

Juvenile sexual delinquents: contrasting child abusers with peer abusers

J. HENDRIKS¹ and C.C.J.H. BIJLEVELD², ¹De Waag Ambulant Center for Forensic Psychiatry, Den Haag, and FORA Center for Ambulant Youth Care, Leiden, the Netherlands,² NSCR Institute for the Study of Crime and Law Enforcement, Leiden, and Department of Criminal Law and Criminology, Free University Amsterdam, the Netherlands

ABSTRACT

Background *There is growing concern regarding juvenile sex offenders, and concomitant interest in a more scientific database which could help direct management and treatment resources.*

Aims *To investigate whether juveniles who sexually offend against children (or those at least five years younger than themselves) differ from those who sexually assault their peers or older victims.*

Method *The study is based on data from psychological screenings conducted for the juvenile courts in the Netherlands.*

Results *As hypothesized, juvenile child molesters scored higher on neuroticism, had experienced more social problems, and had been bullied more often at school than their peers who sexually assaulted same-age or older victims. Child molesters also reported a more negative self-image. When referred for screening, they were younger but had committed more sex offences, more often against males than females.*

Conclusions *The results were suggestive of greater need for psychological interventions in the child molester group, although in both groups substantial minorities had had experience of early childhood deprivation or abuse.*

Introduction

Juvenile sex offenders are the focus of increasing attention, both in the media and in the applied sciences such as criminology, but the European scientific literature remains scant. In general it is assumed that juvenile sex offenders, like adult sex offenders, constitute a heterogeneous population (Caldwell, 2002; Hunter et al., 2003). Even though most typologies are clinically rather than

empirically based, it is supposed that subgroups homogeneous for career pathway and sex offence pattern could be distinguished on the basis of demographic and personality characteristics. If this were so, there could be advantages for clinical treatment and/or prevention of recidivism.

Boyd et al. (2000) stated that type of sexual offence correlates with risk of recidivism. There is some empirical evidence that adult sex offenders who molest children start at an earlier age, harm a relatively larger number of victims and continue their careers over a relatively longer period than others (Groth et al., 1982; Barbaree et al., 1998; Boyd et al., 2000). The main aim of our study was to test the extent to which this distinction applies to juvenile sex offenders.

Review of the relevant literature

O'Brien and Bera (1986) distinguished seven types of (not necessarily juvenile) sex offenders. The first six are offenders who commit the offence on their own; a seventh type is the group offender. The distinction, however, was clinically based, and has little systematic research substantiation. Sipe et al. (1998) proposed categorizing sex offenders on the basis of the type of offence. Becker et al. (1993) differentiated into 'hands-off offences' (such as voyeurism, exhibitionism and obscene phone calls), 'hands-on offences' (sexual assault and rape) and paedophile offences in which the victim is four years or more younger than the offender. Hands-off offences appear to be committed mainly against same-age or older victims (Davis and Leitenberg, 1987). Hands-on offences are committed mostly against unknown women, again mostly of the same age or older than the offender (Lewis et al., 1979). Paedophile offence victims are often acquaintances or relatives of the offender, and more often male (Davis and Leitenberg, 1987).

Personality structure is an important element in typologies of sexual offenders. Personality is generally described as the consistent and stable manner in which a person adapts or reacts to varying circumstances. It is supposedly a conglomerate of a number of characteristics that determine the behavioural repertoire. Some researchers have reduced personality characteristics to a small number of basic properties, namely intelligence, emotionality or neuroticism, hardness, conscientiousness and extraversion; other subdivisions include sociability, impulsivity and sensation seeking (see for instance, Cattell, 1946; Eysenck, 1964). Many studies have shown that certain of these personality characteristics correlate with (the seriousness of) criminal behaviour or discriminate between delinquent and non-delinquent respondents (see among others, Hampson and Kline, 1977; Oliver et al., 1993; Rogers and Bagby, 1994; Perry Hume et al., 1996; Bijleveld et al., 1998). Hare (1991) stressed the importance of emotional impairment, such as lack of guilt, as a correlate of recidivism.

Referring specifically to juveniles, Bijleveld and Hendriks (2003) showed that solo sex offenders are more neurotic and impulsive than group sex

offenders, are less sociable and score higher on sensation seeking. Lane (1997) reported how the majority of juvenile sex offenders are unable to maintain adequate social and intimate relations. Barbaree et al. (1998) coined the phrase 'syndrome of social inadequacy' in this respect. Ford and Linney (1995) reported that all types of juvenile sex offenders have trouble voicing their interpersonal desires. According to Becker et al. (1993) the lack of social and assertive skills is characteristic of this group and leads to social isolation. The self-esteem of adolescent sex offenders is generally low. Bagley and ShewchukDann (1991) stressed the great variability of psychological and social problems within the group of juvenile sex offenders. Bijleveld and Hendriks (2003) found that solo offenders were more often victims of bullying than group sex offenders. Hunter et al. (2003) stressed their finding that, especially in adolescent child abusers, psychosocial functioning is low.

Hsu and Starzinsky (1990) compared adolescent rapists with adolescent child molesters and found no difference in sexual abuse history or disturbed family backgrounds. Saunders et al. (1986) described the adolescent typical child molester as a young male abusing an approximately 10 years younger boy of the same race, of whom he is a relative or an acquaintance. Conversely, the adolescent rapist tends to abuse an older, female, unknown victim, and may use a weapon to subdue her. Extrapolating from Bijleveld and Hendriks's findings (2003), adolescent peer abusers are more from often ethnic minorities, while child abusers are more often indigenous Dutch. Worling (1995) distinguished juvenile sex offenders on the basis of the age of their (female) victims. He could not confirm the hypothesis that child molesters are more socially isolated, have worse social relations with their peers and a lower self-image than peer abusers. He did find that peer abusers had been subjected more often to harsh disciplining.

Hunter et al. (2003) contrasted adolescent males who sexually offended against prepubescent children with those who targeted pubescent and post-pubescent females. The former had greater deficits in psychosocial functioning, used less aggression and were more likely to offend against relatives. Lack of social confidence, concomitant depression and anxiety were characteristic of sex offending against prepubescent children. Nearly half of the sample met assessment instrument criteria for clinical intervention for depression and anxiety. Hunter et al. concluded that the two contrasted groups may have different clinical needs. Manocha and Mezey (1998) reported, in their study on English juvenile sex offenders, that the average age of victims was around seven years.

The main aim of the present study was to investigate the extent to which juveniles who offend sexually against children differ from juveniles who offend sexually against people of their own age or older (peer abusers). From the literature just reviewed we derived the following specific hypotheses, each of which is formulated with reference to peer abusers:

1. Child molesters are more neurotic, less extravert and have lower levels of sensation seeking.
2. Psychopathology is more prevalent among child molesters.
3. Child molesters have more often been victims of bullying.
4. Child molesters have a more negative self-image.
5. Child molesters have poorer contacts with their peers.
6. Child molesters have a more problematic family background, as indicated by neglect and the use of violence between the parents.
7. Child molesters have more often been victims of sexual abuse.
8. Child molesters are more often indigenous Dutch.
9. The average age of child molesters is lower.
10. Child molesters use less physical violence and more verbal violence to subdue their victim.
11. Victims of child molesters are more often known to the perpetrator.
12. Victims of child molesters are more often male.
13. The criminal career of the child molesters more often includes sexual offences and fewer other types of offence.

Method

Sample

The sample consisted of all 116 male juveniles prosecuted for a sexual offence other than exhibitionism, for whom psychological testing had been requested and for whom, at the time of the study, a dossier was present at the Ambulant Bureau Jeugdwelzijnszorg in Leiden (ABJ). Those who offended as part of a group were excluded.

A small number of 11-year-olds were included in the group studied. Although they cannot be prosecuted under criminal law in the Netherlands, psychological screenings may be conducted because of concern for the development of these boys.

The ABJ is a joint initiative set up in 1987 involving educationists, psychologists and psychiatrists. Its objective is to carry out psychological and educational screening among children, adolescents and those responsible for their upbringing, to give treatment and provide advice, information and courses. Requests for assessment are in particular submitted by judicial bodies, such as the Courts, the Prosecutor's Office, the Child Welfare Council, (family) guardian organizations and the (Youth) Probation Service. Requests submitted by the Prosecutor's Office and the (Juvenile) Courts take place within the context of legal pre-investigations at the request of the examining judge or prosecutor. The foundation 'Forensisch Arrangement' (Forensic Arrangement, abbreviated as FORA) absorbed the ABJ during the time this study was undertaken. It is standard policy at the ABJ that all dossiers are destroyed after five years; the sample consists therefore of all dossiers relevant to this study that were

reported between 1 January 1996 and 30 June 2000 and were present in the archive at ABJ during the time of the study.

Research design

Data were collected from the ABJ dossiers by a trained student, using a purpose-designed variable list. The rater was independent of the psychological assessments for the ABJ. Most of the data were straightforward practical matters on which no personal judgement by a researcher was necessary or were the results of standardized psychometric testing. Ratings of 'not present' were made only when there was a clear negative statement in the record; otherwise in the absence of the variable clearly being present a 'not known' was recorded. Where judgement was required, for example in relation to the more qualitative ratings of the quality of peer relationships, or whether or not an individual had experienced sexual abuse, reliability was assessed by inter-rater agreement, where the second rating was carried out independently by a trained psychologist, who had again also not been involved in the original screening.

The dossiers

All dossiers contained a psychologist's report of an assessment consisting of a number of standard questionnaires, an intelligence test and an interview with the juvenile and his parents/caretakers. Whenever it is considered necessary, information is also sought from third parties such as schoolteachers, guardian or probation officer. The reason the assessment was requested was always noted, and there are almost always copies of the police reports. Relevant information from the Child Welfare Council, or treatment institutions, is included where the youngsters have had contact.

Variables chosen

Demographic and historical details recorded on the variable checklist included ethnicity, age, education, criminal career and/or history of supervision order; family background variables such as abuse, neglect, violence between the parents, their drug or alcohol addiction, any psychopathology and employment status. In addition we registered whether the juvenile was a victim of bullying, the quality of his contacts with peers and whether he had been a victim of sexual abuse.

With regard to psychological measures, intelligence was scored with the aid of the Raven Progressive Matrices Test (Raven et al., 1979). The scores were transformed to fit within the categories 'sub-normal' (below 10th percentile), 'below average' (10th–25th percentile), 'average' (25th–75th percentile), 'above average' (75th–90th percentile) and 'gifted' (above 90th percentile), according to the advised standard.

Neuroticism was measured using the Amsterdam Biographical Questionnaire (ABV; Wilde, 1970) for those over 14 or the ABV-K for those up to and including 14 (Van Dijk and Wilde, 1982). Impulsiveness, extraversion and sensation seeking were measured with the Adolescents Temperament List (ATL; Feij and Kuiper, 1984). These are all self-administered personality questionnaires that are standard screening instruments in the Netherlands, with reliability and validity measures published. The ATL has been specially developed for use in adolescents aged 13 to 18 years. The scores are categorized as 'high' (above 90th percentile), 'above average' (70th–90th percentile), 'average' (30th–70th percentile) and 'low' (below 30th percentile). Information relating to self-image and psychopathology is also derived from the assessment report.

The offences were categorized in terms of the age of the victim relative to the defendant, these categories being, first, offences in which the victim was at least five years younger and, second, offences in which the victim was less than five years younger or older than the defendant. Rape and sexual assaults were distinguished according to qualification by the police or prosecutor. In addition, the place where the offence took place was rated, and the relationship of the offender to the victim and the type and extent to which violence was used by the offender at the time of the offence were noted. In each case, information on the offence that led to the request for the personality assessment was scored, this offence being the 'leading offence'.

Data analysis

To measure differences between groups of offenders, we used a non-parametric test for differences: the Mann–Whitney test. When testing categorical correlations the chi-square test was used. The tests were performed one-sided given the shape of our hypotheses. Given the number of separate statistical tests performed (20), we set a stricter than usual limit for significance, applying an α of 2.5% in all univariate tests. In addition, we carried out a logistic regression analysis to investigate what univariately significant predictors gave a unique contribution to the prediction of offender group membership.

Results

General characteristics of the sample

Four juveniles had abused both peers and children, and were therefore excluded from the analyses. The results that we report here are therefore based on 112 perpetrators. In three cases where the age difference between the offender and the victim was only four years but the victim was younger than 10 years, we categorized the offending juvenile as belonging to the child abuser group. Thus, there were 58 juveniles designated for research purposes as child abusers, and 54

cases as peer abusers. Ten juveniles denied the offence but they were not excluded from the results reported here (although doing so in fact made no difference to the main findings).

The average age of the perpetrators at the time the offence was committed was 14 years and 7 months ($SD = 1.71$, range 11–18). Two-thirds of the juveniles lived in a family with both genetic parents; the others were in a range of situations including single-parent families, stepfamilies or adoptive families. The majority of them (55%) were of Dutch origin, 24% belong to the traditional minority groups (for the Netherlands these are Surinamese, Antillean, Moroccan and Turkish), and more than 20% are of mixed or other ethnic origin.

The juveniles in the sample were on average of below average intellectual capacity. The median score on Raven's matrices was 2, with categorized scores ranging from 1 to 5. About 50% were enrolled in special education; two were still at primary school. Fifteen offenders played truant, ranging from sometimes to frequently. Almost half indicated having been bullied at school. Slightly more than one in 10 of the offenders in the sample indicated using or having used soft drugs but only one offender indicated using hard drugs. Three offenders were under the influence of alcohol at the time the offence was committed. For almost half of the juveniles some form of psychopathology was reported.

The age of the victims of the leading offence varied between two months and 50 years of age; 60% were aged 10 years or younger. Only five victims had been 17 years or older at the time of the leading offence. The 112 juvenile perpetrators had over the life course committed crimes against a total of 234 victims; 76% had had just one victim, but 21% certainly victimized two people, 8% three to five people and 5% more than five people. These figures are a minimum estimate given that, in a number of cases, the exact number of multiple victims could not be ascertained, in which case we coded the number of victims as '2'. The largest number of victims mentioned was 18.

The distribution of the leading offences across the two groups is given in Table 1.

| Offence | Child abuser n = 58 | Peer abuser n = 54 |
|----------------|------------------------|-----------------------|
| Rape | 20 | 19 |
| Sexual assault | 35 | 33 |

Note: ¹In total in five cases this relates to a rape and a sexual assault, in which case the offence was not classified as either.

Similarities and differences between characteristics of juveniles committing sex offences against children and those committing such offences against peers or adults

Table 2 gives the results of the principal statistical comparisons between those young males who sexually assaulted children and those who offended against peers or adults. The juvenile child abusers had higher neuroticism scores than their peers offending against older victims, and a significantly higher proportion were rated as having psychopathology at the time of assessment. They were similar, however, in terms of extraversion and sensation seeking.

The child abusers were significantly more likely to have reported being bullied than the others, and to have poorer peer contact. They had a more

| | Child Abusers ¹ | Peer abusers ¹ | |
|---|----------------------------|---------------------------|-----------------------------------|
| Neuroticism ² | 3.09 (1–4) | 2.31 (1–4) | $z = 3.649, p = < 0.001$ |
| Extraversion ¹ | 1.95 (1–4) | 2.09 (1–4) | n.s. |
| Sensation seeking ¹ | 1.98 (1–4) | 1.94 (1–4) | n.s. |
| Psychopathology | 55% (n = 32) | 33% (n = 18) | $\chi^2(1) = 5.397, p = < 0.01$ |
| Victim bullying ³ | 2.12 (1–3) | 1.44 (1–3) | $z = 4.054, p = < 0.001$ |
| Self-image ⁵ | 2.21 (1–4) | 2.55 (2–4) | $z = -2.517, p = < 0.01$ |
| Contact peers ⁵ | 2.02 (1–4) | 2.52 (1–4) | $z = -3.736, p = < 0.001$ |
| Cruelty by parents | 14% (n = 8) | 21% (n = 11) | n.s. |
| Neglect by parents | 28% (n = 16) | 42% (n = 22) | n.s. |
| Violence between parents | 13% (n = 7) | 28% (n = 13) | n.s. |
| Victim of sexual abuse | 16% (n = 9) | 11% (n = 6) | n.s. |
| Dutch origin | 72% (n = 42) | 37% (n = 20) | $\chi^2(1) = 14.162, p = < 0.001$ |
| Age at offence | 14.3 (11–17) | 14.9 (11–18) | $z = -2.018, p = < 0.025$ |
| Use of physical violence ⁶ | 1.38 (1–4) | 1.79 (1–4) | $z = 1.984, p = < 0.025$ |
| Use of verbal violence/threats ⁷ | 1.77 (1–4) | 1.71 (1–4) | n.s. |
| Relation to victim: | | | |
| Family | 19% (n = 11) | 15% (n = 8) | $\chi^2(2) = 33.939, p = < 0.001$ |
| Acquaintance (school/nb.hd) | 68% (n = 39) | 56% (n = 30) | |
| Stranger | 12% (n = 7) | 30% (n = 16) | |
| Male victim(s) | 55% (n = 32) | 11% (n = 6) | $\chi^2(1) = 24.218, p = < 0.001$ |
| No. of previous sex offences | 0.82 (0–2) | 0.27 (0–1) | $z = 2.672, p = < 0.01$ |
| No. of previous non-sex offences | 0.91 (0–3) | 1.15 (0–3) | n.s. |

Note: ¹Numbers in parentheses give the range within this group; (n = refers to the numbers of respondents with the characteristic); ²ranging from 1–4 with labels ranging from ‘1’ meaning ‘below norm values’ to ‘4’ meaning ‘high’; ³ranging from 1 to 3 with ‘1’ meaning no victimization, ‘2’ meaning ‘at times’ and ‘3’ meaning ‘frequent victimization’; ⁴category labels have the following interpretations here: ‘1’ means ‘very negative’, ‘2’ ‘negative’, ‘3’ ‘normal’, ‘4’ ‘positive’; ⁵category labels have the following interpretations here: ‘1’ means ‘very poor’, ‘2’ ‘poor’, ‘3’ ‘normal’, ‘4’ ‘good’; ⁶category labels have the following interpretations here: ‘1’ means ‘no violence’, ‘2’ ‘minor violence’, ‘3’ ‘considerable violence’ and ‘4’ means ‘serious violence’; ⁷category labels have the following interpretations here: ‘1’ means ‘no violence’, ‘2’ ‘minor violence’, ‘3’ ‘considerable violence’, ‘4’ ‘serious violence’.

negative self-image. Family background variables, including any childhood sexual abuse, did not distinguish the groups. Child abusers were more likely to be of Dutch origin (72%); peer abusers were in 63% of the cases of non-Dutch origin.

Logistic regression analysis (Table 3) showed how many of the variables for which significant associations were found with sex offender group membership covaried. On entering all the significant associations in one regression analysis, only having been bullied was independently related to sex offender group. Age at offence and neuroticism just missed such status. Exactly 80% of offenders were correctly classified on the basis of their background and personality characteristics.

| | B | S.E. | sig |
|-----------------|--------|-------|------|
| Neuroticism | -.695 | .393 | .077 |
| Psychopathology | .244 | .720 | .735 |
| Victim bullying | -1.027 | .475 | .031 |
| Self-image | -.397 | .694 | .567 |
| Contact peers | .739 | .545 | .175 |
| Dutch origin | .779 | .649 | .229 |
| Age at offence | .377 | .213 | .077 |
| Constant | -7.320 | 3.801 | .054 |

Note: ¹'1' meaning that the respondent has been classified as a child abuser and '2' indicating that the respondent has been classified as a peer abuser.

Offence characteristics of the juvenile child abusers and peer abusers compared

Table 2 also shows characteristics of these young males in direct relation to the offence. The average age of the juveniles abusing younger victims was lower at the time of the offence than that of the others. Although there was no difference between the groups in verbal aggression, physical violence was significantly more likely in the group with peer/older victims. Equally, the victims of the latter group were more likely to offer resistance. There was a significant interaction between victim age group and relationship to offenders, with the most important differences being higher proportion of those assaulting peer/older victims assaulting strangers rather than true peers; family victimization hardly differed. The tendency for peer abusers to assault strangers was present also in their previous sex offending careers, that is, their careers exclusive of the index offences in the ABJ dossier ($z = 2.263, n = 12, p < 0.025$). More of the child abusers had assaulted males, but their choice was not exclusive.

Logistic regression analysis showed how also many of the criminal career and offence characteristics for which significant associations were found with sex

offender group membership covaried (Table 4). Sex of the victim and use of physical violence, however, were independently associated. Again a little over 80% of offenders were correctly classified on the basis of their criminal career and leading offence characteristics.

| | B | S.E. | sig |
|---------------------------------|--------|-------|------|
| Use of physical violence | .585 | .286 | .040 |
| Relation to victim ² | | | .309 |
| relative | -.597 | 1.116 | .592 |
| neighbourhood | -1.310 | 1.013 | .196 |
| Previous stranger victims | .009 | .520 | .986 |
| Sex victim ³ | 2.595 | .686 | .000 |
| Constant | -4.856 | 1.726 | .005 |

Notes: ¹'1' meaning that the respondent has been classified as a child abuser and '2' indicating that the respondent has been classified as a peer abuser; ² 'stranger' is the reference category; ³'1' being male, '2' being female.

Discussion

Methodological limitations

The data used in this study were solely from records. The advantage of this is that data collection took place, as it were, prospectively, and the assessors proceeded unbiased by the hypotheses. The personality characteristics were recorded after the offence was committed but in so far as that would bias assessment results we have no reason to believe that these biases would affect our groups differentially. A real disadvantage of studying records, however, could lie in the fact that not all the relevant information was collected. However, in general, it is true to say that the closer the reason for the creation of the dossiers is to the objective of the study, the more adequate is the information in them. In our case the objectives were very closely related.

A potentially greater problem for our research lay in selection of the sample. Given that the ABJ, now FORA, carries out many psychological assessments of juveniles requested for forensic purposes, and almost all of those of perpetrators of sexual offences, the sample studied is probably representative nationally of such young males in the Netherlands. The same reservations apply, however, as in other criminological research: i.e. that only the select group that gets caught and is prosecuted can be investigated. With regard to juvenile sex offenders the 'dark number' is considered to be very high. That means that generalization is limited. For this study, we tried to extend applicability by including all defendants, whether or not convicted, but we are aware that some researchers would

have reservations about that. As it happens, in most cases the evidence was pretty compelling, and most boys had confessed to the offence; whether or not the denying juveniles were retained in analysis made no difference to the significance or otherwise of the findings.

There was a difference between the two juvenile sex offender groups in regard to being native or not. This could have had the effect of artificially biasing some of the findings. People who had not been long in the country, for example, might not have neighbourhood acquaintances, or be separated from most of their family. Any criminal record might not be traceable. The direction of relationship between offending careers and offence groups, however, suggests that any such issues would have served to minimize the significance of the findings rather than affect their direction. By contrast, ethnic differences might have affected willingness to seek help for possible offending against children; these victims were much more likely to be known to the offender. Cultural factors could have affected results on psychometric testing, perhaps leading to an underestimate of potential need for psychological assistance.

An emergent typology for juvenile sex offenders

It seemed that an offending typology similar to that described in adults (Groth et al., 1982; Barbaree et al., 1998, Boyd et al., 2000) was emerging in these youngsters. The group who offended against children had started at an earlier age and had had relatively more victims. It is arguable that it is too soon to tell whether length of sex-offending career will ultimately distinguish the groups, and longer term follow-up to test this could be important. Hendriks and Bijleveld (2004) show how offenders against children have markedly higher recidivism chances after treatment in a Dutch inpatient facility, after a median follow-up period of approximately 6½ years. Hagan et al. (2001), however, found no such difference over eight years.

From a treatment perspective, the differences we found may be of practical assistance. The child sex offender group ostensibly had more psychological problems. We accept, though, that the two types of juvenile offenders had as many similarities as differences – a point emphasized by Hsu and Starzinsky (1990). We had expected, for example, that our child sex abusers would have been more likely to have experienced sex abuse themselves as children. The sample sizes were statistically speaking modest, so this may have masked a real difference in this respect. Perhaps the most important observation, however, is that substantial minorities of both groups had had impoverished or abusive childhoods and that both may need help with these issues.

Conclusions

Our results are suggestive that, among juveniles who offend sexually, those who have child victims are more likely to be indigenous, younger, more established

in sex-offending careers and to have more indication of psychological disturbance than those who victimize peers or older people. They were not distinguished by history of abuse in their own childhood; substantial minorities of both groups reported parenting problems and early abuse. A central feature of these boys appears to be their social isolation as captured by their victimization from bullying and concomitant poor relations with peers. Preference for male victims and little to no use of violence to subdue the victim appear to be particular distinguishing characteristics of the offences committed by child abusers. The findings point to early establishment of a typology similar to that found among adult offenders but we acknowledge possible bias by studying only a group of young males charged with a criminal offence.

Acknowledgement

The authors wish to thank Marike Muizer and Lieke Bakker for assistance in data collection as well as two anonymous reviewers for their useful comments on an earlier draft of this paper.

References

- Bagley C, ShewchukDann D (1991) Characteristics of 60 children and adolescents who have a history of sexual assault against others: evidence from a controlled study. *Journal of Child and Youth Care* Fall special issue, 43–52.
- Barbaree HE, Marshall WL, McGormick J (1998) The development of deviant sexual behaviour among adolescents and its implications for prevention and treatment. *Irish Journal of Psychology* 19(1), 1–31.
- Becker JV, Harris CD, Sales BD (1993) Juveniles who commit sexual offences: a critical review of research. In: Hall GCN, et al., eds. *Sexual Aggression: Issues in Aetiology, Assessment and Treatment*. Washington/London: Taylor & Francis, pp. 215–228.
- Bijleveld CCJH, Bakker L, Hendriks J (1998) Contact crimes in relation to neuroticism, impulsiveness, conscience formation and intelligence: an exploratory discriminant analysis in juvenile delinquents. *Psychology, Crime and Law* 4(4), 341–360.
- Bijleveld CCJH, Hendriks J (2003) Juvenile sex offenders: differences between group and solo offenders. *Psychology, Crime and Law* 9(3), 237–245.
- Hendriks J, Bijleveld CCJH (2004) *Recidive van jeugdige zedendelinquenten* [Juvenile sex offender recidivism], Report No. 2004-2. Leiden: NSCR.
- Boyd NJA, Hagan M, Cho ME (2000) Characteristics of adolescent sex offenders: a review of the research. *Aggression and Violent Behavior* 5(2), 137–146.
- Caldwell MF (2002) What we do not know about juvenile sexual reoffence risk. *Child Maltreatment* 7(4), 291–302.
- Cattell RB (1946) *Description and Measurement of Personality*. New York: World Book Company.
- Davis GE, Leitenberg H (1987) Adolescent sex offenders. *Psychological Bulletin* 101(3), 417–427.
- Eysenck HJ (1964) *Crime and Personality*. London: Routledge & Kegan.
- Feij JA, Kuiper CM (1984) *Adolescenten Temperament Lijst* (Adolescents' Temperament List). Lisse, the Netherlands: Swets & Zeitlinger.
- Ford ME, Linney JA (1995) Comparative analysis of juvenile sexual offenders, violent nonsexual offenders, and status offenders. *Journal of Interpersonal Violence* 10(1), 56–70.

- Groth A, Longo R, McFadin B (1982) Undetected recidivism among rapists and child molesters. *Crime and Delinquency* 28(3), 482–485.
- Hagan MP, Gust-Brey KL, Cho ME, Dow E (2001) Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. *International Journal of Offender Therapy and Comparative Criminology* 45(3), 314–324.
- Hampson SE, Kline P (1977) Personality dimensions differentiating certain groups of abnormal offenders from non-offenders. *British Journal of Criminology* 17(4), 310–331.
- Hare RD (1991) *The Hare Psychopathy Checklist-Revised*. Toronto, Ontario: Multi-Health Systems.
- Hsu LKG, Starzinsky J (1990) Adolescent rapists and adolescent child sexual assaulters. *International Journal of Offender Therapy and Comparative Criminology* 34(1), 23–30.
- Hunter JA, Figuerdo AJ, Malamuth NM, Becker JV (2003) Juvenile sex offenders: toward the development of a typology. *Sexual Abuse* 15(1), 27–45.
- Lane C (1997) *Juvenile Sexual Offending*. San Francisco: Jossey-Bass.
- Lewis DO, Shankok SS, Pincus JH (1979) Juvenile male sexual assaulters. *American Journal of Psychiatry* 136(9), 1194–1196.
- Manocha KF, Mezey G (1998) British adolescents who sexually abuse: a descriptive study. *Journal of Forensic Psychiatry* 9(3), 588–608.
- O'Brien M, Bera W (1986) Adolescent sex offenders: a descriptive typology. *A Newsletter of the National Family Life Education Network*, 1, 1–5.
- Oliver LL, Hall GCN, Neuhaus SM (1993) A comparison of the personality and background characteristics of adolescent sex offenders and other adolescent offenders. *Criminal Justice and Behaviour* 20(4), 359–370.
- Perry Hume M, Kennedy WA, Patrick CJ, Partyka DJ (1996) Examination of the MMPI-A for the assessment of psychopathy in incarcerated adolescent male offenders. *International Journal of Offender Therapy and Comparative Criminology* 40(3), 224–233.
- Raven JC, Court JH, Raven J (1979) *Manual for Raven's Progressive matrices and Vocabulary Scales, Section I: General Overview*. London: HK Lewis.
- Rogers R, Bagby RM (1994) Dimensions of psychopathy: a factor analytic study of the MMPI antisocial personality disorder scale. *International Journal of Offender Therapy and Comparative Criminology* 38(4), 297–308.
- Saunders EB, Awad GA, White G (1986) Male adolescent sexual offenders: the offender and the offense. *Canadian Journal of Psychiatry* 31(6), 542–549.
- Sipe R, Jensen EL, Everett RS (1998) Adolescent sexual offenders grown up. *Criminal Justice and Behavior* 25(1), 109–124.
- Van Dijk H, Wilde GJS (1982) *Handleiding bij de ABVK (ABVK Manual)*. Amsterdam: Van Rossen.
- Wilde GJS (1970) *Neurotische labiliteit gemeten volgens de vragenlijstmethode. De Amsterdamse Biografische Vragenlijst* (Neurotic lability measured through the questionnaire method. The Amsterdam Biographical Questionnaire). Amsterdam: Van Rossen.
- Worling JR (1995) Adolescent sex offenders against females: differences based on age of their victims. *International Journal of Offender Therapy and Comparative Criminology* 39(3), 276–293.

Address for correspondence: J. Hendriks, MA, De Waag Ambulant Center for Forensic Psychiatry, Casuariestraat 3, 2511 VB Den Haag, the Netherlands.
Email: hendj@worldonline.nl