The relationship between schemas and offence supportive attitudes in mentally disordered sexual offenders

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The study of schemas in sexual offenders is a relatively new approach in attempts to understand the deviant beliefs and attitudes of sexual offenders. Emerging findings suggest that offence supportive attitudes may be the product of an offender's underlying schemas. This study aims to establish the relationship between offence supportive attitudes and schemas in a sample of mentally disordered sexual offenders. Thirty-one male sexual offenders held within low through to high secure forensic mental health units were assessed using the Young Schema Questionnaire (YSQ-S3) and the Questionnaire on Attitudes Consistent with Sex Offending. Correlational analyses suggested a *pattern* of relationships in which Insufficient Self-Control, Entitlement and Enmeshment arose as the schemas associated with most offence supportive attitudes. This supports a relationship between schemas and offence supportive attitudes in mentally disordered sexual offenders and is consistent with the literature to date. Implications for further research and treatment are considered.

Keywords: sexual offenders; mental disorder; schemas; implicit theories; cognitive distortions; offence supportive attitudes

1. Introduction:

1.1 Offence supportive attitudes:

Historically the theory and treatment of sexual offenders has placed emphasis on 'cognitive distortions' (Hall & Hirschman, 1991, 1992; Ward & Beech, 2006; Ward & Seigert, 2002), defined as a belief system which supports sexual offending, including justifications, judgements and rationalisations (Abel, Becker & Cunningham-Rathner, 1984).

Within the general psychological literature excuse making is described as a normative process and Mann and Shingler (2006) have argued that sexual offenders

may engage in excuse making following offending to avoid personal costs to self-esteem and self-image. Furthermore, Maruna (2001) found that making external excuses for offending was actually linked to desistence from further crime. Maruna and Mann (2006) therefore argued that the assessment and treatment of sexual offenders may need to focus less upon post offending excuses and justifications (e.g. 'she enjoyed it', 'I was using drugs') and more upon other empirically established risk factors for offending and recidivism. Offence supportive attitudes (e.g. 'sex is good for children', 'men are entitled to have sex with whomever they like') have therefore been suggested as a more appropriate therapeutic focus.

Whilst the theoretical shift from 'cognitive distortions' to 'offence supportive attitudes' represents progress, Ward (2000) contended that there remains 'little attempt to develop a theoretical account of the mechanisms generating these distorted attitudes' (p.493), and suggested they may be the product of an offenders underlying schemas. The Integrated Theory of Sexual Offending (ITSO) represents an attempt by Ward and Beech (2006) to develop a comprehensive theory of sexual offending which includes '*offence supportive attitudes'* along with '*emotional/behavioural regulation problems', 'social difficulties',* and '*deviant sexual interests'* as the four groups of *clinical symptoms* often seen in sexual offenders. It is suggested that given a number of environmental influences, the presence of these 'symptoms' may increase the risk of an individual engaging in sexual offending. Using the ITSO (Ward and Beech 2006) it can be theorised that genetic predispositions combined with environmental factors and experiences lead to particular neuropsychological systems which may support maladaptive schemas. In turn maladaptive schemas may bias social information processing, including the production of offence support attitudes, such that sexual offending may be more likely to occur.

Should the theoretical suggestion that the offence supportive attitudes of sexual offenders represent the products of underlying schemas (Mann & Shingler, 2006; Ward, Polaschek & Beech 2006) be empirically established, it may prove more meaningful to focus treatment at an offender's underlying schemas rather than offence supportive attitudes. This is particularly important given the recent challenge to the effectiveness of Sex Offender Treatment in their current format (Langstrom, 2013).

1.3 Schema theories of sexual offending:

The concept of 'schemas', when first introduced to Cognitive Therapy, was used to describe 'stable cognitive patterns' that form a 'basis for screening out, differentiating, and coding the stimuli that confront the individual' (Beck et al. 1979, pp.12-13) and as 'specific rules that govern information processing and behaviour' (Beck et al., 1990 p.8). In reviewing the sex offending literature, numerous theoretical conceptualisations of the term 'schema' can be found, for example: Mann and Shingler's (2006) *Hostile Masculinity*, *Suspiciousness*, and *Sexual Entitlement* Schemas; the Implicit Theories of Polaschek & Ward (2002); and the Early Maladaptive Schemas described in Young's Schema Model (1998; Young Klosko & Weirshaar, 2003). Whilst the use of each term reflects distinct theoretical models, there are notable comparisons including the shared notion that such schemas bias information processing and that they are maladaptive to a greater or lesser extent.

Mann and Shingler (2006) theoretically proposed the presence of three schemas in sexual offending: *Hostile Masculinity*, *Suspiciousness*, and *Sexual Entitlement*, where a *Hostile Masculinity* schema reflects the belief that men are powerful and that women are passive and deceptive; a *Suspiciousness* schema reflects mistrust regarding the validity of women's responses; and a *Sexual Entitlement* schema is conceptualised as a

belief that men's rights outweigh women's. As such men who possess one or more of these schema may be more likely to interpret women's behaviours in line with their schemas, seek out situations which confirm their beliefs and to act upon them.

Ward and colleagues (Polaschek & Ward, 2002; Ward et al., 2006), in using the term implicit theory, drew upon literature in developmental psychology to describe how children develop implicit theories about the world, others and themselves, to create increasingly accurate predictions about others' minds and behaviours. Similar to the schema processes described by Mann and Shingler (2006) above, an offender may seek out situations or interpret others' behaviours, desires and beliefs consistent with implicit theories developed many years earlier.

A review of measures used to assess offence supportive attitudes in child molesters suggested five implicit theories: *children as sexual objects, entitlement, dangerous world, uncontrollability, and nature of harm* (Ward & Keenan, 1999). The *children as sexual objects* implicit theory refers to the belief that children are motivated by a desire for pleasure, including sex. The *entitlement* implicit theory related to beliefs that one has a right to assert their needs and desires over others. It is not difficult to see how such beliefs might relate to sexual offending. The *dangerous world* implicit theory implies that others are likely to be abusive and rejecting. An individual may respond by punishing those they feel are abusive, or they may turn to children for intimacy, viewing adults as untrustworthy. The *uncontrollability* implicit theory suggests that a man's desire is uncontrollable, and as such an offender may believe that he is not responsible for his offending, while a *nature of harm* implicit theory suggests that there are degrees of harm and that sexual behaviour is beneficial and therefore not harmful.

Five implicit theories were also highlighted in measures of offence supportive attitudes of rape: *women are unknowable, women as sex objects, male sex drive is*

uncontrollable, entitlement, and *dangerous world* (Poleschek & Ward, 2002). A *women are unknowable* implicit theory suggests that women are inherently different from men and as such cannot be understood. A *women as sex objects* implicit theory would suggest that women are highly sexual, desire sex constantly and need to meet men's desires. The later three theories are similar to those of child sex offenders described above.

Whilst initially *implicit theories* were merely inferred from attitudinal measures qualitative investigations have since supported the presence of implicit theories in samples of rapists (Polaschek & Gannon, 2004;), child molesters (Mariano, Ward, Beech & Pattison, 2006) and sexual murderers (Beech, Fisher & Ward, 2006), and Implicit Association Tests have found evidence of *children as sexual beings* and *uncontrollability* implicit theories within samples of child molesters (Brown, Gray & Snowden, 2009; Nunes, Firestone & Baldwin, 2007). However there was notably more research investigating child molesters than other sexual offenders and a degree of variability and inconsistency within the research (e.g. Keown, Gannon & Ward, 2010).

The third reference to the term 'schema' in the sex offender literature is Young's Schema Model (1998, Young et al, 2003) which describes Early Maladaptive Schemas (EMS), as *"a broad, pervasive theme or pattern, comprised of memories, emotions, cognitions, and bodily sensations, regarding oneself or one's relationships with others, developed during childhood or adolescence, elaborated throughout one's lifetime, and dysfunctional to a significant degree"* (Young et al, 2003, p.7). Young's Schema Model was developed originally to assist in the understanding and treatment of Personality Disorder where Schema Focused Therapy has been shown to be effective in the reduction of dysfunctional behaviours and in increasing quality of life (e.g. Gleisen-Bloo et al., 2007; Young et al, 2003). Young's Schema Model defines 18 Early

Maladaptive Schemas (EMS) which fall under 5 domains: Disconnection and Rejection , Impaired Autonomy and Performance, Impaired Limits, Other-directedness, and Over-vigilance and Inhibition. The Young Schema Questionnaire (YSQ; Young, 1998, 2005) has been developed to determine the reported presence of Early Maladaptive Schemas (EMS). Please see Table 1 for details of the content of the EMS.

Richardson (2005) differentiated between a clinical and non-clinical group of sexually abusive adolescents by their EMS, where *Emotional Inhibition, Social Isolation* and *Mistrust/Abuse* were highest within the clinical population. Moreover, higher levels of *Entitlement, Insufficient Self-Control* and *Emotional Inhibition* were found to differentiate those who offended against children from those who offended against peers/adults. Similarly Manesh, Baf, Abadi and Mahram (2010) reported significantly elevated schemas in a sample of Iranian rapists compared to controls, particularly prevalent in the Disconnection/Rejection and Impaired Autonomy and Performance domains.

There is therefore some limited but promising research investigating the EMS and implicit theories of sexual offenders, however the findings have been somewhat inconsistent and highlight the need for further investigation, particularly looking at how EMS relate to sexual offending.

Within the sexual offending research more generally studies have found sexual entitlement to be a significant factor reported by rapists (Beech, Ward & Fisher, 2006; Polaschek & Gannon, 2004), sexual murderers (Beech, Fisher & Ward, 2005), child sexual offenders (Hanson, Gizzarelli & Scott, 1994; Marziano, Ward, Beech & Pattison, 2006; Ward & Keenan, 1999) and MDSOs (Adie & Lord, 2010). Similarly research has demonstrated that sexual offenders often present with deficits in self-regulation (Stinson, Robbins & Crow, 2011), which along with their poor ability to appropriately

select and manage goal directed behaviour could arguably relate to an *uncontrollability* schema and reflects one of the groups of clinical *symptoms* often found in sexual offenders (e.g. emotional/behavioural regulation problems; Ward & Beech, 2006). This research suggests the possibility of *entitlement* and *uncontrollability* schemas in sexual offenders and raises the question of whether these may be related to offence supportive attitudes.

1.4 Schemas and mental disorder

Studies investigating individuals with psychosis have used the Brief Core Schema Scale (BCSS) (Addington & Tran, 2009; Fowler et al., 2006), which assesses four dimensions reflecting positive/negative views of self/other. However the schemas conceptualised in the BCSS appear to be more closely related to the conceptualisation of attachment styles, than to schemas.

One study investigated the EMS of patients with Schizophrenia and found significantly higher scores on 12 out of 14 EMS compared to controls. However once depression was controlled for this reduced to six (*Emotional deprivation*, *Social isolation*, *Defectiveness*, *Enmeshment*, *Failure* and *Subjugation*) (Bortolon et al, in press). After controlling for depression, the Mistrust/Abuse EMS was also found to predict positive symptoms of Schizophrenia, suggesting a potential role for EMS within psychosis.

Similarly only one study was found that investigated the EMS of mentally disordered sexual offenders (MDSOs). Chakhissi, de Ruiter and Bernstein (2013) looked at the EMS of 23 child sexual offenders, compared to 19 offenders against adults and 24 nonsexual offenders held within a Dutch forensic psychiatric hospital. They

found that, after controlling for psychopathy, multivariate analysis of covariance indicated that the child sexual offenders had a significantly higher prevalence of *Abandonment*, *Social Isolation*, *Defectiveness/Shame*, *Subjugation* and *Self-Sacrifice* compared to non-sexual offenders. Child sexual offenders also showed a trend for higher scores in *Social Isolation*, compared to adult sexual offenders. Importantly, whilst this study demonstrated that EMS were more prevalent in child sexual offenders compared to nonsexual offenders, men with Schizophrenia or other psychosis were excluded from the study.

Whilst research investigating EMS within mentally disordered offenders is limited, there is growing interest in the application of Schema Therapy in forensic mental health settings. Preliminary results from a Dutch multicenter randomised clinical trial including hospitalised patients with antisocial, borderline, narcissistic, and paranoid personality disorders, diagnoses often associated with violence, suggested that Schema Therapy may be a promising treatment (Bernstein et al., 2012). Moreover Bernstein, Arntz and Vos (2007) extended Young's Schema Model to incorporate "schema modes" that are more commonly seen in forensic patients, suggesting again the relevance of schema constructs to the understanding and treatment of mentally disordered offenders..

Given the varied use of the term 'schema' in the literature and the differing methodologies, the decision to use Young's Schema Model to form the basis of the current study was primarily because Young's Schema Model is established in its utility within clinical populations, the Young Schema Questionnaire is used routinely in forensic mental health settings, and Schema Focused Therapy is growing in its application to forensic populations.

1.4 Rationale and aim of the research:

Over the past 15 years, there has been increasing support for the proposed presence of schemas in sexual offenders. This has implications for both treatment and risk management, with interventions potentially being directed towards an offender's underlying schemas rather than offence supportive attitudes (see Drake, Ward, Nathan & Lee, 2001; Mann & Beech, 2003). However research is still in its infancy, and the proposed relationship between schemas and offence supportive attitudes has yet to be empirically established. Similarly, despite being an important subgroup of sexual offenders, with an increased risk of sexual offending (e.g. Alden, Brenman, Hodgins & Medwick, 2007; Fazel, Sjostedt, Langstrom and Grann, 2007), research involving MDSOs is relatively sparse with clinicians typically adapting treatment from Sex Offender Treatment Programmes (SOTP) designed for men without a mental illness (Baker & White, 2002).

The current research therefore aimed to investigate the relationships between schemas and offence supportive attitudes within a sample of MDSOs. Previous studies investigating the schemas of non-MDSOs have often suggested the presence of *entitlement* and *uncontrollability* schemas. As such the current study hypothesised that *entitlement* and *uncontrollability* schemas (*Entitlement* and *Insufficient Self-Control* EMS) would be related to offence supportive attitudes within a sample of MDSOs.

2. Method:

2.1 Participants

The sample consisted of 31 male inpatients, held within low through high security forensic mental health units, between the ages of 23 and 65 years old (Mean 37.32, SD 12.43), who had 'a well documented history of sexual offending'. This included three men who possessed no convictions for sexual offences, but had well-documented *problematic sexual behaviour*. Thirty men also displayed evidence of *problematic sexual behaviour* prior to or during hospitalisation. The majority (n=26) of the sample had offended against adult females, 14 men had offended against female children and two men offended against male adults and children. Fifteen men had adult only victims, three men had child only victims and the remaining 13 men had mixed victims. A proportion of the men (n=19) had engaged in some form of treatment for sexual offending.

Regarding psychiatric diagnosis 21 men had a diagnosis of mental illness alone, two men had a diagnosis of personality disorder alone and eight men had co-morbid mental illness and personality disorder. Of the 29 men with a mental illness the majority had received a diagnosis of paranoid schizophrenia (n=23) and of the 10 men with a personality disorder diagnosis the most common was dissocial personality disorder (n=8).

The majority of the sample described themselves as either Black or Black British (n=12) or White British (n=12), a further three reported their ethnicity as Asian, three as Mixed ethnicity and one as South African. The majority of the sample had attended full time mainstream education until 16 years old (n=27) and 13 men had been employed full-time, four part-time, eight occasionally and six men had not engaged in any employment. Twenty-four men described their relationship status as single.

Men with a learning disability, a known brain injury and substance induced psychosis were excluded from the study. Similarly, men deemed to be high risk (e.g. current aggressive or inappropriate behaviour), men who did not have sufficient expression or comprehension of the English language, and men with active symptoms of mental illness to a degree that may have distracted them or limited informed consent were not appropriate to take part.

2.2 Measures

2.2.1 Young Schema Questionnaire - Short Version 3 (YSQ-S3; Young, 2005):

The YSQ-S3 is a 90 item self-report measure designed to assess 18 Early Maladaptive Schemas (EMS) with each scale comprising 5 items. Respondents are asked to rate how well a statement describes them on a 6 point scale (from 1="Completely untrue of me" to 6="described me perfectly").

The original questionnaire possessed adequate internal consistency and test-retest reliability as assessed in both student and clinical samples (Lee, Taylor & Dunn, 1999; Schmidt, Joiner, Young & Telch, 1996). Since its initial development the questionnaire has undergone a number of revisions and a short form has been designed (YSQ-S; Young, 1998). The YSQ-S and YSQ-L are seen as broadly comparable (Waller, Meyer & Ohanian, 2001) and the initial 15 factor structure of the YSQ-S has been confirmed in clinical samples (Hoffart et al., 2005; Welburn, Coristine, Dagg, Pontefract & Jordan, 2002). Furthermore, studies have demonstrated acceptable to very good internal consistency ($\alpha > .70$) for both the overall YSQ-S and its subscales (Waller et al., 2001; Welburn at al., 2002).

Within the current research the YSQ-S3 demonstrated acceptable internal consistency (α>.70) for all but two EMS (*Subjugation* and *Unrelenting Standards* α=.57 each).

2.2.2 Questionnaire on Attitudes Consistent with Sex Offending (QACSO; Lindsay, Whitefield, Carson, Broxholme & Steptoe, 2004):

The QACSO is a 60 item questionnaire, administered through interview, designed to assess attitudes that may be consistent with or permissive of sexual offending. A scoring technique of 0 and 1 was used, whereby 0 represents a socially acceptable response, 1 represents an unacceptable response and "don't know" responses are omitted.

Eight scales are present including: *Rape and Attitudes Towards Women*, *Voyeurism*, *Exhibitionism*, *Dating Abuse*, *Stalking and Sexual Abuse*, *Homosexual Assault* and *Offences Against Children*, as well as a social desirability scale. Table 2 details the content of the scales and the number of items included. Alpha coefficients for each scale are greater than .80 (except the *Homosexual Assault* scale), indicating high internal consistency. Within the current study the internal consistency of the scales, ranged from acceptable (*Rape and Attitudes towards Women* α=.80; *Voyeurism* α=.73; *Offences against Children* α=.80; and *Stalking and Sexual Harassment* α=.79) through to questionable (*Exhibitionism* α=.69 and *Dating Abuse* α=.62) and unacceptable (*Homosexual Assault* α=.21 and *Social Desirability* α=.32). The *Homosexual Assault* and *Social Desirability* scales were therefore excluded from subsequent analyses.

Although the QACSO was designed for use with men with intellectual disability, it was felt to be appropriate for use with men of all intellectual abilities due to its high face validity. Specifically, as the current research included men with a range of sexual offences and victims, the breadth of assessment provided by the QACSO was felt to be advantageous. Norms for a group of 'mainstream males' (22 non-offenders with

no intellectual disability recruited from a football team) were available for comparison (Lindsay, Whitefield & Carson, 2007).

2.2.3 Paulhus Deception Scales (PDS; Paulhus, 1999):

Given the transparency of attitude scales and the possibility of socially desirable responding an independent measure of socially desirable responding was used. The PDS is a 40 item self-report questionnaire designed to assess the tendency to produce socially desirable responses. Respondents are asked to rate a statement regarding how true it is of them on a five point scale (from 1="not true" to 5="very true"). It includes two scales: Self Deceptive Enhancement (SDE) and Impression Management (IM). The SDE scale assesses the tendency to give honest but inflated favourable responses, whereas the IM assesses conscious efforts to lie or fake good. Scores range from 0 to 20 on each scale, with an overall total out of 40. If items are omitted the scores are adjusted to increase accuracy. A cut off score of above 12 on the IM scale is used to determine whether respondents are likely to be "faking good".

The reported alpha coefficients of the scales suggest satisfactory reliability, with the SDE scale ranging from .70 to .75 and the IM and overall PDS scales ranging from .81 to .86 (Paulhus, 1998). Within the current sample IM and the PDS Total displayed acceptable internal consistency (α=.72 and .74 respectively) and SDE displayed good internal consistency (α=.81). The PDS is also reported to be strongly associated with other measures of socially desirable responding, suggesting good concurrent validity (Paulhus, 1998).

2.2.4 Demographic Information:

Demographic and offence related information were collected through interviews and file reviews.

2.3 Procedure

The sample was recruited from four secure units (low, medium and high security) in and around London. Consent to approach participants was gained from Responsible Clinicians and participants were given information about the study and provided written informed consent to take part. Testing was completed individually with the researcher in a quiet room on the ward, including details of the confidentiality of the information provided. Participant demographics were collected first through interview to encourage engagement, followed by the YSQ-S3, the PDS and the QACSO, in that order. The YSQ-S3 and the QACSO were completed through interview and the PDS completed independently by the participant. Testing typically took place over two, one hour sessions, however this was flexible and determined by the participant's level of concentration and engagement. Length of testing therefore ranged from one 60 minute session, to six 30 minute sessions. Whilst this meant that the assessments were not completely standardised, it was deemed necessary to enable the participants to complete the measures and to facilitate engagement within a population that is difficult to engage. At the end of testing participants were given the opportunity to receive feedback from the research and were entered into a prize draw as compensation for their time.

3. Results:

3.1 Data Screening:

The data was entered into and analysed using SPSS 19. The variables were screened for normality of distribution which indicated that five variables (YSQ-S3: *Abandonment;* QACSO: *Rape and Attitudes Towards Women, Offences Against Children, Stalking and Sexual Harrassment*; PDS Self Deceptive Enhancement) were not normally distributed

due to positive skew. Square root transformations were therefore computed for these variables, resulting in a normal distribution.

3.2 Descriptive Statistics:

Descriptive statistics for the three measures were produced. Table 3 summarises the means (M) and standard deviations (SDs) for the YSQ-S3 EMS. Observations of the data highlighted *Self-Punitiveness* and *Unrelenting Standards* to be the most highly endorsed schemas in the sample as a whole (M=17.19 and 16.87 respectively).

The means and standard deviations for the QACSO scales can be seen in Table 4 and compared to published norms for a group of mainstream males (Lindsay et al., 2004). Further analysis using one sample t tests and a Bonferonni corrected p value of .008 (for 6 comparisons p=.05/6=.008), revealed significantly higher mean QACSO scale scores in the research sample compared to the mean scale scores of the reference sample. However caution was used in interpreting the results of these tests as non-transformed variables were used as no non-parametric alternative test was available, and therefore parametric assumptions were not met.

The means and standard deviations for the PDS total (M=9.43, SD=4.98), Impression Management (IM) (M=6.47, SD=3.34) and Self Deceptive Enhancement (SDE) (M=3.34, SD=3.20) were calculated. Using a cut-off of above 12 on the IM scale, two men displayed evidence of *faking good* which would suggest their responses were invalid, and a further seven men displayed elevated IM scores (above 8). Pearson's correlation coefficients also demonstrated that IM was significantly negatively correlated with the *Entitlement* schema (Pearson's r=-.358, p<.05), and the PDS total was significantly negatively correlated with the *Entitlement* (Pearson's r=-.385, p<.05) and *Emotional Inhibition* schemas (Pearson's r=-.432, p<.05). The PDS scores were not

related to any of the QACSO scales. Therefore in order to retain the sample size, but to control for the impact of impression management in the participant's' responses, IM partialled correlations were calculated.

3.3 Correlational Analysis:

To investigate the relationship between schemas and offence supportive attitudes Pearson's correlations between the YSQ-S3 schemas and the QACSO scales were performed. Given the large number of correlations, the analysis was at risk of producing a type I error and Bonferroni corrections would have resulted in a restricted p value (p = .05/126 = 0.0004) leaving none of the correlations significant. Similarly the relatively small sample size restricted statistical power and meant that individual correlations could not be interpreted reliably. Instead the *pattern* of correlations was investigated. Initial and IM partialled correlations can be seen in Table 5.

As hypothesised, the Insufficient Self Control and Entitlement schemas (and also the Enmeshment schema) were positively associated with the greatest number of attitude subscales on the QACSO (4, 4 and 3 scales respectively). The *Rape and Attitudes towards Women* scale was positively associated with the most Early Maladaptive Schemas (9 schemas), followed by the *Offences Against Children* scale (4 schemas).Post-hoc analyses were used to further investigate the influence of impression management upon these key variables. Mann Whitney U Tests (used due to small group sizes) indicated no significant differences between the valid and invalid respondents on the three key EMS and two key QACSO scales (using a Bonferroni correction of p =.05/5=.01).

4. Discussion:

4.1 The relationship between schemas and offence supportive attitudes:

The current study hypothesised that there would be a relationship between the schemas and offence supportive attitudes of a sample of mentally disordered sexual offenders (MDSOs), particularly with respect to *entitlement* and *uncontrollability* schemas. The results suggested a pattern of relationships in which *Insufficient Self-Control*, *Entitlement*, and *Enmeshment* EMS were found to be associated with the greatest number of offence supportive attitudes.

Interestingly, both the *Insufficient Self-Control* and *Entitlement* EMS are comparable to the *Uncontrollability* and *Entitlement* implicit theories described by Ward and Keenan (1999) and Polaschek and Ward (2000) in child molesters and rapists respectively, and the *Sexual Entitlement* schema suggested by Mann and Shingler (2006). Therefore supporting the research hypothesis.

Using the descriptions in Young's Schema Model individuals with *Entitlement* and *Insufficient Self-Control* EMS may believe that their needs are more important than others and they have little control over their impulses. They are therefore likely to lack internal inhibitions or an understanding of reciprocity and present as unconstrained by rules, the needs of others and often act impulsively to reach personal goals or express emotional needs. However *Entitlement* EMS can also develop as *overcompensation* for other EMSs such as *Emotional Deprivation* - a pattern typically found in narcissistic individuals.

Regarding the *Enmeshment* EMS, it is argued that some individuals have difficulties separating from their family and in developing individuation, perhaps believing that they are unable to function independently. This mirrors the subjective account presented by a number of the research participants, who spoke informally

during the assessment about close relations with family members, not typical of their age. It is likely that individuals with such a schema would have difficulties developing appropriate personal and interpersonal goals and relationships. A desire for overly close relationships, with little social skills to achieve them, may result in offence supportive attitudes as a way of meeting an individual's interpersonal, intimacy and sexual needs.

Whilst this finding does not replicate evidence from previous research*Enmeshment* was found to be one of six EMS significantly elevated within a sample of patients with Schizophrenia, after controlling for depression (Bortolon et al, in press). It is therefore possible that within the current sample this finding may represent the influence of mental disorder, particularly as there is evidence to suggest that patients with schizophrenia show higher maternal overprotection compared to controls (Willinger et al, 2002). However this finding requires further investigation.

Interestingly the three schemas correlated with the greatest number of offence supportive attitudes were not the most endorsed schemas within the current research sample. Instead *Self-Punitiveness* and *Unrelenting Standards* were the highest endorsed schema, demonstrating a relatively unexpected pattern of EMS within this sample when compared to previous studies using the YSQ within samples of non-MDSOs (Manesh, Baf, Abadi & Mahram, 2010; Richardson, 2005). The endorsement of these schemas may reflect the high prevalence of psychosis within the sample and in particular the presence of paranoia. Whilst not assessed in this study, paranoia can often be separated into persecutory and punishment paranoia, with punishment paranoia reflecting a belief that the individual deserves inherently to be punished (e.g. Chadwick, Birchwood & Trower, 1996). It is possible therefore that the more prevalent EMS may potentially reflect the influence of mental disorder. However, the limited investigation of schemas within this population and

within mentally disordered populations more generally, restricted the comparisons and interpretations that could be made.

In summary, the results of the current study suggest that there was a positive relationship between *Entitlement*, *Insufficient self-control* and *Enmeshment* EMS and offence supportive attitudes within a sample of MDSOs, supporting the initial hypothesis and the research to date. Whilst a causal relationship cannot be inferred, the findings do support the theory that offence supportive attitudes are the product of sexual offenders' underlying schemas (Ward, Polaschek & Beech, 2006; Mann & Shingler, 2006; Ward, 2000). Whilst interpretation of the relationships between specific schemas and types of offence supportive attitudes is beyond the scope of this study it is possible that *Entitlement* or *Insufficient self-control* EMS for example could lead to the presence of offence supportive attitudes such as 'male sex drive is uncontrollable' or 'men are entitled to have sex with whoever they like', which in combination with other risk factors for sexual offending, may increase the risk that an individual may engage in sexual offending. Indeed, using Young's Schema Model, sexually entitled attitudes (or 'core cognitive distortions') and behaviours (such as schema *surrender, avoidance* or *over-compensation*) may emerge in a maladaptive attempt to cope when EMS are triggered by events such as a rejection from a significant other or an equivalent enactment of an earlier unmet need. However, the aetiology of sexual offending is complex, resulting from an interaction between a range of risk and protective factors as outlined by the Integrated Theory of Sexual Offending (ITSO; Ward & Beech, 2006) and likely to be unique to each sexual offender. It is therefore unlikely that a single schema leads to the presence of a particular offence supportive attitude, but rather that a particular pattern of schemas, in addition to other risk factors, lead to the presence of offence supportive attitudes which are permissive of sexual offending, and in interaction

with a number of other psychological, environmental and situational variables increase the risk of sexual offending.

4.2 Socially desirable responding:

Previous studies investigating the schemas of sexual offenders have found mixed evidence of socially desirable responding (Howitt & Sheldon, 2007; Mann & Hollin, 2010; Wood & Riggs, 2009). Whilst generally it has been shown that sexual offenders, compared to violent offenders, display higher levels of socially desirable responding, particularly with regards to child sexual offenders (Gannon, Keown & Polaschek, 2007; Gudjonsson & Sigurdsson, 2000; Tierney & McCabe, 2001), the evidence is somewhat inconclusive (Tan & Grace, 2008).

In an attempt to control for socially desirable responding in the current study, the Paulhus Deception Scales were used to assess the degree of impression management within the sample. The results suggested that the responses of nine men were potentially invalid. However there was no significant difference between the valid and invalid respondents on the most highly correlated schema and offence supportive attitude scales and controlling for impression management in the correlations had little impact on the results. Furthermore, there is evidence to suggest that controlling for impression management may actually exclude a degree of offence related variance when predicting recidivism (e.g. Mills & Kroner, 2005, 2006). Therefore the impact of socially desirable responding appeared to be minimal, consistent with Mathie and Wakeling's (2011) finding that socially desirable responding in sexual offenders is less than expected and has a limited influence on self-report methodologies.

4.3 Limitations:

In addition to being open to socially desirable responding, the use of self-report

measures relies on participants being able to consciously access their schemas. Whilst schemas are generally assumed to represent unconscious processes, the general principle of Schema Therapy and change suggests they can be brought under conscious control and awareness (Young, Klosko & Weishaar, 2003). However, subjectively, certain participants appeared to find responding to the YSQ-S3 more difficult than others suggesting there may be variability in the accessibility of individuals' schemas, dependent upon their level of insight and cognitive ability. Whilst implicit methodologies have been used to address this difficulty, (e.g. Brown, Gray & Snowden, 2009; Milhailidies, Devilly & Ward, 2004; Nunes, Firestone & Baldwin, 2007) future research is likely to benefit from a range of methodologies, aiming to elucidate current inconsistencies in findings (Keown, Gannon & Ward, 2010).

The measures within this study were also compared against available normative samples, however due to the scarcity of research utilising MDSO samples, many of the comparison samples were not equivalent. This raises queries about the suitability of these measures for MDSOs, and the need to develop psychometrically tested and normed measures for use with MDSO. Whilst this suggests a degree of caution in the interpretation of the current results, the main aim of the current study was not to determine whether the participants displayed clinically significant scores on the measures, but merely whether there was a relationship between their scores on the different assessments. Therefore the difficulty raised by limited comparison groups is minimal.

Notably the small sample size in the current study resulted in restricted statistical power. In an attempt to minimise the chances of a type II error, the pattern of correlations, rather than individual correlations was investigated, however the resultant interpretations were cautious and the results require replication. Importantly, the current

research included the largest known sample of MDSOs to be empirically tested within the literature.

The sample was also extremely heterogeneous, with regards to psychiatric diagnosis, sexual offending, and victim type, which has been noted in other MDSO studies (Hughes & Hebb, 2005). Whilst the aim of the current study allowed for the inclusion of a number of different types of MDSOs, it also brought in the possibility of confounds. Such difficulties with diagnostic and offending definitions are likely to be present in all research involving MDSOs, and consideration of resources, funding and sample size are likely to influence inclusion criteria.

4.4 Conclusions and implications:

The current study revealed a relationship between the schemas of *Entitlement*, *Insufficient Self-Control* and *Enmeshment* and attitudes consistent with sexual offending in a sample of MDSOs.

The findings support previous research which highlights the importance of *entitlement* and *uncontrollability* schemas in sexual offenders (Mann & Shingler 2006; Polaschek & Ward 2000; Ward & Keenan, 1999) and suggests a relationship between schemas and offence supportive attitudes in MDSO's.

The present study also noted a number of similarities between MDSOs and previous studies of non-MDSOs in terms of demographics, offence related variables, schemas and offence supportive attitudes (e.g. Cantor et al., 2006; Connolly & Woollons, 2008; Starzyk & Marshall, 2003) – characteristics which are established risk factors for offending recidivism (Hanson & Harris, 2000; Hanson & Morton-Bourgon, 2005). This suggests that some aspects of Sexual Offender Treatment Programmes (SOTPs) designed for non-MDSO populations may be beneficial for MDSOs. Research

on group therapy for MDSOs (Clarke, Tapp, Lord & Moore, in press) has demonstrated that treatment programmes can be adapted for this client group as long as their mental state and treatment readiness are assessed and person-specific support is provided. The relationship between schemas and offence supportive attitudes therefore suggests that schemas may be an appropriate treatment target and indeed the work of Bernstein and colleagues (2007, 2012) suggests that if Schema Focused Therapy can modify particular aspects of personality functioning associated with risk of antisocial conduct, then arguably it can be considered an 'offence-focused' intervention (Beckley, 2011).

Notably this study is one of the first to investigate schemas within a MDSO sample, and includes the largest known sample of MDSOs in research to date. Whilst the study included a relatively representative sample of MDSOs, this also meant that a number of inherent methodological limitations were present. The need for further investigation within this relatively understudied population is highlighted, both to increase our understanding of sexual offending and the role of mental disorder in sexual offending, but most importantly to further the development of appropriate treatment.

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Table 1**:** The 18 Early Maladaptive Schemas, separated into 5 domains, including brief descriptions:

	DISCONNECTION AND REJECTION DOMAIN
1.	Abandonment/Instability I*nstability in relationships due to the belief that others are unreliable or will leave.*
2.	Mistrust/Abuse *The belief that others will be abusive in some way.*
3.	Emotional Deprivation *The belief that others will not be able to appropriately meet their needs for emotional support.*

4. Defectiveness/Shame

   The belief that they are inferior or less than others in some way.

5. Social Isolation/Alienation

   The belief that they are different and separate from others.

IMPAIRED AUTONOMY AND PERFORMANCE DOMAIN

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6. Dependence/Incompetence

   The belief that they cannot tackle everyday tasks and problems on their own.

7. Vulnerability to Harm or Illness

   The belief that they are at risk of imminent harm.

8. Enmeshment/Undeveloped Self

   Difficulties with self identity stemming from overly close relationships, typically with a primary care giver, including a belief that one cannot survive without the other.

9. Failure

   The belief that they have or are likely to fail in comparisons to others.

IMPAIRED LIMITS DOMAIN

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10. Entitlement/Grandiosity

    The belief that they are superior to others and therefore should not be constrained by the same rules or regulations.

11. Insufficient Self-Control/Self-Discipline

    Difficulty or refusal to inhibit emotions or impulses, which may interfere with meeting goals.

OTHER-DIRECTEDNESS DOMAIN

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12. Subjugation

    The belief that their desires and needs are not as important as others.

13. Self-Sacrifice

A tendency to focus excessively on the needs of others, often to their own detriment.

14. Approval-Seeking/Recognition-Seeking

A desire of attention and approval from others, on which their self esteem is contingent.

OVERVIGILANCE AND INHIBITION DOMAIN

15. Negativity/Pessimism

A tendency to focus on negative aspects of experience, including the belief that ultimately things will go wrong.

16. Emotional Inhibition

The belief that emotions should be controlled and not shown to others for fear of a negative reaction or losing control.

17. Unrelenting Standards/Hypercriticalness

The belief that they must meet inflexible high standards, including a tendency to be critical of themselves and others.

18. Punitiveness

The belief that mistakes should be punished.

Table 2: The QACSO Scales, including number of items and brief descriptions of content.

QACSO Scale	No. of items
Rape and attitudes to women	11
Attitudes and beliefs that support rape and sexual assaults against adult women. For example: if a rape occurs it means the women must have wanted it to.	
Dating abuse	8
Attitudes and beliefs which support abusive dating behaviours and potential offending. For example: A women is playing a game if she makes out she does not want to kiss on a date.	
Voyeurism	8
Attitudes and beliefs that support staring and voyeuristic inappropriate sexual behaviours. For example: women like men to stare at their bodies.	

Exhibitionism	5
Attitudes and beliefs which support flashing at women. For example: flashing at someone is a good way to show them that you want to have sex.	
Stalking	10
Attitudes and beliefs which support men following women. For example: women feel attractive when men follow them.	
Homosexual assault	4
Attitudes and beliefs which support sexual assaults against males. For example: A man forcing another man to have sex is just a bit of fun.	
Offences against children	12
Attitudes and beliefs which support sexual contact with children. For example: some children enjoying having sex with adults.	

Table 3. YSQ-S3 EMS means and SDs.

Schemas	Mean	SD
Abandonment	12.16	5.09
Mistrust	13.32	6.36
Emotional deprivation	11.81	5.55
Defectiveness/Unlovability	11.10	5.32
Social Isolation/Alienation	14.48	5.93
Practical Incompetence/Dependence	12.77	5.88
Vulnerability to Harm or Illness	12.61	6.08
Enmeshment	10.74	5.51
Failure to Achieve	12.68	6.58

Entitlement/Superiority	14.10	4.89
Insufficient Self-Control/Self-Discipline	13.94	5.83
Subjugation	12.45	4.50
Self sacrifice	14.97	5.83
Admiration/Recognition Seeking	15.16	5.51
Pessimism/Worry	14.90	6.19
Emotional Inhibition	12.71	5.44
Unrelenting Standards	16.87	4.99
Self-Punitiveness	17.19	6.03
Total	*241.68*	*73.03*

Table 4: Means and SDs of the QACSO scales, compared to a reference sample using one sample t tests

			Mainstream Males:			Sig. (2
	Mean	SD	Mean (SD)	t	df	tailed)
Rape and Attitudes Towards Women	1.29	1.88	0.1 (0.30)	3.52	30	.001
Voyeurism	3.84	2.18	0.61 (0.80)	8.26	30	.000
Exhibitionism	1.39	1.45	0.12 (0.33)	4.86	30	.000
Dating Abuse	2.29	1.95	0.32 (0.65)	5.62	30	.000
Offences Against Children	2.13	2.45	0.06 (0.25)	4.71	30	.000
Stalking and Sexual Harassment	2.42	2.58	0.45 (0.77)	4.25	30	.000

Table 5: Initial and PDS IM partialled correlations between YSQ-S3 schema and QACSO scales

				YSQ-S3 Schema																
				Abandonment	Mistrust	Emotional deprivation	Defectiveness/Unlovability	Social Isolation/Alienation	Practical Incompetence/Dependence	Vulnerability to Harm or Illness	Enmeshment	Failure to Achieve	Entitlement/Superiority	Insufficient Self-Control/Self-Discipline	Subjugation	Self sacrifice	Admiration/Recognition Seeking	Pessimism/Worry	Emotional Inhibition	Unrelenting Standards	Self-Punitiveness
QACSO Scales	Rape & Attitudes to Women	Initial Correlations	Pearson's r	**.463****	.304	**.396***	.320	**.412***	**.441***	.314	**.408***	.313	**.473****	**.595****	**.516****	.202	.306	.337	**.414***	.173	.026
			Sig	.009	.096	.027	.079	.021	.013	.086	.023	.087	.007	.000	.003	.275	.094	.064	.021	.351	.888
		PDS IM Partialled	Pearson's r	**.453***	.288	**.406***	.298	**.398***	**.425***	.291	**.393***	.292	**.462***	**.588****	**.506***	.234	.296	.315	**.397***	.176	.034
			Sig	.012	.123	.026	.109	.030	.019	.118	.032	.118	.010	.001	.004	.213	.112	.090	.030	.352	.858
	Voyeurism	Initial Correlations	Pearson's r	.064	-.001	.066	-.048	.084	.273	.046	.177	.061	.180	.223	.195	.141	.008	.095	.047	-.076	-.201
			Sig	.731	.996	.723	.800	.654	.137	.808	.340	.743	.332	.229	.294	.448	.967	.610	.803	.686	.279
		PDS IM Partialled	Pearson's r	.049	-.022	.072	-.085	.062	.254	.013	.158	.033	.150	.199	.168	.168	-.004	.064	.017	-.075	-.196
			Sig	.797	.908	.706	.656	.744	.176	.944	.403	.863	.428	.291	.375	.374	.982	.737	.928	.694	.300
	Exhibitionism	Initial Correlations	Pearson's r	.139	.112	.158	.098	.210	**.401***	.297	.242	.251	.286	.342	.334	.187	.059	.271	.108	.168	-.047
			Sig	.457	.548	.394	.598	.257	.025	.105	.190	.174	.119	.060	.066	.315	.754	.140	.565	.366	.802
		PDS IM Partialled	Pearson's r	.143	.118	.158	.109	.218	**.421***	.316	.251	.265	.313	**.363***	.360	.186	.061	.291	.117	.168	-.048
			Si	.451	.535	.405	.567	.246	.021	.089	.181	.157	.092	.048	.050	.324	.749	.119	.539	.375	.801
	Dating Abuse	Initial Correlations	Pearson's r	.275	.255	.036	.110	.304	**.375***	.257	**.379***	**.363***	.315	**.573****	**.356***	.314	.240	.306	**.373***	-.064	.032
			Sig	.134	.166	.847	.557	.096	.038	.163	.035	.045	.085	.001	.049	.085	.193	.094	.039	.731	.865

			YSQ-S3 Schema																
			Abandonment	Mistrust	Emotional deprivation	Defectiveness/Unlovability	Social Isolation/Alienation	Practical Incompetence/Dependence	Vulnerability to Harm or Illness	Enmeshment	Failure to Achieve	Entitlement/Superiority	Insufficient Self-Control/Self-Discipline	Subjugation	Self sacrifice	Admiration/Recognition Seeking	Pessimism/Worry	Emotional Inhibition	Unrelenting Standards	Self-Punitiveness
	PDS IM Partialled	Pearson's r	.251	.221	.048	.042	.268	.333	.201	.347	.320	.252	**.541***	.302	**.381***	.223	.251	.330	-.064	.047
		Sig	.181	.240	.800	.827	.152	.073	.286	.060	.085	.180	.002	.105	.038	.237	.181	.075	.737	.803
Offences Against Children	Initial Correlations	Pearson's r	.284	**.412***	.264	.269	.316	**.381***	**.393***	**.414***	.347	**.417***	**.460****	**.377***	.121	.253	.264	.353	.098	-.106
		Sig	.122	.021	.152	.144	.083	.034	.029	.021	.056	.020	.009	.037	.516	.170	.151	.052	.600	.570
	PDS IM Partialled	Pearson's r	.265	**.391***	.277	.228	.289	.350	.360	**.391***	.314	**.381***	**.431***	.339	.165	.238	.221	.320	.102	-.097
		Sig	.157	.033	.138	.227	.122	.058	.051	.033	.091	.038	.017	.067	.384	.205	.241	.085	.592	.610
Stalking & Sexual Harassment	Initial Correlations	Pearson's r	.041	.256	.125	.025	-.115	.080	.011	**.397***	-.179	.297	.021	.101	.166	.224	.029	.239	.052	-.107
		Sig	.827	.164	.502	.892	.539	.669	.953	.027	.336	.105	.911	.588	.372	.226	.876	.195	.781	.568
	PDS IM Partialled	Pearson's r	.065	.294	.120	.076	-.085	.128	.061	**.444***	-.144	**.384***	.072	.165	.139	.245	.083	.296	.051	-.118
		Sig	.733	.115	.529	.689	.656	.501	.751	.014	.449	.036	.705	.384	.464	.191	.662	.112	.789	.536

* Correlation significant at the .05 level

** Correlation significant at the .001 level