these results, we can say that the factor structure is acceptable, i.e. that the confirmatory factor analysis enabled the verification of the two-dimensional YRS model.

The results of the factor analysis confirm the findings of previous studies which show that the instrument used in this study can detect the prevalence of internalized and externalized behavioral problems in young adolescents and gender differences.

### Data processing methods

The following methods in the research were used: descriptive statistical methods, measures of central tendency, measures of dispersion and asymmetry of score distribution on Youth Self Report scales, t-test and Cohen's d index and correlation.

## RESULTS AND DISCUSSION

To show the prevalence of externalized and internalized problems in the adolescent population, we used descriptive statistics. Measures of central tendency, measures of dispersion and asymmetry of score distribution on YSR scales are shown in Table 7. According to skewness values, for all YSR scales and subscales asymmetry is positive (longer right arc of distribution, more below-average cases) pointed (leptocurtic). Since lower scores indicate less externalized and internalized problems, we can say that the psychosocial functioning of most adolescents in the sample is within the norm. In statistical data processing, in determining the clinical rank, the T score must be 70 or greater than 70 ( $T > 70$ ) (Achenbach & Rescorla, 2001).

Table 7. Measures of central tendency, measures of dispersion and asymmetry of score distribution on YSR scales

| Variable                 | N   | Min | Max | M      |      | SD    | Skewness |      | Kurtosis |      |
|--------------------------|-----|-----|-----|--------|------|-------|----------|------|----------|------|
|                          |     |     |     | Stat   | St.e |       | Stat     | St.e | Stat     | St.e |
| Anxiety/depression       | 587 | 16  | 41  | 24.13  | .17  | 4.22  | 1.08     | .10  | 1.81     | .20  |
| Recitence /depression    | 587 | 8   | 21  | 10.81  | .10  | 2.51  | 1.15     | .10  | 1.27     | .20  |
| Somatic Problems         | 587 | 9   | 25  | 11.74  | .13  | 3.16  | 1.42     | .10  | 1.80     | .20  |
| Social Problems          | 587 | 11  | 27  | 14.07  | .12  | 2.89  | 1.47     | .10  | 2.70     | .20  |
| Thinking Problems        | 587 | 10  | 28  | 13.08  | .14  | 3.37  | 1.49     | .10  | 2.29     | .20  |
| Attention problems       | 587 | 28  | 65  | 42.57  | .26  | 6.28  | .57      | .10  | .48      | .20  |
| Rules violation problems | 587 | 12  | 28  | 16.21  | .12  | 2.91  | 1.41     | .10  | 2.28     | .20  |
| Aggressive behavior      | 587 | 20  | 53  | 29.16  | .22  | 5.34  | 1.18     | .10  | 1.58     | .20  |
| Internalized problems    | 587 | 33  | 86  | 46.69  | .35  | 8.37  | 1.26     | .10  | 2.00     | .20  |
| Externalized problems    | 587 | 32  | 79  | 45.37  | .31  | 7.62  | 1.34     | .10  | 2.01     | .20  |
| Total score              | 587 | 118 | 255 | 161.77 | .99  | 24.21 | 1.12     | .10  | 1.34     | .20  |

**Legend:** N- total number; MIN- the lowest score; MAX- the highest score; AM- Arithmetic mean; SD- Standard deviation; Skewness; Kurtosis; St.e.- Standard error

Analyzing the relation between internalized and externalized problems, their significant relation was established. The correlation coefficient is .60 at the significance level of  $p < .01$ . This data tells us that adolescents who have more internalized problems also have more externalized problems and vice versa.

Achenbach and Rescorla (2001) report an average correlation of .53 between children's internalized and externalized problems. Similar data have been obtained in other studies (Achenbach & McConaughy, 1997; Barry et al, 2005; Brajsa-Zganec, 2002; Caron, 2006; Macuka, 2008; Stevens et al., 2005). Covariation is a very common occurrence when it comes to problems in adolescence. For example, one longitudinal study shows that between 19% and 25% of boys between the ages of 7 and 14 have more than four covalent disorders and this number increases with age (Jessor, 1998). We can conclude that in the psychopathology of adolescence the covariation of behavioral disorders is more the rule than the exception.

Since the gender of adolescents is a relevant factor in relation to behavioral disorders, differences in the prevalence of externalized and internalized problems in male and female adolescents were also analyzed. Assumed significant differences in the prevalence of externalized and internalized problems between male and female adolescents were identified, and the results of the comparison are shown in Table 8.

No significant differences in overall YRS score were found between male and female respondents. The score is the total result, i.e. the sum of the amounts of items related to a certain syndrome. However, it was noticed that externalized problems were statistically significantly more prevalent in male respondents ( $t = -5.73$ ;  $p < .001$ ), and internalized problems in female respondents ( $t = 3.65$ ;  $p < .001$ ). In addition, the male respondents had statistically significantly higher scores on the Social Problems and Rule Violation Behavior subscales. The female respondents had statistically significantly higher scores on the Anxiety/Depression, Somatic Problems, and Thinking Problems subscales. Research conducted by Cristovam MAS. et al. (2019) shows that female respondents showed a higher frequency of internalized problems and overall problems than male respondents ( $p < .001$  for both). Male respondents in a variety of cultures exhibit more impulsiveness and other uncontrolled outward-directed behaviors than females (Achenbach & Rescorla, 2001; Macuka, 2008; Mash & Barkley, 2003). A broad European study conducted in the Netherlands and Italy indicates that females are at higher risk in the area of sexual behavior, while males are in the area of delinquent behavior and consumption of psychoactive substances (Ciairano et al., 2009, according to Ricijas, Krajcer, & Bouillet, 2010).

Table 8. Gender differences in scores on YRS scales and subscales

| Variable                 | Gender | N   | AM     | SD    | t     | p   |
|--------------------------|--------|-----|--------|-------|-------|-----|
| Anxiety /depression      | male   | 303 | 23.41  | 4.14  | 2.13  | .03 |
|                          | female | 284 | 24.90  | 4.16  |       |     |
| Recitence /depression    | male   | 303 | 10.58  | 2.35  | -2.20 | .83 |
|                          | female | 284 | 11.05  | 2.64  |       |     |
| Somatic problems         | male   | 303 | 11.24  | 3.00  | 2.10  | .03 |
|                          | female | 284 | 12.27  | 3.24  |       |     |
| Social problems          | male   | 303 | 14.01  | 3.00  | -2.40 | .01 |
|                          | female | 284 | 14.12  | 2.77  |       |     |
| Thinking problems        | male   | 303 | 13.05  | 3.33  | -2.01 | .04 |
|                          | female | 284 | 13.10  | 3.40  |       |     |
| Attention problems       | male   | 303 | 42.13  | 6.57  | -1.74 | .08 |
|                          | female | 284 | 43.04  | 5.93  |       |     |
| Rules violation problems | male   | 303 | 16.61  | 3.17  | -5.97 | .00 |
|                          | female | 284 | 15.76  | 2.53  |       |     |
| Aggressive behavior      | male   | 303 | 28.82  | 5.60  | 1.24  | .21 |
|                          | female | 284 | 29.51  | 5.02  |       |     |
| Internalized problems    | male   | 303 | 45.24  | 8.07  | -3.65 | .00 |
|                          | female | 284 | 48.22  | 8.41  |       |     |
| Externalized problems    | male   | 303 | 45.44  | 8.18  | 5.73  | .00 |
|                          | female | 284 | 45.28  | 6.98  |       |     |
| Total score              | male   | 303 | 159.88 | 25.30 | 1.01  | .31 |
|                          | female | 284 | 163.78 | 22.85 |       |     |

Although gender differences in research are mostly consistently determined (externalized problems are more common in boys and internalized problems in girls), their significance is not well explained.

For example, it is difficult to determine whether the observed gender differences are due to differences in the expression of the disorder itself (e.g., direct aggression versus indirect aggression).

The mechanisms and causes of gender differences are different for different disorders and for the same disorders at different ages. This further complicates the understanding of symptomatology with respect to the gender of adolescents. In order to determine the magnitude of the effect of differences in independent samples of young adolescents, additional analyzes (Cohen's *d* index) were made. The index scores are as following: for internalized problems *d* = .78, for externalized problems *d* = .11, for anxiety/depression *d* = .35, for social recitence *d* = -.35, for aggression *d* = .15, for rules violation *d* = -.58, for social problems *d* = .45, for thinking problems *d* = .16, and for attention problems *d* = .21. These scores indicate that the determined magnitudes of the effect belong to low or moderate, but internalized problems are high differences, and additionally indicate that the difference in the prevalence of these problems between two samples of young male adolescents and young female adolescents is significant. In a study conducted by Macuka (2016), it is noticeable that the group of younger adolescents achieves slightly higher results in the cluster of internalized problems compared to the cluster of externalized problems, which is confirmed by the values of additional calculated t-test (internalized problems: *M* (*SD*) = 14.21 (7.55), externalized problems: *M* (*SD*) = 12.73 (7.17), *t* = 4.38, *p* < .01). By analyzing the differences in the representation of individual clusters of problems, gender differences in the representation of grouped problems of the internalized type (which are more common in adolescent girls) but not the externalized type were determined between adolescents. However, the analysis of the results on separate scales of the syndromes found statistically significant differences in the syndromes anxiety / depression, physical difficulties and delinquency-rules violation (Macuka, 2016).

High results on the syndrome scales are clinically significant, because they indicate a high level of problems. In determining the clinical rank of scores (*T* > 70), Achenbach and Rescorla (2001) started from the DSM-IV classification. The YSR score was divided into three categories: normal (up to 67), borderline (67 to 70), and clinical (above 70). This means that if the total number of results in one questionnaire exceeds 70, they are sorted into a group with a high level of problems. The task of the respondents was to answer each of these 112 statements (items) in the questionnaire with 0 - not true, 1 - sometimes or partially true, and 2 - completely true. The total number of chosen answers on the items represents the score. Higher scores imply a higher prevalence of behavioral problems.

A significant association between ASEBA scores and DSM diagnoses - at a significance level of *p* < .001 (Kasius et al., 1997) was observed and confirmed in numerous studies. Table 9 shows the distribution of adolescents according to normal and clinical levels depending on the severity of externalized and internalized problems. In this study, it was found that in the general population there are about 3% of adolescents with clinically significant levels of

externalized problems and about 2% of those who exceed the clinical rank of internalized problems. At the same time, these are adolescents who need appropriate treatment.

Table 9. Distribution of adolescents according to the severity of the disorder

|                       | Clinical level |     | Normal level |      |
|-----------------------|----------------|-----|--------------|------|
|                       | N              | %   | N            | %    |
| Externalized problems | 18             | 2.9 | 569          | 97.1 |
| Internalized problems | 13             | 2.3 | 565          | 97.7 |

A higher incidence of delinquency, more mistrust in relationships, lower communication skills, less empathy and less socialization was observed in males in relation to females (Cristovam MAS et al., 2019).

Examining the presence of externalized and internalized problems in previous studies using YSR indicates certain similarities and differences between cultures. One study comparing Dutch and American adolescents found that American adolescents had more problems than Dutch adolescents (Verhulst et al., 1989). The authors found that 13% of the variance may explain the national difference (Verhulst et al., 1989). Achenbach (1991) reports significantly lower overall scores on a sample of Puerto Rican adolescents compared to American adolescents. A comparison between adolescent Americans and adolescents from Jamaica, however, did not reveal significant differences in overall problems (Lambert et al., 1998). In two Scandinavian studies, Danish adolescents showed a lower level of problems compared to American adolescents, while Norwegian adolescents, especially females, had higher overall scores of problems (Kvernmo & Heyerdahl, 1998).

## RESEARCH LIMITATIONS

The effect of using self-assessment of personal problems in the behavior of younger adolescents is a limitation of this research. Additional assessments of adolescent behavior from several different sources would be useful in future research. Eventually, the possibility of involving parents or teachers in some future research should be considered, as they are also a valuable source of information. In this research, we obtained all the data from younger adolescents by the method of self-assessment, which should certainly be taken with caution because it is about student perceptions, and it would be very interesting to know what the answers of parents or teachers would be and how they assess family functioning and adolescent behavior. However, it should be noted that some researchers emphasize the importance of subjective thinking of young adolescents (Smetana & Daddis, 2002). This would mean that the personal perception of adolescents has a leading role and is very important, regardless of the degree to which the real situation is reflected.

## CONCLUSION

The results of this research are in line with theoretical explanations of the development of behavioral problems and the results of relevant empirical studies by other authors that clearly indicate differences in the manifestation of internalized and externalized behavioral problems with respect to gender. The progress of knowledge about behavioral problems can be primarily attributed to a large number of empirical studies that have been conducted over the last half century. Thanks to the results of the research, numerous questions have been clarified about the etiology and epidemiology of behavioral problems, as well as successful approaches in the prevention and treatment of problems of this kind. In an effort to prevent externalized behavioral problems in young adolescents, it is important to emphasize the importance of studying the etiology. Identifying the causes of behavioral disorders is necessary in order to develop effective prevention and treatment programs aimed at reducing the incidence and prevalence of behavioral problems. The role and position of the family in this regard is extremely important. The research provided epidemiological data on the prevalence of externalized behaviors of young adolescents, and the secondary goal is the need to emphasize the importance of designing and implementing successful prevention and treatment programs. Preventive programs seek to reduce risk, and strengthen protective factors, while family therapy gives the best results in severely dysfunctional families.

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