AN INVESTIGATION OF ANTISOCIAL ATTITUDES, FAMILY BACKGROUND AND MORAL REASONING IN VIOLENT OFFENDERS AND POLICE STUDENTS

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ABSTRACT

In the present study we investigated the relationship between moral judgment competence, antisocial attitudes and family background as contributors to criminal behavior. We used two contrasting samples: offenders convicted for murder and police students, in order to better capture the variables differentiating between offenders and non-offenders. We were also interested in testing the developmental delay hypothesis, which states that it is possible for violent offenders to operate at lower levels of moral judgment competence. The results partially confirmed this hypothesis (at a global level of moral reasoning competence, but with a preference of both groups for moral reasoning placed at stage 4: “maintaining the social order”). The other two variables that were investigated – antisocial attitudes and family background – were found to adequately distinguish between the two samples.

KEYWORDS: moral judgment competence, antisocial attitudes, family background, developmental delay hypothesis.

INTRODUCTION

An impressive number of studies have tried to identify the factors that generate or are involved in criminal behavior. Although finding the antecedents of crime offers valuable information regarding patterns of offending behavior, there

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are also a number of limitations to this approach. First, according to Aleixo and Norris (2000), there are practical problems, since a large number of variables are known to be associated with crime, so that even if it would be possible to accurately measure all of these, any experimental control over the large number of variables would be impossible. Second, many psychological investigations attempt to explain crime using purely psychological rather than mainstream criminological constructs (Aleixo & Norris, 2000, p. 610).

Given the considerable social negative effects of criminal behavior, its etiology has been extensively studied for many years (Abbott, 2000). Research in this field shows that a number of variables involved in etiology of criminal behavior have been identified. Among these, the most important are (1) an antisocial personality, including hostility, impulsivity, and psychopathic personality; (2) a history of having engaged in criminal behavior; (3) antisocial associates/peers that offer social support for antisocial behavior; and (4) attitudes, values, beliefs, and rationalizations supportive of criminal conduct (Andrews & Bonta, 1994). Other researchers indicated the role of sociomoral immaturity and criminal sentiments (Stevenson, Hall, & Innes, 2003; McGuire, 1995). Criminal sentiments represent attitudes and beliefs which constitute the proximal personal and interpersonal cognitive support for engaging in offending behavior (Andrews & Bonta, 1994). Andrews and Wormith (1984) suggested that criminal sentiments consisted in three constructs: negative attitudes towards law, courts and police, tolerance for law violation and identification with criminal others.

Within the field of criminal psychology and criminology, a substantial emphasis was placed on the attitudes, or more specifically, the antisocial attitudes construct. In the literature, the construct of antisocial attitudes encompasses such things as criminally oriented norms, values and beliefs regarding legal institutions and authority, identification with criminal others, rationalizations, justifications or tolerance for law violations, pride in the commission of criminal acts, as well as beliefs in luck, random chance and/or other externally attributable factors (Shields & Simourd, 1991; Shields & Whitehall, 1994; Simourd, 1996; Simourd & Van de Ven, 1999; Mills, Kroner, & Forth, 2002; Andrews & Bonta, 1994).

Below we briefly review each variable included in the present investigation, which contrasts a group of criminal offenders (convicted for murder) to a sample of police students on the dimensions of antisocial attitudes, moral reasoning, family background, taking into account the social desirability of the responses.

a) Antisocial attitudes

Antisocial attitudes have been identified as one of the most important criminogenic risk factors (Andrews et al., 1990). Gendreau, Little, and Goggin (1996) have examined in their meta-analysis the influence of several variables: age/gender/race, criminal history, family factors, intellectual functioning, social class, personal distress, social achievement, and criminogenic needs (consisting in antisocial personality, companions, attitudes, and behavior regarding

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Among these variables, the criminogenic needs were the best predictor for recidivism, and within this domain, the antisocial attitudes and antisocial peers were the best predictors.

The positive relationship between antisocial attitudes and offending is very well documented in the literature (Stevenson, Hall, & Innes, 2003). The criminal sentiments can explain up to 40% of the total variance in three year recidivism (Andrews & Bonta, 1994).

Simourd and van de Ven (1999), and Abbott (2000) have investigated the antisocial attitudes measured with the Criminal Sentiments Scale (Andrews & Wormith, 1984), and Pride in Delinquency Scale (Shields & Whitehall, 1991) in a sample of violent offenders and non-violent offenders. Both scales predicted recidivism, but non-violent offenders had greater antisocial attitudes.

b) Moral development

The psychologist Lawrence Kohlberg started from Piaget's work to elaborate a theory that explained the development of moral reasoning. Kohlberg extended Piaget’s theory, proposing that moral development is a continual process that occurs throughout the lifespan. Piaget had described a two-stage process of moral development, while Kohlberg’s theory of moral development outlined six stages grouped within three hierarchical levels. Lawrence Kohlberg can be credited with legitimizing the moral development as a field of psychological inquiry (Walker, 2004); the six stages of moral reasoning that Kohlberg formulated reflect the author’s interest in the cognitive-developmental approach, being declared a follower of Piaget’s legacy. Georg Lind has developed Kohlberg’s moral development theory and proposed a widely used instrument to measure this dimension: The Moral Judgment Test (Lind, constructed during 1975-1977; for a recent review, see Lind, 2008).

Colby et al. (1983; also Walker, 2004) showed that the following general criteria apply to the six stages included in this theory: a) the stages are distinctly and qualitatively different modes of thinking; b) development through the stages follows an invariant sequence; c) each stage represents a structured whole; d) stages are hierarchical integrations of insights that were achieved in lower stages, and represents a “reorganization of the individual thought patterns rather than learning of new content”.

Kohlberg’s typology has six stages grouped into three distinct developmental levels, which will be briefly described below (according to Lind, Hartmann, & Wakenhut, 1985).

The Pre-conventional level: children are receptive to social labeling (good and bad) which they interpret in terms of physical consequences (punishment) or reinforcements. Therefore, reasoners in the pre-conventional level judge the morality of an action by its direct consequences and are purely concerned with the self in an egocentric manner.

1) Obedience and punishment orientation – the good or bad is determined directly by the physical consequences, free of moral significance.
2) **Individualism and Exchange**: correctness/justice/right is what is in one's own best interest and occasional others' interest. There are some elements of honesty, equal sharing and a specific kind of reciprocity – “what you do to me, I’ll do to you”/ “you scratch my back, and I'll scratch yours.”

**The Conventional level**: is characterized by conformism, obeying the subject’s relevant groups or family exigencies, expectations and rules. As members of society, people conform and maintain their loyalty to the family and society, regardless of the consequences.

3) **Good Interpersonal Relationships**: subjects try to receive approval from the others for being a “good boy” or a “good girl”. At this stage the intentions of actions play a more significant role. Good behavior means doing whatever pleases or helps others.

4) **Maintaining the Social Order**: the authority and social order obedience stage, the person gains respect by acting correct in fulfilling the moral duty. The person considers that when someone violates a law, it is morally wrong. Laws are upheld unless they conflict with other social studies. What is best for group is most important.

**The Post-conventional level** – The person at the postconventional level stops defining right and wrong in terms of group loyalties or norms. Instead, the adult at this level develops moral principles that define right and wrong from a universal point of view. If you ask a person at the postconventional level why something is right or wrong, she will appeal to what promotes or doesn't promote the universal ideals of justice or human rights or human welfare (Kohlberg, 1976).

5) **Contract and Individual Rights**: in this stage, laws and social contracts for conflict mediation appear. The person is aware that procedural values for getting the consensus are relative. There is a high degree of respect for justice, equality and human dignity.

6) **Universal Principles**: the level is based on individual moral principles as an expression of individual moral autonomy. The basic assumption is: Do to the other what you want the other to do to you. These moral laws can’t be destroyed, being more important than any other written laws. The individual takes into account the social norms and rules, but also his own consciousness – his own system of norms and values.

A number of studies conducted with young adult participants have presented data supporting a developmental delay hypothesis regarding moral development: especially aggressive offenders are using a pre-conventional moral reasoning, in contrast with non-offenders who used conventional moral reasoning (Basinger, Gibbs, & Fuller, 1995; Blasi, 1980; Jennings, Kilkenny, & Kohlberg, 1983; Palmer & Hollin, 1998; Nelson, Smith, & Dodd, 1990). Regarding the research on adult offenders the things are less clear and the results are contradictory (Stevenson, Hall, & Innes, 2003; Griffore & Samuels, 1978; Thornton & Reid, 1982; Valliant, Gauthier, Pottier, & Kosmyna, 2000).
c) Family background

A number of family characteristics were studied in relationship with criminal behavior; among these we can talk about the family structure, quality of family relationships, amount of communication, disciplinary and supervision practices, childhood maltreatment, marital discord, familial abuse, parental criminality or antisocial attitudes, substance use and psychopathology (Abbott, 2000). In this study we will only focus on the following dimensions (following the procedure implemented by Abbott, 2000): parental monitoring/discipline; parental deviance, such as antisocial behaviors, associates, and attitudes; and childhood maltreatment, including abuse and neglect.

Andrews and Bonta (1994) theoretically postulated two dimensions of family functioning related to criminal behavior: the normative dimension and the relationship dimension. The normative dimension consists in the parent’s role to induce prosocial norms and values into their children. If the parents manifest an antisocial model, doubled by an inconsistent parenting style, the positive development of this dimension is impeded. The relationship dimension is viewed as the factor that facilitates the assimilation of prosocial values. The factors found to inhibit this dimension are neglect and maltreatment. A number of studies have shown that parental antisocial attitudes are positively associated with lying, stealing and substance use (Van Dieten, 1990, as cited in Abbott, 2000). This author also suggests that it is possible that children learn from their parents the deviant values and attitudes. Laoeber (1990) showed that parental criminality and antisocial peers were moderate predictors of delinquent behavior.

Regarding the physical and sexual abuse, Dutton and Hart (1992) showed that 41% of 604 incarcerated offenders were exposed to some sort of abuse during childhood. Tornberry (1995) showed in a sample of students that the more extensive the maltreatment, the higher rates of self-reported and official reported rates of juvenile delinquency.

d) Socially desirable responding

Given the widespread and recognized tendency of human subjects to offer overly positive answers on questionnaires (especially in certain contexts), the psychologists have tried to develop methods for detecting these response biases. There are a number of techniques that are available for detecting biased responses: (a) social desirability scales, (b) intrapsychic measures (the degree to which test-takers rate themselves more positively than others and the correlation between test takers’ self-ascribed traits and their ratings of the desirability of those traits), and (c) discrepancy measures – see below (Paulhus, Harms, Bruce, & Lysy, 2003).

The better than average effect (Alicke, 1985) refers to the fact that people tend to present themselves in a better fashion than they rate other people. Researchers have tried to use this characteristic in order to estimate the amount of response bias, but this approach was criticized on the fact that in this way no indicator of external reality is involved (Colvin, Block, & Funder, 1995).
Discrepancy measures consist in comparing the subject’s response to an external credible criterion, which can be operational or social consensus. An example of operational criterion consists in using the intelligence scores to assess the self-reported intelligence. On the other side, social consensus refers to the fact that “a set of informed observers is the best estimate of social reality” (Paulhus et al., 2003).

The most common approach to measure individual differences in socially desirable responding (SDR) is via questionnaires. These instruments pose questions designed to identify individuals who exaggerate their positive and minimize their negative qualities. Two dimensions have been identified as the most important variables for socially desirable responding: impression management and self deception. The self deception refers to the tendency of some respondents to describe themselves in a overly positive fashion, even when they try to be honest (Paulhus, 1999). Impression management refers to the situation when respondents deliberately try to present themselves in a more positive light. Thus, according to Paulhus (1984), self deception refers to the fact that people actually believe their positive responses, while impression management refers to the situation in which people consciously distort their responses. It is expected that in a context with a higher possibility for secondary gains or loses (legal context), these distortions are often amplified (Rogers, Salekin, Sewell, Goldstein, & Leonard, 1999).

In the present study, we wanted to investigate the relationship between antisocial attitudes and moral reasoning in two samples: offenders convicted for murder and undergraduate police officers. Studying the two extreme groups in terms of antisocial attitudes and comparing them in terms of level of moral reasoning may result in important insights regarding the manifestation of these variables in the two populations.

A similar study realized by Abbott (2000, unpublished doctoral dissertation) brought further evidence sustaining the relationships between antisocial attitudes, family background and criminal behavior. We wanted to extend the findings of this study in several ways: first, we introduced the moral competence dimension. Second, we evaluated a group of police students as a contrast group, considering that it would provide a more appropriate comparison than the regular students from the Abbott study, due to their greater involvement in the legal issues. More specific, although moral reasoning is insufficiently investigated in both populations (at this level the study is exploratory), we can safely assume that both populations contrasted in this study (offenders and police students) will be closely involved in legal issues, to a greater degree than the population of students used as a contrast group in the previous studies. And third, the offenders sample in the present study consisted in offenders all incarcerated for violent crime (murder) while in the Abbott study the offenders were convicted for murder, manslaughter, attempted murder, assault, robbery, and arson.

Based on this theoretical framework, our predictions are: 1) Offenders would have delayed moral reasoning development compared with undergraduate police officers. 2) Moreover, offenders will have a higher level of criminal
sentiments than undergraduate police officers. 3) A positive relationship would be observed between the three constructs of antisocial attitudes: the higher the negativity towards the justice system will relate to greater tolerance toward law violation and more pronounced identification with criminal others. 4) The offenders’ group will have a history of higher parental deviance, substance abuse and child maltreatment than police students.

METHOD

Participants

The offenders sample consisted in 50 inmates with an age range between 22 and 55 years (M = 36.18, SD = 9.24). The offenders volunteered for the study, while they were imprisoned in two maximum-security facilities in northwestern Romania. Only the offenders convicted of murder were selected for the study; 47 were male and 3 were female. They were informed that participation in the study was anonymous and that they could withdraw from the study at any point without consequences. Verbal consent was obtained from each participant. The initial sample comprised 52 participants, but the data from two of them were excluded from the analyses because of the reading and text comprehension difficulties.

The police students (N = 50, age range = 19-25 years, M = 20.24, SD = 1.43, 2 female) were recruited from the Police Agents School, Cluj-Napoca. The selection and consent procedure was similar to the one used for the offenders group.

Instruments

The Criminal Sentiments Scale-Modified (CSS-M; Shields & Simourd, 1991) has 41 items, with 3 subscales investigating procriminal attitudes, values, and beliefs. The first subscale, Attitudes Toward Law, Courts, and Police - ALCP, has 25 items, such as “the legal system is rotten”. The second, Tolerance for Law Violations - TLV, has 10 items such as “it's okay to break the law as long as you don’t get caught”; and lastly, Identification With Criminal Others – ICO subscale, has 6 items such as “I have very little in common with people who never break the law”. Each endorsement of an antisocial statement (or rejection of a prosocial one) yields 2 points, whereas the rejection of an antisocial statement (or acceptance of a prosocial one) yields 0 points. Undecided responses are scored as 1. Thus, higher scores reflect increasing criminal attitudes. A number of studies have established the validity and reliability of the CSS and CSS-M in the adult population (Andrews & Wormith, 1984; Roy & Wormith, 1985; Simourd, 1996) and juvenile offenders (Shields & Simourd, 1991; Simourd & Van de Ven, 1999).
The Moral Judgment Test
The Moral Judgment Test (MJT) has been constructed to assess subjects’ moral judgment competence as it has been defined by Lawrence Kohlberg: “the capacity to make decisions and judgment which are moral (i.e., based on internal principles) and to act in accordance with such judgments” (Lind, 1999). The test was developed by Georg Lind (1975-1977) to assess subject’s moral competence in accordance with the definition given by Kohlberg. The test presents the subjects with two moral dilemmas and with arguments pro and against subject’s opinion on solutions for solving each of them.

An important feature of MJT is that it assesses the moral judgment competence not only by evaluating the person’s pro-arguments in a moral dilemma, but also by evaluating the counter-arguments, that is, the arguments that oppose his or her position on a difficult problem. The counter-arguments represent the moral task that the subjects have to cope with (Lind, 1999).

The C-index of the MJT measures the degree to which a subject’s judgments about the pro and con arguments are determined by moral points of view rather than by non-moral considerations, like opinion agreement (Lind, 1999). The C-index can take values from 1 to 100, and the scores can be graded as following: low (1-9), medium (10-29), high (30-49) or very high (over 50). There are also other measures that can be derived from the MJT (moral ideals or attitudes or situational adequacy of moral judgment), but in this study we focused only on the main score, the C-index. We used the translated and adapted version of MJT for the Romanian population by Lupu (2005, as cited in Lind, 2008).

Family Background Scale
This self-report measure was developed by Abbott (2000) in order to broadly assess an individual's family history. The scale was derived from the Early Family Background Interview developed by Forth (1995). A total of 23 items are used grouped to form three subscales: parental supervision, parental deviance, and childhood maltreatment. Sample items are: “When you were a child, how often did your parents know your whereabouts?” “Did a parent ever suggest to you that doing crime was "okay" (e.g., stealing, drug use)?” or “Did your father have a drinking problem?” and “By your definition, were you physically abused by a family member as a child?”.

The Paulhus Deception Scales (PDS)
The Paulhus Deception Scales (PDS) represent a 40 item self-report questionnaire designed to measure the tendency to give socially acceptable or desirable responses. It evolved from the earlier development and revisions of the Balanced Inventory of Desirable Responding – BIDR, and measures two distinct forms of SDR: self deception and impression management. According to theories of deception styles, “self-deception” represents an unconscious process to deny psychologically threatening thoughts and feelings, and “other-deception” represents conscious distortion toward self-enhancement.
The two scales of PDS are designed to capture two different styles of responses considered socially desirable. Impression Management (IM) involves conscious use of inflated self-descriptions, faking, or lying, and is thought to indicate hypersensitivity to situational self-presentation demands. Self-Deceptive Enhancement (SDE) intends to capture the tendency to give honest but inflated self-descriptions reflecting a lack of insight and an unconscious bias toward favorable self-portrayal. Item content of the two subscales was rationally composed to reflect and distinguish the two respective biases in self-report (Paulhus, 1999).

RESULTS
Looking at the descriptive results (see Table 1), clear differences appeared in the two groups’ responses on the Criminal Sentiments Scale. The actual mean values in the offenders group were strikingly similar to the ones obtained in the study of Abbott (2000) on the Attitudes toward law, court and police subscale (mean = 23.38 in the present study, mean = 23.06 in the Abbott, 2000 study). On the Tolerance toward law violation subscale, the present offenders group had a slightly higher mean (10.34, as compared to 8.61 in the Abbott, 2000 study), while on the Identification with other criminals subscale, the results were again very similar (6.65 in the present study, as compared to 5.04). In the police students group, while the results were similar to the Abbott (2000) study on the first two subscales, the police students had a lower Identification with criminal others than regular students (1.72, the present study, and 3.47, the Abbott, 2000 study). The differences between the two groups in the present study were confirmed by the statistical comparisons, revealing a main effect of group on the Attitudes towards law, court and police, t(98) = 3.49, p < .01, and on the Identification with criminal others, t(98) = 13.83, p < .01 subscales from the Criminal Sentiments Scale (again similar to the results in the abovementioned study). On both subscales, the offenders had higher response means, thus presenting greater antisocial attitudes (towards the court, the law and the police) and greater identification with criminal others than the police students.

No significant difference appeared between the desirability of the two groups’ responses on the Balanced Inventory for Desirable Responding, either on the Self-Deceptive Enhancement scales, or on the more critical Impression Management subscale. Although this lack of difference between the two groups was also noted in the Abbott (2000) study, the actual levels of social desirability expressed by the two groups included in the present study was higher than the one in the abovementioned study (7.23 vs. 4.11 on the Impression Management scale and 7.71 vs. 6.35 on the Self-Deceptive Enhancement scale). These results suggest that although the level of desirable responding is slightly higher in both groups from this study, this factor does not differentially affect the two groups’ responses on the other instruments included in this study.
Table 1

Descriptive results for all the measures in the study; comparisons among the two groups

<table>
<thead>
<tr>
<th>Measure</th>
<th>Offenders</th>
<th>Police students</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS: Attitudes toward law, court and police</td>
<td>23.28</td>
<td>17.98</td>
</tr>
<tr>
<td></td>
<td>6.00</td>
<td>8.59</td>
</tr>
<tr>
<td>t-test</td>
<td>3.49**</td>
<td></td>
</tr>
<tr>
<td>CSS: Tolerance for law violations</td>
<td>10.34</td>
<td>9.10</td>
</tr>
<tr>
<td></td>
<td>5.20</td>
<td>3.70</td>
</tr>
<tr>
<td>t-test</td>
<td>1.37</td>
<td></td>
</tr>
<tr>
<td>CSS: Identification with criminal others</td>
<td>6.65</td>
<td>1.72</td>
</tr>
<tr>
<td></td>
<td>1.86</td>
<td>1.63</td>
</tr>
<tr>
<td>t-test</td>
<td>13.83**</td>
<td></td>
</tr>
<tr>
<td>BIDR: Impression Management</td>
<td>7.15</td>
<td>7.43</td>
</tr>
<tr>
<td></td>
<td>4.16</td>
<td>3.43</td>
</tr>
<tr>
<td>t-test</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>BIDR: Self-Deception</td>
<td>7.70</td>
<td>7.72</td>
</tr>
<tr>
<td></td>
<td>2.63</td>
<td>3.23</td>
</tr>
<tr>
<td>t-test</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>FBS: Parental supervision, deviance and child</td>
<td>7.98</td>
<td>4.04</td>
</tr>
<tr>
<td>maltreatment</td>
<td>5.50</td>
<td>2.84</td>
</tr>
<tr>
<td>t-test</td>
<td>4.50**</td>
<td></td>
</tr>
<tr>
<td>FBS: Parental attitude toward law &amp; law violation</td>
<td>0.78</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>1.87</td>
<td>1.29</td>
</tr>
<tr>
<td>t-test</td>
<td>2.06*</td>
<td></td>
</tr>
<tr>
<td>FBS: Parental substance addiction</td>
<td>-2.36</td>
<td>-3.54</td>
</tr>
<tr>
<td></td>
<td>1.19</td>
<td>0.81</td>
</tr>
<tr>
<td>t-test</td>
<td>5.79**</td>
<td></td>
</tr>
<tr>
<td>MJT: C-index</td>
<td>9.06</td>
<td>12.32</td>
</tr>
<tr>
<td></td>
<td>7.86</td>
<td>8.47</td>
</tr>
<tr>
<td>t-test</td>
<td>1.99*</td>
<td></td>
</tr>
</tbody>
</table>

Note: CSS = Criminal Sentiments Scale; BIDR = Balanced Inventory for Desirable Responding; FBS = Family Background Scale; MJT = Moral Judgment Test.

The participants’ responses on the Family Background Scale revealed significant differences between the two groups on all three dimensions, suggesting that in the offenders group, there were higher values of parental neglect, deviance and child maltreatment, a more favorable parental attitude toward law violation, and higher levels of parental substance addiction than those in the police students group.

Finally, there was a small, but significant difference in the two groups’ global pattern of responses on the Moral Judgments Test, as revealed by the C-index computed from this test. The group of police students had a significantly higher level of overall moral judgment competence than the group of offenders, t(98) = 1.99, p < .05. Taking a closer look at both groups’ attitudes toward each of the six levels of moral reasoning proposed by Kohlberg’s theory, there was a significant difference only in the greater preference of police students for arguments belonging to the second stage of moral development, t(98) = 2.06, p < .05. Another interesting result was that within both groups there was a clear preference for the fourth stage. In the offenders group, as revealed by paired samples t-tests, this stage was chosen significantly more than stage 1, t(43) = 2.94, p < .01, stage 2, t(43) = 4.02, p < .01, stage 3, t(43) = 3.06, p < .01, and marginally significant more than stage 5, t(43) = 1.82, p = .07 and stage 6, t(43) = 1.73, p = .09. In the police students group, stage 4 was preferred to stage 1, t(44) = 3.55, p = .02,
Taking a look at the interrelations between the responses on all measures first within the offenders group (see Table 2), there was a positive relation between Identification with criminal others and the Impression Management scales, \( r(50) = .31, p < .05 \), suggesting that, somehow surprisingly, those offenders which involve a conscious use of inflated self-descriptions, faking, also declare themselves as stronger identified to other criminals. In the same group, parental neglect, deviance and child maltreatment are positively related to parental substance addiction, \( r(50) = .36, p < .05 \). However, the report of this substance abuse is negatively related to the Impression Management scale, \( r(98) = -.30, p < .05 \), revealing that those offenders who are more concerned with issues of self-presentation don’t have (or might not report) having a history of substance abuse in their family. In the police officers group, there is greater coherence of the Criminal Sentiments Scale subscales, with a high correlation between the Attitude toward law, court and police and the Tolerance toward law violation, \( r(50) = .45, p < .01 \). There was an interesting negative correlation between the moral competence C-index and the Attitude toward law, court and police, \( r(50) = -.37, p < .01 \). However, the responses on the latter subscale in this group were related to the desirability of responses on both BIDR subscales, so they should be regarded with caution. This relation with desirable responding was also present when looking at the Tolerance toward law violation subscale, \( r(50) = -.29, p < .05 \), and at the Family Background general scores, \( r(50) = -.37, p < .01 \) with Impression.
Management, and \( r(50) = -0.37, p < .01 \), with Self-Deceptive Enhancement, respectively. The two subscales of the BIDR also showed higher coherence within this police students group, \( r(50) = 0.62, p < .01 \), than in the offenders’ group, \( r(50) = 0.33, p < .05 \).

Table 2

<table>
<thead>
<tr>
<th>Measure</th>
<th>Offenders (N = 50)</th>
<th>Police students (N = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>- .07</td>
<td>- .14</td>
</tr>
<tr>
<td>LCP</td>
<td>.12</td>
<td>-.45**</td>
</tr>
<tr>
<td>TLV</td>
<td>-.11</td>
<td>.27</td>
</tr>
<tr>
<td>IOC</td>
<td>.19</td>
<td>.35*</td>
</tr>
<tr>
<td>FBS</td>
<td>-.10</td>
<td>-.16</td>
</tr>
<tr>
<td>FBS-A</td>
<td>-.09</td>
<td>.02</td>
</tr>
<tr>
<td>FBS-B</td>
<td>.24</td>
<td>-.37**</td>
</tr>
<tr>
<td>C-Index</td>
<td>-.09</td>
<td>-.08</td>
</tr>
<tr>
<td>BIDR-IM</td>
<td>.04</td>
<td>-.08</td>
</tr>
<tr>
<td>BIDR-SDE</td>
<td>.01</td>
<td>-.08</td>
</tr>
</tbody>
</table>

Note. LCP = Attitudes toward law, court and police - scale, TLV = Tolerance for law violation - scale, IOC = Identification with other criminals - scale (from the Criminal Sentiments Scale); FBS = Family Background Scale; BIDR = Balanced Inventory for Desirable Responding.

**GENERAL DISCUSSION**

Our hypotheses were mainly confirmed by the results of the present investigation. The first hypothesis was that we would find differences in the level of moral reasoning between the two samples. Regarding this, the results showed that, on this population and using The Moral Judgment Test, there is a small, but...
significant difference between the two groups regarding the general C-index, indicating the participant’s global level of moral reasoning competence. Another significant difference that was found was related to the moral development stage preference: the police students preferred to answer significantly more according to stage two of moral reasoning (Individualism and Exchange) than did the offenders, suggesting that they judge according to principles of simple social reciprocity. Both offenders and non-offenders largely preferred a level 4 of moral reasoning competence (Maintaining the Social Order), revealing that both groups value highly value laws and social order principles as moral universals. These results contradicted the findings obtained by Stevenson, Hall & Innes (2003): these authors also could not find evidence supporting the developmental delay hypothesis in the population of offenders. However, other authors (Nelson, Smith, & Dodd, 1990; Basinger, Gibbs, & Fuller, 1995) offered evidence supporting this delay hypothesis in the group of offenders. The results we obtained are to be interpreted cautiously because of the age differences between the groups; it is possible that if the police officers group would match the age range of the offenders group such differences would appear more clearly (given the possibility for further moral reasoning development or maturation in the police students). Moreover, it would be appropriate to use other complementary instruments designed to assess the moral development, such as the Defining Issues Test (Rest, Narvaez, Thoma, & Bebeau, 1999).

Clearer differences between the two groups were found in the domain of antisocial attitudes. Confirming the previous findings in the literature (Stevenson, Hall, & Innes, 2003; Andrews & Bonta, 1994, 1998, 2003; Abbott, 2000; Simourd & Van de Ven, 1999; Mills, Kroner & Forth, 2002), our investigation brought further evidence supporting the implication of criminal sentiments in the criminal behavior. A strong effect indicated that police officers have more positive attitudes toward law, courts and police and identify less with criminal others. A somehow interesting finding was obtained on the Tolerance for Law Violation scale: the results suggest that regarding this domain, there are no significant differences between the groups, probably as a result of the fact that the police students were tested at the beginning of their training as police officers. The results also showed that in the police student’s group the higher the positive attitudes toward law, court and police, the lower the tolerance for law violation. This finding was not replicated in the offenders group.

A positive relationship was found in the offenders group between the impression management scale from BIDR and the identification with criminal others scale from the CSS. This may suggest that in the offenders population identification with other perpetrators might be a valued thing for a person’s public image. Also in this group we observed a negative relation: a higher tendency towards exaggerated self presentation was associated with lower scores obtained on the C-index.

We predicted that the higher negativity towards the justice system will relate to greater tolerance toward law violation and more pronounced identification
with criminal others. The results we obtained did not support this hypothesis, unlike the results presented by Stevenson, Hall, and Innes, (2003). It is possible that for Romanian criminal offenders the attitudes toward law, courts and police and the tolerance for law violation might be two different, unrelated concepts. Moreover, also the identification with criminal others scale was not related with the two other scales of CSS in the offenders group.

Looking at the participants’ responses on the Family Background Scale, there were significant differences between the two groups on all three components, suggesting that in the offenders group, there were higher values of parental neglect, deviance and child maltreatment, a more favorable parental attitude toward law violation, and higher levels of parental substance abuse than those in the police students group. Interestingly, no difference in these dimensions of the family background was found in the Abbott (2000) study. It is possible that the differences in the offenders group between our study and Abbott’s study to be responsible for these results (more heterogeneous group of offences in Abbott’s study).

There are some limitations of the research design (some of them already mentioned in the interpretation of results) that caution us to further extend this study in order to strengthen its conclusions. First, in the present investigation there is a lack of a true control group matched to both offenders and police students by age and education. The presence of such a control group could bring important information regarding our first hypothesis in principal, but also pertaining to the other hypotheses. Second, it would be interesting to use a group of adult police officers in a similar design in order to more accurately assess the developmental delay hypothesis. Third, the fact that offenders group only consisted in violent offenders convicted for murder is an asset and also a limitation, because in this way it is not possible to draw conclusions on the other types of offenders, but the group was more homogenous with respect to type of offence.

The present findings support the role of antisocial attitudes in criminal behavior, offer limited support for the developmental delay hypothesis and generate further evidence for the importance of family background implications for later offending behavior. The previous body of evidence and the results of the present investigation support the relationships among the variables involved in offending behavior (moral development, antisocial attitudes and family background); this valuable information could be used in identifying the risk factors and in designing prevention programs aiming to reduce antisocial conduct.

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