

# Family Factors Associated with Auto-aggressiveness in Adolescents in Croatia

Mara Tripković<sup>1</sup>, Tanja Frančišković<sup>2</sup>, Neda Grgić<sup>1</sup>, Nela Ercegović<sup>1</sup>, Mirjana Graovac<sup>3</sup> and Iva Zečević<sup>1</sup>

<sup>1</sup> Psychiatric Hospital for Children and Youth, Zagreb, Croatia

<sup>2</sup> University of Rijeka, School of Medicine, Department of Psychiatry and Psychological Medicine, Rijeka, Croatia

<sup>3</sup> University of Rijeka, Psychiatry Clinic, Rijeka, Croatia

## ABSTRACT

*The aim of this research is to look into the roles of families' social situation and cohesion in adolescent auto-aggressiveness in Croatia. The research was conducted on a sample of Zagreb high school students which encompassed 701 pupils of both genders aged 14–19. The basic demographic data were obtained using the Structured Demographic and Family Data Questionnaire. Auto-aggressiveness was tested using a section of the Report on Youth Aged 11–18 and the Scale of Auto-destructiveness – SAD, whereas the family cohesion was tested with the Family Adaptability and Cohesion Evaluation Scales FACES III. The obtained results show differences according to the gender: girls are more prone to auto-aggressiveness than boys ( $t=-3.385$ ,  $df=565$ ,  $p=0.001$ ) and girls more often show symptoms of destructiveness ( $t=-3.809$ ,  $df=637$ ,  $p<0.001$ ) and anxiety ( $t=-6.562$ ,  $df=640$ ,  $p<0.001$ ), while boys show pronounced aggressiveness ( $t=2.655$ ,  $df=653$ ,  $p=0.008$ ). Significant family factors associated with auto-aggressiveness are parents' marital status ( $\chi^2=18.039$ ,  $df=4$ ,  $p=0.001$ ), their financial situation ( $F(2.548)=4.604$ ,  $p=0.010$ ), alcoholic father ( $\chi^2=9.270$ ,  $df=2$ ,  $p=0.010$ ), mentally ill mother ( $t=5.264$ ,  $df=541$ ,  $p<0.001$ ), as well as mentally ill father ( $t=4.744$ ,  $df=529$ ,  $p<0.001$ ), and corporal punishment by mother ( $F(2.542)=8.132$ ,  $p<0.001$ ) or father ( $F(2.530)=5.341$ ,  $p=0.005$ ). Adolescents from split families show more auto-aggressiveness. Family cohesion appears to be considerably associated with auto-aggressiveness and the adolescents that see their families as less cohesive have more mental problems ( $\chi^2=29.98$ ,  $df=2$ ,  $p<0.001$ ). There is a connection between auto-destructive behavior in adolescents and family factors. Knowledge of family's social situation and cohesion may help understand, prevent and treat auto-aggressiveness in adolescents.*

**Key words:** auto-aggressiveness, deliberate self-harm, adolescents, family factors, family cohesion

## Introduction

Daily hospital experience, as well as numerous researches, indicates that the auto-aggressiveness problem, especially with adolescents, is increasingly important<sup>1</sup>. Auto-aggressive behavior in adolescence includes various phenomena ranging from deliberate self-harm (scaring, piercing, burning – most commonly with cigarette butts, head-banging, hitting and kicking against hard sharp objects), chronic self-destruction in cases of severe food disorders (anorexia, bulimia), abuse of addictive substances (alcohol and drugs), suicidal thoughts with a death wish, all the way to actual suicide attempts<sup>2</sup>. Deliberate self-harm is a common, often hidden problem with adolescents. The widest study on self-harm in children and adolescents in Europe (CASE) was conducted between 1998 and 2004 and included 30.000 adolescents,

mostly fifteen- and sixteen-year-olds in Austria, Belgium, England, Hungary, Ireland, the Netherlands and Norway. The research concluded that 3 in 10 girls and 1 in 10 boys self-inflict injuries or contemplate such behavior. The most disturbing find is that 59% of the ones that self-harmed themselves said that they wanted to die. It was shown that self-harm is twice as common with girls as with boys; that 1 in 5 cases of self-harm happened under the influence of alcohol, and 1 in 8 cases under the influence of drugs, boys being more prone to more dangerous methods that can have serious consequences such as self-hitting and hanging<sup>3–7</sup>.

The data indicates a significant connection between social factors and occasional self-harm<sup>7</sup>. It was proved

that family cohesion has a protective effect by way of alleviating negative effects of risk factors during adolescence<sup>8</sup>. Olson defines family cohesion as the degree of one's connectedness to one's family<sup>9</sup>. Cohesive and flexible families, which are supportive and consistent in their behavior, create a sense of security in children; strengthen their self-esteem and sense of control. Such families better meet the children's basic psychical needs for belonging and security<sup>10</sup>. According to Baer, more adjusted adolescents see their families as cohesive, expressive, organized and supportive of independence of its members<sup>8</sup>.

In Croatia, in 2008, there was a research conducted on auto-destructiveness on a relatively small clinical sample, and the results showed that the family dynamics, interpersonal relations and material status of the family are associated with mental problems<sup>11</sup>.

Moreover, it indicated that important factors associated with the increased risk of self-harm in girls comprise low self-esteem, forced sexual activity, self-harm of a member of the family, arguments with parents, and problems with friends, while in boys they are peer molesting, school problems, impulsiveness and anxiety<sup>4</sup>.

Post-war period in Croatia, as well as complex transitional social changes tied with economical problems, job insecurity and a great number of persons with PTSP disorder, most definitely deeply affected the functioning of the family, distribution of family roles, and family's capacity to contain and provide adequate emotional support to adolescents growing up within the family<sup>12,13</sup>. We assumed that these transitional changes were associated with the auto-aggressiveness in the adolescent population in Croatia. Therefore, the aims of this research were to investigate the incidence of auto-destructive activities in the general adolescent population, then look into the role family's social situation and cohesion plays in auto-aggressiveness with adolescents. The insight into the roles of those factors can help produce preventive and therapeutic guidelines for future work with adolescents and their families.

## Methods

### *Participants*

The research included 701 high-school students, of which one's gender was not recorded and 3 were twenty years old, which exceeded the planned age span<sup>14,19</sup>, so their data were excluded from further investigation. The final sample consisted of 697 respondents, of which 395 boys and 302 girls. The respondents' age averaged  $16.5 \pm 1.0$ . The respondents attended 35 classes in various Zagreb high-schools (vocational and regular), where the ratio of vocational and regular classes was kept in accordance with the actual population ratio (1:3 in favor of vocational classes). The respondents' structure followed the actual ratio of the school types (1/3 regular and 2/3 vocational), while the gender distribution was in favor of boys due to the type of vocational schools involved. None of the respondents refused to take part in the research, making the turnout 100%.

### *Procedure*

Upon the obtained written permission of the Ministry of Science, Education and Sport, the headmasters of the schools in question were informed of the research. Parents were sent a written notice and the pupils were briefly informed of the aims, method and procedure of the research. If both the parents and the student agreed to take part in the research, they signed a consent form. The testing was done in groups, in the classroom, during class, and lasted two classes (90 minutes). The questionnaire sequence varied in the way that in each class the sequence was moved forward by one (the last questionnaire in one class was the first in the next class, the first one became the second, etc.). Data collection was anonymous and the respondents had the right to withdraw at any moment. They were offered a possibility to talk to the examiner or to get help at any time during or after the examining.

### *Instruments*

The following instruments were used to gather the data:

1. For basic demographic data, a specially designed Structured Demographic and Family Data Questionnaire containing questions on parents' marital, working and socio-economic status, the presence of grave illnesses, alcoholism and mental illnesses, corporal punishment in the family etc.

2. For auto-aggressiveness testing, a standardized questionnaire Scale of Auto-destructiveness – SAD<sup>14</sup>. SAD is the instrument measuring auto-destructive tendencies in individual's personality which is applied to respondents over 14 years of age. It consists of 107 grouped statements that make 4 subscales (suicidal depression, anxiety, aggressiveness, and borderline). The respondents' task was to answer with a YES or NO depending on whether the statement was true for them. The scale's application can be individual or group, and on average it takes 15–20 minutes<sup>14</sup>.

3. For auto-aggressiveness incidence, five sections of the Youth Self Report for Ages 11–18 were used<sup>15</sup>. The respondents' task was to rank each statement according to how true it was for them: 0 – not true, i.e. the statement does not apply to the respondent; 1 – partially true; 2 – quite true or often true<sup>15</sup>.

4. For family cohesion, a standardized Family Adaptability and Cohesion Evaluation Scale – FACES III was used<sup>9</sup>. The instrument contains 20 sections measuring 2 dimensions of family functioning: cohesion and adaptability.

A high cohesion result means high connectedness within the family, and a high adaptability result means more flexibility. The respondents' perception of their real families and their views on the ideal family are assessed. The instrument's internal consistency is relatively high (77 for cohesion and 62 for adaptability) (0.77 and 0.62) suggesting its great validity<sup>9</sup>.

### Statistical analysis

Standard descriptive statistical methods were used for statistical and graphical data analysis (arithmetic mean, standard deviation and minimum and maximum result for normally distributed variables, and median and inter-quarter dispersion for asymmetrically distributed variables). Furthermore, the calculation of differences between groups was done with the t-test and variance analysis in cases where the variables were normally distributed and where the conditions of examined groups' variance homogeneity were met. Where the prerequisites for calculation of parametric statistical analysis were not met, a non-parametric test was used, either Mann-Whitney U-test or Kruskal-Wallis test. Of the other statistical methods, multiple regression analysis was calculated. The data analysis was done using Statistical Package for Social Sciences for Windows v. 13.0 (SPSS Inc., Chicago, IL, USA).

## Results

### Incidence of auto-aggressiveness

The incidence of auto-aggressiveness according to the Achenbach questionnaire is shown in Table 1.

**TABLE 1**  
TYPE AND INCIDENCE OF AUTO-AGGRESSIVE ACTIONS  
IN ADOLESCENTS ACCORDING TO THE ACHENBACH  
QUESTIONNAIRE RESULTS (N=568)

Auto-destructive behavior	Incidence (No., %)		
	Never	Sometimes	Often or quite often
intentional self-harm	525 (92)	28 (5)	15 (3)
self-inflicted cuts	534 (94)	22 (4)	11 (2)
suicidal thoughts	503 (89)	44 (8)	20 (4)
alcohol consumption	247 (43)	211 (37)	110 (19)
cigarette smoking	362 (64)	78 (14)	128 (23)

According to the results on Scale of Auto-destructiveness – SAD, in 4% of adolescents the proneness towards auto-aggressiveness is high above average, and as many as 9% have above-average results. Low auto-destructiveness was recorded in 87% respondents.

### Average differences according to gender on certain questionnaire scales – SAD

The results show that girls achieve significantly higher values on the overall SAD result ( $t=-3.385$ ,  $df=565$ ,  $p=0.001$ ) as well as on the scales of suicidal depression ( $t=-3.809$ ,  $df=637$ ,  $p<0.001$ ), anxiety ( $t=-6.562$ ,  $df=640$ ,  $p<0.001$ ), and borderline personality traits ( $t=-2.606$ ,  $df=643$ ,  $p=0.009$ ), while boys have higher values on the aggressiveness scale ( $t=2.655$ ,  $df=653$ ,  $p=0.008$ ) (Figure 1).

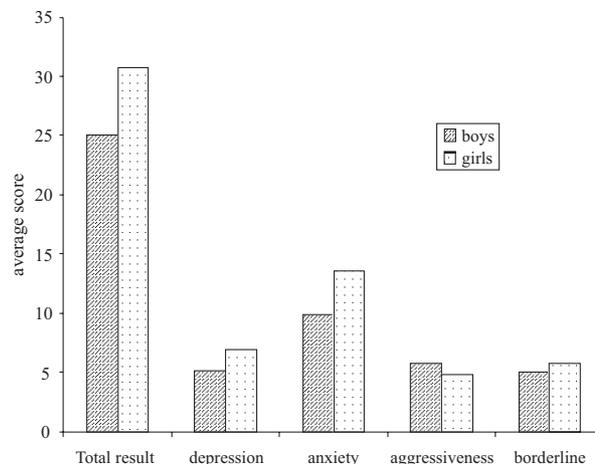


Fig. 1. Average results for boys (shaded) and girls on SAD scales with regards to gender\*; \*the difference with regards to gender is significant at 0.01 on all scales.

### Differences in auto-aggressiveness depending on family factors

A series of t-tests and variance analyses were conducted in order to study the influence of family situation (parents' marital status, financial situation etc.) on the overall level of auto-aggressive behavior (Table 2). Either Kruskal-Wallis or Mann-Whitney test was used as non-parametric replacement in case of variance unhomogeneity, depending on whether the independent variable had 2 or more levels. Kruskal-Wallis test shows a statistically significant difference in the overall auto-aggressiveness ( $\chi^2=18.039$ ,  $df=4$ ,  $p=0.001$ ) with regards to the parents' marital status. Variances are not homogenous and the number of respondents in certain categories is extremely low so there is a statistically significant difference only between the pupils whose parents are married and the ones whose parents are divorced ( $p=0.002$ ), where the latter show more auto-aggressiveness. There was no statistically significant difference in auto-aggressiveness with regards to the frequency of alcohol consumption by mother ( $\chi^2=4.225$ ,  $df=2$ ,  $p=0.121$ ), while alcohol consumption by father has a significant effect. Markedly higher auto-aggressiveness was shown by children whose fathers often or quite often drink alcohol ( $\chi^2=9.270$ ,  $df=2$ ,  $p=0.010$ ). There is a statistically significant increase in auto-aggressiveness in pupils whose mother ( $t=5.264$ ,  $df=541$ ,  $p<0.001$ ) or father ( $t=4.744$ ,  $df=529$ ,  $p<0.001$ ) have a mental illness.

Corporal punishment by mother has a significant influence on auto-aggressiveness ( $F(2,542)=8.097$ ,  $p<0.001$ ), where the only significant difference is between »never« and »rarely/sometimes«. In the »quite often« category  $n$  equals 10, which makes the statistical significance difficult to attain. Corporal punishment by father does not have a statistically significant effect on SAD ( $F(2,532)=2.118$ ,  $p=0.121$ ). When looking at current corporal punishment, both mother and father have a significant role in the increase of auto-aggressiveness ( $F(2,542)=8.132$ ,

**TABLE 2**  
DIFFERENCES IN AUTO-AGGRESSIVENESS DEPENDING ON FAMILY FACTORS

		N (%)	$\bar{X}$ for auto-aggressiveness and 95% CI	Difference test in auto-aggr.	Signifi-cant difference p
Parent marital status	Married	546 (78)	25.9 (25.0–27.6)	18.039†	0.001*
	Divorced	78 (11)	36.2 (30.3–42.2)		
	Widowed father	5 (1)	46.2 (33.1–59.3)		
	Widowed mother	23 (3)	32.4 (21.6–43.2)		
	Other	15 (2)	24.4 (10.7–38.1)		
Mother's working status	Employed	487 (70)	28.0 (25.9–30.1)	7.154†	0.067
	Unemployed (temporarily)	50 (7)	29.8 (24.5–35.1)		
	Housewife	111 (16)	23.4 (19.9–26.9)		
	Pensioner	19 (3)	29.9 (23.5–36.2)		
Father's working status	Employed	533 (76)	26.7 (24.8–28.5)	1.459‡	0.233
	Unemployed (temporarily)	34 (5)	26.6 (20.6–32.5)		
	Pensioner	72 (10)	31.2 (25.7–36.6)		
Housing status	With family in rented apartment	34 (5)	26.9 (18.2–35.6)	0.037‡	0.990
	With family in own apartment	227 (33)	27.1 (24.1–30.1)		
	With family in own house	367 (53)	27.6 (25.4–29.8)		
	Institution	45 (6)	28.0 (21.9–34.0)		
Financial situation	Below average	58 (8)	34.9 (29.5–40.2)	4.604‡	0.010*
	Average	480 (69)	27.1 (25.2–29.1)		
	Above average	132 (19)	24.9 (21.0–28.9)		
Alcohol consumption – mother	Never	403 (58)	26.1 (24.0–28.2)	4.225†	0.121
	Very rarely or sometimes	246 (35)	29.4 (26.6–32.2)		
	Often or quite often	17 (2)	27.8 (17.1–38.5)		
Alcohol consumption – father	Never	198 (28)	25.7 (22.6–28.8)	9.270†	0.010*
	Very rarely or sometimes	379 (54)	26.6 (24.6–28.7)		
	Often or quite often	67 (10)	35.7 (29.2–42.2)		
Mental illness – mother	Yes	24 (3)	49.4 (45.1–54.7)	5.264§	<0.001*
	No	639 (92)	26.3 (25.5–27.1)		
Mental illness – father	Yes	29 (4)	45.3 (42.0–48.6)	4.744§	<0.001*
	No	617 (88)	26.3 (25.5–27.1)		
Corporal punishment – generally – mother	Never	456 (65)	24.9 (23.0–26.8)	8.097‡	<0.001*
	Very rarely or sometimes	198 (28)	31.4 (28.2–34.7)		
	Often or quite often	10 (1)	40.7 (23.7–57.8)		
Corporal punishment – generally – father	Never	444 (64)	26.0 (24.0–28.0)	2.118‡	0.121
	Very rarely or sometimes	189 (27)	28.8 (25.7–31.9)		
	Often or quite often	16 (2)	35.0 (19.8–50.2)		
Corporal punishment – current – mother	Never	638 (91)	26.4 (24.7–28.0)	8.132‡	<0.001*
	Very rarely or sometimes	22 (3)	39.1 (27.8–50.4)		
	Often or quite often	4 (1)	55.8 (35.4–76.1)		
Corporal punishment – current – father	Never	616 (88)	26.3 (24.6–27.9)	5.341‡	0.005*
	Very rarely or sometimes	24 (3)	40.3 (28.4–52.1)		
	Often or quite often	5 (1)	40.2 (5.2–75.2)		

\* the difference is statistically significant at 0.05; † Kruskal-Wallis test; ‡ variance analysis; § t-test

$p < 0.001$ ), ( $F(2.530) = 5.341$ ,  $p = 0.005$ ), and the post-hoc test shows significant difference only between the ones who are »never« and »rarely/sometimes« corporally punished. Mother's working status does not affect SAD ( $\chi^2 = 7.154$ ,  $df = 3$ ,  $p = 0.067$ ), nor does father's ( $F(2.526) = 1.459$ ,  $p = 0.233$ ). Housing status does not affect the level of auto-aggressiveness either ( $F(3.551) = 0.037$ ,  $p = 0.990$ ), while the financial situation has a significant influence ( $F(2.548) = 4.604$ ,  $p = 0.010$ ). High-school students living in below-average financial situations show more auto-aggressive behavior in comparison with the other two groups.

Family cohesion appears to be a statistically significant predictor of the overall auto-aggressiveness – low cohesion indicates high auto-aggressiveness. Furthermore, female gender and older age brings about greater auto-aggressiveness, just like father or mother's mental illness or mother's frequent corporal punishment (Table 3). Multiple regression analysis, with family cohesion and family factors, as predictors of the overall result in SAD i.e. auto-aggressiveness, shows that these factors explain 17% of the criteria variance ( $F = 4.850$ ,  $p < 0.001$ ).

**TABLE 3**  
REGRESSION ANALYSIS OF INDIVIDUAL FAMILY FACTORS  
IN PREDICTING AUTO-AGGRESSIVENESS

Predictors:	Criterion: auto-aggressiveness		
	$\beta$	t	p
Family cohesion	-0.140	-3.034	0.003*
Gender	0.138	3.110	0.002*
Age	0.095	2.131	0.034*
Number of brothers/sisters	0.019	0.425	0.671
Parents' marital status	0.048	1.063	0.289
Mother – working status	-0.029	-0.639	0.523
Father – working status	-0.025	-0.563	0.573
Where respondent lives	0.025	0.578	0.564
Parents' financial situation	-0.045	-1.006	0.315
Alcohol consumption – mother	0.049	1.040	0.299
Alcohol consumption – father	0.033	0.702	0.483
Mental illness – mother	-0.123	-2.321	0.021*
Mental illness – father	-0.106	-2.022	0.044*
Corporal punishment – mother general	0.140	2.481	0.013*
Corporal punishment – father general	-0.073	-1.300	0.194
Corporal punishment – mother current	0.042	0.796	0.426
Corporal punishment – father current	0.096	1.868	0.062

### *Connection between family cohesion and auto-aggressiveness*

In order to examine the connection between family cohesion and auto-aggressiveness, bivariate correlations

of all subscales of the questionnaire – SAD and family cohesion were calculated. All correlations are statistically significant, so significant correlations and the ones higher than 0.20 will be deemed relevant.

Overall family cohesion has a low correlation with auto-aggressiveness ( $r = -0.23$ ), as does the cohesion subscale ( $r = -0.26$ ), while adaptability does not have a significant connection with the auto-aggressiveness aspects. The cohesion subscale has significant, low correlations with subscales of the SAD questionnaire: suicidal depression ( $r = -0.24$ ), aggressiveness ( $-0.28$ ) and borderline ( $-0.32$ ). All significant correlations indicate that the more adolescents perceive their family as less cohesive, the more mental problems they have. Kruskal-Wallis test was used to examine the way the cohesion level affects the shown auto-aggressiveness level. The test displayed a statistically significant difference in the overall auto-aggressiveness ( $\chi^2 = 29.98$ ,  $df = 2$ ,  $p < 0.001$ ) in connection to the family cohesion. The most pronounced auto-aggressiveness was shown by the respondents who perceive their family as loosely connected and with low cohesion.

## **Discussion**

The results of the research show a high incidence of auto-aggressive behavior in adolescents. Almost 8% of adolescents sometimes or often self-inflict injuries, and 11% sometimes or often contemplate suicide. Examining the frequency of self-inflicted cuts, we found out that 6% of the children are prone to that kind of auto-aggressiveness. Drinking alcohol is very common, as 57% of them drink it sometimes or often, while smoking is present in 37%. According to the results of the SAD questionnaire, 14% of children show above-average to high above-average proneness to auto-aggressiveness. Comparing these to other research results, it seems that the self-harm incidence in Croatia is in accordance with the CASE results as well as with some other studies where also 10% of children contemplate or commit self-harm<sup>3-7,16</sup>.

Girls are more prone to auto-aggressiveness than boys, and girls often show symptoms of suicidal attitude and anxiety, whereas boys show greater aggression. The obtained results are in line with the CASE results which showed that self-harm is more common with girls<sup>3-7,16</sup>. According to the SAD questionnaire girls show a higher incidence of depression and anxiety which is in line with results of other research showing that internalized disorders such as anxiety and depression are more common in girls<sup>17,18</sup>. On the other hand, male respondents more often express aggression which also corresponds to the findings in literature<sup>17,19</sup>. Some research states that a higher incidence of self-harm in girls, compared to boys, might be associated with other risk factors such as depressive behavior, eating disorders and problems in emotional relationships<sup>20</sup>.

Parents' marital status, their financial situation, alcoholism and mental illness, and corporal punishment by parents proved to be significant family factors associated with auto-aggressiveness. Adolescents whose parents are

divorced show more auto-aggressiveness. In Kerfoot research<sup>16,21</sup> more than half of children and adolescents that self-inflict injuries are in a single-parent family (primarily due to divorce) with big current family problems. Longitudinal research confirms the connection between family environment during growing up and self-harm in adolescence<sup>22–25</sup> showing an increased risk in children whose parents are divorced and in families with marital problems<sup>26</sup>.

Our research showed that adolescents in poor financial situations are more prone to auto-aggressiveness. Literature confirms this by indicating low socio-economic status, poor education, low income and poverty as socio-economic risk factors for auto-aggressiveness. Moreover, in the longitudinal research<sup>22</sup> socio-economic problems during childhood continued to be a predictive factor for self-harm later in age regardless of the mental problems and stressful life events<sup>16,26–28</sup>.

Our sample showed that the youth whose parents were prone to alcohol or had a mental illness also had a tendency towards auto-aggressiveness as opposed to the youth whose parents were mentally healthy. Those results were in line with the expectations since other studies' results point to the fact that parents' psychopathology makes a risk factor for auto-aggressiveness<sup>29</sup>. On the other hand, children that may inherit biological vulnerability for mood disorders and addiction, for example, are most probably growing up in dysfunctional families<sup>29</sup>. Mother-child relationship is especially important. When this relationship was bad, suicidal symptoms in adolescents were more pronounced<sup>30</sup>.

Another important family factor associated with auto-aggressiveness in our research was corporal punishment by parents. That is consistent with the retrospective research in adults that showed connection between self-harm and child abuse, such as emotional, physical and sexual abuse and some other problems of that sort within the family like father's physical violence towards mother<sup>31</sup>. Inadequate parenting and child abuse can increase the risk of self-harm since the mentioned factors lead to serious problems in interpersonal relationships during adolescence, in terms of difficulties with social skill adoption, which are key to healthy interpersonal relations<sup>24</sup>. Good communication in the family, i.e. good family cohesion, proved to be a protective factor for auto-aggressive behavior in adolescence<sup>25,32</sup>. Those results are in accordance with ours where family cohesion is significantly associated with auto-aggressiveness in a way that those adolescents that perceive their family as less cohesive have more mental problems. Poor communication between parents and adolescents proved to be highly associated with auto-aggressiveness so communication problems between adolescents and their parents play an important role in the incidence of auto-aggression<sup>33</sup>.

To understand the connection of family cohesion to youth's auto-aggressiveness, Bowlby's theory of attachment can be useful. Bowlby believed that self-harm in youth was meant to provoke a reaction in the parent with

whom they have a relation of insecure attachment. The intention there is twofold: to punish the parent and by showing their own suffering to stress the need for parent's affection<sup>34</sup>. McLaughlin finds that adolescents prone to auto-aggressiveness have more problems with family, friends, partners and school, and have less understanding in their families compared to adolescents that are not prone to auto-aggressiveness<sup>35</sup>. Interpersonal problems play an important role in the incidence of self-harm problems in all age groups, but for children and adolescents their relationship with their parents is of the greatest importance. Dysfunctional relationship with parents, especially in mother-adolescent relationship, is associated with depression and suicidal ideas<sup>36</sup>. Meta-analysis results of self-harm in adolescence stress the importance of poor communication, support and acceptance within the family.

Family cohesion seems to relieve the effects of other stressors<sup>38</sup> so uncohesive families contribute to the dysfunctional behavior patterns in adolescents.

The limitation of our research arises mainly from its methodology. Self report measures were used and the adolescents' perception does not necessarily reflect the real state. The used questionnaire tests the proneness to auto-aggressiveness in continuum. The data on actual self-harm and its incidence was obtained using a relatively small number of sections and for any in-depth auto-aggressiveness research an international auto-aggressiveness measuring instrument, such as Deliberate Self-harm Inventory<sup>39</sup> or Self-harm Behavior Questionnaire<sup>40</sup> should be translated and standardized. The respondent sample from which the data was gathered consisted of urban population since the research was conducted in Zagreb, and the generalization of the research is only possible for a similar population. The research did not encompass students that dropped out of school, who often show a great number of mental problems<sup>41</sup>. In examining factors that are associated with auto-aggressiveness, it would be useful to examine others that can be risk factors, such as impulsiveness, unresourcefulness in problem solving<sup>42</sup>, proneness to pessimism and self-blame, or they can be protective factors, such as optimism, religiousness, good social network, high self-esteem etc. This research tests the difference between adolescents from different social situations of the family.

In order to make any conclusions on cause-effect relationship, it is necessary to conduct a longitudinal research.

In conclusion, the results of our research show a great incidence of auto-destructive behavior among adolescents and the family factors that contribute to it. Consequently, there are several implications of our research, the most important of which being that preventive intervention lies in improvement of family communication and providing social support to families. It is vital to include the family in the therapeutic work with self-harming adolescents. Moreover, a higher incidence of auto-aggressiveness in girls as well as their greater anxiety and proneness to suicide in comparison to boys, who in their

turn express greater aggressiveness, poses the question whether there should be adopted a different approach in work with girls as opposed to boys. Having in mind the importance of treatment of adolescents prone to auto-aggressive behavior, it would be advisable to identify indi-

viduals in schools that need help. Further research of psychosocial factors associated with auto-aggressiveness in adolescents is needed, as well as a study on family intervention effectiveness.

## REFERENCES

- MARIĆ J, Klinička psihijatrija, XI prerađeno i dopunjeno izdanje. (Beograd, Megraf, 2005). — 2. RUTTER'S M, BISHOP D, PINE D, SCOTT S, STEVENSON J, TAYLOR E, THAPAR A, Rutter's Child and Adolescent Psychiatry, (Blackwell Publishing, 5th edition, 2008). — 3. MADGE N, HEWITT A, HAWTON K, DE WILDE EJ, CORCORAN P, FEKETE S, VAN HEERINGEN K, DE LEO D, YSTGAARD M, J Child Psychol Psychiatry, 49 (2008) 667. — 4. MCMAHON EM, REULBACH U, CORCORAN P, KEELEY HS, PERRY IJ, ARENSMAN E, Psychol Med, 8 (2010) 1. — 5. GUERREIRO DF, NEVES EL, NAVARRO R, MENDES R, PRIOSTE A, RIBEIRO D, LILA T, NEVES A, SALGADO M, SANTOS N, SAMPAIO D, Neuropsychiatr Dis Treat, 16 (2009) 611. — 6. CERUTTI R, MANCA M, PRESAGHI F, GRATZ KL, J Adolesc May, 12 (2010). — 7. BRUNNER R, PARZER P, HAFFNER J, STEEN R, ROOS J, KLETT M, RESCH F. Arch Pediatr Adolesc Med, 161 (2007) 641. — 8. BAER J, J Marital Fam Ther, 64 (2002) 668. — 9. OLSON, DH. FACES III, Family Adaption and Cohesion Scales. (St. Pula, University of Minnesota, 1985). — 10. KLEWER W, KUNG E, J Clin Child Psychol, 27 (1998) 278. — 11. SIČIĆ M, MUŽINIĆ L, Faktori rizika kod pojave samoozljeđivanja djece i mladih. In: Ljetopis socijalnog rada, Vol. 15 No. 1, 2008. — 12. FRANČIŠKOVIĆ T, MORO LJ, URLIĆ I, RONČEVIĆ GRŽETA I, TIĆ BAČIĆ T, Coll Antropol, 24 (2000) 579. — 13. FRANČIŠKOVIĆ T, TOVILOVIĆ Z, ŠUKOVIĆ Z, STEVANOVIĆ A, AJDUKOVIĆ D, KRALJEVIĆ R, BOGIĆ M, PRIEBE S, Croat Med J, 49 (2008) 483. — 14. DAUTOVIĆ M., Skala autodestruktivnosti i priručnik za skalu autodestruktivnosti SA, (Jastrebarsko, Naklada Slap, 2000). — 15. ACHEBACH TM, RESCORLA LA, Manual for ASEBA School Age Forms and Profiles. Burlington VT: University of Vermont, Research Center for Children, Youth and Families, 2001. — 16. KERFOOT M, Children and Society, 10 (1996) 236. — 17. CRICK NR, ZAHN-WAXLER C, Dev. Psychopathol, 15 (2003) 719. — 18. SCHONERT-REICHL KA, OFFER D, Gender differences in adolescent symptoms. In: LAHEY B, KAZDIN AE. (eds.), Advances in Clinical Child Psychology (Plenum Press, New York, 1992). — 19. WANGBY M, BERGMAN LR, MAGNUSSON D, Child Dev, 70 (1999) 678. — 20. WICHSTRÖM L, ROSSOW I, Suicide Life-Threat, 32 (2002) 101. — 21. KERFOOT M, DYER E, HARRINGTON V, WOODHAM A, HARRINGTON R, Br J Psychiatry, 168 (1996) 38. — 22. FERGUSSON DM, WOODWARD LJ, HORWOOD LJ, Psychol Med, 30 (2000) 23. — 23. BROWN J, COHEN P, JOHNSON JG, SMAILES EM, J Am Acad Child Adolesc Psychiatry, 38 (1999) 1490. — 24. JOHNSON JG, COHEN P, GOULD MS, KASEN S, BROWN J, BROOK JS, Arch Gen Psychiatry, 59 (2002) 741. — 25. MARTIN G, ROZANES P, PEARCE C, ALLISON S, Acta Psychiatr Scand, 92 (1995) 336. — 26. BEAUTRAIS AL, Aust N Z J Psychiatry, 34 (2000) 420. — 27. SCHMIDTKE A, BILLE-BRAHE U, DELEO D, et al, Acta Psychiatr Scand, 93 (1996) 327. — 28. TAYLOR R, PAGE A, MORRELL S, CARTER G, HARRISON J, Br J Psychiatry, 185 (2004) 486. — 29. MOSCICKI EK, Psychiatr Clin North Am, 20 (1997) 499. — 30. GARBER J, LITTLE S, HILSMAN R, WEAVER K, J Adolesc, 21 (1998) 445. — 31. DUBE SR, ANDA RF, FELITTI VJ, CHAPMAN DF, WILLIAMSON DF, GILES WH, JAMA, 286 (2001) 3089. — 32. EVANS E, HAWTON K, RODHAM K, Clin Psychol Rev, 24 (2004) 957. — 33. TULLOCH AL, BLIZZARD L, PINKUS Z, J Adolesc Health, 21 (1997) 267. — 34. VULIĆ-PRTORIĆ A. Depresivnost u djetinjstvu i adolescenciji, (Jastrebarsko, Naklada Slap, 2004). — 35. MCLAUGHLIN J, MILLER P, WARWICK H, J Adolesc, 19 (1996) 523. — 36. ADAMS DM, OVERHOLSER JC, SPIRITO A, Can J Psychiatry, 39 (1994) 43. — 37. LACKOVIĆ-GRGIN K, Psihologija adolescencije. (Jastrebarsko, Naklada Slap, 2006). — 38. RUBENSTEIN J, HALTON A, KASTEN L, RUBIN C, STECHLER G, Am J Orthopsychiatry, 68 (1998) 274. — 39. GRATZ KL, J Psychopathol Behav Assess, 23 (2001) 253. — 40. GUTIERREZ PM, OSMAN A, BARRIOS FX, KOPPER BA, J Pers Assess, 77 (2001) 475. — 41. LAYE-GINDHU A, SCHONERT-REICHL K, J Youth Adolesc, 34 (2005) 447. — 42. KINGSBURY S, HAWTON K, STEINHARDT K, JAMES, J Am Acad Child Adolesc Psychiatry, 38 (1999) 1125.

M. Tripković

Psychiatric Hospital for Children and Youth, Kukuljevićeva 11, 10000 Zagreb, Croatia  
e-mail: mara.tripkovic@djecja-psihijatrija.hr

## OBITELJSKI ČIMBENICI POVEZANI S AUTOAGRESIVNOŠĆU KOD ADOLESCENATA U HRVATSKOJ

### SAŽETAK

Cilj ovog rada bio je ispitati ulogu obiteljskih socijalnih prilika i obiteljske kohezivnosti na iskazivanje autoagresivnosti kod adolescenata u Hrvatskoj. Istraživanje je provedeno na srednjoškolskom uzorku na području Zagreba i obuhvatilo je 701 učenika oba spola u dobi od 14 do 19 godina. Za pribavljanje osnovnih demografskih podataka korišten je Strukturirani upitnik s demografskim i obiteljskim podacima. Za ispitivanje autoagresivnosti dio Izvješća za mlade od 11 do 18 godina te Skala autoadestruktivnosti – SAD, a za ispitivanje obiteljske kohezivnosti korišten je Upitnik obiteljske prilagodljivosti i kohezivnosti FACES-III. Dobivene su razlike po spolu: djevojke su sklonije autoagresivnosti od mladića ( $t=-3,385$ ,  $ss=565$ ,  $p=0,001$ ), a kod djevojaka se češće nalaze i simptomi depresivnosti ( $t=-3,809$ ,  $ss=637$ ,  $p<0,001$ ) i anksioznosti ( $t=-6,562$ ,  $ss=640$ ,  $p<0,001$ ), dok je kod mladića više izražena agresivnost ( $t=2,655$ ,  $ss=653$ ,  $p=0,008$ ). Značajnim obiteljskim čimbenicima povezanim s autoagresivnošću pokazali su se bračni status roditelja ( $\chi^2=18,039$ ,  $ss=4$ ,  $p=0,001$ ), financijska situacija roditelja ( $F_{(2,548)}=4,604$ ,  $p=0,010$ ), alkoholizam oca ( $\chi^2=9,270$ ,  $ss=2$ ,  $p=0,010$ ) i psihička bolest majke ( $t=5,264$ ,  $ss=541$ ,  $p<0,001$ ), kao i oca ( $t=4,744$ ,  $ss=529$ ,  $p<0,001$ ) te tjelesno kažnja-

vanje od strane majke ( $F(2,542)=8.132$ ,  $p<0,001$ ) ili oca ( $F(2,530)=5,341$ ,  $p=0,005$ ). Adolescenti čiji su roditelji razvedeni iskazuju više autoagresivnosti. Obiteljska kohezivnost pokazala se značajno povezanom s autoagresivnošću. Adolescenti koji svoju obitelj percipiraju manje kohezivnom imaju više psihičkih tegoba ( $\chi^2=29,98$ ,  $ss=2$ ,  $p<0,001$ ). Postoji povezanost autodestruktivnih ponašanja kod adolescenata i obiteljskih faktora. Poznavanje obiteljskih socijalnih prilika i obiteljske kohezivnosti može pomoći u razumijevanju, prevenciji i tretmanu autoagresivnosti kod adolescenata.