JUVENILE DELINQUENCY: ANALYSIS OF RISK AND PROTECTIVE FACTORS USING QUANTITATIVE AND QUALITATIVE METHODS

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ABSTRACT

Several factors are associated to delinquency. It is difficult to change or to reduce risk factors, therefore, the perspective of protective factors promotion appears as an alternative or a complementary approach for the risk behaviour prevention. The present study was developed using mixed methods in order to analyse risk and protective factors in juvenile delinquency. First, a quantitative study, using structural equation modelling with 300 juvenile offenders, was conducted in order to develop an explanatory model of delinquency. Secondly, a qualitative study, using a “focal groups” procedure, was also conducted with 24 juvenile offenders, aiming at knowing their perceptions regarding risk and protective factors for delinquency. Several different risk and protective factors were found. The quantitative study showed that, “substance use” was the most salient risk factor for juvenile delinquency while “positive relations in school context” was the most salient protective factor. The qualitative results confirmed these results. Implications to selective and universal preventive interventions are discussed.

KEYWORDS: delinquency, risk and protective factors, preventive intervention.

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INTRODUCTION

Delinquent and disruptive behaviors include different forms of aggression and violence. These behaviors are associated, on one hand, to illicit drug-use and traffic, urban, racial, and xenophobic violence (Delles, 2001; União Europeia, 2001); on the other hand, these behaviors are associated with anxiety and mood disorders, and other behavioral disorders (Frick, Bodin, & Barry, 2000; Hill, 2002; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Delinquency is increasing in some countries, and is increasing in females, while the age of juvenile offenders decreases (Loeber, Farrington, & Petechuck, 2003; União Europeia, 2001). Delinquency has also several social adverse outcomes, like disadvantages regarding social integration and economic independency (Fergusson & Horwood, 1999; Moffitt, Caspi, Harrington, & Milne, 2002; Werner & Smith, 2001), and other costs for society related to medical, rehabilitation, and custody costs (DiClemente, Hansen, & Ponton, 1996). Therefore, it becomes important to know the determinants of these behaviors during adolescence, and in different life contexts. Only knowing the factors that place the young people at risk, and the ones that protect them from potential problems, it is possible to draw up preventive interventions. The research developed on this topic shows that these behaviors have several different determinants but also share common determinants There is a diversity of causes or paths that can lead to a certain outcome, but there is also a diversity of effects that a single factor can produce (Thornberry, Ireland, & Smith, 2001). This is valid for risk factors, but also for protective factors. It is difficult to change or to reduce risk factors therefore, the perspective of protective factors promotion appears as an alternative or a complementary approach for the risk behavior prevention (Matos, et al., 2003; Matos & Simões, 2003).

Research in this area found several factors associated with delinquent and disruptive behavior: (1) Individual (stress, genetic vulnerability, physiological, psychological, cognitive, or behavioral) characteristics (Barkauskiene & Bieliauskaite, 2002; Frick, et al., 2000; Hill, 2002; Matos & Simões, 2003; McBurnett, Naguib, & Brown, 2000; O'Connor, Neiderhiser, Reiss, Hetherington, & Plomin, 1998); (2) Peer relationships, that draw attention to the influence of socializing with peers with similar antisocial behaviors (Hill, 2002; Lahey, Gordon, Loeber, Stouthamer-Loeber, & Farrington, 1999; Shoemaker, 1996; Tiêt & Huizinga, 2002); (3) Social that highlight the influence of socioeconomic and social organization features on antisocial behavior development, and (4) Situational that underline the opportunities to crime practice as the main determinant of delinquency (Cloward & Ohlin, 1960; Farrington, 1998; Hill, 2002; Shoemaker, 1996).

Despite the value of all these perspectives, and the knowledge they had brought to delinquency understanding, it is now widely recognized that these behaviors are determined by several domains factors interaction. In this scope, integrative perspectives, like Farrington theory (Farrington, 1995, 1998), Patterson,
Debaryshe, and Ramsey model (2000), Walgrave theory (Walgrave, 1994), or Lahey, Waldman and McBurnett’s causal model (1999), claimed that social behavior is the result of several factors and mechanisms. Although each of these theories approach specific processes in delinquency development, it is possible to corroborate all of them highlighting the influence of significant life contexts in childhood and adolescence, namely family, peers and school (Simões, 2005a, 2007). Regarding family, these theories highlight the fact that a family environment where there is a good attachment and communication, democratic rules, parental supervision over adolescent’s behaviors has all the ingredients to be a protective environment. On the other hand, a potential risky family context for delinquency development involves a violent family climate with communication difficulties, without rules or supervision.

The same can be said regarding peer influence or the impact of school context. Supportive peers with negative attitudes towards delinquency can act as a buffer, while peers’ positive attitudes towards delinquency can be a risk factor for the behaviors above-mentioned. At school context, good school performance, good relationships with teachers and classmates, security and participation opportunities act as protective factors and the absence of these factors can promote risk in school context. But the risk or the protective factors can also be found at the individual level. Positive expectations and attitudes towards delinquency, low levels of social and decision making skills, maladjustment symptoms, certain personality traits, like aggressiveness or sensation seeking, can be risk factors at this level. Risk behaviors, like substance use are also often mentioned as associated to juvenile delinquency (Dishion, Capaldi, & Yoerger, 1999; Teplin, et al., 2002) and some studies point out that substance use seems to be a better indicator of juvenile delinquency for boys than for girls (Huizinga, Loebel, Thornberry, & Cothern, 2000). On the other side, negative attitudes towards these kinds of behaviors, risk perception, communication, and social skills to cope with stress and aggression are pointed as protective factors.

Besides all these features, other factors, like age and gender are frame determinants of delinquency (Kolip & Schmidt, 1999; Simões, 2005a). The involvement with risk behaviors increases with age, and boys are more prone to these behaviors. In what concerns age, studies show that delinquency peaks in adolescence (Le Blanc, 2003; Loebel, et al., 2003; Moffitt & Caspi, 2001). Some adolescents show delinquent behaviors only at this stage of development, while others have already started during childhood. Research also shows that individuals who begin earlier, are at a greater risk to persist and extend this delinquent trajectory to adulthood (Loebel, et al., 2003; Moffitt, et al., 2002). The reverse seems to be true for the ones that begin only in adolescence. According to some authors these behaviors appear in adolescence due to the maturity gap and express mainly the need to state the autonomy from parents, and/or peer acceptance (Moffitt & Caspi, 2001; Moffitt, et al., 2002). Boys are more involved than girls in delinquency during adolescence, especially during childhood (Barbarin, 1999; Daeeater-Deckard, Dodge, Bates, & Pettit, 1998; Fergusson & Horwood, 2002;
Moffitt & Caspi, 2001), and probably that’s why most of the delinquency studies have male samples (Hill, 2002). Several authors point out different reasons for this difference. Boys are more vulnerable than girls to develop attention-deficit and hyperactivity disorder (Hill, 2002), learning disabilities (Shoemaker, 1996), delayed communication skills development (Lahey et al., 1999) or even higher levels of callous-unemotional traits (Frick, et al., 2003; Lahey, et al., 1999), factors associated with a heightened risk for developing delinquent and disruptive behaviors. Other authors mention the impact of parents behaviors that differ for boys and girls (Lahey 1999), or the role of masculinity ideology as determinants of problem behaviors in boys (Pleck, Sonenstein, & Ku, 1994).

All these features are mentioned in literature as part of a complex net of factors associated to delinquency. This net of antecedents goes in line with the position of some authors (Igra & Irwin, 1996; Roemer, 1991; Udry, 1994) that point to an interaction between environmental and individual factors. As Igra and Irwin (1996) stated some individual aspects, specifically psychological factors, represent not only important risk behavior determinants, but also personal filters through which social stimulus are interpreted and translated into actions.

The aims of this paper are: (1) to develop an explanatory model for delinquency, taking into consideration the personal and social factors analysed in the previous section (see Figure 1); according to this model, the main social contexts (family, friends, classmates and teachers) are associated to the development of personal factors (psychological symptoms, subjective well-being, school satisfaction) that may promote or inhibit the involvement in risk behaviours, like juvenile delinquency. (2) To analyse in-depth the perceptions of institutionalized juvenile offenders about risk and protective factors for delinquency at individual, family, peers, school and community levels.
Study 1

METHODS

PARTICIPANTS AND PROCEDURE

We gathered data for this study from 300 juvenile male offenders (210 institutionalized, 90 with supervision in the community). From these, 25 (8.3%) were excluded due to missing data on variables such as gender or age. The final sample included 275 subjects (74% institutionalized, 26% with supervision in the community) Subjects were 11 to 18 years old (M=15 years old, SD = 1.40 years old).

Data were collected through anonymous, self-completion questionnaires. The questionnaires were administered in the classroom, in the case of institutionalized subjects, and, in the case of subjects under supervision in the community, in a training room, where by the time of data collection a program of social competences was been promoted. The Health Behavior in School Aged Children (HBSC) questionnaire was used to collect data related to social contexts, perceptions and health related behaviors. For the present study 27 variables related to eight factors were selected: family communication (father and mother); friends communications; time with friends after school; classmates (e.g., enjoy being...
together, are kind and helpful, accept me as I am); teachers (ex. treat us fairly, encourage to express my own views in class); psychological symptoms (e.g., feeling low, nervous); subjective well-being (health and happiness); school satisfaction; and substance use (marijuana). For the delinquency factor, 11 items of the leisure and delinquent behavior questionnaire (Vieira, 1999) were used: In the last year how frequently did you... (e.g., stolen a car or a motorbike; threaten someone younger or weaker; brought something from a store without paying for it). The response options for most of items are on a 1 to 5 scale.

RESULTS

Structural Equation Modelling, EQS Structural Equation Modelling Software, version 6.1 (Bentler, in press), was the statistical procedure used to analyse the proposed model and its relations. Robust estimation was used for all analysis. Before running the model analysis, variables were transformed in continuous variables through optimal scaling. Optimal scaling is a procedure that attaches optimal quantifications to the arbitrary original ordinal values, while it analyses the relationships among the observable variables to produce the factor scores. This strategy aims to increase measurement reliability, improve accuracy and power of discrimination, because a composite construct range is larger and more parsimonious for comparisons between different groups than the individual items (Batista-Foguet, Fortiana, Currie, & Villalbi, 2004). Since the indicators in our study are ordinal, it is appropriate to submit them to optimal scaling before using linear relationship analysis techniques such as Structural Equations Modelling (Batista-Foguet, et al., 2004; Simões, Batista-Foguet, Matos, & Calmeiro, 2008). In this analysis, the optimal scaling had lead to a new set of values for the categories of the variables in study.

The analysis of the model had been conducted in two steps: first the test of the measurement model and then the relationships between factors. A confirmatory factorial analysis was conducted to test the model partially, before running the global model, to control if the latent variables were adequately measured. For the proposed model, three measurement models were tested: the “independent latent factors model” that tested the measurement quality of independent latent variables (family, friends, classmates and teachers); the “intervening latent factors model” that tested the measurement quality of independent latent variables (psychological symptoms, subjective well-being and school satisfaction), and the “dependent latent factors model” that tested the measurement quality of dependent variables (substance use and delinquency).

After testing the measurement models, the global model and the relations between the latent factors have been tested. The analysis of each measurement model conducted to some adjustments in their structure. The adjustments made involved the removal of indicators with low factors loadings (<.60) and the introduction of error covariances between two indicators. The introduction of these
error covariances is justified because the unique components of these indicators are sharing something which is outside the model. In the "independent latent factors model" three indicators had been removed (two related to friends factors: “easy to make new friends” and “time with friends after school”; one related to teachers factor: “teachers treat us fairly”), because their factors loadings were low. In the “intervening latent factors model” two indicators, from school and psychological symptoms factors, had been removed (“feeling safety in school” and “feeling low”), because of low factor loading. The indicator “health” of subjective well-being factor was also low, as well as the indicator “feel about school”, but since these factors had only two indicators the decision was to keep the two indicators of each factor. Finally, in the “dependent latent factors model” two indicators (from delinquency factor) had factor loadings below .60 and so they were removed from the model (threaten someone younger or weaker; broken windows from an abandon house). Only an error covariance between the indicators “assault an house” and “took money or objects from an house” had been introduced. The fit indices held in the measurement models after these adjustments were good ($\chi^2$/df <2; NFI and CFI>.95; SRMR and RMSEA<.05). Factor loadings, residuals and explained variance of the nine factors indicators in the model are presented in Table 1.

Table 1
Factor loadings ($\lambda$), Residuals (E) and $R^2$ of the indicators of the nine factors in the model

<table>
<thead>
<tr>
<th>Factor</th>
<th>Indicator</th>
<th>$\lambda$</th>
<th>E</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Father communication</td>
<td>.640</td>
<td>.768</td>
<td>.410</td>
</tr>
<tr>
<td></td>
<td>Mother communication</td>
<td>.679</td>
<td>.734</td>
<td>.462</td>
</tr>
<tr>
<td>Friends</td>
<td>Same gender friends communication</td>
<td>.718</td>
<td>.696</td>
<td>.515</td>
</tr>
<tr>
<td></td>
<td>Opposite gender friends communication</td>
<td>.710</td>
<td>.704</td>
<td>.504</td>
</tr>
<tr>
<td>Classmates</td>
<td>Enjoy being together</td>
<td>.660</td>
<td>.752</td>
<td>.435</td>
</tr>
<tr>
<td></td>
<td>Are kind and helpful</td>
<td>.677</td>
<td>.736</td>
<td>.458</td>
</tr>
<tr>
<td></td>
<td>Accept me as I am</td>
<td>.707</td>
<td>.707</td>
<td>.500</td>
</tr>
<tr>
<td>Teachers</td>
<td>Encourage to express my on own views</td>
<td>.605</td>
<td>.796</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>Help when I need</td>
<td>.727</td>
<td>.686</td>
<td>.529</td>
</tr>
<tr>
<td></td>
<td>Are interested in me as person</td>
<td>.925</td>
<td>.379</td>
<td>.856</td>
</tr>
<tr>
<td>Psychological</td>
<td>Irritability or bad temper</td>
<td>.624</td>
<td>.725</td>
<td>.524</td>
</tr>
<tr>
<td></td>
<td>Nervous</td>
<td>.862</td>
<td>.258</td>
<td>.862</td>
</tr>
<tr>
<td>Symptomatics</td>
<td>Health</td>
<td>.963</td>
<td>.271</td>
<td>.927</td>
</tr>
<tr>
<td>Well-being</td>
<td>Happiness</td>
<td>.209</td>
<td>.978</td>
<td>.044</td>
</tr>
<tr>
<td>School</td>
<td>Feel about school</td>
<td>.365</td>
<td>.931</td>
<td>.133</td>
</tr>
<tr>
<td></td>
<td>School is boring</td>
<td>1.000</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Substance use</td>
<td>Tried marijuana</td>
<td>.625</td>
<td>.781</td>
<td>.390</td>
</tr>
<tr>
<td></td>
<td>Illicit drug use last month</td>
<td>.888</td>
<td>.459</td>
<td>.789</td>
</tr>
<tr>
<td>Delinquency</td>
<td>Stolen a car or a motorbike</td>
<td>.780</td>
<td>.626</td>
<td>.609</td>
</tr>
<tr>
<td></td>
<td>Make graffiti’s in the walls</td>
<td>.638</td>
<td>.770</td>
<td>.408</td>
</tr>
<tr>
<td></td>
<td>Brought something from a store without paying for it</td>
<td>.703</td>
<td>.711</td>
<td>.494</td>
</tr>
<tr>
<td></td>
<td>Broken windows from a living house</td>
<td>.748</td>
<td>.664</td>
<td>.559</td>
</tr>
<tr>
<td></td>
<td>Assault an house</td>
<td>.758</td>
<td>.652</td>
<td>.574</td>
</tr>
</tbody>
</table>
After testing the measurement models the global model was tested. Table 2 summarizes tests of model fit. The fit indices held in the analysis for the global model were good (1st step). Nevertheless, LM test showed that introducing a path, between classmates’ factor and delinquency would decrease significantly the chi-square value. Since this kind of path is often mentioned in literature, it was introduced and the model was analyzed again (see Table 2 – 2nd step).

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural model fit indexes</td>
</tr>
<tr>
<td>χ² (d.f.)</td>
</tr>
<tr>
<td>1st Step</td>
</tr>
<tr>
<td>2nd Step</td>
</tr>
</tbody>
</table>

1 – Satorra-Bentler Scaled Chi-Square
2 – Robust
* p<.05; ** p<.01; *** p<.001
1st Step – Proposed model
2nd Step – Introduction of a new path

The standardized solution (Figure 2 shows the beta coefficients and explained variance for each dependent factor) show that the factors with higher impact on delinquency were substance use (β=.41) followed by classmates (β=-.19) and school satisfaction (β=-.17). Substance use present a positive impact and classmates and school satisfaction a negative impact which allows us to say that the more frequent is substance use and the more negative are the relations in the school context the more frequent will be the delinquent behaviors. Subjective well-being was an important predictor for substance use (β=-.38), as well as for psychological symptoms (β=.23).

For the intervening factors, it was possible to verify that “friends” was the only factor with significant impact on psychological symptoms (β=.18). For subjective well-being, again only one factor presents a significant impact, namely “classmates” (β=.36). This result allows us to say that more positive relations with classmates promote higher levels of well-being. For school satisfaction, teachers (β=.22) and family (β=.20) had a significant impact. The positive beta coefficient shows that better relations with teachers and better communication with the family conduct to higher school satisfaction levels. Psychological symptoms had also a significant impact on school satisfaction, but in this case, a negative one (β=-.13).

It is also important to mention that since there isn’t multi-collinearity (correlations between independent factors are very low - varied from .09 “family-
classmates” to .13 “family-friends”), the level of confidence with the significance test and also with the estimates of the beta coefficients is high. The correlations between “family-teachers”, “friends-classmates”, “friends-teachers”, and classmates-teachers” weren’t significant.

The explained variance varied from 5% to 23%. Substance use, classmates and school satisfaction explain 21% of the variance of delinquency factor. For substance use, it was possible to verify that well-being and psychological symptoms explain 23% of the variance on this factor. Regarding the intervening factors, it was possible to verify that family and teachers factors explain 10% of the variance of school satisfaction. For subjective well-being, the classmates explain 20% of the variance on this factor. Finally, friends explain 5% of the variance on psychological symptoms factor.

Figure 2
Delinquency explanatory model

Note: represent non-significant paths
represent an additional path to the original model
represent paths p<.05
DISCUSSION

The results of the quantitative study show that the proposed model supports the hypothesis that the influence of social contexts on delinquency is mediated by psychological aspects (Igra & Irwin, 1996). Therefore, it seems that features related to the family, friends, classmates and teachers are associated to the development of personal factors that may promote or inhibit the involvement in risk behaviours, like juvenile delinquency.

Results suggested that substance use is the main predictor of delinquency. This aspect, which was confirmed in this study, is often mentioned in the literature as an important risk factor for delinquency, especially for boys (Dishion, et al., 1999; Huizinga, et al., 2000; Teplin, et al., 2002). Other factors, like school satisfaction and classmates had also a direct impact on delinquency. These two factors appeared as protective factors for the involvement in delinquent behaviors since they had a negative impact on delinquency. These results are supported several theories that point out the importance of positive relations in social contexts, namely school, as protective factors for delinquency (Lahey et al., 1999; Patterson, et al., 2000; Walgrave, 1994). Subjective well-being also appears to be a protective factor against delinquency through its significant negative impact on substance use. On the other side, psychological symptoms appear to be a risk factor for delinquency, due to their positive impact on substance use and their negative impact on school satisfaction. Other studies refer that internalizing and externalizing problems in adolescence often go together, and therefore risk behaviors, like substance use and delinquency, are coping strategies to deal with stress and other psychological symptoms (Simões, 2005a; 2007).

The family, the teachers and again the classmates also appear to be important protective factors, namely through their positive impact on intervening factors. The communication with the family and the relationships with teachers had a positive impact on school satisfaction, while classmates had a positive impact on subjective well-being. On the other side, friends appeared to be a risk factor for psychological symptoms and consequently for substance use and delinquency. Several studies refer to friends as a risk factor for risk behaviors, but it seem that this is only true when peers are involved in this kind of behavior or when they have positive attitudes towards risk behaviors (Hill, 2002; Lahey, Gordon, et al., 1999; Shoemaker, 1996; Tiêt & Huizinga, 2002).

Study 2

METHODS

The second study was developed using focus groups method. A focus group is a discussion-based interview, which involves the simultaneous use of multiple respondents to gather data on a certain issue (Lambert, Hublet, Verduyckt, Maes, & Van den Broucke, 2002). This method allows to collect information on
the perceptions, beliefs, and values of a group's participants (Calderon, Baker, & Wolf, 2000).

**PARTICIPANTS AND PROCEDURE**

We conducted four group interviews, with 24 institutionalized juvenile male offenders from 11 to 18 years old. The session started with a brief introduction about the aim of the interview and an ice-breaker activity to make participants ready to engage in the discussion. Participants were told there were no wrong answers and that research results will be anonymous. Tapping equipment had been used, with participants consent. Topics for discussion (risk and protective factors in main life contexts) were introduced in an open and informal style, to allow the participants bring up their opinions. The time allocated for each group interview was between 60 to 90 minutes.

**RESULTS**

The data from the focus groups were analyzed to set up categories and subcategories for each one of the main topics (risk and protective factors at an individual, family, peers, school and community level). The data presented here reflects all the features brought up into discussions. Special attention is dedicated to categories/subcategories that were discussed in several focus groups. In this case a brief description and an illustration with selected quotations were introduced.

**Risk factors**

Several features in different levels were pointed as risk factors for delinquency. Nevertheless five risk factors for delinquency had a special emphasis in the discussion: delinquent friends, poor parent-child relationships, opportunities, positive expectations, and decision-making skills deficit.

**Delinquent friends**

Having friends that are involved in this kind of behavior is referred by juvenile offenders as one of the main reasons for getting into delinquency. This topic was discussed in all focus groups and generally it was the first one brought up to the discussion. Participants state that these friends, that they call “bad companies” influence them to get involved. Some of them talk about peer pressure, especially from the oldest over the youngest:

“We are all here because of the bad companies”
“We begin to steal because we saw the oldest stealing”
“Sometimes friends tell us: If we don’t steal is because you are a coward / are afraid”
“Our oldest friends call us to join them for stealing”
“We steal to affirm ourselves in the group”
Poor parent-child relationships
Lack of attachment, attention and communication between parents and child was pointed as an important reason for getting involved in delinquency.

“I hadn’t a father and a mother when I was born to give me love and attention... and what leads us to risky behaviors is the fact that we don’t have anyone to rely on when we need it the most, that is the 10-12 years old period... we don’t have a mother, a father, a grandmother or a grandfather to help us by that time, to relieve... I started like that... I started to be revolted... to stay out late at night... stay with friends... spend the nights out of home”

Opportunities
Opportunities to steal were mentioned as an important reason to get into delinquency. Nevertheless participants tell that many times opportunities don’t come by chance. They result from an oriented, targeted search.

“When we see something that is just near our hand we steal it”
“We go for a ramble and when something appears...”
“Opportunities... it depends... I’m not gone risk myself for a 2 Euros thing... but for a mobile phone that costs more then 500 Euros... I go for it”

Positive Expectations
Positive expectations were also a significant issue for delinquency. According to participants, getting involved in this risk behavior has several positive consequences, namely, obtaining goods and money, a “cool” image and fun. Participants mentioned several products that are gained through delinquent acts, specifically trade mark clothes and sport shoes, mobile phones, play stations TM and computers. In what concerns image, participants mentioned that being involved in delinquent acts gives them a rebel and tough image, which for them is a positive one. Also, fun was referred as a reason to practice delinquent acts.

“We begin to steal to have trade mark clothes and sport shoes, play stations TM, computers... our parents have difficulties to buy them and as we never had them, we steal”.
“With the money we steal, we can go to the disco, invite boys and girls out...”
“We steal to show... to show to others that we are evil”
“I steal just for fun”.

Deficits in decision-making skills
Do things without thinking in what they are getting into and in its outcomes is, accordingly to participants, another main reason to delinquency.
“Friends influence a lot, but only the ones who want to go, really go... the problem is that we don’t think twice”.
“Only when I go the police office I think: Cursed hour! I should think it twice”.

Besides these main factors, other reasons were mentioned by the participants (see Table 3). In what concerns individual factors, positive attitudes towards delinquency (liking what they do and getting pleasure from these activities), low risk perception (especially when they are younger and they know that they won’t go to jail), substance use (they need money to buy drugs when), leisure time (sometimes delinquent acts are just a way to spend their free time) and sensation seeking (try new sensations) were also brought up to the discussion. In what concerns family, features like the lack of parental supervision (over friends and activities); lack of rules and delinquent parents were also mentioned. Regarding the school context, low commitment and poor academic performance were mentioned as risk factors for delinquency. Community factors, like poor and unsafe neighborhoods and discrimination (especially because of unequal socioeconomic status) were also brought up to discussion.

Table 3
Risk factors (categories and subcategories)

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Cognitive</td>
</tr>
<tr>
<td></td>
<td>Positive expectations</td>
</tr>
<tr>
<td></td>
<td>Positive attitudes</td>
</tr>
<tr>
<td></td>
<td>Low risk perception</td>
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<tr>
<td></td>
<td>Decision-taking skills deficit</td>
</tr>
<tr>
<td></td>
<td>Behavior</td>
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<tr>
<td></td>
<td>Substance use</td>
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<tr>
<td></td>
<td>Leisure time</td>
</tr>
<tr>
<td></td>
<td>Personality</td>
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<tr>
<td></td>
<td>Sensation seeking</td>
</tr>
<tr>
<td>Family</td>
<td>Relations</td>
</tr>
<tr>
<td></td>
<td>Poor parent-child relationships</td>
</tr>
<tr>
<td></td>
<td>Lack of parental supervision</td>
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<tr>
<td></td>
<td>Lack of rules</td>
</tr>
<tr>
<td></td>
<td>Perceptions</td>
</tr>
<tr>
<td></td>
<td>Delinquent parents</td>
</tr>
<tr>
<td>Peers</td>
<td>Relations</td>
</tr>
<tr>
<td></td>
<td>Delinquent friends</td>
</tr>
<tr>
<td>School</td>
<td>Behavior</td>
</tr>
<tr>
<td></td>
<td>Low commitment/poor academic</td>
</tr>
<tr>
<td></td>
<td>performance</td>
</tr>
<tr>
<td>Community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor neighborhoods</td>
</tr>
<tr>
<td></td>
<td>Discrimination</td>
</tr>
<tr>
<td></td>
<td>Opportunities</td>
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</tbody>
</table>
Protective factors

Several features at different levels were also brought up as protective factors against delinquency. Six features had a particular emphasis in the discussion: non-delinquent friends, high-risk perception, socio-cognitive skills, family communication, physical punishment and residential placement for juvenile offenders.

Non-delinquent friends

Have friends that are not involved in delinquency was referred to as being one of the most important protective factors. Friends especially the oldest ones, give them advice to stay out of delinquency and emphasize the negative outcomes of delinquency.

“Some friends advise us, some others get us a job in order to stay out of this bad life”.
“They told me several times not to steal, that I’ll end up in a residential placement for juvenile offenders... and it was true”.
“We have in our neighborhood some friends that are very critical to this...”

High-risk perception

The knowledge of short term and long term delinquency’s negative outcomes was found to be an important feature to prevent involvement with delinquency.

“The ones that don’t steal have a better life”.
“I’m scared when I have the stolen things with me... scared of the proofs, the fingertips”.
“... and when the police are close to me...”
“I can’t get involved in anything else... I will go immediately to prison. I have two years of suspended punishment”.

Socio-cognitive skills

Some socio-cognitive skills, like self-control, saying no, or decision-making competencies were mentioned as a protective factors against risk behaviors.

“You need to have self-control to stay out of risk behaviors”.
“We must have our head on our shoulders and say no! No! No!”.
“If you think before acting you can avoid many things”.

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Family communication

Communication between parents and adolescents is considered very important to prevent risk behaviors. Participants had mentioned that it is important that parents talk about delinquency outcomes and advices them to stay out of these behaviors.

“Family tells us not to steal, not to make a mess, to keep us calm".
“Family can give advices about risk behaviors”.

Physical punishment

Physical punishment was brought up to discussion by juvenile offenders has a significant protective in family context for delinquency.

“Family can protect their children by slapping their face”.
“Parent can spank...”.

Residential placement for juvenile offenders

Being on a residential placement for juvenile offenders was mentioned as an important protective factor for risk behaviors. Participants mentioned features like freedom restrictions and acquiring new academic and life competencies, as some of the positive aspects of this placement.

“When I get out of here I won’t get into anything else”.
“It’s better to be here than go to jail in the future”.
“You are here now but you still can be someone important,... a doctor...”

Besides these aspects, other features were mentioned by the participants as potential protective factors for delinquency (see Table 4). In what concerns individual factors, participants also stressed the impact of having a job; at a family level, participants mentioned the importance of having restrictive rules along with having support and warm family climate, especially on difficult moments; at school level, good relations with teachers and school staff who simultaneously give them advice and supervise them were also referred as important protective factors against delinquency.

Table 4

Protective factors (categories and subcategories)

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
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<tbody>
<tr>
<td>Individual</td>
<td>Cognitive</td>
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<td></td>
<td>Behavior</td>
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DISCUSSION

The results of the qualitative study show that juvenile offenders have a wide view of risk and protective factors associated to delinquency. Among the several features related to delinquency, the most referred ones were interpersonal (peers and family) and individual. Most of the aspects brought up by the participants are referred in literature as important risk or protective factors (Cloward & Ohlin, 1960; Farrington, 1995, 1998; Hill, 2002; Lahey et al., 1999; Patterson, et al., 2000; Pleck, et al., 1994; Shoemaker, 1996; Walgrave, 1994). Regarding risk factors, the influence of delinquent friends or parents, positive expectations, namely of material goods or of a certain trendy image, substance use or abuse, sensation seeking, decision making skills deficit and opportunities to delinquency were discussed. Also poor family relationships, poor parenting practices, such as lack of parental supervision and rules, as well as a low commitment to school or neighborhood and wide social influences were stressed. Regarding protective factors, participants highlighted the impact of non-delinquent friends as people that can alert them to delinquency dangers, high-risk perception, socio-cognitive skills, positive relations on school with teachers and school staff, the impact of family support, communication and affection, but also physical punishment. About this last topic, research show that this kind of strategy doesn’t have the desired positive outcomes regarding adjustment and development (Figueiredo, 1998; McWhirter, McWhirter, McWhirter, & McWhirter, 1998). Studies also confirm that there is a tendency to replicate these strategies with the next generations, and it seems that this revive of educational strategies is especially true for negative parenting styles (Oliveira et al., 2002).

CONCLUDING COMMENTS

The results obtained in both studies point out to the importance of social contexts, like family, peers and school, as the starting point for the involvement in risk behaviors. It is important to prevent these problematic behaviors, given their present and future negative consequences on adolescent lives. An early intervention is especially important, because the ones that have an earlier onset of delinquent behaviors have more chances to become chronic offenders (Loeber, et al., 2003). It is important to pay attention to the first signs of disruptive behavior, aggressiveness and interpersonal difficulties in the first years of life, namely in the kindergarten. It is particularly important that the promotion of protective factors through programs which aim to develop personal and social skills (Lipsey, 1995; Matos, 2005; Matos, Simões, & Carvalhosa, 2000; Simões, 2000, 2005b, 2007).
Since risk and protection factors are present in several life contexts, it is important to promote, besides individual-centered interventions, actions that engage family, peers and school, in order to reduce risk and trigger resources for support.

**REFERENCES**


