Title	Psychological profiles of sexually abusive adolescents in Ireland
Authors(s)	O'Halloran, Maria, Carr, Alan, O'Reilly, Gary, et al.
Publication date	2002-06
Publication information	O'Halloran, Maria, Alan Carr, Gary O'Reilly, and et al. "Psychological Profiles of Sexually Abusive Adolescents in Ireland" 26, no. 4 (June, 2002).
Publisher	Elsevier
Item record/more information	http://hdl.handle.net/10197/5280
Publisher's statement	This is the author.s version of a work that was accepted for publication in Child Abuse and Neglect. Changes resulting from the publishing process, such as peer review, editing, corrections, structural formatting, and other quality control mechanisms may not be reflected in this document. Changes may have been made to this work since it was submitted for publication. A definitive version was subsequently published in Child Abuse and Neglect (26,4 (2002-06)) DOI:10.1016/S0145-2134(02)00313-7
Publisher's version (DOI)	10.1016/S0145-2134(02)00313-7

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O'Halloran, M., Carr, A., O'Reilly, G., Sheerin, D., Cherry, J., Turner, R., Beckett, R., & Brown, S. (2002). Psychological profiles of sexually abusive adolescents in Ireland. *Child Abuse and Neglect*, 26 (4), 349-370.

PSYCHOLOGICAL PROFILES OF SEXUALLY ABUSIVE ADOLESCENTS IN IRELAND

Maria O'Halloran,

Department of Psychology, Mid Western Health Board, Limerick, Ireland

Alan Carr,

Department of Psychology, University College Dublin, Dublin, Ireland

Gary O'Reilly,

Department of Psychology, University College Dublin, Dublin, Ireland

Declan Sheerin,

**Department of Child and Adolescent Psychiatry, Regional Child and Family
Centre, North Eastern Health Board, St. Mary's Hospital, Drogheda, Louth, Ireland.**

Joan Cherry,

Northside Inter-Agency Project, Temple Street Children's Hospital, Dublin, Ireland

Rhonda Turner,

**Southside Interagency Treatment Team, St Louise's Unit, Our lady's Hospital for Sick Children,
Crumlin, Dublin, Ireland.**

Richard Beckett & Sarah Brown

Oxford Forensic Psychology Service, Littlemore Mental Health Centre, Oxford Clinic, Oxford, UK

Running head: Sexually abusive adolescents

Keywords: Child sexual abuse, perpetrators, adolescents, CBCL, YSR, ASOAP

Correspondence address: Dr Alan Carr, Director of the Clinical Psychology Training Programme, Dept of Psychology, Science Building, University College Dublin, Belfield, Dublin 4, Ireland.

email: alan.carr@ucd.ie

Phone: +353-1-7062390

FAX: +353-1-7062846

Paper submitted in December 2000, revised and resubmitted in August 2001; accepted in

September 2001; Final Copy sent in November 2001: *Child Abuse and Neglect Editorial Office, 205*

Whitney Avenue STE 100, New Haven, CT 06511, USA. Email: Mary Roth <mary.roth@yale.edu>

Acknowledgements: This project was partially funded by grants from Irish Professionals for the Prevention of Sexual Abuse (IPPSA) and the Mid Western Health Board. Thanks to all clinicians who contributed to the study at the Northside Interagency Project (NIAP); the South Side Interagency Treatment Team (SIATT); the

North Eastern Health Board Regional Child and Family Centre; St Louise's Unit, Our Lady's Hospital Crumlin; St Claire's Unit, the Children's Hospital Temple Street; Andrew Conway and staff at the Mater Hospital Child Guidance Clinic; Tom Breen and staff at St Joseph's Adolescent and family Service, St Vincent's Hospital Fairview; and the North Eastern Health Board, Meath Community Care service.

ABSTRACT

Objective. This study aimed to profile the psychological and psychosocial characteristics of a group of Irish adolescents who had sexually abused other youngsters.

Method. Levels of behaviour problems, personal adjustment, anger management and psychosocial adjustment were compared in 27 Irish adolescents with a history of sexual abusing another youngster (SA group); 20 clinical controls who had significant behavioural problems but no history of sexual offending (CC group); and 29 normal controls who were without significant psychological problems (NC group). Measures used included the Child Behaviour Checklist (CBCL); the Youth Self Report Form (YSR); selected scales from Beckett (1997) Adolescent Sex Offender Assessment Pack (ASOAP); and the Family Environment Scale (FES).

Results. Compared with the CC group the SA group displayed fewer problems overall on the CBCL and the YSR. The SA group showed problems with self-esteem, emotional loneliness, and perspective taking similar to those of the CC group, but their impulsivity scores were similar to those of the NC group. The locus of control scores of the SA group fell between those of the CC and NC groups. The SA group showed an anger management profile which fell at an intermediate position between those of the NC and CC groups. The SA group showed problematic family functioning in the areas of expressiveness, behaviour control and social support similar to those of the CC group. Their difficulties with family cohesion were less severe than those of the CC group but worse than those of the NC group.

Conclusions. Overall the psychological adjustment of adolescents with a history of sexual abusing others was more problematic than that of normal controls but less problematic than that of youngsters who had significant behavioural problems but no history of sexual offending.

INTRODUCTION

Studies of the psychological adjustment of adolescents who sexually abuse other youngsters have shown that they differ from normal control groups, and hold some features in common with clinical control groups with other psychological problems and incarcerated control groups convicted of non-sexual offenses. For example, they show more behaviour problems than normal controls but not incarcerated controls; they have difficulties with making and maintaining friendships and establishing empathy with others; they have problems with impulse control, anger management and assertiveness; and they come from families characterized by a variety of problems (Graves, Openshaw, Ascoine, & Ericksen, 1996; Hastings, Anderson, & Hemphill, 1997; James & O'Neil, 1996; Monto, Zgourides, & Harris, 1998; Monto, Zgourides, Harris, & Wilson, 1994; Vizard, Monck, & Misch, 1995). Despite the burgeoning international literature in this area, few studies have been conducted on Irish adolescent sexual abusers (Carr, 1999a, 1999b; O'Reilly & Carr, 1998) and non-adjudicated abusers.

In the only published Irish study in this area, O'Reilly, Sheridan et al. (1998) compared a group of non-adjudicated sexually abusive adolescents who had completed a community based treatment programme with a group of non-offending peers matched for age, sex, and socio-economic status. Physical abuse, parental separation, and school related educational and behavioural difficulties were more common in the histories of the sexually abusive adolescents than in the histories of their control group counterparts. Despite this, compared with the control group, the sexually abusive adolescents were found to have the same level of psychological and psychosocial functioning following treatment. This was interpreted tentatively as evidence for treatment effectiveness. However, not all cases responded to treatment. When the sexually abusive adolescents were classified by treatment staff as those at high and low risk for reoffending following treatment, high risk cases who failed to respond to treatment were found to have lower ability levels, lower levels of maternal and paternal care, and poorer levels of psychological and psychosocial functioning.

James and Neil (1996) in a UK community prevalence study of adolescent sexual offenders within Oxfordshire over a one-year period identified 31 male and 3 female adolescent offenders. A personal history of sexual abuse was present for 35% of cases; a history of physical abuse in 42% of cases; and neglect had occurred in 61% of cases. There was a history of behavioural problems and psychological adjustment difficulties in the majority of cases.

Bischof and colleagues found poorer communication between parents and non-adjudicated sexually abusive youngsters compared with normal controls (Bischof, Stith, & Wilson, 1992; Bischof, Stith, & Whitney, 1995; Stith & Bischof, 1996).

The present study aimed to contribute to this small literature on non-adjudicated sexually abusive youngsters by profiling the psychological and psychosocial characteristics of a group of Irish adolescents who had sexually abused other children.

DESIGN AND QUESTIONS

A three-group comparative cross-sectional design was used in this study which permitted comparisons to be made between adolescents with a history of sexually abusing another youngster (SA); clinical controls (CC) who had significant behavioural problems but no history of sexual offending; and normal controls (NC) who were without significant psychological problems. In all three groups behaviour problems, personal adjustment, anger management, and psychosocial adjustment were evaluated. The study was designed to address the following questions:

- ✂ In what ways do the behaviour problem profiles of the SA, CC and NC groups differ?
- ✂ In what ways do the profiles of the SA, CC and NC groups differ on the following indices of personal adjustment: self-esteem, emotional loneliness, locus of control, capacity for general empathy, impulsivity, and assertiveness?
- ✂ In what ways do the profiles of the SA, CC and NC groups differ on indices of anger management?
- ✂ In what ways do the profiles of the SA, CC and NC groups differ on indices of psychosocial functioning, specifically family functioning, mother-child and father-child relationships, and social support?
- ✂

METHOD

PARTICIPANTS

The Sexually Abusive (SA) group contained 27 boys between 12-18 years who had sexually abused a child or adolescent. The Clinical Control Group (CC) contained 20 boys between 12 and 18 years who were attending outpatient mental health services and who scored above the clinical cut off T- score of 63 on the Child Behaviour Checklist (Achenbach, 1991) internalizing and externalizing behaviour problem scales. The Normal Control (NC) group contained 29 boys between 12 and 18 years who had neither a history of

sexually abusive behaviours nor attendance at adolescent mental health services and who scored in the normal range on the Youth Self Report Form (Achenbach, 1991), a self-report version of the Child Behaviour Checklist. All three groups were convenience samples, not random samples.

The SA group was drawn from three Irish adolescent sexual offender treatment programmes run by the North-Eastern Health Board; the South Side Interagency Treatment Team in Dublin, and the North Side Interagency Project Team also in Dublin. The 27 members of the SA group had all participated in the treatment programmes in the preceding two years. 48% had engaged in penetrative abuse with their victims and the remainder had engaged in non-penetrative abuse. In 37% of cases the abuse was exclusively extrafamilial. In 11% of cases the abuse was exclusively intrafamilial. In the remaining cases both intrafamilial and extrafamilial abuse occurred. In 44% of cases there were single victims and in the remainder there were 2 or more victims. In 11% of cases there were both male and female victims. In one case there was a single male victim, but in the vast majority of cases (85%) victims were female. In 37% of cases the adolescent perpetrators had been abused as children and in half of these cases the abuse was sexual, whereas in the other half of these cases youngsters had been physically abused.

The CC group was drawn from a number of outpatient mental health clinics in the Eastern and North-Eastern Health Board regions. These included St. Joseph's Adolescent and Family service, St. Vincent's Hospital, Fairview; the Mater Hospital Child Guidance Clinic; the North Eastern Health Board Regional Child and Family Centre; and the North Eastern Health Board, Meath Community Care service. These children had been referred for treatment of conduct and emotional problems, and did not have a psychotic disorder, intellectual disability, or brain damage.

The NC group was drawn from a comprehensive boys' secondary school on the North-side of Dublin and included boys in their teens who showed no clinically significant emotional or behavioural problems

The distribution of members of the 3 groups across social classes was similar, with the majority of cases coming from social classes 3,4 and 5 (O' Hare, Whelan, & Commins,1991). IQ estimates based on the Similarities subtest of the WISC-R (Wechsler, 1974) were available for 17 member of the SA group (Mean IQ =90); 20 members of the CC group (Mean IQ = 96); and 29 members of the NC group (Mean IQ =90). A one-way ANOVA confirmed that intergroup differences in estimated IQ were not statistically significant ($F(2,63) = 0.46, p > .1$). The mean ages of the three groups differ significantly with the SA group ($M=15.5, SD=1.20$) being significantly older than the CC ($M=13.62, SD=1.29$) and NC ($M=13.79, SD=1.00$) groups ($F(2,73)=20.64, p < .01$).

INSTRUMENTS

The following questionnaires were used in the study to evaluate behavior problems, personal adjustment, anger management and psychosocial adjustment.

Behaviour problems

- _ The Child Behaviour Checklist (CBCL, Achenbach, 1991)
- _ Youth Self Report Form (YSR, Achenbach, 1991)

Personal adjustment

- _ Self-Esteem Scale (SE, Beckett, 1997)
- _ The University of California Los Angeles (UCLA) Emotional Loneliness Scale (EL, Russell, Peplau, & Cutrona, 1980)
- _ Locus of Control (LOC, Nowicki & Strickland, 1973)
- _ Interpersonal Reactivity Inventory (IRI, Davis, 1980)
- _ Impulsivity (I, Eysenck & Eysenck, 1978)
- _ Children's Assertiveness Behaviour Scale (CABS, Michelson & Wood, 1982)

Anger management

- _ Novaco Anger Scale (NAS, Novaco, 1996)

Psychosocial adjustment

- _ Family Environment Scale (FES, Moos & Moos, 1986)
- _ Parental Bonding Instrument (PBI, Parker, Tupling & Brown, 1979)
- _ The Multi-Dimensional Scale of Perceived Social Support (MSPSS, Dahlem, Zimet, & Walker, 1991)

Validity of Self-Reports

- _ Personal Reaction Inventory (Social Desirability or Soc D, Beckett, Beach, Fisher & Fordham, 1994)

What follows is a brief account of each instrument. It is worth noting the instruments used in this study to measure personal adjustment and anger management come from the Adolescent Sex Offender Assessment Pack (A-SOAP, Beckett, 1997). The ASOAP derives from the STEP pack (Beckett et al., 1994) which was used to evaluate the effectiveness of a number of programmes for adult sexual offenders in the UK.

The Child Behaviour Checklist (CBCL)

This 113 item reliable and valid inventory is completed by parents so as to give a description of their children's behaviour problems (Achenbach, 1991). A three point response format is used for each item: 0=not a problem, 1=sometimes a problem, 2=often a problem. The CBCL yields scores on 3 broad band scales and 8 narrow band subscales. The total problem scale, the externalizing behaviour problem scale and the internalizing behaviour scale are broad band dimensions. The narrow band subscales are: withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behaviour, and aggressive behaviour.

Youth Self Report Form (YSR)

The YSR is the self-report version of the CBCL (Achenbach, 1991). The structure of this questionnaire and response format are identical to those of the CBCL, yielding scores on the 3 broad band and the 8-narrowband subscales. The reliability and validity of the YSR has been established (Achenbach, 1991).

Self-Esteem Scale (SE)

This is an eight item reliable and valid self-esteem inventory (Beckett, 1997). True or false response formats are used for all items which inquire about how respondents evaluate themselves. The scale has high internal consistency reliability ($\alpha=0.8$) and correlates with the Neuroticism scale of the EPQ (Eysenck & Eysenck, 1975).

The UCLA Emotional Loneliness Scale (EL)

The UCLA Emotional Loneliness Scale (Russell et al., 1980) is a reliable and valid 20-item inventory derived to detect variations in emotional loneliness and social isolation that occurs in everyday life. A 4 point Likert response format is used for all items. The scale has high internal consistency reliability ($\alpha =0.9$). In the STEP study improvements in emotional loneliness correlated with treatment length (Beckett et al., 1994).

Locus of Control (LOC)

The locus of control scale is a 40 item reliable and valid instrument which provides a measure of the extent to which respondents believe events are contingent on their behaviours and the extent to which they believe

events are controlled externally (Nowicki & Strickland, 1973). A Yes-No response format is used for all items. Better adjustment is associated with more internal scores on this dimension.

Interpersonal Reactivity Inventory (IRI)

The Interpersonal Reactivity Inventory is a reliable and valid 28 item questionnaire which was designed to measure four dimensions of empathy: perspective taking, empathic concern, fantasy, and personal distress (Davis, 1980). Perspective taking refers to the ability to assume cognitively the role of another. Empathic concern refers to feelings of warmth, compassion and concern for another. Fantasy refers to the ability of the respondent to identify with fictional characters. Personal distress refers to anxiety and negative emotional experiences, which result from interacting with another who is distressed. A 5 point Likert response format is used for all items. Beckett et al. (1994) in the STEP study found that adult child sex abusers showed deficits in perspective taking.

Impulsivity (I)

This 20-item reliable and valid instrument measures self-reported impulsivity and difficulty delaying strongly motivated actions (Eysenck & Eysenck, 1978). A true or false response format is used for all items.

Children's Assertiveness Behaviour Scale (CABS)

The CABS, is a self-report questionnaire which measures assertive behaviours in a variety of social situations (Michelson & Wood, 1982). The instrument consists of descriptions of 27 socially challenging situations. In each instance participants indicate which one of 5 responses they would make. These are scored so as to range from (-2) extremely under assertive to (+2) extremely over assertive. The inventory yields a measure of under-assertiveness and over-assertiveness. The CABS resembles the Social Response Inventory, a reliable and valid assertiveness scale for adults, which was used in the STEP project (Beckett et al., 1994). Under-assertiveness on the Social Response Inventory, was found to improve significantly over the course of treatment. In the present study the CABS showed moderate internal consistency reliability with $\alpha = 0.6$ for each of the subscales. Validity data are unavailable.

Novaco Anger Scale (NAS)

The NAS is a 73 item questionnaire which yields a comprehensive assessment of cognitive, affective and behavioural aspects of anger and the type of situations that provoke anger (Novaco, 1996). A three point response format is used for all items: 1=never true; 2=sometimes true, 3=always true. The NAS yields scores on two broad band scales (part A-anger reactions and part B-anger provoking situations); three anger reaction domains (cognitive domain, arousal domain and behavioural domain); and 17 narrow-band subscales which reflect specific aspects of anger reactions or specific anger eliciting situations.

The first broad band scale - part A – evaluates the overall extent of anger reactions. This broad band scale is based on summary scores from the cognitive, arousal and behavioural domains.

The cognitive domain score evaluates important aspects of the cognitive mediation of anger. It is based on the sum of scores from four narrow-band subscales (attentional focus, suspicion, rumination, and hostile attitude). Attentional focus measures the extent to which respondents focus on anger provoking cues or not. The suspicion subscale measures the tendency to appraise situation antagonistically. The rumination subscale evaluates the tendency to become preoccupied with anger provoking experiences. The hostile attitude subscale measures the tendency to interpret ambiguous or innocuous situations in a hostile way.

The arousal domain score reflects respondents' accounts of their physiological arousal when angry. It is based on the sum of scores from four narrow-band subscales (intensity, duration, somatic tension, and irritability). The intensity subscale evaluates the extent to which the magnitude of the physiological aspect of anger has exceeded the individual's ability to control it. The duration subscale assesses whether anger reactions are prolonged or momentary. The somatic tension subscale measures physical tensions that may accompany anger reactions. The irritability subscale evaluates the tendency to be annoyed by minor events.

The behavioural domain score reflects overt behavioural responses when angry. It is based on the sum of scores from four narrow-band subscales (impulsive reaction, verbal aggression, physical confrontation, and indirect expression). Impulsive reaction measures the respondent's tendency to react in an impulsive, aggressive manner without thinking about the behaviour or its consequences. Verbal Aggression measures the extent to which the respondent uses aggressive and provocative language when angry. Physical confrontation evaluates respondents' tendencies to be physically aggressive towards others. Indirect expression measures the extent to which respondents displace their anger onto others who are not connected with the source of the provocation.

The second broad band scale - part B – evaluates respondents' perceived sources of anger. This broad band scale is based on summary scores from five narrow-band subscales (disrespectful treatment,

unfairness-injustice, frustration-interruption, annoying traits and irritations). The disrespectful treatment subscale measures respondents' perceptions of disrespect from others. The unfairness-injustice subscale measures the degree to which respondents perceive that anger is a justifiable response to certain situations. The frustration-interruption subscale evaluates respondents' likely reactions to frustrating situations. The annoying traits subscale assesses reactions to characteristics of others often found to be difficult to tolerate. The irritations subscale assess reactions to incidental annoyances and aggravations.

In the present study, the internal consistency reliability for Parts A and B of this instrument was $\alpha=0.9$. Validity data are unavailable.

Family Environment Scale (FES)

The FES is a reliable and valid measure of the social-environmental attributes of families (Moos & Moos, 1986). Form- R, which provides a measure of respondents' perceptions of their nuclear families, was used in this study. In this 90 item self-report instrument all items are answered using a forced choice 'yes' or 'no' response format. This FES yields scores on 10 subscales, which fall into three broad domains: relationships, personal growth, and system maintenance factors.

Within the relationship domain there are three subscales (cohesion, expressiveness and conflict). Cohesion evaluates the degree of commitment, help and support family members provide for one another. Expressiveness evaluates the extent to which family members are encouraged to express their feelings directly. Conflict assesses the amount of openly expressed anger and conflict among family members.

Within the personal growth domain there are five subscales (independence, achievement orientation, intellectual cultural orientation, active recreational orientation and moral religious emphasis). Independence refers to the extent that family members are assertive, self-sufficient, and make their own decisions. Achievement orientation which refers to the extent to which activities (such as school and work) are cast in an achievement-orientated or competitive framework. Intellectual orientation refers to the level of interest in political, intellectual and cultural activities family members express. Active recreational orientation refers to the amount of participation in social and recreational activities in which family members engage. Moral religious emphasis is defined as the importance placed on ethical and religious values within the family.

Organization and control are the two subscales, which fall within the system maintenance domain. Organization refers to the degree of importance accorded to clear organization and structure in planning

family activities and responsibilities. Control reflects the degree to which set rules and procedures are used to guide family life.

Parental Bonding Instrument (PBI)

The Parental Bonding Instrument (Parker et al., 1979) is a reliable and valid 25 item questionnaire designed to measure a person's perception of their relationship with their parents. The scale yields scores on two bipolar scales: caring and over-protectiveness. The caring scale assesses affection, emotional warmth, empathy and closeness on the one hand and emotional coldness, indifference, and neglect on the other. High scores on this scale represent the receipt of more care from that parent and are indicative of optimal parenting style. The over-protectiveness scale assesses parents' promotion of their child's independent behaviour and the development of autonomy on the one hand and parental control, over-protection, intrusion, excessive contact, infantilization, and the prevention of independent behaviour on the other. Low scores on this scale represent optimal parenting. In the present study participants completed two copies of the PBI to allow a measure of their perception of their relationship with each parent to be obtained.

The Multi-Dimensional Scale of Perceived Social Support (MSPSS)

The MSPSS is a reliable and valid 12 item measure of perceived social support (Dahlem et al., 1991). A 7 point Likert response format is used for all items. The MSPSS yields a total social support score and three subscales scores indicating support from family, friends and a significant others.

Personal Reaction Inventory (Social Desirability)

The Personal Reaction Inventory is a 20-item social desirability response set scale developed by Beckett, Beach, Fisher, & Fordham (1994). A 5 point Likert response format is used for all items. The scale evaluates respondents' tendency to respond to self-report items so as to represent themselves in a positive light. To evaluate the extent to which self-report data were contaminated by a social-desirability response set, scores on the Personal Reaction Inventory were correlated with all self-report dependent variables. Where low correlations were obtained it was concluded that self-report data were valid insofar as they were largely uncontaminated by a social-desirability response set.

PROCEDURE

Ethical approval to conduct the study was first obtained from involved agencies. Data collection spanned 18 months. Participants in the SA group were drawn from three adolescent treatment programmes mentioned in the participants section above. In all three agencies the Adolescent Sex Offender Assessment pack (ASOPAP, Beckett, 1997) which includes the personal adjustment and anger management measures listed above in the instruments section was routinely administered to all new cases as part of the initial clinical assessment. For the present study, the pack was extended to include the remaining instruments listed in the previous section. Written consent for information from the intake assessment to be used for research purposes was routinely obtained in all three centres. Assessment packs were completed in an individual or small group setting under clinical supervision. This usually took about two hours and occurred within 4 weeks of the youngsters initial contact with the clinic.

The CC group was drawn from a number of health care agencies listed above in the participants section. In each service, clinical staff identified suitable clients based on the study's inclusion and exclusion criteria and introduced them to the principal researcher (MO'H) who invited them to participate in the study. Participants and their parents read a detailed information sheet and gave written consent before completing the questionnaire pack in either an individual or small group setting. The questionnaires took about two hours to complete and were administered across one or two sessions within 4 weeks of the youngsters initial attendance at their child and adolescent mental health care agency.

The NC group was recruited from a comprehensive boys' secondary school. Parents of children gave consent for their sons to complete the instrument pack in a classroom-based group format in school in a single 2-hour session.

For the SA and CC group, parents completed the CBCL, but CBCL data were not collected for the NC group.

RESULTS

MISSING DATA

For all instruments except the CBCL, YSR, FES, PBI and MSPSS complete data were available for 27 cases in the SA group, 20 cases in the CC group and 29 cases in the NC group. For the CBCL data were available for 15 members of the SA group, 18 members of the CC group and no data were collected for the NC group. For the YSR data were available for 16 cases in the SA group, 20 cases in the CC group and 29 cases in the NC group. For the FES data were available for 16 cases in the SA group and all cases in the CC

and NC groups. For the maternal PBI data were available for 20 cases in the SA group and all cases in the CC and NC groups. For the paternal PBI data were available for 20 cases in the SA group, 15 cases in the CC group and all cases in the NC group. For the MSPSS data were available for 15 cases in the CC group and all cases in the SA and NC groups.

ANOVAs

The statistical significance of intergroup differences on all but 4 dependent variables was evaluated using a series of one-way Analyses of Variance (ANOVAs) with Scheffe post-hoc tests for unequal N designs. Mean scores and F values from these ANOVAs are reported in Tables 1-5 for these variables.

ANCOVAs

Analyses of covariance (ANCOVAs) were conducted in those 4 instances where there was a significant correlation ($p < .01$) between age and the dependent variable (CBCL attention problems ($r = -.46$), emotional loneliness ($r = .29$), perspective taking ($r = -.33$), and NAS attentional focus ($r = -.33$)). The four ANCOVAs were conducted because, as has been noted in the participants section, the mean ages of the three groups differed significantly ($p < .01$). Adjusted mean scores and F values from the ANCOVAs are reported in Tables 1, 3 and 4 for these four variables.

SIGNIFICANCE LEVELS

Because of the large number ($N = 72$) of dependent variables in this study, the p value for statistical significance in the ANOVAs, ANCOVAs and correlational analyses was set at .01 rather than .05 to reduce the probability type 1 error (accepting chance differences or correlations as significant).

BEHAVIOUR PROBLEMS

From Table 1 it may be seen that, compared with the CC group, the SA group obtained significantly lower mean scores on 6 of 13 CBCL subscales (total, internalizing, withdrawn, anxious-depressed, social problems, and aggressive behaviour). From Table 2 it may be seen that on 9 of the 13 YSR subscales there were significant intergroup differences (total, internalizing, externalizing, withdrawn, somatic complaints, anxious-depressed, thought problems, attention problems and aggressive behaviour). In 6 instances (total, internalizing, withdrawn, somatic complaints, anxious-depressed, thought problems, and attention problems)

the pattern of intergroup differences was such that the means of the SA and NC groups did not differ, but both of these means were less than the mean of the CC group ($SA=NC<CC$). In 2 instances (externalizing and aggressive behaviour) the pattern of intergroup differences was such that the mean of the SA group did not differ significantly from either that of the CC or the NC groups, but the mean of the CC group was significantly greater than that of the NC group ($SA=CC\&NC$, $CC>NC$).

PERSONAL ADJUSTMENT

From Table 3 it may be seen that there were significant intergroup differences on 6 of the personal adjustment scales: self-esteem, emotional loneliness, locus of control, perspective taking (on the IRI), personal distress (on the IRI) and impulsivity. For four of the scales (self-esteem, emotional loneliness, perspective taking and personal distress) compared with the NC group, the SA and CC groups obtained more abnormal scores, but the SA and CC groups scores were not significantly different from each other. For two of the scales (locus of control and impulsivity) the scores of the SA group did not differ significantly from those of the NC or CC group, but the mean score of the CC group was significantly different from and more abnormal than the score of the NC group.

ANGER MANAGEMENT

From Table 4 it may be seen that on 6 of the NAS subscales there were significant intergroup differences (part A-total, cognitive domain, attentional focus, rumination, arousal domain, impulsive reaction). For all of these variable except the variable 'attentional focus', the pattern of intergroup differences was such that the means of the SA and NC groups did not differ, and the means of the SA and CC groups did not differ. But the means of the CC group were significantly greater than those of the NC group. For the variable 'attentional focus' the adjusted means of the SA and CC group did not differ and both were greater than the mean of the NC group.

PSYCHOSOCIAL ADJUSTMENT

From Table 5 it may be seen that on 4 of the 18 measures of Psychosocial Adjustment there were significant intergroup differences. These were the cohesion, expressiveness and control subscales of the FES and the family support subscale of MSPSS. In 2 instances (expressiveness and control) the pattern of intergroup differences was such that the means of the SA and CC groups did not differ, but both of these means were

greater than the mean of the NC group. On the cohesion subscale, the pattern of intergroup differences was such that the means of the SA group did not differ significantly from either that of the CC or the NC groups, but the mean of the CC was significantly greater than that of the NC group ($SA=CC > NC$, $CC > NC$). On the Family Support subscale, the pattern of intergroup differences was such that the means of the SA and CC groups did not differ, but both of these means were less than the NC group ($SA=CC < NC$).

VALIDITY OF RESPONSES

Sixty-one of 72 dependent variables were based on youngsters self-reports. Only 11 dependent variables (from the CBCL) relied on observations of others. An important concern is the validity of the self-report data used in this study and the extent to which it was contaminated by a social-desirability response set. To evaluate this possibility, a measure of social desirability response set (the total score from the Personal Reaction Inventory) was correlated with all 61 self-report dependent variables and the number of correlations greater than .4 identified. Where correlations greater than an absolute value of .4 occur, this indicates that a substantial amount (more than 16%) of the variance in the dependent variable may be accounted for by a social desirability response set. Correlations exceeded an absolute value of .4 in only 7 of 61 or 11% of all instances. Thus it may be concluded that self-report data were largely uncontaminated by a social-desirability response set. The correlations greater than an absolute value of .4 occurred for the following variables YSR total ($r=-.44$), YSR externalizing ($r=-.53$), YSR attention problems ($r=-.47$), YSR delinquent behaviour ($r=-.47$), YSR aggressive behaviour ($r=-.47$), NAS hostile attitude ($r=-.42$), and FES independence ($r=.44$).

DISCUSSION

This study addressed a set of four questions concerning differences between adolescents with a history of sexual abusing another youngster; clinical controls who had significant behavioural problems but no history of sexual offending; and normal controls who were without significant psychological problems in the domains of behaviour problems, personal adjustment, anger management and psychosocial adjustment.

BEHAVIOUR PROBLEMS

With respect to the first question concerning intergroup differences in behaviour problems, it may be seen from Table 6 that the SA group showed fewer parent-reported behaviour problems than the clinical controls

and more closely resembled the normal than the clinical control group in terms of self-reported behaviour problems. With respect to parent reported behaviour problems, compared with clinical controls, the SA group displayed fewer problems overall, and also showed fewer problems on the following specific CBCL dimensions: internalizing behaviour problems, withdrawn, anxious-depressed, social problems, attention problems and aggressive behaviour. With respect to self-reported behaviour problems, compared with clinical controls, the SA group displayed fewer problems overall, and fewer problems on the following specific YSR dimensions: internalizing behaviour problems, withdrawn, somatic complaints, anxious-depressed, thought problems and attention problems. However, the level of externalizing behaviour problems and aggressive behaviour of the SA group fell at an intermediate position between those of the clinical and normal controls.

PERSONAL ADJUSTMENT

With respect to the second question concerning intergroup differences on indices of personal adjustment, it may be seen from Table 6 that the SA group showed an overall profile which held some features in common with the profiles of the clinical and normal control groups. The SA group showed problems with self-esteem, emotional loneliness, and perspective taking similar to those of the clinical controls, but their impulsivity scores were similar to those of the normal control group. Their locus of control scores fell between those of the clinical and normal controls.

ANGER MANAGMENT

With respect to the third question concerning intergroup differences on indices of anger management, it may be seen from Table 6 that the SA group showed an overall profile which fell at an intermediate position between those of the clinical and normal controls. Their scores for overall anger response; for anger responses within the cognitive domain (specifically rumination); for anger responses within the physiological arousal domain; and for anger responses within the impulsive reaction behavioural subdomain all fell between those of the clinical and normal controls.

PSYCHOSOCIAL FUNTIONING

With respect to the fourth question concerning intergroup differences on indices of psychosocial functioning, the SA group more closely resembled clinical than normal controls. They showed problematic family

functioning in the areas of expressiveness, behaviour control and social support similar to those of clinical controls. However, their difficulties with family cohesion were less severe than those of the clinical control group but worse than those of the normal controls.

Thus, overall it may be concluded that the psychological adjustment of adolescents with a history of sexual abusing is more problematic than that of normal controls but less problematic than that of youngsters who have significant behavioural problems but no history of sexual offending.

METHODOLOGICAL LIMITATIONS

This study had a number of limitations. First, the groups, which were convenience samples, were not matched for age but an attempt was made to deal with this problem by using age as a covariate in those instances where age was correlated with the dependant variable. Second, most of the dependent variables were based on self-reports and so the validity of variables based on these self-reports may have been compromised by response set. When we correlated a measure of social desirability response set with all self-report dependent variables, correlations greater than .4 were found with only 11% of them indicating that, almost 90% of the self-report data were uncontaminated by a social-desirability response set. Third, our data set was not complete and for some scales a number of participants had missing data. This limited the power of statistical tests to detect intergroup differences. In view of these limitations and our attempts to deal with them we are fairly confident that the profiles we found in this study are valid for the groups we studied.

COMPARISON WITH OTHER STUDIES

Across the four broad areas evaluated in this study, our finding concerning behaviour problems deserve particular mention because they are not as consistent with the international literature on personal adjustment, anger management and psychosocial adjustment. Our finding that adolescents who have sexually abused other youngsters have fewer behaviour problems than clinical controls and more closely resemble normal controls is not consistent with the results of a number of previous studies conducted outside Ireland (e.g., James & O'Neil, 1996; Hastings, Anderson, & Hemphill, 1997). This may be because more serious aggressive and abusive populations of offenders are not attending Irish treatment programmes. However, this is a hypothesis, not a fact. We can only speculate about the possible reasons for this, in light of our clinical experience within the field. In Ireland our treatment programmes are almost exclusively voluntary with 95% of participants never being subject to legal proceedings in relation to their abusive

behaviour. This probably occurs because many victims and their families decide against making a formal complaint to the Gardaí (the Irish police force) and go no further than reporting the matter to the Community Care department of their local health board (who in Ireland have the role of the statutory child protection agency). In these cases, an investigation is conducted which culminates in the protection of victims, not the prosecution of perpetrators. In those rare cases where families make a report to the Gardaí, the Gardaí prepare a file and send it to the Director of Public Prosecutions (DPP). A decision to prosecute adolescent sex offenders is not often made in such cases. The justification for decisions of the DPP are not published and so do not enter the public domain, so there is a lack of clarity about the reasons why so few cases go to trial. A possible outcome of this is that more serious and disturbed young abusers and their families may not attend our treatment programmes. This hypothesis may explain the limited behavioural problems of the SA group who participated in this study. However, this need not be the case in future. Adolescents convicted of sexual offences could be diverted into treatment programmes as a condition of their probation or as a condition of a suspended sentence, provided programmes were adequately resourced and referred cases were deemed suitable for therapy by treatment teams.

IMPLICATIONS FOR RESEARCH

One implication from this study worth highlighting is that when developing theoretical models of the aetiology of sexual offending by juveniles we need to include in our formulations an explanation of the development and functioning of young abusers similar to those in this study whose adjustment, overall, does not deviate markedly from that of normal adolescents. Hypotheses derived from these models need to be tested in further empirical studies. To date this subgroup of relatively well adjusted juvenile sexual offenders have been neglected by researchers.

Another issue deserving further study is the problem of heterogeneity of offenders. The heterogeneity of the target group profiled in this study may have concealed important differences between different subgroups of sexually abusive adolescents. For example, Graves, Openshaw, Ascoine and Erickson (1996) in a meta-analysis identified three distinct subgroups of adolescent offenders: the paedophilic offender, the sexual assault offender, and the mixed-offence offender. They found that paedophilic and sexually assaultive youths came from families in which the structure was judged to be chaotic-rigid, or disengaged-enmeshed. A greater percentage of the mixed offence subtype reported living in a flexible-structured family environment. Further typological studies are required to examine the different

psychological profiles of different subtypes of adolescent sexual abusers on the range of assessment instruments used in the present study.

CLINICAL IMPLICATIONS

The results of this study highlights the value of the instruments used in the study for inclusion in an assessment protocol for evaluating and monitoring adolescent sexual abusers referred for group treatment.

REFERENCES

- Achenbach, T. (1991). *Integrative Guide for the 1991 CBCL/4-18, YSR and TRF profiles*. Burlington, VT: University of Vermont Department of Psychiatry.
- Beckett, R. (1997). *The Adolescent Sex Offenders Assessor Pack*. Unpublished manual. Oxford Forensic Service.
- Beckett, R., Beech, A., Fisher, D., & Fordham, A. (1994). *Community-Based Treatment for Sex Offenders: An Evaluation of Seven Treatment Programmes*, London: Home Office.
- Bischof, G., Stith, S., & Wilson, S. (1992). A comparison of the family systems of adolescent sex offenders and non-sexual offending delinquents. *Family Relations*, 41, 318-323.
- Bischof, G., Stith, S., & Whitney, M. (1995). Family environments of adolescent sex offenders and other juvenile delinquents. *Adolescence*, 30, 157-170.
- Carr, A. (1999a). *Handbook of Clinical Child Psychology: A Contextual Approach*. London: Routledge.
- Carr, A. (1999b). Appendix. A summary of research on the effectiveness of psychological treatments of offenders. In J. Olden, A. Carr, P. Casey, R. Gogan, F. MacCarthy, P. Nolan, D. O'Mahony, & R. Ryan (Eds.), *Report of the Group Established to Review the Psychology Service of the Department of Justice, Equality and Law Reform* (pp. 46-55). Dublin: Stationary Office
- Dahlem, N., Zimet, G., & Walker, R. (1991). The multidimensional scale of perceived social support: A confirmation study. *Journal of Clinical Psychology*, 47 (6), 756-761.
- Davis, M. (1980). A multi-dimensional approach to individual differences in empathy. In A. Salter (Ed.), *Treating Child Sex Offenders and their Victims: A Practical Guide*. London: Sage.
- Eysenck, H., & Eysenck, S. (1978). An Impulsivity Scale. In R. Beckett (Ed.), *The Adolescent Sex Offenders Assessor Pack* (p.5). Unpublished manual. Oxford Forensic Service.
- Eysenck, H., & Eysenck, S. (1975). *The Eysenck Personality Questionnaire*. London: EPQ.
- Graves, R., Openshaw, D., Ascoine, F., & Ericksen, S. (1996). Demographic and personal characteristics of youthful sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 40, 300-317.
- Hastings, T., Anderson, S., & Hemphill, P. (1997). Comparisons of daily stress, coping, problem behaviour, and cognitive distortions in adolescent sexual offenders and conduct disordered youth. *Sexual Abuse: A Journal of Research and Treatment*, 9, 29-42.

- James, A., & O'Neil, P. (1996). Juvenile sexual offending: One year period prevalence study within Oxfordshire. *Child Abuse & Neglect*, 20, 477-485.
- Michelson, L., & Wood, R. (1982). Development and psychometric properties of the Children's Assertive Behaviour Scale. *Journal of Behavioural Assessment*, 4, 3-14.
- Monto, M., Zgourides, G., & Harris, D. (1998). Empathy, self-esteem, and the adolescent sexual offender. *Sexual Abuse: A Journal of Research and Treatment*, 10, 2.
- Monto, M., Zgourides G., Harris D., & Wilson, J. (1994). Empathy and adolescent male sex offenders. *Perceptual and Motor Skills*, 79, 1598.
- Moos R., & Moos B. (1986) *Family Environment Scale Manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Novaco, R. (1996). Anger as a risk factor for violence. In J. Monaghan, & H. Steadman (Eds.), *Violence and Mental Disorder. Developments in Risk Assessment* (pp.70-75). Chicago: Unicef Chicago Press.
- Nowicki, S., & Strickland, B. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40, 148-155.
- O' Reilly, G., Sheridan, A., Carr, A., Cherry, J., . Donohoe, E., McGrath, K., Phelan, S., Tallon, M., & O' Reilly, K. (1998). A Descriptive study of adolescent sexual offenders in an Irish community based treatment programme. *The Irish Journal of Psychology*, 19, 152-167.
- O'Reilly, G., & Carr, A. (Eds.) (1998). *Understanding, Assessing and Treating Juvenile and Adult Sex Offenders. Special Guest Edited Issue of the Irish Journal of Psychology* (Volume 19 No.1). Dublin: Psychological Society of Ireland.
- O'Hare, A., Whelan, C., & Commins, P. (1991). The development of an Irish census based social class scale. *The Economic and Social Review*, 22, 135-156.
- Parker G., Tupling H., & Brown, L. (1979). A Parental Bonding Instrument. *British Journal of Medical Psychology*, 52, 1-10.
- Russell, D., Peplau, L., & Cutrona, C. (1980). The revised UCLA loneliness scale. Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472-480.
- Stith, S., & Bischof, G.(1996). Communication patterns in families of adolescent sex offenders. In D. Cahn, & S. Lloyd (Eds.), *Family Violence from a communication Perspective*(pp. 108-126). Thousand Oaks, CA: Sage.

Vizard, E., Monck, E., & Misch, P. (1995). Child and adolescent sex abuse perpetrators: A review of the research literature. *Journal of Child Psychology and Psychiatry*, 36, 731-756.

Wechsler, D. (1974). *Manual for the Wechsler Intelligence Scale for Children – Revised*. San Antonio, TX: The Psychological Corporation.

Table 1. Status of the sexually abusive and clinical control groups on the Child Behaviour Checklist scales

CBCL Subscale		SA Group (N=15)	CC Group (N=18)	ANOVA F	Group Diffs
Total	M	41.33	68.56	20.67*	SA<CC
	SD	18.07	15.22		
Internalising	M	12.93	23.72	17.36*	SA<CC
	SD	6.94	7.76		
Externalising	M	16.60	24.50	6.29	
	SD	7.60	9.71		
Scale 1: Withdrawn	M	5.00	9.27	13.05*	SA<CC
	SD	3.76	3.04		
Scale 2: Somatic Complaints	M	2.20	3.88	2.16	
	SD	1.93	4.07		
Scale 3: Anxious/Depressed	M	6.40	12.16	17.42*	SA<CC
	SD	3.71	4.13		
Scale 4: Social Problems	M	1.06	3.44	11.08*	SA<CC
	SD	1.22	2.52		
Scale 5: Thought Problems	M	3.33	5.77	4.70	
	SD	3.17	3.26		
Scale 6: Attention Problems+	M	8.35	10.53	1.23	
	SD	5.16	2.61		
Scale 7: Delinquent Behaviour	M	5.06	6.88	2.22	
	SD	2.68	3.98		
Scale 8: Aggressive Behaviour	M	11.53	18.41	9.15*	SA<CC
	SD	5.93	6.81		

Note: M= Mean. SD=Standard Deviation. SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. *p<.01. + Adjusted means and F value from ANCOVA with Age as covariate is given for this variable.

Table 2. Status of the sexually abusive, clinical control and normal control groups on Youth Self-Report scales

YSR Subscale		SA Group (N=16)	CC Group (N=20)	NC Group (N=29)	ANOVA F	Group Diffs
Total	M	37.25	64.75	27.93	13.77*	SA=NC<CC
	SD	25.75	25.81	22.66		
Internalising	M	10.75	21.95	8.62	13.23*	SA=NC<CC
	SD	9.68	10.82	7.56		
Externalising	M	17.87	21.75	11.00	6.91*	SA=CC&NC
	SD	11.58	9.65	9.79		CC>NC
Scale 1 :Withdrawn	M	2.50	6.00	2.58	10.86*	SA=NC<CC
	SD	2.60	3.22	2.45		
Scale 2: Somatic Complaints	M	5.87	12.90	3.82	13.16*	SA=NC<CC
	SD	6.69	8.26	3.7		
Scale 3: Anxious/Depressed	M	3.31	6.15	2.75	7.12*	SA=NC<CC
	SD	2.57	3.73	3.07		
Scale 4: Social Problems	M	1.31	3.15	1.55	4.09	
	SD	1.25	3.15	1.78		
Scale 5: Thought Problems	M	2.93	5.55	2.44	8.47*	SA=NC<CC
	SD	2.40	3.13	2.45		
Scale 6: Attention Problems	M	6.18	10.05	3.89	20.63*	SA=NC<CC
	SD	3.74	3.33	3.00		
Scale 7: Delinquent Beh.	M	4.87	6.20	3.62	3.56	
	SD	3.09	3.51	3.33		
Scale 8: Aggressive Beh.	M	11.93	15.55	7.37	8.06*	SA=CC&NC
	SD	8.12	6.66	6.74		CC>NC

Note: M= Mean. SD=Standard Deviation. SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. *p<.01.

Table 3. Status of the sexually abusive, clinical control and normal control groups on personal adjustment scales

Instrument	Subscale		SA Group (N=27)	CC Group (N=20)	NC Group (N=29)	ANOVA F	Group Diffs
Self-esteem Scale							
	Self-esteem	M	6.81	6.35	8.68	6.74*	SA=CC<NC
		SD	2.38	2.56	1.44		
Emotional Loneliness Scale							
	Emotional Loneliness+	M	36.50	42.43		170*	SA=CC>NC
		SD	6.19	5.48	1.11 4.69		
Locus of Control Scale							
	Locus of control	M	12.25	13.90	10.27	4.87*	SA=CC&NC CC<NC
		SD	4.08	3.24	4.48		
Interpersonal Reactivity Inventory							
	Perspective Taking+	M	11.00	12.91	32.30	88.83*	SA=CC<NC
		SD	3.70	4.83	4.27		
	Empathic Concern	M	14.73	15.28	14.20	0.37	
		SD	4.12	3.96	4.69		
	Fantasy	M	6.77	6.50	7.00	0.96	
		SD	1.52	1.10	1.00		
	Personal Distress	M	9.74	14.05	11.13	5.71*	SA=NC<CC
		SD	4.14	4.68	4.31		
Impulsivity Scale							
	Impulsivity	M	10.62	12.05	8.86	5.18*	SA=CC&NC CC>NC
		SD	3.04	3.76	3.55		
Children's Assertive Behaviour Scale							
	Underassertiveness	M	-9.96	-11.50	-11.13	0.61	
		SD	5.53	5.65	5.76		
	Overassertiveness	M	7.42	8.65	7.82	0.76	
		SD	5.80	5.38	5.80		

Note: M= Mean. SD=Standard Deviation. SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. *p<.01. + Adjusted means and F value from ANCOVA with Age as covariate is given for this variable.

Table 4. Status of the sexually abusive, clinical control and normal control groups on Novaco Anger Scales

Subscale		SA Group (N=27)	CC Group (N=20)	NC Group (N=29)	ANOVA F	Group Diffs
Part A Total	M	92.40	100.75	86.65	5.15*	SA=CC&NC CC>NC
	SD	14.38	17.28	14.14		
Cognitive Domain	M	31.18	34.65	30.34	4.70*	SA=CC&NC CC>NC
	SD	4.44	5.89	4.79		
Attentional Focus+	M	8.96	9.94	46.32	566.9*	SA=CC<NC
	SD	1.88	1.50	2.01		
Suspicion	M	8.11	8.90	7.72	4.01	
	SD	1.15	1.94	1.25		
Rumination	M	7.62	8.60	6.82	6.38*	SA=CC&NC CC>NC
	SD	1.41	2.34	1.41		
Hostile Attitude	M	7.00	8.20	7.55	1.92	
	SD	1.79	2.37	2.09		
Arousal Domain	M	29.51	32.15	26.93	4.57*	SA=CC&NC CC>NC
	SD	5.85	6.89	5.35		
Intensity	M	8.18	8.95	7.24	3.33	
	SD	2.57	2.32	2.02		
Duration	M	7.07	7.45	6.41	2.38	
	SD	1.70	1.98	1.45		
Somatic Tension	M	6.51	7.70	6.20	3.95	
	SD	1.90	2.08	1.69		
Irritability	M	7.74	8.05	7.06	2.31	
	SD	1.48	1.93	1.60		
Behavioural Domain	M	31.70	33.95	29.37	3.32	
	SD	6.19	6.45	5.89		
Impulsive Reaction	M	7.66	8.70	6.79	4.94*	SA=CC&NC CC>NC
	SD	2.20	2.05	2.00		
Verbal Aggression	M	8.74	8.75	8.00	1.58	
	SD	1.67	2.12	1.58		
Physical Confrontation	M	8.29	8.55	8.20	0.16	
	SD	2.30	1.98	2.05		
Indirect Expression	M	7.00	7.95	6.37	4.10	
	SD	1.73	2.30	1.69		
Part B Total	M	67.55	74.55	67.41	2.49	
	SD	11.07	13.87	11.85		
Disrespectful Treatment	M	13.74	14.30	13.44	0.55	
	SD	2.63	3.22	2.62		
Unfairness/Injustice	M	14.48	15.70	14.06	1.85	
	SD	2.37	3.68	2.90		
Frustration/Interruption	M	13.74	14.95	13.79	1.13	
	SD	2.56	3.15	3.27		
Annoying Traits	M	13.51	14.75	13.24	1.28	
	SD	3.45	3.66	3.03		
Irritations	M	11.38	14.61	13.83	4.45	
	SD	3.39	3.53	3.20		

Note: M= Mean. SD=Standard Deviation. SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. *p<.01. + Adjusted means and F value from ANCOVA with Age as covariate is given for this variable.

Table 5. Status of the sexually abusive, clinical control and normal control groups on measure of psychosocial adjustment

Instrument	Subscale		SA Group (N=27)	CC Group (N=20)	NC Group (N=29)	ANOVA F	Group Diffs
Family Environment Scale							
	Cohesion	M	6.25	5.75	7.55	6.90*	SA=CC&NC CC>NC
		SD	2.17	2.14	1.05		
	Expressiveness	M	4.43	4.30	2.24	7.91*	SA=CC>NC
		SD	2.80	2.08	1.72		
	Conflict	M	2.50	2.26	1.20	4.40	
		SD	1.82	1.79	1.26		
	Independence	M	5.87	5.65	5.93	0.25	
		SD	1.50	1.42	1.33		
	Achievement Orientation	M	6.37	4.75	5.72	3.92	
		SD	1.14	1.99	1.86		
	Intellectual-Cultural Orientation	M	3.81	3.50	4.58	2.25	
		SD	1.83	1.82	1.86		
	Active-Recreational Orientation	M	5.43	5.50	6.06	1.12	
		SD	1.78	1.76	1.36		
	Moral-Religious Emphasis	M	4.68	4.20	5.34	2.82	
		SD	1.62	1.67	1.71		
	Organisation	M	4.12	3.654	4.68	2.05	
		SD	1.92	1.84	1.64		
	Control	M	4.46	4.65	2.03	24.54*	SA=CC>NC
		SD	1.41	1.38	1.49		
Parental Bonding Instrument							
	Maternal caring scale	M	16.80	15.65	16.44	0.84	
		SD	2.82	2.70	3.07		
	Maternal overprotectivness	M	17.80	17.20	20.03	2.12	
		SD	4.65	5.17	5.40		
	Paternal caring scale	M	20.65	18.66	21.51	2.17	
		SD	4.52	5.86	3.42		
	Paternal overprotectivness	M	14.05	15.00	16.72	1.34	
		SD	5.98	4.72	6.05		
Perceived Social Support							
	Total Support	M	61.20	59.05	64.55	1.79	
		SD	9.75	9.06	11.06		
	Significant Other	M	20.86	20.30	21.37	0.32	
		SD	4.77	4.52	4.71		
	Family Support	M	19.66	20.55	23.75	5.14*	SA=CC<NC
		SD	5.15	5.47	3.33		
	Friends Support	M	20.66	18.20	19.41	1.09	
		SD	4.06	5.06	5.16		

Note: M= Mean. SD=Standard Deviation. SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. * $p < .01$. N=16 in the SA Group on the FES. N=20 in the SA Group on the Maternal and Paternal PBI. N=15 in the CC group for Paternal PBI and MSPSS.

Table 6. Overall pattern of results

Domain	Instrument	Subscale	Sexually Abusive	Clinical Controls	Normal Controls
Behaviour Problems	CBCL	Total	-	+	
		Internalising	-	+	
		Scale 1: Withdrawn	-	+	
		Scale 3: Anxious/Depressed	-	+	
		Scale 4: Social Problems	-	+	
		Scale 8: Aggressive Behaviour	-	+	
	YSR	Total	-	+	-
		Internalising	-	+	-
		Externalizing	+/-	+	-
		Scale 1 :Withdrawn	-	+	-
		Scale 2: Somatic Complaints	-	+	-
		Scale 3: Anxious/Depressed	-	+	-
		Scale 4: Social Problems	-	+	-
		Scale 5: Thought Problems	-	+	-
		Scale 6: Attention Problems	-	+	-
		Scale 8: Aggressive Behaviour	+/-	+	-
Personal Adjustment	SE	Low self-esteem	+	+	-
	EL	Emotional Loneliness	+	+	-
	LOC	Locus of control	+/-	+	-
	IRI	Problems with perspective taking	+	+	-
		Personal Distress	-	+	-
	I	Impulsivity	+/-	+	-
Anger Management	NAS	Part A Total-Anger Response	+/-	+	-
		Cognitive Domain	+/-	+	-
		Attentional Focus	+	+	-
		Rumination	+/-	+	-
		Arousal Domain	+/-	+	-
		Impulsive Reaction	+/-	+	-
Psychosocial Adjustment	FES	Low cohesion	+/-	+	-
		Expressiveness problems	+	+	-
		Control problems	+	+	-
	MSPSS	Lack of family support	+	+	-

Note:SA=Sexually abusive adolescents. CC=Clinical Controls. NC=Normal Controls. CBCL=Child behaviour checklist. YSR=Youth self-report form. SE=Self-esteem scale. EL=Emotional loneliness scale. LOC=Locus of control scale. IRI=Interpersonal reactivity inventory. I=Impulsivity scale. NAS=Novaco anger scale. FES=Family environment scale. MSPSS=Multidimensional scale of perceived social support. - = the feature was at a low level. + the feature was at a high level. +/- = the feature was at an intermediate level.