PERCEIVED QUALITY OF PARENTING AND ITS RELATIONS WITH FREQUENCY OF OFFENDING AND PSYCHOSOCIAL FUNCTIONING AMONG INSTITUTIONALISED ADOLESCENTS

Stavros P. Kiriakidis

University of Stirling, Scotland, UK

Abstract: The present paper explored the relations of two dimensions of perceived parenting, namely care and protection, with several legal, institutional and demographic characteristics of young offenders held in custody. The sample was 152 randomly selected male young offenders from the largest young offenders' institution in Scotland, UK. They took part in a structured interview asking several socio-demographic characteristics and they filled in the questionnaire Parental Bonding Instrument. Most of the young offenders reported a parenting style of affectionate constraint, characterised by high care and high protection. The sample of the study scored significantly higher on both care and protection in comparison to community and young offenders of previous studies. Lower perceived care was related with a higher degree of past recidivism rate, earlier age of initiation of alchohol and drug use and several indices of mental health problems. The lack of relationship between perceived care and protection suggests that perceived care and protection are rather independent dimensions of perceived parenting.

Key words: Adolescence, Child-rearing practices, Juvenile delinquency.

INTRODUCTION

Neglect in the family has been considered a risk factor for multiple problematic outcomes in adolescence. Parenting has been consistently found to be related and predictive of juvenile delinquency; thus, it is considered a general risk factor for juvenile delinquency and general

Acknowledgment: The research of this article was financially supported by the Greek State Scholarships Foundation.

Address: Stavros Kiriakidis, 29 Kapetanaki Str., Ag. Dimitrios, 173 42 Athens, Greece. Tel./Fax: +30-210-9828455. E-mail: skyriak@syros.aegean.gr & kiriaks@yahoo.gr

socio-emotional functioning (Loeber & Farrington, 1998; Pedersen, 1994). Research has followed a variable-oriented strategy, and family functioning has been viewed as a single attribute responsible for many adverse outcomes, including delinquency and substance abuse among others, following the principle of multifinality (Thornberry, Ireland, & Smith, 2001). On the other hand, regarding adolescent delinquency, it has been proposed (Rutter, 1994; Rutter et al., 1997; Rutter, Giller, & Hagell, 1998) that the causes of antisocial and offending behaviour are not easily captured under one causal factor rather; many factors are operating in adolescents' and young adults' offending behaviour, consistent with the principle of equifinality (Thornberry et al., 2001). A combination of various risk factors with either additive or/ and interactional effects has been proposed (Farrington, 1995).

However, as the experience of adverse family environment does not lead everyone to the experience of poor psychosocial functioning, a within-person approach has been followed for the identification of pathways or mediational mechanisms that translate experience of family functioning into developmental problems in adolescence (Bolger & Patterson, 2001; Cicchetti & Rogosch, 1996; Kiriakidis, 2005). The mediational role of family functioning is more evident in the relation between social disadvantage and delinquency.

Parenting as a mediator between social disadvantage and delinquency

Consistent with the ecological systems theory (Bronfenbrenner, 1979) that problematic behaviour of children and adolescents could not be examined outside the contexts they live in, several researchers (Barrera et al., 2002; Conger et al., 2002; Farmer & Farmer, 2001; Wadsworth & Compass, 2002) considered child-rearing practices as mediators of the relationship between social disadvantage and family structural variables, on the one hand, and juvenile delinquency, on the other, in line with Rutter (2005) that adverse environmental experiences are a critical factor of psychosocial poor adjustment. Wilson (1980) reported that child-rearing practices and, especially, parental supervision, in deprived inner city areas, played a buffering role in juvenile delinquency by imposing strict rules. Wilson (1980) suggested a process linking parental supervision with juvenile delinquent behaviour, where involvement with antisocial peers is a key mediating factor. However, this explanation remained at a narrative level and was not directly empirically tested.

Support for such a mediational role comes from Laub and Sampson (1988), who analysed the data of Glueck and Glueck (1950) and found that erratic discipline by mother and father, poor maternal supervision, parental rejection of the boy and parental attachment were significantly related to delinquency and, more interestingly, the effects of these background structural factors on delinquency were almost totally mediated by family functioning variables, and their effects on delinquency behaviour were minimized when family functioning variables were taken into consideration

Larzelere and Patterson (1990) measured parental discipline and monitoring with various methods, resulting into multiple indicators in the longitudinal Oregon Youth Study of 206 boys coming from schools within an area with the highest police arrest rate per capita. The boys in the study were followed up from the 4th to the 7th grade at school. The authors reported that parental management fully accounted for the relation between socioeconomic status at 4th grade and self-reported delinquency at 7th grade.

McLoyd (1998) also stated that «the link between socio-economic disadvantage and children's socio-emotional functioning appears to be mediated partly by harsh, inconsistent parenting and elevated exposure to acute and chronic stressors» (p. 185). Similarly, Rutter (2005) argued that family functioning is an important mediational mechanism for the development of many poor developmental outcomes, while stressing the need to investigate whether common experiences result in a variety of psychosocial problems and the possibility that different phenomena might be the outcome of the same adverse experience.

McLoyd (1998) provided complementary evidence on the role of parenting in the psychosocial development of children. The evidence came from studies that searched for protective factors that buffer possible effects of deprivation, disadvantage and chronic stressors on children's development and which instil into them a sense of resilience. The author reviewed studies of children exposed to a high number of chronic adversities and negative events and tried to distinguish stress resilient children from those affected by stress. The factors that generally characterised resilient children were according to McLoyd (1998) «no separation of child and primary caregiver during infancy; positive parent-child relations during the preschool years; a strong sense of parenting efficacy by the primary caregivers; and parental use of reasoned, age-appropriate, consistent disciplinary practices» (p. 197). The author also concluded that effective parenting, or the existence of non-parental adults in the children's environment, who provide positive role

models or have the role of a "mentor" for the child, seemed to be factors that could buffer any negative effects that adversities and hardships could have on the psychosocial development of children faced with them.

Similar conclusions were reached by Yoshikawa (1994) who reviewed effects of family support on chronic delinquency. Based on several studies reviewed, he argued that there is evidence for a mediational role of family variables such as parental discipline and maternal affection between juvenile delinquency and socio-economic disadvantage. In any case, he warned that the link between socio-economic disadvantage and delinquency is more evident when the former is measured as a community-wide characteristic, thus the link at the individual level of analysis appears to be prone to the ecological fallacy. Any inferences for the individual should be made with extreme caution and only after the link is replicated with the two levels of analysis.

Rutter (2005) argued that the development of poor psychosocial functioning, including antisocial and delinquent behaviour, is actually mediated through several mediational prosecces. He argued that adverse experience has a long-term effect on psychosocial functioning through cognitive and/or affective working models, representation of the self, and several environmental interpersonal interaction experiences and interactions. Among the most important factors exerting a significant influence on the development of adolescent behaviour is the family environment they are living in. Neglect has been repeatedly related with antisocial and delinquent behaviour (Stouthamer-Loeber, Loeber, Homish, & Wie, 2001), with the development of psychological problems in the general population (Cohen, Brown, & Smailes, 2001), with dysfuctions in the neuroendocrine operation (Cicchetti & Rogosch, 2001), with the development of multiple dysfuctional behaviours in adolescence (McGee, Wolfe, & Olson, 2001), and with reduced resilience in the face of several stressors during adolescence and adulthood (McGloin & Widom, 2001).

Similarly, different causal chains operating at various points in the process of antisocial behaviour have been proposed in an attempt to integrate empirical findings associated with it. Rutter et al. (1997, 1998; Rutter, 2005) acknowledged the need for identifying more immediate antecedents of delinquency, as they can be the outcome of the long-term processes operating in the development of antisocial behaviour. This led to a host of studies examining the relations of poor parenting and

delinquency in children and adolescents, as poor parenting has been considered key factor for delinquent involvement.

Several explanations have been proposed with regard to the way that family influences are brought about and have an effect in the antisocial behaviour displayed by adolescents. Liska and Reed (1985) summarised the possible underlying causal processes that have been suggested by theorists who link family child-rearing practices with juvenile delinquency. Among these processes is safe attachment (Bowlby, 1997) that acts as a protective factor in the involvement of the child and the adolescent with delinquent peers. Simons, Robertson, and Downs (1989), in a similar way, proposed two main pathways through which inadequate parenting and weak bonding can exert an influence on juvenile delinquency. They argued that socialisation in a family characterised by little concern and warmth among family members leads to a callous interpersonal style to the children of these families. This is likely to be generalised to other interpersonal relationships as well, assuming a pervasive role that internal working models of attachment can exert on later development. Consistent with that view of internal working representation is the evidence that family-related variables are mediated into behavioural decisions or intentions of re-offending through the development of antisocial cognitive representations (Kiriakidis, 2005). It was found that any effects of perceived parenting on the decisions of offenders to recidivate were totally accounted for by antisocial attitudes. In addition, Bolger and Patterson (2001) found that perceived external control mediated the effect of neglect and maltreatment on children's internalising problems.

Parental protection

Although the possible causal and predictive role of parenting in juvenile delinquency seems well supported it is also evident that the conceptualisation and operationalisation of child-rearing practices is not consistent across the literature. Both structural aspects of the family and quality of parenting have been examined. However, the literature suggests that it is mainly the quality of parenting, which children are subject to, that matters for their psychosocial development and the expression of delinquent behaviour in adolescence (Simons et al., 1989). Parker (1989, 1990) identified two main dimensions of parenting: care and protection. Protection can be perceived as something positive but, also, as not permitting psychological independence, or as monitoring of activities (Cubis, Lewin, & Dawes, 1989). If protection conveys

the meaning of monitoring by the parents of the child's activities, this could be expected to have a positive effect on the child's behaviour. Parents would actually identify and restrict potential opportunities of antisocial behaviour, and/or the association of the child with antisocial peers, which could have a negative influence on the child's behaviour. This could be done by imposing clear rules and limits on the juvenile's behaviour, making obvious the kind of behaviour that is accepted. In this case parental protection would be expected to have a negative association with juvenile delinquent behaviour. On the other hand, protection may convey the meaning of parental interference to the child's independence, as overprotection. In this case the adolescent might be more prone to rebellious acts, in an attempt to gain his/her independence from parents, which could involve delinquent behaviour.

Community studies on parental bonding

Mak (1994) examined parental neglect and overprotection as correlates of self-reported delinquency. She administered the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979) and a self-report scale of delinquency to 405 male and 387 female adolescents in Australia. She reported significant relationships of self-reported delinquency with care and with protection from both parents. Both maternal and paternal care correlated negatively with delinquency while maternal and paternal protection correlated positively with delinquency.

The PBI measures four distinct types of parenting style for each parent. Mak (1994) had hypothesized that a combination of high care and low protection describes an optimal bonding, high care and high protection describe affectionate constraint, low care and low protection weak bonding, whereas low care and high protection are suggestive of affectionless control, which is regarded as the most detrimental of parenting styles. She found that, in line with her expectation, the affectionless group reported higher delinquency than the group of optimal parenting style. Adolescents who had experienced the affectionless control parenting style differed significantly from the optimal parenting group in terms of delinquent behaviour. When delinquent behaviour was regressed onto several demographic variables as well as to the parental care and protection variables, maternal neglect emerged as the most important predictor of the variability in delinquent behaviour, followed by being male, coming from a broken home, low

paternal care, father's education, and an interaction effect of gender, paternal care, and paternal protection. Males differed with respect to maternal/parenting style while females on paternal/parenting styles. Although the combined predictors accounted for 12.48% of the variation of delinquent behaviour in the adolescent sample, the role of neglect, as perceived by the adolescents, mainly for mothers and secondarily for fathers, emerged as a significant potential determinant of juvenile delinquency.

Pedersen (1994), employing a short 20-item form of the PBI, in a community sample of 573 Norwegian adolescents aged 15-19, investigated the relationships of parental care and protection with several indices of adolescent psychosocial functioning. He reported that self-reported delinquency could be predicted significantly by low maternal care as a main predictor, followed by paternal care. Protection was not found to be significantly associated with delinquency problems in the sample. The findings of the Mak (1994) and of the Pedersen (1994) studies suggest that the role of mothers and fathers might be different in influencing adolescent psychosocial development. Perceptions of low paternal care in the Pedersen (1994) study were associated with anxiety and depression, while perceptions of low maternal care were associated with self-reported delinquent behaviour. However, as both aspects of psychosocial functioning were found to be related to low perceptions of care, this could be suggestive of the role of parental care, at least, to be a non-specific risk factor in the development of dysfunctional behavioural patterns of adolescents.

Studies employing the PBI in custody

The PBI as a measure of two aspects of parenting, care and protection, has been employed in Scottish young offenders' institutions for the exploration of relationships of perceived parenting received by incarcerated inmates and psychological distress experienced in custody by young inmates (Biggam & Power, 1998). Another study investigated the interaction of parental styles in the experience of psychological distress as well as other characteristics of young offenders that have been found related and predictive of juvenile delinquency (Chambers, Power, Loucks, & Swanson, 2000). Specifically, as regards psychological distress, the Biggam and Power (1998) study examined depression, anxiety and hopelessness. It was found that maternal protection and, secondly, paternal protection was significantly related to the three psychological distress indices. The results

are suggestive of the role perceptions of parental protection might have in the process of adjustment and the experience of psychological dysfunction in a custodial environment for young offenders.

THE PRESENT STUDY

The present study attempted to replicate the previous studies and compare the mean scores on the PBI subscales of care and protection with normative data available in an attempt to clarify the differences found in the previous two studies, that is, the extent to which differences in parenting perceptions exist between incarcerated young offenders and samples drawn from the general male adolescent population, and the extent of these differences.

In addition, the two aforementioned studies did not examine the possibility that, either the perceptions of parenting reported and/or the experience of psychological distress by the young offenders could be due to their incarceration. The present study tried to overcome this and examined whether perceived parenting was related to the time the young offenders have been in custody for their present offence. If any effects of incarceration on the offenders' views of their child-rearing practices exist then they should be evident in a co-variation of the time of incarceration with their views of the parenting dimensions their parents exercised.

Finally, our study aimed to examine the role of parenting and its relation with substance abuse. In general family drug misuse patterns in terms of parental and sibling drug misuse were significantly related to adolescent substance abuse (Dobkin, Tremblay, & Sacchitelle, 1997; Leukefeld et al., 1998; Rutherford, Cacciola, Alterman, McKay, & Cook, 1997; Whipple, Fitzgerald, & Zucker, 1995). Moreover, children of alcoholics showed diminished resilience across many behavioural domains (Carle & Chassin, 2004). Whipple et al. (1995) compared parent-child interactions in 17 alcoholic and 23 non-alcoholic families and their biological sons. The two groups did not differ on mean parent and son age nor on socio-economic status. In general, the interactions of alcoholic parents with their children were characterised by a lack of parental warmth, their children displayed more negative affect, and there was a parental demand for more independent behaviour during child-directed play was observed. This suggested that those children were expected to display independent behaviour quite early.

Dobkin et al. (1997) examined maternal parenting as a correlate of substance abuse in a sample of 13-year-old boys. They found that maternal nurturing behaviour was predictive of early onset substance abuse, in addition to disruptive behaviour of the boys. Maternal parenting behaviour promoting autonomy was unrelated to the adolescents' substance abuse.

Leukefeld et al. (1998), from a review of a number of studies examining the relation of family variables with adolescent drug misuse, reported that family drug misuse patterns in terms of parental and sibling drug misuse were significantly related to adolescent substance abuse. In addition, parental positive attitudes towards substance use, availability and drug misuse modelling, significantly contributed to drug misuse by adolescents. In addition they noted that broadly defined family interaction has been found to be related to adolescent substance abuse.

Such issues have relatively little been examined in institutionlised populations. Thus, a further aim of the study was to examine the relations of perceived parenting with self-reported substance abuse in young offenders. Specifically, the aims of the study were (a) to explore the relations of perceived parenting care and protection with several indices of background characteristics of adolescents, such as the age of initiation of substance abuse, the past recidivism rates of the young offenders, and the time the young offenders have been in custody for their present offence; (b) to examine the relations of perceived parenting and juvenile delinquency by comparing data from institutionalised adolescents with data from the community.

Hypotheses

- 1. It was hypothesised that lower parental care would be associated with increased past recidivism rate, early initiation of substance abuse, and increased risk of psycho-social functioning problems as indicated by the contact with mental health professionals and attempted suicide.
- 2. It was hypothesised that higher parental protection would be associated with increased past recidivism rate.
- 3. It was hypothesised that the sample of the young offenders would score lower on care and higher on protection in comparison to community samples.

METHOD

Participants

One hundred and fifty-two male young offenders from Polmont, the largest institution in Scotland, were randomly selected to take part in the study. At the time the study was carried out, the total population of young offenders held in Scotland was about 750 inmates of which 451 were kept in Polmont. The sample of the study consisted of young offenders serving a range of sentences and having committed various offences, mainly those offences that create the most serious problems in terms of recidivism rates, such as property offences, violent offences, drug-related offences, and more often than not, a combination of all of them. Although the largest institution in Scotland, Polmont is not representative of the young offenders' population in Scotland, in terms of profiles of offenders and types of offences committed. Young offenders serving long sentences for homicides and other serious offences and young people on remand are not represented in the present sample so any generalizations would not apply to them.

Approximately 33% of the young offenders from each hall of Polmont was selected and interviewed. This simple stratification was employed since offenders with different characteristics are kept in each hall. The number of interviewees from each Hall reflected the size of the population in each Hall and was as follows: Spey = 32, Argyle = 31, Lomond = 27, Nevis = 26, Cramond = 18, Rannoch = 12, Beechwood = 4, and Dunedin = 2. The young offenders were placed in each hall according to the following criteria: in Rannoch, if low risk offenders serving long sentences, in Cramond, if at risk of being bullied or likely to harm themselves in any way, in Dunedin, if they were bullies or exhibiting violent behaviour, in Beechwood, if well adjusted and transferred to the low security hall at the end of their sentence, in Nevis, if serving long-term sentences, in Lomond, if under 18 years old, and Spey and Argyle halls, hosting the majority of the offenders, usually sentenced for a relatively short period.

The age of the sample ranged from 16 to 21 years (M=18.9, SD=1.3) and 29% were in custody mainly for property offences, 53% for violent offences, 9% for drug dealing and 9% for other offences. The length of their sentences ranged from 2 to 96 months (M=26.4, SD=20.3). They had been in previous custody (M=2.5 months, SD=2.2) and had been remanded (M=4.8 times, SD=5.4). They had previous sentences (M=1.3)

11.1 months, SD = 13.8) and at the time of the interview they had stayed in custody for a mean of 6.9 months (SD = 7.1). The mean total time they had spent in custody was 19.6 months (SD = 16.4). The self-reported age of their first offence was 12.3 years (SD = 2.6), of first arrest 14 years (SD = 2.4) and of first time in custody 16.8 years (SD = 1.5). They had tried alcohol (M = 12.7 years of age, SD = 1.9) and drugs (M = 12.8 years of age, SD = 1.7).

Procedure - Measures

The study was conducted with the administration of the short form of PBI (Pedersen, 1994) to the participants of the study and with an interview with them.

Interview. The interview was structured-scheduled employing closed-ended questions. It asked information about certain background features of the participants such as their age, current offence, offending history, educational attainment, employment history, family issues, such as criminal convictions in the family, reliance on social benefits and/or social work, current living situation, and drug and alcohol abuse. Structured interviews responses were completely confidential and the data analysis was done anonymously. This was stressed early in the interview thereby encouraging participants to honest responses.

In addition to informing the participants about the aims of the research they were told that they had been selected completely randomly, that there was no other particular reason for their selection, that the interview was not part of any prison assessment procedure or any other official legal, social, correctional or governmental agency. They were told that the interviews were part of a research project based at Stirling University and that the prison service would not have access to the individual information confided by the participants.

The factual and behavioural information asked from the participants was based on an extensive review of the literature, in an attempt to identify key correlates of deliquency. The instructions to the respondents were also predetermined as well as the sequence of the questions, in an attempt to minimise the effects of the variations that the delivery of the interview could have on the variations between the subjects' responses, thus, enhancing reliability. The interviews were conducted by the same researcher, which controlled, to a certain degree, possible interviewer

210

effects, as the stimuli provided by the interviewer were the same for all the respondents. As the sample consisted of young offenders, a population that presents some limitations, in their level of literacy, because of their often restricted education attainment, and a rather limited attention span, extra care was taken for the wording of the questions so that they appear as simple, straightforward and unambiguous as possible. Care was taken to ensure that jargon and complex words were avoided, as well as double-barrelled, loaded and leading questions. All the items were written in a way that asked the respondent to specify his answers in personal reference and relevance.

S. P. Kiriakidis

The final interview schedule was pre-tested on 10 participants to ensure that the questions were comprehensible, that any ambiguities were identified and clarified, and whether the sequence of the questions was the one that optimally permitted honest responses and the establishment of rapport during the main phase of the research. Although the sequence was predetermined to begin with "easy" questions and then to proceed to the more difficult ones and finally to present some "easy" questions again, based on the feedback from the respondents in the pilot study, the sensitive questions, especially those regarding information about the families of the respondents, were asked almost at the end of the interview, starting with the least sensitive to the more sensitive. This was done because it was observed during the pilot testing that the presentation of sensitive questions prematurely (that is, before a certain degree of rapport is established between the researcher and the participants) could either put the respondents in a defensive position or make them suspicious and ask for more information about the purpose of the research.

The interview lasted from approximately forty to seventy minutes and asked several personal and familial socio-demographic, legal, institutional, educational, vocational, mental health characteristics as well as issues of drugs and alcohol abuse. For the assessment of the above issues a modified version of the interview schedule employed by Chambers et al. (2000) was used. This was made available to the researcher by the Anxiety and Stress Research Centre at the University of Stirling.

The Parental Bonding Instrument (PBI). A short form of the PBI (Pedersen, 1994) was used in the study derived from the factor analytic instrument developed by Parker et al. (1979). The short form of the PBI consists of 10 attitudinal and behavioural items, each scored in a Likert-type scale ranging from 0 (strongly disagree) to 3 (strongly agree). For both

mother and father five items measure perceived care: "She/He appeared to understand my problems and worries", "She/He was affectionate to me", "She/He did not talk to me very much", "She/He did not seem to understand what I needed or wanted", "She/He tended to babe me"; and five items measured protection: "She/He let me decide things for myself", "She/He liked me to make my own decisions", "She/He tried to control everything I did", "She/He was overprotective of me", "She/He did not help me as much as I needed". The items "She/He did not talk to me very much", "She/He did not seem to understand what I needed or wanted", "She/He let me decide things for myself", "She/He liked me to make my own decisions", "She/He did not help me as much as I needed" were reversed scored. However, although care appears to be a homogeneous factor, protection seems to be less homogeneous as Cubis et al. (1989) reported. They detected two aspects of protection, namely "protection in social domain" and "protection in personal domain" as sub-factors of the Protection factor in the PBI. Reliability and validity for the care factor have been very satisfactory, while overprotection usually achieves reliability and validity lower than care, which could be the result of some difficulty in the definition of overprotection (Lopez & Gover, 1993).

From the 152 young offenders who participated in the interview, five were unable to fill in the PBI in relation to their mothers or a mother figure and thirteen for their fathers or a father figure. All the participants, however, were retained in subsequent analysis. Factor analysis of the protection scale revealed one factor solution. Alpha reliability coefficients for the subscales of the PBI were, maternal care .82, paternal care .89, maternal protection .63 and paternal protection .63. Care and protection were not interrelated for both parents, suggesting the independence of the two factors. There was a positive and significant correlation of r = .38, p < .01, between mother care and father care, while mother protection and father protection did not correlate.

RESULTS

Parental care and protection and young offenders' characteristics

Correlations of perceived parental care and protection with certain background characteristics of the young offenders are presented in Table 1. It is interesting to note that perceived protection of both parents was unrelated to almost all of the background characteristics of the young offenders except for age at first arrest and age at first time in prison. Hypothesis 2 that perceived protection would be related with increased recidivism rate was not verified. Higher maternal protection was related with an earlier age at first time in prison while higher paternal protection with later age at first arrest. On the other hand, lower perceived maternal care was related to increased history of past offending, to being in residential care, to less contact with family while in custody, to alcohol abuse in family, to earlier age at first time taken drugs and at first time drinking alcohol, to increased contact with a psychologist in the community, and more attempted suicide. Lower perceived paternal care was related to increased history of past offending, to being in residential care, to earlier age of first time drinking alcohol, and to more attempted suicide. Duration of current stay in custody was found unrelated to the young offenders' perceptions of maternal care or to perceived protection from both their parents. It was, however, positively related to paternal care -the higher the paternal care (i.e., overprotection) the longer the length of current sentence. Therefore, Hypothesis 1 was confirmed, except for the relationship between paternal care and length of current sentence.

Table 1. Correlations of maternal care and protection and paternal care and protection with offenders' background characteristics

Maternal care	Paternal care	Maternal protection	Paternal protection
.05	.21*	02	01
25**	-28**	-15	.05
.12	.18*	.09	09
.11	.14	12	.17*
.04	.04	18*	.05
35**	-22**	.07	.05
.24**	.15	.08	05
23**	12	.11	01
.26**	.16	11	.14
.19*	.24**	03	.02
24**	.04	.07	03
24**	21*	.05	.03
	.05 25** .12 .11 .04 35** .24** 23** .26** .19* 24**	.05 .21*25** .28** .12 .18* .11 .14 .04 .0435** .22** .24** .1523** .12 .26** .16 .19* .24**24** .04	25** -28** -15 .12 .18* .09 .11 .1412 .04 .0418* 35** -22** .07 .24** .15 .08 23**12 .11 .26** .1611 .19* .24**03 24** .04 .07 24** .05

Note: History of past offending was based on a composite measure of the sum of the numbers of previous custodial sentences, previous arrests and non-custodial sentences of the sample of the young offenders divided by their age to obtain a recidivism rate measure. 1 = Pearson's correlation, the rest Point-Biserial correlations. $^*p < .05$; $^{**}p < .01$.

Comparison of PBI scores to other studies

The parenting styles reported by the young offenders in this study are presented in Table 2. The assignment of each offender to one of the four possible quadrants was based on normative mean scores of the male adolescents that participated in the Pedersen (1994) study. Parker et al. (1979), in the development of the PBI, also reported normative values. However, the Pedersen (1994) ones were used because they were based on the short form of the PBI which was employed in the current study. Yet, it should be noted that there are differences between the two studies arising from the fact that the normative values in the Pedersen study were derived from a culturally different sample. Our results suggest that there were small proportions of the young offenders assigned either to optimal parenting or to neglectful parenting. Rather, as the sample overall scored rather high in protection, most of the offenders could be classified as experiencing an affectionate constraint parenting style. A smaller percentage experienced parenting characterised by affectionless control.

Table 2. Perceived parental styles reported by the young offenders for mothers and fathers based on Pedersen (1994) normative sample means

Parental style	Mothers	Fathers
Optimal parenting, High care, and Low protection	3 (4.41%)	5 (3.59%)
Neglectful parenting, Low care, and Low protection	3 (4.41%)	7 (5.03%)
Affectionate constraint, High care, and High protection	120 (81.63%)	89 (64.02%)
Affectionless control, Low care, and High protection	21 (14.28%)	38 (27.33%)

As the studies reported in Table 3 employed either the original version of the PBI (Parker et al., 1979) or the short form (Pedersen, 1994), the procedure suggested by Chambers et al. (2000) was followed, that is, the scores of the studies employing the original version of the PBI were scaled down, that is, the mean scores of the original version of the PBI were divided by the number of items used in the short form of the PBI, so that the results were comparable across the studies. From a number of t-tests, the results of which are reported in Table 4, and the inspection of the mean scores for the samples of the studies, it can be seen that the young offenders in the present study scored significantly higher in comparison to both the normative samples and the samples of young offenders in other studies, in terms of both paternal and maternal care and protection. The differences were particularly obvious in the case of perceived paternal protection and maternal protection and less so for perceived paternal care and maternal care.

unu puta mu pi arania					
			Study 3 (YOs)	Study 4	Study 5
	Study 1 (YOs)	Study 2 (YOs)	(scaled)	Normative	Normative (scaled)
	N = 152	N = 101	N = 114	N = 267	N = 1068
Maternal care	15.01 (3.5)	10.62 (3.3)	10.52	11.4 (2.6)	9.88
Maternal protection	10.97 (2.5)	6.92 (2.5)	3.84	5.6 (3.0)	5.76
Paternal care	12.12 (4.19)	7.96 (3.6)	7.47	10.1 (3.1)	9.25
Paternal protection	9.91 (2.7)	6.18 (2.4)	2.84	4.8 (2.9)	5.12

Table 3. Means (and standard deviations) of maternal care, maternal protection, paternal care, and paternal protection

Note: Study 1 = Present study; Study 2 = Chambers et al. (2000); Study 3 = Biggam & Power (1998); Study 4 = Pedersen (1994); Study 5 = Cubis et al. (1989). YOs = young offenders.

The differences in the scores of the young offenders in the PBI factors of parental care and protection were significantly higher than the mean scores of male adolescents of the general population and from the mean scores of the young offenders in the two previous studies employing the measure in a similar population (see Table 4).

Table 4. T-tests of scores of the PBI subscales of the young offenders of the study with scores of samples of other young offenders and normative data

	YOs of Study 1 vs.	YOs of Study 1 vs.	YOs of Study 1 vs	YOs of Study 1 vs.
	YOs of Study 2	YOs of Study 3	Study 4	Study 5
Maternal care	t(146) = 15.18*	$t(146) = 15.52^*$	t(146) = 12.48*	t(146) = 17.73*
Maternal potection	t(146) = 19.10*	t(146) = 33.62*	t(146) = 25.32*	t(146) = 24.57*
Paternal cre	$t(138) = 11.70^*$	t(138) = 13.08*	t(138) = 5.68*	t(138) = 8.07*
Paternal potection	t(138) = 16.16*	t(138) = 30.63*	t(138) = 22.14*	t(138) = 20.75*
			~	(1000)

Note: Study 1 = Present study; Study 2 = Chambers et al. (2000); Study 3 = Biggam & Power (1998); Study 4 = Pedersen (1994); Study 5 = Cubis et al. (1989). YOs = young offenders. *p < .001.

The perceived parental care and protection mean scores between violent, non-sexual, on the one hand, and property offenders, on the other, were also compared. While no differences were observed in terms of perceived maternal protection, t(118) = .29, p > .05, and paternal protection, t(112) = .32, p > .05, between the two groups, property offenders reported significantly lower perceived care by their mothers, t(118) = 3.78, p < .001, and their fathers, t(112) = 2.64, p < .01. It is not clear why these differences between the two groups, property offenders vs. violent offenders, emerged. A possible explanation might be that property offenders reported significantly higher alcohol abuse in their families as compared to violent offenders, t(122) = 2.11, p < .04. Therefore, Hypothesis 3 was confirmed as regards parental protection, but not as regards parental care.

DISCUSSION

Independence of care and protection factors

Care and protection were unrelated for both parents, suggesting the independence of the two factors. There was a positive and significant correlation of r=.38, p<.01, between mother care and father care, while mother protection and father protection did not correlate. These results are not in line with Chambers et al. (2000) who found no relationship between mother care and father care. They also reported a positive correlation of mother care and protection and a negative correlation of father care and protection, which were not found in this study. Additionally, Mak (1994) reported moderate correlations between care and protection for both mothers and fathers. Care and protection for both mothers and fathers. Care and protection for both mothers and fathers were negatively associated, while maternal and paternal care, as well as maternal and paternal protection, were positively associated. Parker et al. (1979), in the development of the PBI, noted the possibility of different associations of the subscales of the instrument for different populations and suggested different ways of handling the data for different purposes.

Our findings suggest that the independence of the two factors, care and protection, has not been well established, although in the present study of young offender population, the two factors did not correlate. The present results suggest that there was some consistency in the care received from both parents, as perceived by the young offenders, suggesting an overall family pattern. While the independence of the two main factors of care and protection, as measured by the PBI is supported, an overall family function of care and warmth emerged, suggesting that those young offenders who perceived their mothers as caring tended to perceive their fathers as caring as well.

Perceived care and protection and history of offending

Both maternal and paternal care correlated significantly with a composite index of offending history reflecting frequency of past incarcerations, remands and previous sentences. Overall, the results suggest that the less the perceived care, from both the father and mother, the more frequent the offending behaviour. The results are in line with a great number of studies, which identified a consistent relationship of parental rejection and hostility with juvenile delinquency and persistent offending in adolescence (e.g.,

Loeber & Farrington, 1998; McGee et al., 2001; Stouthamer-Loeber et al., 2001). However, it should be pointed out that low perceived care is not the same as rejection or hostility. In the future the relation between low perceived care with perceived rejection and hostility should be investigated.

The present study focused on an incarcerated sample of young offenders and thus concentrated on the more extreme proportion of the population of young people in whom persistent offending was more likely to be evident. Concentration on the more extreme part of the population, in terms of offending and persistent delinquency, runs the risk of a restricted range of variability in the values of offending history. Assuming delinquent behaviour as a normally distributed variable in the population, the sampling was restricted to the top of the distribution. The significant negative correlations, however, of parental care and offending history of the incarcerated young offenders, which could be attenuated due to lack of variability in the offending history variables, further support the well established association between parental child-rearing practices and persistent juvenile delinquency.

The results of any research taking place in an institutional environment are subject to being confounded by the effects of institutionalisation on the participants. Duration of time the inmates had been incarcerated in the institution for their current sentences was measured. Hirschi and Selvin (1967) and Laub and Sampson (1988) argued that if incarceration per se has any effect on the variables of interest in a study of institutionalised offenders, then this effect could at least be evident from the covariation between duration of institutionalisation and the variables of interest. Duration of incarceration for the present sentence of the offenders was not related with either their perceptions of parental care and overprotection or with indices of their offending history. While this was a statistical post hoc testing of any effects of incarceration on the variables of interest, rather than actual control of this probably confounding variable in the research design, duration of current incarceration was unrelated to the variables of interest, thus making the assumption of any effects on either perception of parenting or offending history indices rather remote to consider, at least for the present sample of young offenders.

Perceived care and protection and substance abuse

So far, the pattern of alcohol and drug misuse has not been investigated in incarcerated samples of young offenders in relation to the child-rearing

practices they have experienced. From the findings reported in the present study it seems that parental protection was not related to early initiation of either of these behaviours, while a moderate and significant positive relationship existed between care and first time taken drugs. The findings of the present study are in accord with findings reported by Dobkin et al. (1997). Maternal care was found consistently related to early onset of both alcohol and drug misuse, whereas overprotection was, both maternal and paternal, found unrelated to early substance abuse reported by the young offenders.

Specifically, inspection of the results of Table 1 reveals that there was a significant relationship between maternal care and the age at which the young offenders tried drugs and between paternal care and maternal care and the age at which the young offenders reported drinking. The higher the perceived parental care, the later the age these behaviours were initiated by the participants. Parental protection, on the other hand, was not associated with the age at which the young offenders started drinking or taking drugs. This finding is not in line with Rutherford, Cacciola, Alterman, McKay, and Cook (1997), who found a significant relationship of parental overprotection with alcohol consumption in a community sample of young men.

The positive role of parental care was further supported in our study because maternal care was negatively related to alcohol abuse in the family. This implies that maternal care served as a buffer to the negative effects of alcohol abuse on children. Parental alcohol abuse in the family is expected to be related to less care of the children. Rutherford et al. (1997) showed that alcoholic fathers were rated by their sons as less caring than fathers with no alcohol problems. In the present study paternal care was not sugnificantly related to alcohol abuse in the family. Nor did paternal protection.

The results of the present study are in accord with the picture evolving of the familial environment of adolescent drug misusers from community studies with non-incarcerated adolescents and young adults (Carle & Chassin, 2004; McGee, Wolfe, & Olson, 2001; McGloin & Widom, 2001; Leukefeld et al., 1998). It seems that the same relations are generally supported in a population of young offenders, at least, about perceived care from the mother and drug misuse initiation for male young offenders.

Perceived care and protection and indices of mental health problems

It is interesting to note that maternal care was negatively correlated with

contact with a psychologist in the community and both maternal and paternal care were negatively associated with suicidal attempts. Although the degree of association between parental care and those indices of psychological dysfunction and distress was at best moderate, it was significant and consistent with both psychological treatment and suicidal attempts. These results are similar to Chambers et al. (2000), where parental care was negatively associated with psychological distress in a similar sample of young offenders.

Moreover, care and protection were not associated, in the present study, making the relative contribution of care and protection, as distinct factors of parenting, in the experience of psychological distress, easier to examine. Despite the emergence of care, mainly maternal care, as a significant parental correlate of psychological distress among incarcerated young offenders, it has to be noted that psychological distress can only be inferred by an indirect retrospective operationalisation of contact with mental health professionals in the community and self-reported attempts to suicide. More research is needed with direct measures of distress in the future.

Young offenders' scores on the PBI in comparison to other studies

Our analyses showed that the differences in the protection scores between the sample of the study and the normative samples. The difference was in the expected direction, as higher perceptions of protective parenting have been associated with juvenile delinquency (Mak, 1994; Pedersen, 1994). The higher scores of parental care in this study, however, as compared to other samples, are not compatible with the proposition of an association of lower care and juvenile delinquency. This association that had been supported by findings of both Biggam and Power (1998) and Chambers et al. (2000) in Scottish Young Offenders' samples. The higher perceptions of parental care reported by the sample of the present study are not easily interpretable. A possible speculation might that there was higher percentage of violent offenders in the present study (53% were convicted for violent offences and 23% for property offences). The way parents "managed" their children's violent behaviours might have been perceived as "caring".

In general, the high percentage of violent offenders in the present sample may account for the significant differences between both the normative and the young offenders' data of the previous studies. Further research is needed for the clarification of the relationship of the quality of parenting and different groups of offenders and offending behaviours as the high risk factors and predisposing conditions for different groups of offenders might differ and perceived parenting might have a differential effect for violent and property offending or be mostly related with one class of offending.

Overprotection and delinquent behaviour

The findings of the study indicated that overprotection was not related to most of the forms of delinquency in adolescence. Perceived maternal overprotection was related to lower age of first time in prison and paternal overprotection was related to age at first time arrest. Paternal overprotection, however, was not related to length of present sentence, history of past offence, and age of first offence. Therefore, the relations of perceived parental overprotection with delinquency are not consistent across indices of delinquency. Moreover, the role of paternal overprotection can be seen only in the case of age at first time arrest. These findings require further investigation.

The role of care, however, emerged as more puzzling and inconsistent with previous findings suggesting a relation of low care with delinquency. It has to be noted that the studies attempting to explore such a relationship (e.g., Mak, 1994) employed measures of delinquency that measured mainly trivial offences where the commitment of more serious violent offences was not represented in the sample. It could be speculated that the role of perceived parental care with juvenile delinquency is further complicated when this is examined in samples of juvenile offenders (samples drawn from populations in custody). They could represent a restricted range of perceived parenting and possible differences in the direction and strength of the relationship for different sub-samples of incarcerated young offenders can emerge. All these overall, suggest that further research is needed before any definite conclusions can be provided for the link between perceived parenting and serious and violent juvenile delinquency.

Theoretical implications

The protective role of parenting is supported by the correlations of mainly maternal care and several indices of dysfuctional features including delinquent behaviour. The results of the study show that perceived inadequate parenting, as regards care, is related to many psychosocial problems, such as increased offending history, early initiation of substance abuse, contact

with mental health services and attempted suicide in young offenders. The role of a caring and supportive family environment could be suggested as a protective factor for juvenile delinquency and many psychosocial dysfunctions. The picture is similar to results of community samples (McGee et al., 2001). The results fit with Rutter's (2005) proposition that multiple psychological outcomes might be related to general underlying factors influencing multiple developmental problems, consistent with the principle of multifinality (Farrington, 1995; Thornberry et al., 2001). However, Rutter (2005) stressed the need to follow an approach examining mediational mechanisms that translate adverse experiences into psychosocial maladjustment. One way of examining that is to examine the way humans cognitively represent these experiences (Rutter, 2005).

In relation to the family, this argument has been proposed by Bowlby (1977) who argued that a secure attachment of the children to their primary caregiver results in children that are more able to explore and, in that respect, refine and employ their skills and talents in a constructive way. Belsky and Cassidy (1994) argued that the concept of attachment has been employed as a domain-specific model as well as a broad general model that «depicts attachment security as foundational to a variety of features of development. Thus, sensitivity to attachment signals promotes attachment security, which fosters development in a wide variety of domains» (pp. 382-383). From this general perspective the results of the study seem not surprising. The young offenders who perceived their parents as less supportive seem not to be able to function adaptively and to regulate their lives in constructive ways, both for them and society. In the case of juvenile delinquency, it seems that adverse family experience, and probably lack of care, is a general factor predisposing youth to antisocial and delinquent behaviour. One mediational mechanism that translates these influences into decisions to reoffend is cognitive representations of offending behaviour (Kiriakidis, 2005). This line of research, however, needs to be further pursued.

Clinical implications

It seems reasonable to propose that educational programmes on the role of parenting in the socio-emotional functioning of children could be initiated within the correctional institutions, especially for young offenders, as they are likely to have their own families. Such an approach could be promising in preventing the transmission of poor child-rearing practices across generations

and reduce its effects in the general socio-emotional functioning of children. The results of the current study are potentially informative for such purposes especially within the broader literature of intervention studies suggesting a causal role of child-rearing practices in antisocial behaviour and beneficial outcomes for disadvantaged families from the implementation of such programes.

Larzelere and Patterson (1990) and Patterson (1986) reported that interventions, aimed at parental education and training to deal with delinquent and antisocial behavioural manifestations in children and adolescents resulted in reductions in the antisocial conduct of the adolescents. Patterson and Reid (1973), replicating an earlier study of parental education on monitoring and effective use of behavioural principles for reducing antisocial behavioural manifestation of their children, reported that nine out of eleven families showed «reductions of greater than 30 per cent (targeted deviant behavior) from baseline» (p. 390). Although the results of the study aimed at changing different kinds of antisocial behaviour in general and aggression in particular, they, however, provide support for the proposition that parental management is related, to a high degree, to the antisocial and aggressive behaviour of children.

Yoshikawa (1994) reviewed the programs that had been designed to provide early family support and education to children and their families who were under the influence of risk criminogenic factors. The interventions were intensive during the children's first five years and were designed with a clear research orientation and assessment of progress in view. They included control groups and random assignment to intervention with extensive followups that enabled the researchers to assess possible "sleeper" effects and stability of gains over time. The studies actually postulated two pathways in the development of resiliency against delinquency, one through the effects of cognitive development and school achievement and the other through the enhancement of parenting for buffering socio-emotional dysfunction. The interventions were designed to facilitate the general development of children and functioning of the families. Yoshikawa (1994) concluded that there had been noticed sustained improvements in the socio-emotional functioning of the children, which included school attainment, reduction in delinquency and antisocial behaviour and less chronic delinquency rates in comparison to the controls. Interventions including both family support and children's education achieved better results than those that targeted either of them, mainly due to their cumulative or interaction effects. Despite the difficulty inherent in the studies to assess the relative contribution of improved parenting on the delinquent behaviour of the children, it seems that effective parenting is a necessary, while not sufficient, factor for the normal development of children and the inhibition of antisocial behavior and delinquency in childhood and adolescence.

REFERENCES

- Barrera, M., Prelow, H. M., Dumka, L. E., Gonzales, N. A., Knight, G. P., & Michaels, M. L. (2002). Pathways from family economic conditions to adolescents' distress: Supportive parenting, stressors outside the family, and deviant peers. *Journal of Community Psychology*, 30, 1-18.
- Biggam, F. H., & Power, K. G. (1998). The quality of perceived parenting experienced by a group of Scottish incarcerated young offenders. *Journal of Adolescence*, 21, 161-176.
- Belsky, J., & Cassidy, J. (1994). Attachment: Theory and evidence. In M. Rutter & D. Hay (Eds.), *Development through life* (pp. 373-402). Oxford, UK: Blackwell.
- Bolger, K. E., & Patterson, C. J. (2001). Pathways from child maltreatment to internalising problems: Perceptions of control as mediators and moderators. *Development and Psycho*pathology, 13, 913-940.
- Bowlby, J. (1977). The making and breaking of affectional bonds: II. Aetiology and psychopathology in the light of attachment theory. *British Journal of Psychiatry*, 130, 201-210.
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34, 844-850.
- Carle, A. C., & Chassin, L. (2004). Resilience in a community sample of children of alcoholics: Its prevalence and relation to internalizing symptomatology and positive affect. *Applied Developmental Psychology*, 25, 577-595.
- Chambers, J. A., Power, K. G., Loucks, N., & Swanson, V. (2000). Psychometric properties of the parental bonding instrument and its association with psychological distress in a group of incarcerated young offenders in Scotland. *Social Psychiatry and Psychiatric Epidemiology*, 35, 318-325.
- Cicchetti, D., & Rogosch, A. F. (2001). The impact of child maltreatment and psychopathology on neuroendocrine functioning. *Development and Psychopathology*, 13, 783-804.
- Cohen, P., Brown, J., & Smailes, E. (2001). Child abuse and neglect and the development of mental disorders in the general population, *Development and Psychopathology*, 13, 981-999.
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Development and Psychopathology*, 38, 179-193.
- Cubis, J., Lewin, T., & Dawes, F. (1989). Australian adolescents' perceptions of their parents. *Australian and New Zealand Journal of Psychiatry*, 23, 35-47.
- Dobkin, P. L., Tremblay, R. E., & Sacchitelle, C. (1997). Predicting boys' early-onset substance abuse from father's alcoholism, son's disruptiveness, and mother's parenting behavior. *Journal of Consulting and Clinical Psychology*, 65, 86-92.

- Farmer, T. W., & Farmer, E. M. Z. (2001). Developmental science, systems of care and prevention of emotional and behavioral problems in youth. *American Journal of Orthopsychiatry*, 7, 171-181.
- Farrington, D. P. (1995). The twelfth Jack Tizard memorial lecture: The development of offending and antisocial behaviour from childhood. Key findings from the Cambridge Study in Delinquent Development. Journal of Child Psychology and Psychiatry, 360, 929-964.
- Glueck, S., & Glueck, E. (1950). *Unraveling juvenile delinquency*. Cambridge, MA: Harvard University Press.
- Hirschi, T., & Selvin, H. C. (1967). *Delinquent research: An appraisal of analytic methods*. New York: The Free Press.
- Kiriakidis, S. (2005). Perceived parental care and supervision: Relations with cognitive representations of future offending in a sample of young offenders. *International Journal of Offender Therapy and Comparative Criminology*, 50(2), 187-203.
- Larzelere, R. E., & Patterson, G. R. (1990). Parental management: Mediator of the effect of socioeconomic status on early delinquency. *Criminology*, 28, 301-324.
- Liska, A. E., & Reed, M. D. (1985). Ties to conventional institutions and delinquency: Estimating reciprocal effects. *American Sociological Review*, 50, 547-560.
- Laub, J. H., & Sampson, R. J. (1988). Unraveling families and delinquency: A reanalysis of the Gluecks' data. *Criminology*, 26, 355-380.
- Loeber, R., & Farrington, D. P. (1998). Serious and violent juvenile offenders: Risk factors and successful interventions. Thousand Oaks, CA: Sage.
- Lopez, F. G., & Gover, M. R. (1993). Self-report measures of parent-adolescent attachment and separation-individuation: A selective review. *Journal of Counseling and Development*, 71, 560-569.
- Leukefeld, C. G., Logan, T. K., Clayton, R. R., Martin, C., Zimmerman, R., Cattarello, A., Milich, R., & Lynam, D. (1998). Adolescent drug use, delinquency, and other behaviours. In T. P. Gullotta, G. R. Adams, & R. Montemayor (Eds.), *Delinquent violent youth: Theory and interventions* (pp. 98-128). London: Sage.
- Mak, A. (1994). Parental neglect and overprotection as risk factors in delinquency. *Australian Journal of Psychology, 46*, 107-111.
- McGee, R., Wolfe, D., & Olson, J. (2001). Multiple maltreatment, attribution of blame, and adjustment among adolescents. *Development and Psychopathology*, 13, 827-846.
- McGloin, J. M., & Widom, C. S. (2001). Resilience among abused and neglected children grown up. *Development and Psychopathology*, *13*, 1021-1038.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53, 185-204.
- Parker, G. (1989). The Parental Bonding Instrument: Psychometric properties reviewed. *Psychiatric Developments*, *4*, 317-335.
- Parker, G. (1990). The Parental Bonding Instrument: A decade of research. *Social Psychiatry and Psychiatric Epidemiology*, 25, 281-282.
- Parker, G., Tupling, H., & Brown, L. B. (1979). A Parental Bonding Instrument. *British Journal of Medical Psychology*, 52, 1-10.
- Patterson, G. R., & Reid, J. B. (1973). Intervention for families of aggressive boys: A replication study. *Behavior Research and Therapy*, 11, 383-394.

- Pedersen, W. (1994). Parental relations, mental health, and delinquency in adolescents. Adolescence, 29, 975-990.
- Rutherford, M. J., Cacciola, J. S., Alterman, A. I., McKay, J. R., & Cook, T. J. (1997). Young men's perceived quality of parenting based on familial history of alcoholism. *Journal of Child and Adolescent Substance Abuse*, 6, 43-56.
- Rutter, M. (1994). Family discord and conduct disorder: Cause, consequence, or correlate? *Journal of Family Psychology*, 8, 170-186.
- Rutter, M. (2005). Multiple meanings of a developmental perspective on psychopathology. European Journal of Developmental Psychology, 2(3), 221-252.
- Rutter, M., Giller, H., & Hagell, A. (1998). *Antisocial behaviour by young people*. New York: Cambridge University Press.
- Rutter, M., Maughan, B., Meyer, J., Pickles, A., Silberg, J., Simonoff, E., & Taylor, E. (1997). Heterogeneity of antisocial behaviour: Causes, continuities and consequences. In D. W. Osgood (Ed.), *Nebraska Symposium on Motivation: Motivation and delinquency* (Vol. 44, pp. 45-118), Lincoln, NE: University of Nebraska Press.
- Simons, R. L., Robertson, J. F., & Downs, W. R. (1989). The nature of the association between parental rejection and delinquent behavior. *Journal of Youth and Adolescence*, 18, 297-310.
- Stouthamer-Loeber, M., Loeber, R., Homish, D. L., & Wie, E. (2001). Maltreatment of boys and the development of disruptive and delinquent behavior, *Development and Psychopathology*, 13, 941-955.
- Thornberry, T. P., Ireland, T. O., & Smith, C. A. (2001). The importance of timing: The varying impact of childhood and adolescent maltreatment on multiple problem outcomes. *Development and Psychopathology, 13*, 957-979.
- Wadsworth, M. E., & Compas, B. E. (2002). Coping with family and economic strain: The adolescent perspective. *Journal of Research on Adolescence*, 12, 243-274.
- Whipple, E. E., Fitzgerald, H. E., & Zucker, R. A. (1995). Parent-child interactions in alcoholic and non-alcoholic families. *American Journal of Orthopsychiatry*, 65, 153-159.
- Wilson, H. (1980). Parental supervision: A neglected aspect of delinquency. The British Journal of Criminology, 20, 203-235.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. *Psychological Bulletin*, 115, 28-54.