#### SOCIO-FAMILIAL FACTORS THAT LEAD TOJUVENILE DELINQUENCY

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Abstract: Introduction. Delinquency represents a complex social issue which results from the interactions between the individual and the environment. The purpose of this study is to identify individuals and socio-familial (IQ level, toxics, school abandonment) factors associated with the repeated committing of antisocial crimes.

Material and method. A retrospective study was made, containing minors forensic psychiatrically examined at the Institute of Legal Medicine Tirgu-Mures in the period 2009-2012. The inclusion criteria was age between 14 and 18 at the time of the crime.

Results and discussions. The mean age of the 290 minors included in the study was  $14.93 \pm 0.87$  years, 88.3% of them being male. The most frequent antisocial committed act was theft, in 82% of the cases. The environment which they came from (rural/urban) is not significantly associated with committing crimes and the simple evaluation (organized/unorganized) of the familial environment revealed statistically significant differences regarding drug use and school drop-out. A reduced IQ ( $\leq$ 79) level was found at 35 minors, and a statistically significant correlation was found (p=0.023) between the high number of crimes ( $\geq$  3) and the small IQ level. The school abandonment percentage was 56.5% at the time of the psychiatric forensic examination.

Conclusions: the minors who abandoned school are the most exposed to committing antisocial acts, and should be the target group in prevention programmes. The low intelligence level predisposes them to repeated acts, and in our opinion admission in amedical-educational institute (art.105 from the Penal Code) would be a both educational and preventive measure.

Keywords: juvenile delinquency, IQ level, theft, school dropout.

#### Introduction

It is known that teenagers go through great crisis of life: puberty and adolescence, which are leaps of situations transformations. These situations make them oppositionist and unhappy. [1]Intelligence is the most a critical aspect of personality, and it also plays a significant role in behavior determination.

Delinquency represents a complex social issue which results from the interactions between the individual and the environment, being nothing else then a series of illicit facts, no matter if they have or haven't a penal character. In addition to the primary reasons (biological) of juvenile delinquency, secondary reasons exist, that cumulated lead to personality and behaviour disorders, like school abandonment, home run away or crimes committing. [2]

Many studies have tried to identify the causes of juvenile delinquency, but no single pathway has been identified, although evidence in the recent literature supports the theory that some behavioural and lifestyle characteristics may increase the probability of delinquency. [3] Among these characteristics, mental health disorders, alcohol and other drug use, poor family status or child violence or abuse are included. [4, 5]

In a study [6] from 2012 conducted on 528 American juvenile offenders with and without intellectual disability (ID), the authors concluded that adolescents with intellect disability had committed more offenses against persons compared to adolescents without ID

and juvenile offenders without ID more often had problems in the relationship and alcohol/drugs domain, whereas juveniles with ID more often experienced problems in the domains of attitude, aggression and skills.

Some of the most important research on developmental theories on violence and aggression has emanated from the work of Moffitt [7] who categorizes antisocial adolescents according to their age of onset of deviant behaviour, in early starters vs. late starters. According to this theory early starters are more likely to develop into life-course persistent offenders rather than adolescent-limited offenders as with late starters.

The Romanian Penal system requires that all the juvenile delinquents with ages between 14 and 15 years old go through a forensic psychiatric examination, to determine the mental capacity to judge the nature and consequences of their ownactions.

The purpose of this study was to find possible correlates between the IQ level, the environment which the juvenile delinquency came from (rural, urban, disorganized families, school dropout) and the illegal actions committed by the minors forensic psychiatrically examined at IML Tirgu Mures in the period 2009-2012.

# Material and method

The data was collected from the files of forensic psychiatric examinations kept in the Institutes archive between the years 2009-2012,inclusion criterion was age between 14 to 18 years. Data was processed with the Epi Info software.

The data collected from the files for each of the 290young people were: the committed social crime, the age of the person at the moment of the crime, the urban or rural provenience, if the person acted alone or was accompanied by someone, the number of committed acts, the IQ level (determinedduring the psychological examination), the use of toxic substances (smoking, drinking, drugs), school abandonment, the familial environment (organized/disorganized). The juveniles with more than one social act were included only once in the study, we cumulated the number of acts.

## Results

Data analysis was performed with the Epi Info software, Chi square, 2 tailed p and Fishers exact test, with a confidence limit of 95% were used. A p value of <0.05 was considered statistically significant. Continuous variables are reported as mean  $\pm$  SD (standard deviation) and categorical variables as observed number of patients (percentage).

The mean age of the 290 minors, at the moment of committing the antisocial act, was  $14.93 \pm 0.87$  years. Regarding the sex of the minors, 88.3% (256) were male and the rest of 11.7% (34) female.

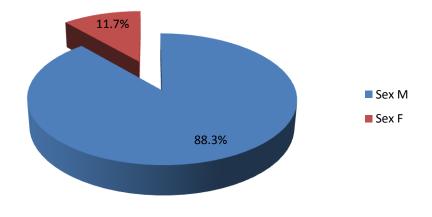


Figure 1. Sex distribution of the studied group

Analysing the group by their provenience environment, 48.3% (140) of them came from urban environment and 51.7% (150) from a rural one; the high number of committed crimes wasn't statistically correlated with the provenience environment, p>0.05.

Regarding the antisocial acts, theft was de most frequent, with a majority of 82% of the total, followed by burglary 8.6%, rape with a little over 4.2%, moderate and minor injury5.2% together.

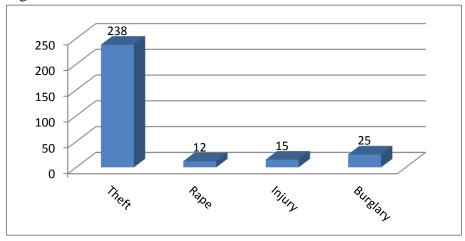


Figure 2. Antisocial committed acts incidence

The total number of antisocial acts committed by the 290 juveniles was 540 acts, with a mean of 1.86 act/minor, with a minimum of 1 act (encountered at 73.4% of them) and a maximum of 32 acts.

Greater attention being granted to the 39 minors with 3 or more antisocial acts, it was observed that almosta quarter of them had an IQ level under 79, with a statistically significant p value of 0.023, we can conclude that there is a correlation between the low IQ level and the high number of antisocial acts. Also the age of these 39 minors was between 14 and 15 years at 36 of them, the other 3 were between16 and17 years old. A statistically significant difference was calculated between the age and the high number of acts, p = 0.037

No of acts	Frequency	Percent
1	213	73.45%
2	38	13.10%
3	18	6.21%
4	5	1.72%
5	2	0.69%
6	3	1.03%
7	1	0.34%
8	2	0.69%
9	1	0.34%
10	1	0.34%
11	1	0.34%
12	1	0.34%
15	1	0.34%
17	1	0.34%
20	1	0.34%
32	1	0.34%
Total	290	100.00%

Table 1 Number of committed acts by the minors

Regarding the IQ levels, 35 (12%) children had an IQ level  $\leq$  79, 22 (7.6%) children had an IQ level between 70 and 79, these being with liminal intellect, 12 (4.13%) of them had mild mental retardation with an IQ level between 50-69, and one girl (0.3% of the total) was with moderate mental retardation with an IQ level 40-50.

IQ	Group 14-15	Group 16-18	Total
	years		
120-139	0%	0%	0%
110-119	0%	0%	0%
100-109	0.4%	0%	0.3%
90-99	3.5%	6.3%	4.1%
80-89	84.1%	80.9%	83.4%

70-79	7,9%	6.3%	7.6%
50-69	3.5%	6.3%	4.1%
20-49	0.4%	0%	0.3%
0-19	0%	0%	0%

Starting from the idea that children with a subnormal intellect IQ  $\leq$  79 are predisposed to committing a higher number of antisocial acts, out of the 35 children with lower than normal IQ, 14 (40%) of them committed more than 1 crime.

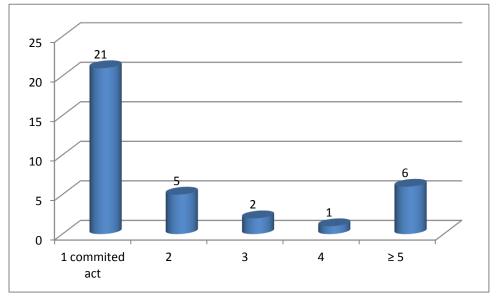


Figure 3. Number of antisocial acts of the minors with IQ level lower than 79

Referring to the number of accomplices, in 43.7% (127) of the cases the minors acted alone, 53.1% (154) of them acted together with one other person, 4 of them had 2 accomplices and 5 of them had 3 accomplices. The presence of accomplices did not correlate statistically significant with the IQ level, p = 0.506, out of the 163 minors which did not act alone, only 22 of them had an IQ level lower than normal.

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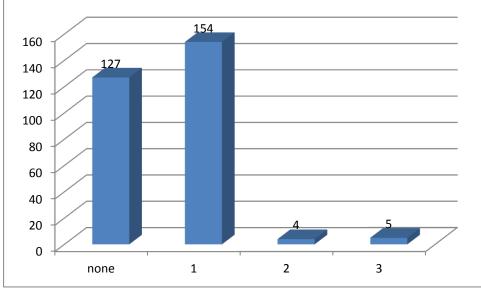


Figure 4. Number of accomplices

Dividing the studied group by age criteria, in the first group we included children with ages between 14 and 15 years old and in the second group, children between 16 and 18 years old. 78.3% of them were in the first group and the rest of 21.7% in the second group.

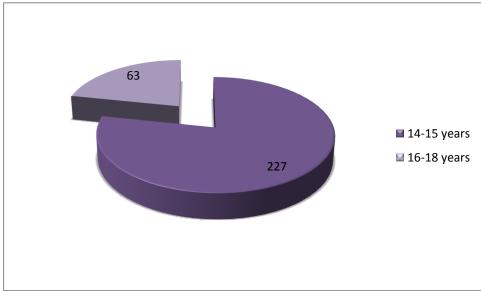


Figure 5. The studied group divided by age criteria

The first group, composed out of children with ages of 14 and 15 years old, was examined, looking to find possible correlations between their IQ level (IQ under 79) and the declared drugs and alcohol use, the presence of accomplices and the high number of committed social acts ( $\geq$ 3). A highly statistical significant difference was found between the IQ level and the high number of social acts, children with low IQ being more exposed to repeating crimes (p=0.008).

	No of soci		
IQ<=79	0	1	Total
0	173	27	200
Row%	86.50%	13.50%	100.00%
Col%	90.58%	75.00%	88.11%
1	18	9	27
Row%	66.67%	33.33%	100.00%
Col%	9.42%	25.00%	11.89%
TOTAL	191	36	227
Row%	84.14%	15.86%	100.00%
Col%	100.00%	100.00%	100.00
Chi-square			0.008

Table 3.14-15 years old group IQ level and number of committed social acts

Inspecting the minors by the familial environment which they came from, 118 (40.7%) of them came from disorganised families, in which at least one of the parents was missing from different reasons (divorce, decease, run-away) and the rest of 80 (59.3%) came from organized families, no significant difference was noted between the familial environment and the higher number of acts, IQ level or accomplices (p > 0.05), but a significant correlation was observed between the children who came from a disorganised familial environment and the school drop-out (p = 0.03) and drug use (p = 0.008).

Regarding the school abandonment of the 290 delinquents, in this study 56.5% of them, at the time of the forensic psychiatric examination, had abandoned school. A statistically significant correlation was found between the low IQ level and the school abandonment, but this was to be expected. Also the minors who abandoned school had a significant higher crime rate (p = 0.0004) and were more often accompanied by at least another person during the offence (p = 0.023).

# Discussions

Due to the particular requirement of the Romanian Penal System that all young people aged 14 - 15 years (until their 16-th anniversary) must undergo a medico-legal psychiatric examination in order to determine their judgment capacity (discernment), we were able to capture the entire juvenile delinquency phenomenon of this age in the area served by our institute (Mures County, Romania, aprox. 580,000 inhabitants) and in the selected period of time (2009 – 2012).

The relationship between intelligence and antisocial behaviour is still controversial. It has been stated that IQ affects the likelihood of delinquent behaviour through its effect on school performance and that the relationship between intelligence and delinquency is at least as strong as that between official delinquency and either class or race [8]. From a structuralist perspective, delinquent behaviour is a consequence of social institutional practices rather than of individual characteristics: the correlation of IQ with delinquency is not because IQ exerts any casual influence on delinquent behaviour but because it may be selected by some institutions as a criterion for different treatment [9]. Our study revealed a shift of the IQ levels of the juvenile offenders towards the low average range (IQ = 80-89, more than 80%) compared to the general population (average IQ 90-109), consistent with similar findings in a study performed in Bucharest (Romania) in the period 1995 - 1997 [10]. We also noted a significant higher percentage of repeated criminality in children with borderline intellectual functioning and mild mental retardation (IQ lower than 80) compared to children with low average and average intelligence. Wilson and Hernstein concluded about a clear and consistent link between criminality and low intelligence when comparing the two groups: offenders and non-criminals [11]. We support the idea of an indirect influence of IQ on delinquency, mediated by frustrating school experiences; academic paucity and breakdown are associated with delinquency. In our group of delinquents, 56% abandoned school education, the percentage is much higher than the one in general population of the same age group (15 – 17%).

Use of public health prevention programs may be particularly well-suited to the early childhood developmental period. By concentrating on early, modifiable risk factors, health professionals can play a greater role in secondary and tertiary prevention. This symbolizes a new and exciting interface between the contributions of scientists, educators, and practitioners alike, and may help address the long-standing public health concern of how to prevent violence [12]

#### Conclusions

Juvenile delinquency is gender-related (high majority of male offenders) and poor school performance is strongly associated with this phenomenon.

Family influence needs to be explored in a more complex way; the simply organized or disorganized family structure is not relevant for the criminal conduct of the children.

Low intellectual development is a predictive factor for future chronic offending. Medicoeducational enrichment programs might help to counteract any influence of intellectual impairment on predilection of young people to commit repeated crimes.

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