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Early maladaptive schemas in a sample of British adolescent sexual abusers: implications for therapy

Graeme Richardson
Northern Forensic Mental Health Service for Young People, Newcastle upon Tyne, UK

Abstract *This study describes the results of the administration of the Young Schema Questionnaire in a British sample of 54 sexually abusive adolescents. This questionnaire is a measurement of the 16 Early Maladaptive Schemas (EMSs) as conceptualized by Young in his schema model of psychopathology. A clinical group of 40 was differentiated from a non-clinical group of 14 on the basis of their respective scores on the questionnaire. In the clinical group the highest scores were for the emotional inhibition, social isolation/alienation and mistrust/abuse maladaptive schemas. Within this clinical group, schema scores were found to differentiate subjects who had sexually abused children from those had sexually assaulted peer-aged or adult females. Schema scores also distinguished subjects with a prior history of sexual victimization from those without this history. The results provided evidence of (1) heterogeneity within the overall sample in terms of the presence of maladaptive schemas and (2) heterogeneity across sub-groups in terms of their scores on particular maladaptive schemas. It was concluded that some sexually abusive adolescents have therapeutic needs that would be met only through the provision of schema-focused therapy to address these maladaptive schemas.*

Keywords *Adolescent sexual abusers; early maladaptive schemas; schema domains; schema therapy*

Introduction

The sex offender literature has identified a range of deficits and dysfunctions' in the personal, interpersonal and social functioning of populations of adult and adolescent sexual abusers, which are regarded as precursors to sexual offending (Hall & Hirschman, 1991; Jacobs, Kennedy & Meyer, 1997; Kobayashi, Sales, Becker, Figueredo & Kaplan, 1995; Malamuth, Heavey & Linz, 1993; Marshall & Barbaree, 1990; Marshall & Eccles, 1993; Marshall, Hudson & Hodkinson, 1993; Polaschek, Ward & Hudson, 1997; Ryan & Lane, 1991; Ward, Hudson & Marshall, 1995; Ward, Hudson, Marshall & Siegert, 1995). In addition, there is empirical evidence for heterogeneity in terms of identified personal, interpersonal and social difficulties (Groth, 1979; Herkov, Gynther, Thomas & Myers, 1996; Knight & Prentky,

*Corresponding author: Graeme Richardson, Consultant Clinical Psychologist, Cognitive Therapist, Northern Forensic Mental Health Service for Young People, 1st Floor St Nicholas House, St Nicholas Hospital, Jubilee Road, Newcastle upon Tyne NE3 3XT, UK. E-mail: Graeme.Richardson@nmht.nhs.uk

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1990; Marshall & Hall, 1995; Oliver, Nagayama-Hall & Neuhaus, 1993; Prentky & Knight, 1991; Smith, Monastersky & Deisher, 1987).

Adult and adolescent sexual offenders have also been found to be heterogeneous in personality and psychopathology (Carpenter, Peed & Eastman, 1995; Erickson, Luxenberg, Walbeck & Seely, 1987; Lussier, Proulx & McKibben, 2001; Marshall, & Hall, 1995; Smith, Monastersky & Deisher, 1987; Worling, 2001). Richardson, Kelly, Graham and Bhate (2004) identified five sub-groups within a British sample of 112 sexually abusive adolescents based on their profiles on the Millon Adolescent Clinical Inventory (Millon, Millon & Davis, 1993). This provided evidence of heterogeneity in terms of personality characteristics and psychopathology in a British sample of young people who sexually abuse.

Young (1990, 1994) developed a schema-focused model of psychopathology and personality disorder, and an intervention approach that he has termed schema-focused therapy. Young (1990) delineated 16 Early Maladaptive Schemas (EMSs), which are measured by the Young Schema Questionnaire (Young & Brown, 1994). These were described as follows: (1) Abandonment/instability refers to the perceived instability or unreliability of those significant others available to provide practical nurturance and emotional support, and the belief that one will be abandoned by significant others. (2) Mistrust/abuse refers to the expectation that others are sources of pain, humiliation, manipulation or abuse, which includes a perception that others seek to inflict intentional harm. (3) Emotional deprivation refers to the expectation that one's needs for affection, emotional warmth and companionship, or for understanding and sharing of feelings, or for direction and guidance from others, will not be adequately met by significant others. (4) Defectiveness/shame refers to feeling one is bad, inferior and unwanted, or believing one would be unlovable if these inherent defects become apparent to others. (5) Social isolation/alienation refers to feeling one is isolated from the rest of the social world, different from other people, and not part of any social group. (6) Social undesirability refers to the belief that one is outwardly unattractive to other people. (7) Dependence/incompetence refers to the belief that one is unable to cope adequately with everyday responsibilities without substantial help from others. (8) Enmeshment/underdeveloped self refers to an excessive emotional involvement with one or more significant others which impedes the process of individuation. (9) Failure to achieve refers to the belief that one will inevitably fail because of being inept, unsuccessful and inadequate relative to one's peers. (10) Vulnerability to harm/illness refers to an exaggerated fear of suffering physical or mental harm due to medical problems or accidental events. (11) Entitlement/self-centredness refers to the belief that one is superior to others and entitled to special rights and privileges or entitled to special dispensations, and not bound by normative social rules and conventions. This can involve the domination of others and an absence of empathy for others. (12) Insufficient self-control/self-discipline refers to the difficulty or refusal to tolerate frustration of immediate desires, or exercise sufficient self-control in order to achieve personal goals, or restrain the excessive expression of one's impulses and emotions. (13) Subjugation refers to feeling coerced to surrender control over one's life to others, and suppression of one's preferences, desires and decision-making, or inhibition of emotional expression, especially anger, motivated by the desire to avoid retaliation or abandonment. (14) Self-sacrifice refers to an excessive need to voluntarily meet the needs of others at the expense of one's own needs. (15) Unrelenting standards refers to the belief that one must meet very high internalized standards of behaviour and performance, usually to avoid criticism. (16) Emotional inhibition refers to the excessive inhibition of spontaneous action, feeling or communication to ensure a sense of security and predictability, or to avoid making mistakes or disapproval by others, or to avoid losing control of one's impulses, especially anger and aggression.

In addition, Young (1990) hypothesized five-schema domains that are higher-order factors, made up of specific clusters of the 16 EMSs. The five-schema domains consist of the following: (1) Disconnection and rejection refers to expectations that one's needs for security, nurturance, understanding, acceptance and respect will not be met in a predictable and consistent manner. The hypothesized family of origin is detached, cold, rejecting, withholding, lonely, explosive, unpredictable or abusive. (2) Impaired autonomy and performance refers to expectations that undermine one's perceived ability to separate and function independently. The typical family of origin is enmeshed, overprotective and fails to reward the child for performing competently outside the family. (3) Impaired limits refers to a deficiency in internal limits, responsibility to others or long-term goal directedness. This results in difficulties in respecting the rights of others, co-operating with others, making commitments or setting and meeting realistic personal goals. The typical family of origin is characterized by permissiveness, overindulgence, lack of direction or a sense of superiority relative to other people. (4) Other directedness refers to an excessive focus on the desires, feelings and reactions of others at the expense of one's own needs. The motivation is to gain love and approval, to maintain a feeling of being connected with others or avoid rejection or retaliation. The typical family origin is where parental love and attention is highly conditional and the child must suppress aspects of itself to gain love and approval. (5) Over-vigilance and inhibition refers to an excessive emphasis on controlling one's spontaneous feelings, impulses and choices in order to avoid making mistakes, or to meet inflexible personal rules and expectations about performance and ethical behaviour or self-expression. The typical family origin is characterized by strict standards related to following rules, performance, duty and avoiding mistakes whereby positive emotions such as pleasure and joy are stifled.

Given the empirical evidence supporting the presence of deficits and dysfunctions in the personal, interpersonal and social functioning of populations of adult and adolescent sexual abusers, it was hypothesized that EMSs will be present in a sample of sexually abusive adolescents. This hypothesis was formulated on the theoretical grounds that EMSs reflect the core of an individual's self-concept and psychopathology underlying personal, interpersonal and social difficulties (Young, 1990, 1994; Young & Klosko, 1994).

Given the empirical evidence for heterogeneity in terms of identified personal, interpersonal and social difficulties, along with evidence for heterogeneity in personality and psychopathology, it was hypothesized that maladaptive schemas will be present in some cases, but not in others. That is, there will be heterogeneity in terms of the presence of maladaptive schemas.

The sex offender literature has documented a range of critical developmental antecedents associated with early upbringing in a dysfunctional and/or abusive family. These may be defined as early and chronic negative life events to which the sexual abuser had been previously exposed, and which result in personal, interpersonal and social difficulties. These antecedents have included parental divorce, caregiver inconsistency, history of institutional care, neglect, intra-familial violence, childhood physical abuse, parental criminality and parental substance and alcohol problems (Fagan & Wexler, 1988; Hall & Hirschman, 1991; Knight & Prentky, 1993; Marshall, 1989; Marshall & Barbaree, 1990; Marshall & Eccles, 1993; Ryan & Lane, 1991; Seidman, Marshall, Hudson & Robertson, 1994; Smith, 1988; Ward, Hudson, Marshall & Siegert, 1995). Empirical studies have reported a history of sexual victimization in the backgrounds of adult sex offenders (Dhawan & Marshall, 1996; Hanson & Slater, 1988; Hilton, 1993; Seghorn, Prentky & Boucher, 1987) and adolescent sexual offenders (Awad & Saunders, 1991; Becker, Cunningham-Rathner & Kaplan, 1986; Benoit & Kennedy, 1992; Butz & Spaccarelli, 1999; Cooper, Murphy & Haynes, 1996; Daleiden, Kaufman, Hilliker & O'Neil, 1998; Richardson, Graham, Bhate & Kelly, 1995; Ryan, 1989).

Several theoretical models of sexual offending and empirical studies have linked the prevalence of adverse childhood experiences within the family of origin with weak attachment bonding with parents/carers (Bumby & Hansen, 1997; Burk & Burkhart, 2003; Cortoni & Marshall, 2001; Marshall & Marshall, 2000; Smallbone & Dadds, 2000; Ward, Keenan & Hudson, 2000). These models of sexual offending emphasize the associations between insecure early attachments with parents/carers and subsequent difficulties in social and intimate relationships, which render the individual vulnerable to sexual offending.

Given these theoretical models and empirical evidence it was hypothesized that the disconnection and rejection schema domain would be most prevalent, as this domain reflects a childhood characterized by loss, rejection, abandonment, neglect and abuse and isolation, and reflects insecure attachments with parents/carers.

Sexual victimization in childhood has been hypothesized to be an aetiological factor in childhood-onset sexual behaviour problems (Friedrich, 1993; Friedrich & Luecke, 1988; Johnson, 1988, 1993; Gray, Busconi, Houchens & Pithers 1997). Studies have found high rates of sexual abuse in child and adolescent perpetrators (Friedrich, Beilke & Urqiza, 1988; Friedrich & Luecke, 1988; Gray, Busconi, Houchens & Pithers, 1997; Richardson, Kelly, Bhate & Graham, 1997; Ryan, Lane, Davis & Isaac, 1987; Wieckowski, Hartsoe, Mayer & Shortz, 1998).

Given the prevalence of childhood sexual victimization in the developmental histories of sexual offenders it was hypothesized that, in a sub-group of the sample who had a known history of sexual victimization, the mistrust/abuse and defectiveness/shame maladaptive schemas would be prevalent. These schemas are two of the five that constitute the disconnection and rejection schema domain. This hypothesis was based on the identification of mistrust ("people will hurt me") and low self-esteem ("I'm bad", "I'm defective", "I deserve to suffer") schemas in a sample of adult survivors of child sexual abuse (Jehu, 1992).

Several studies have provided empirical support for the presence of social isolation and emotional loneliness in populations of adult and adolescent sexual offenders (Becker, Harris & Sales, 1993; Blaske, Borduin, Henggeler & Mann, 1989; Bumby & Hansen, 1997; Cortoni & Marshall, 2001; Graves, Openshaw, Ascione & Ericksen, 1996; Katz, 1990; Marshall, Hudson & Hodkinson, 1993; Marshall, Champagne, Brown & Miller, 1997). Given this evidence, it was hypothesized that the social isolation/alienation maladaptive schema, which is one of the five that constitute the disconnection and rejection schema domain, would be prevalent.

The treatment of choice in the field is multi-component, cognitive–behavioural programmes, which focus on "offence-specific" issues, that is, criminogenic factors (Becker & Kaplan, 1993; Marshall & Fernandez, 1997). The accepted format is group treatment, as individual therapy is considered to be less efficient and less effective (Marshall, Anderson & Fernandez, 1999). In the field of cognitive psychotherapy for personality difficulties/disorders, be it Beckian (Beck, Freeman & Associates, 1990; Davidson, 2000; Layden, Newman, Freeman & Morse, 1993; Padesky, 1994) or schema-focused therapy (Young, 1990, 1994; Young & Klosko, 1994), the predominant format is individual therapy. The focus is on core dysfunctional beliefs or maladaptive schemas that perpetuate enduring, inflexible and maladaptive interpersonal and social functioning. In sex offender treatment, the remediation of skills deficits, such as social skills and anger management training, are referred to as "offence-related" treatment targets (Marshall, Anderson & Fernandez, 1999). If maladaptive schemas were found to be present in a sample or sub-sample of adolescent sexual abusers then, according to Young's theory, these would underpin skill deficits. Maladaptive schemas would then become legitimate "offence-related" treatment targets addressed through the format of individual schema therapy.

The aims of the present study were to investigate (1) the feasibility of the administration of the Schema Questionnaire to this forensic population, (2) the presence of EMSs in this sample, (3) specific hypotheses pertaining to the presence of particular maladaptive schemas in the sample as a whole and a sub-group with a known history of sexual victimization and (4) the clinical relevance of Schema Therapy (Young, Klosko & Weishaar, 2003).

Method

Subjects

The subjects were 54 adolescent males who had committed at least one sexual offence. All had been subject to adjudication by the criminal justice system and had received a criminal conviction for a sexual offence. In addition, Social Services Departments or Youth Offending Services were involved in the case. These adolescents had all been referred to a Forensic Mental Health Service for Young People between the years 1996 and 2001 for clinical services, namely assessment of, and treatment for, their sexually abusive behaviours. All the subjects were participating in a group-based treatment programme that focused exclusively on their sexually abusive behaviour, and which was compatible with the cognitive behavioural approach advocated in the literature (Becker & Kaplan, 1993; Marshall & Fernandez, 1997).

Twenty-six were receiving outpatient group treatment, and twenty-eight were receiving treatment within a residential facility or medium secure hospital. All but one of the subjects were white British. Their mean age was 16 years 1 month ($SD = 1.63$, range = 13 years 1 month–19 years 2 months.). Two of the subjects were aged over 18 years, as the outpatient clinic provided services up to the age of 19 years. Thirty-six (66.7%) had sexually abused male or female children at least 4 years younger than themselves and 18 (33.3%) had committed sexual assaults against peer-aged or adult females. Twenty-five (46.3%) had a history of sexual victimization prior to the onset of their abusive behaviour, whereas 29 (53.7%) had not. Seven (13%) had a diagnosis of personality disorder and were detained under the Mental Health Act 1983, under the category of psychopathic disorder.

The subjects were the first 54 individuals with a history of sexually abusive behaviour, referred to an adolescent forensic mental health service, to have completed the Young Schema Questionnaire.

Measures

The Young Schema Questionnaire, 2nd edition (Young & Brown, 1994). Young (1990) developed the original schema questionnaire to measure the 16 EMSs he had delineated in his schema model of psychopathology (Young, 1990). Questionnaire items were based on his clinical experience with chronic and difficult adult psychotherapy patients. Young and Brown (1994) revised this questionnaire, and this second edition was used in the present study. It is a 205-item self-report inventory. The 205 items are clustered in accordance with the 16 schemas, with each cluster separated by an asterisk and a two-letter code that is an abbreviation for the particular schema. Each item is rated using a six-point scale (1 = completely untrue of me, 2 = mostly untrue of me, 3 = slightly more true than untrue, 4 = moderately true of me, 5 = mostly true of me, 6 = describes me perfectly). Young (1990) originally hypothesized 16 maladaptive schemas, but later (Young, 1994) delineated 18 maladaptive schemas. However, this revised schema listing does not correspond to the Young Schema Questionnaire because it was not revised accordingly. Consequently, in this study the original schema classification is used.

The psychometric properties of the questionnaire have been investigated (Lee, Taylor & Dunn, 1999; Schmidt, Joiner, Young & Telch, 1995). Both studies found that the questionnaire is a valid means of assessing the range of conceptually different schemas proposed by Young (1990). Lee et al.'s (1999) analysis identified 14 of the 16 EMSs and four of the higher-order factors. It concluded that the questionnaire had good internal consistency and its primary factor structure is stable across clinical samples with Axis I and Axis II psychopathology (DSM-IV, American Psychiatric Association, 1994). Schmidt et al. (1995) found that the questionnaire had convergent and discriminant validity with measures of psychological distress, self-esteem, cognitive vulnerability for depression, and symptoms of personality disorder.

It should be noted that there have been no published statistical normative data for the Schema Questionnaire. Consequently, it is not possible to compare scores across different patient groups or age groups.

Wechsler Intelligence Scale for Children—*Third Edition, UK (*Wechsler, 1992/Wechsler Adult Intelligence Scale—*Revised edition (*Wechsler, 1981*)*. These two scales are measures of intellectual functioning with proven validity and reliability. For the purposes of this study, subjects completed at least two verbal sub-tests (vocabulary and similarities) and two performance sub-tests (block design and picture completion). These sub-tests provided a "short form" measure (see Silverstein, 1990; Watkins, 1986). This provided a reasonably accurate estimation of the subject's overall intellectual ability level.

Procedure

The procedure reflected one element in a clinical initiative, begun in 1996 by the author to investigate the viability and relevance of developing a cognitive psychotherapy service for sexually abusive adolescents. The cognitive therapy models that were adopted were those proposed by Beck, Freeman and Associates (1990), Padesky (1994) and Young (1990; Young & Klosko, 1994). These models have proposed that dysfunctional core beliefs or maladaptive schemas underlie psychopathology and personality difficulties/disorders, and that assessment of cognitive schemas is needed to improve clinical assessment and treatment. The clinical objectives were to (1) evaluate the clinical utility of schema-focused assessment and case conceptualization, (2) determine which maladaptive schemas were most commonly present, (3) identify therapeutic needs that were not being met by the offence-specific and offence-related cognitive–behavioural group treatment programmes and (4) provide cognitive psychotherapy when clinically indicated. The Young Schema Questionnaire was selected as a screening measure to assess the presence of maladaptive schemas, which may underlie significant personal, interpersonal and social difficulties. The clinical assumption was that patients who obtained clinically significant scores on the questionnaire might have psychotherapeutic needs that lay outside the scope of the offence-specific treatment programme and adjunct skills training. It should be noted that the practice of schema-focused assessment uses multiple techniques, with the administration of the Young Schema Questionnaire being only one of these techniques (Young, 1994; Young & Gluhoski, 1996). This study reports only the preliminary findings from the administration of this questionnaire.

A detailed case file review and clinical interviews were used to obtain a history of sexually abusive behaviour and sexual victimization for each subject. Official documentation, including case notes and other case file information provided by parents, caregivers, teachers and Social Services or Youth Offending Service agencies, was available on all subjects. On the basis of their known sexually abusive behaviour subjects were assigned to a child or peer/adult sub-group. This is consistent with the sexual offender typology literature, which distinguishes between sexual offenders who abuse child victims and those who assault adolescent or adult

females (Awad & Saunders, 1989, 1991; Becker, 1998; Hsu & Starzynski, 1990; Richardson, Kelly, Bhate & Graham, 1997). Subjects who had abused a male or female child who was at least four years younger in age were assigned to the child group. Subjects who had sexually assaulted a female peer or adult female were assigned to the peer/adult group. Individuals in the peer/adult group were variously convicted of rape, attempted rape or indecent assault. In addition, on the basis of their known history of sexual victimization prior to the onset of their abusive behaviour, subjects were assigned to a victim group or a non-victim group.

The author had provided a clinical assessment in all cases. All subjects volunteered to undertake further clinical assessment provided by the author, initially utilizing the Young Schema Questionnaire. The questionnaire was administered on an individual basis with each individual subject. At the time of administration of the questionnaire, all subjects were participating in an offence-specific cognitive–behavioural group treatment programme. They were at different stages of their planned treatment interventions. They had made detailed disclosures of their sexually abusive behaviour, and openly discussed negative life events, including their experiences of victimization (physical and sexual, and peer victimization) experiences. All were assessed as having been well engaged in their treatment for their sexually abusive behaviours. The Schema Questionnaire was administered individually to all the subjects. To varying degrees subjects required some assistance, in terms of either understanding the meaning of particular words or certain items, which had to be explained or paraphrased. The number of items that each subject was unable to understand without assistance was recorded. With assistance, all subjects were able to provide a response to all items on the questionnaire. In the majority of the cases the questionnaire was completed over two separate administration sessions, each lasting up to 45 minutes.

The questionnaire was scored in accordance with the guidelines provided by Young (1990). Only an item that had been rated 5 or 6 by the respondent was counted as a significant response. These significant responses are summed for each individual schema. As each schema is made up of an unequal number of items, the percentage of significant item responses for each of the 16 schemas was calculated. For example, the abandonment/instability schema was calculated by summing the 5 and 6 responses on items 10–27 and calculating this number as a percentage of these 18 items that make up this schema.

All the maladaptive schemas scores are expressed as percentages, and were interpreted in accordance with the guidelines provided by Young and Klosko (1994) for determining their clinical significance. They suggested the following interpretation of schema scores; 10–29% endorsement is not clinically significant or of "low" significance; 30–39% endorsement represents "moderate" clinical significance; 40–49% represents "high" clinical significance and 50–60% represents "very high" clinical significance.

Subjects who obtained scores in the "low" and "moderate" ranges across all 16 maladaptive schemas were assigned to a non-clinical group. The assumption was that this non-clinical group did not have significant psychological difficulties as defined by the presence of maladaptive schemas. Those with scores in the "high" and "very high" ranges on any single maladaptive schema were assigned to a clinical group. The assumption was that this clinical group did have significant psychological difficulties as defined by the presence of maladaptive schemas. Statistical analyses were carried out to determine any significant between group differences in relation to age, intellectual ability, offence type, history of sexual victimization, outpatient or inpatient status and number of items understood only with assistance.

The intellectual assessments were conducted in strict adherence to the procedures for administration and scoring, as set out in their respective manuals.

All subjects assigned to the clinical group were provided with the results of their individual schema questionnaire scores. Schemas that had reached high and very high clinical

significance were described to the patient in an individual session. The estimated history of the presence of the schemas was explored with each subject. All subjects acknowledged that the particular maladaptive schemas as identified by the questionnaire were applicable to them and their lives. It was apparent in all cases that they reflected long-standing difficulties, predating the onset of their sexually abusive behaviours. All these subjects were offered individual cognitive therapy in relation to the schemas that were salient to them. Twenty-three subjects agreed to participate in this particular form of therapy.

Statistical analyses were conducted to ascertain the mean percentage scores for each of the 16 maladaptive schemas for the clinical group, the two offence type sub-groups and the two sub-groups distinguished by a history of prior sexual victimization. Analysis of variance (one-way ANOVA) was used to investigate the relationships between the maladaptive schemas, and offence type and history of prior sexual victimization. Pearson's product–moment correlation was used to investigate the relationship between full scale IQ and the number of questionnaire items not understood without assistance from the administrator.

Results

Forty (74%) of the subjects were defined as the clinical group and 14 (26%) were defined as the non-clinical group, based on their respective maladaptive schema scores.

The mean full scale IQ for the whole sample was 95.9 ($SD = 12.1$, range = 75–132). The mean number of questionnaire items not understood by all subjects without assistance from the administrator was eight ($SD = 12$, range = 0–52). A significant negative correlation was found between the number of items not understood and full scale IQ ($r = -0.365$, $p = 0.007$, two-tailed). The subject with the lowest intellectual ability (full scale IQ = 75) was unable to understand 52 of the questionnaire items, and was in the non-clinical group. This subject was able to complete the questionnaire with considerable assistance from the assessor in terms of paraphrasing, simplifying, and explaining the content and meaning of the questionnaire items. He was retained in the sample because of this.

The clinical and non-clinical groups were not significantly different in age and intellectual ability level. The clinical group had a mean age of 16 years 4 months ($SD = 1.7$) compared with the non-clinical group mean of 15 years 9 months ($SD = 1.4$), $F = 0.959$, $p = 0.332$. The clinical group had a mean full scale IQ of 97 ($SD = 12.8$) compared with the non-clinical group mean of 91 ($SD = 9.7$), $F = 0.004$, $p = 0.952$. The clinical and non-clinical groups were not significantly different in terms of offence type ($\chi^2 = 0.825$, $p = 0.287$), prior sexual victimization ($\chi^2 = 0.765$, $p = 0.298$), outpatient or inpatient status ($\chi^2 = 0.765$, $p = 0.298$) or number of items understood only with assistance ($F = 0.594$, $p = 0.445$).

In the clinical group, five subjects (12.5%) obtained scores in the "high" category with a modal number of one schema in the category. Thirty-five subjects (87.5%) had scores in the "very high" category, with a modal number of four schemas in the category.

The mean percentage scores for the 16 maladaptive schemas for the clinical group are shown in Table I. Table I also shows the percentage numbers of the clinical group who obtained scores in the "low", "moderate", "high" and "very high" clinical significance ranges for the 16 schemas. The three highest scoring maladaptive schemas were (1) Emotional Inhibition, (2) Social Isolation/Alienation and (3) Mistrust/Abuse.

Twenty-five (62.5%) of the clinical group were assigned to the child offender group and 15 (37.5%) to the peer/adult offender group. Significant between-group differences were found for three maladaptive schemas: (1) entitlement/self-centredness ($F = 16.046$, $p = 0.000$), (2) insufficient self-control/self-discipline ($F = 11.284$, $p = 0.002$) and (3)

Table I. *Mean percentage Early Maladaptive Schemas scores and percentages of subjects' scores in the four clinical significance ranges for the clinical group (N = 40).*

Maladaptive schemas	Mean (SD)	Low %	Moderate %	High %	Very high %
Emotional inhibition	45.90 (24.25)	27.5	7.5	20.0	45.0
Social isolation/alienation	39.50 (33.81)	42.5	5.0	5.0	47.5
Mistrust/abuse	39.05 (26.44)	42.5	7.5	12.5	37.5
Emotional deprivation	34.48 (30.97)	55.0	10.0	7.5	27.5
Social undesirability	33.07 (31.88)	47.5	7.5	10.3	35.0
Insufficient self-control/self-discipline	32.30 (26.72)	60.0	7.5	12.5	20.0
Failure to achieve	31.62 (33.77)	55.0	10.0	10.0	25.0
Defectiveness/shame	29.85 (25.38)	67.5	7.5	5.0	20.0
Self-sacrifice	28.00 (23.04)	72.5	2.5	5.0	20.0
Subjugation	27.25 (26.71)	62.5	2.5	7.5	27.5
Unrelenting standards	25.20 (18.59)	62.5	15.0	5.0	17.5
Abandonment/instability	24.18 (22.25)	72.5	7.5	2.5	17.5
Vulnerability to harm/illness	23.83 (23.31)	70.0	7.5	5.0	17.5
Entitlement/self-centredness	23.33 (27.46)	72.5	5.0	5.0	17.5
Dependence/incompetence	22.03 (24.01)	70.0	7.5	7.5	15.0
Enmeshment/undeveloped self	10.68 (14.85)	82.5	12.5	2.5	2.5

emotional inhibition ($F = 8.850$, $p = 0.005$). The peer/adult offender group obtained significantly higher mean scores on all three maladaptive schemas entitlement/self-centredness (42.4% = "high" clinical range), insufficient self-control/self-discipline (48.6% = "high" clinical range) and emotional inhibition (59.3% = "very high" clinical range).

Eighteen (45%) of the clinical group were assigned to the victim group and 22 (55%) to the non-victim group. Significant between-group differences were found for four maladaptive schemas: (1) emotional inhibition ($F = 12.384$, $p = 0.001$), (2) abandonment/instability ($F = 11.372$, $p = 0.002$), (3) entitlement/self-centredness ($F = 7.563$, $p = 0.009$) and (4) defectiveness/shame ($F = 4.912$, $p = 0.033$). The victim group obtained significantly higher mean scores on abandonment/instability (35.8% = "moderate" clinical range), and defectiveness/shame (39.2% = just below the "high" clinical range). The non-victim group obtained significantly higher mean scores on emotional inhibition (56.6% = "very high" clinical range) and entitlement/self-centredness (33.3% = "moderate" clinical range).

Significantly more of the child offender group were also in the victim group [$n = 15$ (60%), $F = 6.388$, $p = 0.022$, two-tailed, Fisher's test].

All seven subjects with a diagnosed personality disorder were in the clinical group. Five of them were in the peer/adult offender group and three in the victim group, which almost reached significance ($F = 3.844$, $p = 0.085$, two-tailed, Fisher's test). Six of their mean maladaptive schema scores were in the "very high" clinical range: (1) emotional inhibition (63.6%), (2) mistrust/abuse (62.1%), (3) emotional deprivation (60.4%), (4) social isolation/alienation (58.6%), (5) entitlement/self-centredness (55.9%) and (6) insufficient self-control/self-discipline (51.6%). They had twice as many scores in the "very high" clinical range when compared with the 33 clinical subjects without a diagnosed personality disorder (6 compared to 3, $F = 7.287$, $p = 0.010$).

Within the clinical group the mean scores for the five schema domains were (1) over-vigilance/inhibition (35.4%), (2) disconnection/rejection (33.3%), (3) impaired limits (27.8%), (4) other directedness (27.6%) and (5) impaired autonomy/performance (22.2%). Significant between-group differences were found for the offence type groups, with the peer/adult group scoring higher on the impaired limits (45.5%, $F = 16.932$, $p = 0.000$) and over-vigilance/inhibition (42.6%, $F = 4.425$, $p = 0.042$) domains. The same between group

differences were found for the non-victim group compared to the victim group, over-vigilance/inhibition (42%, F = 7.389, $p = 0.010$) and impaired limits (36%, F = 5.573, $p = 0.023$).

Discussion

Purpose of the study

The primary purpose of this study was to investigate the presence of EMSs as conceptualized by Young (1990) through the administration of the Young Schema Questionnaire – 2nd edition (Young & Brown, 1994) in a sample of British adolescent sexual abusers. This was part of a wider clinical initiative to identify and meet the psychotherapeutic needs of these patients, beyond those addressed in an "offence-specific" or "offence-related" cognitive–behavioural group treatment programme (Marshall et al., 1999).

Clinical feasibility and validity

The Young Schema Questionnaire proved to be a measure that could be administered successfully to a group of sexually abusive adolescents with assistance from the administrator. There were no obvious limitations in terms of administering a self-report measure, designed for use with adult patients, to adolescents. The finding of a significant negative correlation between full scale IQ and the number of items not understood by respondents indicated that the clinical applicability and reliability of this measure with low functioning sexual abusers might be questionable. In addition, the finding that many subjects required assistance to complete the questionnaire and did not fully understand at least eight of the 205 items (range = 0–52) suggests that unsupervised self-administration by respondents of even average intellectual ability may be problematic. All subjects completed the schema questionnaire following the establishment of a therapeutic alliance and active participation in offence-specific treatment. This may be a more appropriate point for the administration of the questionnaire, rather than at the initial clinical/forensic assessment stage. In conclusion, the successful administration of the Young Schema Questionnaire to this population seems to reflect a feasible and valid clinical approach, as 35 subjects (87.5%) in the clinical group had scores in the "very high" clinical significance category, with a modal number of four maladaptive schemas in this category.

Hypotheses

The hypothesis that EMSs will be present in a sample of sexually abusive adolescents, and the hypothesis that maladaptive schemas will be present in some subjects and not in others, were confirmed. Forty (74%) of the subjects were defined as the clinical group and 14 (26%) were defined as the non-clinical group based on their respective maladaptive schema scores. This provides support for the further differentiation of sexually abusive adolescents, or heterogeneity.

The hypothesis that the social isolation/alienation maladaptive schema would be prevalent in the sample was confirmed. This provides some support to theoretical explanations of sexual offending, which emphasize the adverse affects of social isolation and emotional loneliness (Marshall, Hudson & Hodkinson, 1993; Marshall & Marshall, 2000).

The hypothesis that the mistrust/abuse and defectiveness/shame maladaptive schemas would be prevalent in subjects with a history of sexual victimization was partly confirmed, as only the defectiveness/shame schema differentiated this group from non-victims.

The hypothesis that the disconnection and rejection schema domain would be most prevalent was not confirmed, as this was found to be the over-vigilance/inhibition domain. This domain refers to an excessive emphasis on controlling one's feelings and actions in order to avoid making mistakes or disapproval, and maintaining vigilance to avoid things going wrong and chaos (Young, 1990). The most prevalent maladaptive schema in this domain was Emotional Inhibition, which indicated that the most salient element of the over-vigilance/inhibition domain is the inhibition or over-control of anger and aggression. It is interesting to note here that, in relation to attachment theory, Bowlby (1973) associated insecure attachment with suppressed anger.

The impaired limits schema domain differentiated the peer/adult offence group and the non-victim groups. This domain refers to deficiencies in internal controls, responsibility to other people and setting long-term goals. Individuals experience difficulties in respecting the rights of others, cooperating with others, making commitments or meeting realistic personal goals. Interestingly, the entitlement/self-centredness schema was significantly more prevalent in this offence type sub-group. This finding may be relevant to studies that have identified sexual entitlement schemas in adult rapists (Mihailides, Devilly & Ward, 2004; Ryan, 2004; Ward, 2000). It implies that there may be a general entitlement schema as well as a sexual entitlement schema, just as generalized empathy is differentiated from victim-specific empathy (Marshall, Hudson, Jones & Fernandez, 1995).

All seven subjects with a diagnosed personality disorder were in the clinical group, and they had twice as many schema scores in the "very high" clinical range when compared with the 33 clinical subjects without a diagnosed personality disorder. This provides some evidence to support the schema conceptualization of personality disorder, and it supports the assumption that the clinical group do have significantly more psychological difficulties as defined by the presence of maladaptive schemas when compared to the non-clinical group.

Treatment targets

For the entire clinical group, the salient maladaptive schemas were (1) emotional inhibition, (2) social isolation/alienation and (3) mistrust/abuse, and these represent the critical treatment targets. For the peer/adult offender group, sub-group-specific treatment targets were the (1) entitlement/self-centredness and (2) insufficient self-control/self-discipline schemas. For the victim group, specific treatment targets were (1) abandonment/instability and (2) defectiveness/shame. Consequently, seven maladaptive schemas were identified as potential treatment targets across the clinical group. Schema therapy targets particular maladaptive schemas, not the more general schema domains.

Emotional inhibition. The dominance of the emotional inhibition schema indicated that the clinical group is characterized by the excessive inhibition of feelings or communication to ensure a sense of security and predictability, or to avoid disapproval by others or avoid losing control of their anger and aggression (Young, 1990). This indicated that their therapeutic needs included learning to appropriately communicate and express their feelings, especially their anger, and changing the belief that this will result in disapproval or loss of self-control, and also helping them to realize that emotional over-control may be associated with risk for re-offending, if anger was a motivating factor.

Social isolation/alienation. The presence of the social isolation/alienation schema indicates that the clinical group is characterized by feeling socially isolated or excluded, and the belief that they are different from their peers and not liked by them (Young, 1990). This schema is associated with social anxiety. Corresponding therapeutic needs are likely to involve changing negative beliefs about likeability and peer acceptance, reduction of social anxiety and avoidance and promoting social integration. Also helping them to realize that social avoidance may be associated with risk for re-offending, if social isolation from same age peers was a motivating factor.

Mistrust/abuse. The presence of the mistrust/abuse schema in the clinical group reflects the global expectation that other people will humiliate or harm them, and a general suspiciousness of other people (Young, 1990). This schema is associated with angry and anxious emotional states. Corresponding therapeutic needs are likely to involve challenging global mistrust, developing neutral or positive perceptions of other people, reducing interpersonal avoidance and promoting trusting friendships or relationships. Also helping them to realize that mistrust may be associated with risk for re-offending, if it caused social avoidance and social isolation was a motivating factor, and if it caused chronic anger when anger was a motivating factor.

Entitlement/self-centredness. The entitlement/self-centredness schema differentiated the peer/adult offender group. This indicates that they view themselves as superior to other people and believe that they are entitled to break rules as required. They also lack empathy for other people and may exploit them to meet their own needs (Young, 1990). Associated therapeutic targets will be to reduce narcissistic cognitions and behaviour, challenge and undermine their excuses for disregarding social rules and the rights of others and increase their social perspective-taking skills, and empathic awareness of the impact that their behaviour has on other people. Also help them to realize that their self-centredness and sense of entitlement may be associated with risk for re-offending, if these characteristics were motivating or contributory factors.

Insufficient self-control/self-discipline. The peer/adult offender group was also differentiated by the insufficient self-control/self-discipline schema, which reflects poor self-control over feelings and actions and impulsive behaviour (Young, 1990). The therapeutic goals here are to increase their beliefs around self-efficacy and an internal locus of control, reduce impulsive actions and establish greater self-control over their emotions and behaviour. Also help them to realize that their impulsivity and poor self-controls may be associated with risk for re-offending, if these characteristics were disinhibiting or contributory factors.

Abandonment/instability. The victim group was differentiated by the presence of the abandonment/instability schema. This reflects the belief that people are unpredictable and unreliable, and the belief that they will always be abandoned and left on their own (Young, 1990). Their respective therapeutic needs may incorporate them recognizing their hypersensitivity to rejection and losing people, learning not to overreact to separations or the breakdown of friendships and the promotion and development of stable and trusting friendships or relationships with other people. The presence of this maladaptive schema may suggest the presence of insecure attachment in this sub-group, which is consistent with theories that emphasize the importance of attachment theory in the conceptualization of sexual offending (Burk & Burkhart, 2003; Marshall, Hudson & Hodkinson, 1993).

Defectiveness/shame. The defectiveness/shame schema also differentiated the victim group. This reflects a global and inflexible belief that they are an inherently flawed individual, a fundamentally bad person and not worthy of respect or love (Young, 1990). Their therapeutic needs are associated with developing a positive self-image and self-regard, increase their assertiveness and the establishment of a set of beliefs around them deserving to be treated with respect and fairness, and that they are likeable and loveable. Internalized shame is also likely to be a therapeutic target, a disabling emotional response that may need to be acknowledged as disrupting interpersonal and social relationships, especially in terms of social withdrawal as a maladaptive coping response.

Treatment model and approach

The overall finding that a sub-group of sexually abusive adolescents presented with maladaptive schemas as measured by the Young Schema Questionnaire (Young & Brown, 1994) indicated that schema therapy is relevant to this particular group. Consequently, this "dysfunctional schema" sub-group would seem to have therapeutic needs that are not typically addressed in either "offence-specific" or "offence-related" cognitive–behavioural group treatment programmes.

The schema-focused approach appears to provide a means of developing a cognitive conceptualization of the deficits in personal, interpersonal and social functioning reported in the sex offender literature (Knight & Prentky, 1993; Marshall & Barbaree, 1990; Marshall & Eccles, 1993; Ryan & Lane, 1991). For example, the Emotional Inhibition schema represents emotional dysregulation in relation to anger. The therapeutic task is not about controlling anger, for example by Novaco's (1975) approach, but rather it is about the psychological processes involved in the sources of anger, perhaps from other activated maladaptive schemas (Beck, Freeman & Associates, 1990), and the suppression of anger for specific psychological reasons. Treatment is then not simply a matter of remediation through skills training, as the problem lies at a deeper level and requires a concomitant deeper level of intervention, namely cognitive psychotherapy. This ought to address the roots of anger problems by targeting the schemata and dysfunctional assumptions that underpin and activate those affective symptoms. This might be more appropriately termed anger therapy as opposed to anger management. Similarly, the social isolation/alienation schema may reflect social competency deficits that are underpinned by a sense of social marginalization or exclusion, social anxiety and a sense of self as different or unlikeable. The remediation of social competency deficits would not only involve training the patient in overt social behaviours, such as Goldstein and McGinnis's (1997) modelling approach, because these deficits are not exclusively behavioural in nature. Rather, the problem lies at the deeper level of those core beliefs about self relative to others in the social environment, as well as the negative emotions they produce. The therapeutic task, then, is to utilize cognitive therapy interventions to modify the cognitive processes that underpin interpersonal and social deficiencies.

The results of this study in conjunction with the conceptual models of cognitive psychotherapy (Beck, 1995; Beck, Freeman & Associates, 1990; Padesky, 1994; Young 1990, 1994) suggest that the application of psychoeducational and skills training approaches to anger management and social competency interventions are unlikely to produce any meaningful or lasting improvement in those patients whose schema profile incorporates the emotional inhibition and social isolation/alienation schemas. This is because this approach leaves intact those maladaptive schemas or dysfunctional schemata which, when activated by contingencies in the social environment, are likely to precipitate maladaptive behaviours that are the antithesis of the skills learned during the course of treatment. As maladaptive schemas

are difficult to modify and require schema-focused therapeutic interventions (Young, 1990, 1994), it is unlikely that offence-specific treatment in-and-of itself, even when delivered in the context of a supportive group environment, would bring about any indirect modification of maladaptive schemas.

Finally, even if cognitive psychotherapy models and techniques were employed with this dysfunctional schema sub-group of young abusers, this approach would have to run alongside a cognitive behavioural "offence-specific" treatment programme that targeted criminogenic factors and incorporated a relapse prevention component.

Conclusions

Five broad conclusions are drawn from the results of this study. These are: (1) the assessment of maladaptive schemas in sexually abusive adolescents is clinically feasible and valid, (2) sexually abusive adolescents are heterogeneous in terms of the presence or absence of maladaptive schemas, (3) young abusers are heterogeneous in terms of the presence of specific maladaptive schemas in different sub-groups based on offence behaviour and history of sexual victimization, (4) some abusive adolescents have therapeutic needs that are not addressed in "offence-specific" or "offence-related" group treatment programmes and (5) in some cases schema change, through schema therapy, may be necessary in order to more effectively treat those personal, interpersonal, and social difficulties described in the empirical literature.

Limitations and future directions

A limitation of the present study was the exclusive use of a single self-report measure. Future studies might also incorporate additional schema-focused and cognitive therapy procedures that are used to elicit negative automatic thoughts, dysfunctional assumptions, schemata and coping strategies (Beck, 1995; Beck, Freeman & Associates, 1990; Padesky, 1994; Young 1994; Young & Gluhoski, 1996). These procedures may provide more information about the relationships between adverse developmental experiences, the formation of dysfunctional core beliefs and maladaptive schemas, the presence of maladaptive coping strategies and the onset and maintenance of sexually abusive behaviours. Further studies are required to investigate the relationships between the presence of specific maladaptive schemas and the presence of adverse developmental experiences, which would allow Young's (1990) model of the development of maladaptive schemas in the context of dysfunctional family and social environments to be tested. Investigation of the presence of maladaptive schemas and their potential role in different developmental pathways towards sexually abusive behaviour may be the most significant area of study in terms of the understanding and treatment of sexual offenders.

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