A Personality-based Typology of Adolescent Sexual Offenders using the Millon Adolescent Clinical Inventory

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Previous research suggests that identifying specific subgroups amongst the population of adolescent sexual offenders may contribute to understanding the aetiology of their offending. Such knowledge may also help to improve the treatment outcomes for this group. The Millon Adolescent Clinical Inventory (MACI) profiles of 25 adolescent male sexual offenders aged 13 to 17 in a community-based treatment sample were analysed to determine if this measure could be used to identify different subtypes of offenders based on personality variables. Three groups were identified by cluster analysis: one group of antisocial and externalising types (n = 11), another group of withdrawn, socially inadequate types (n = 7) and a third group displaying few traits of clinically significant elevation (n = 7). Support was also shown for the hypothesis that adolescent sexual offenders exhibit personality profiles similar to those of delinquent non-sexual offenders. The observed typology suggests potentially different etiological pathways and different treatment needs.

Until the 1980s there was little systematic research of the sexual offending of adolescents (Becker, 1990; Ryan, Lane, Davis, & Isaac, 1987). Largely brushed aside as a product of sexual experimentation or curiosity, investigative attention was primarily focussed on adult sexual offending (Becker & Abel, 1985; Davis & Leitenberg, 1987; Lightfoot & Evans, 2000). Despite the comparative lack of research emphasis in this area, the extent of sexual offending by adolescents is difficult to ignore. Truscott (1993) found that in the United States adolescents committed 20% of all rapes and approximately 30% to 50% of all cases of child sexual abuse. In their review of the literature, Davis and Leitenberg (1987) report that approximately 50% of adult sex offenders report that their first sexual offence occurred during adolescence. This suggests that unless intervention occurs early in the offending career of the adolescent, sexual offending will frequently persist into adulthood (Valliant & Bergeron, 1997; Fehrenbach, Smith, Monastersky, & Deisher, 1986; Kavoussi, Kaplan, & Becker, 1988). From a New Zealand perspective, a 1997 study utilising available police data found that juvenile sexual offending had constituted about 11% of the total annual rate of sexual offending in New Zealand for the 9 years prior, with many of these offences being committed against children (Graveson, 1997; cited in Lightfoot & Evans, 2000). Anderson, Martin, Mullen, Romans, and Herbison (1993) interviewed 497 New Zealand women and found that nearly one third had reported at least one incidence of sexual abuse prior to age 16. One-quarter of the perpetrators of this abuse were males younger than 18. Additionally, it has been noted that unlike acts of physical violence or property offences, sexual offending is significantly under-reported and only a small number of offences committed by adolescents result in an arrest or criminal conviction (Groth & Loredo, 1981).

Although they were once considered to be a homogeneous group, characterised by "perverted and voyeuristic tendencies" (Groth, 1977), current research suggests that adolescent sexual offenders are a heterogeneous population with a diverse range of offence variables, contributing etiological factors and personality constructs (Veneziano & Veneziano, 2002). As such, some researchers have attempted to categorise adolescent sexual offenders into distinct subtypes. Such typologies typically involve classification according to offence type or personality variables.

One of the first studies to classify adolescent sexual offenders was a descriptive typology stemming from the clinical experience of O'Brien and Bera (1986). These researchers identified seven types of offender, whom they labelled the naïve experimenter, the unsocialised child sexual exploiter, the pseudo-socialised child exploiter, the sexually aggressive offender, the sexually compulsive offender, the disturbed impulsive offender, and the group influenced offender. This classification scheme reflected variations in offence and victim characteristics, family background, temperament, socialisation, mental status, peer influence, substance abuse, cognitive

ability, and conduct problems. The model has been described as having significant face validity and is used by many residential facilities (Murphy, Haynes, & Page, 1992; Veneziano & Veneziano, 2002). However, to date there are no data available regarding the statistical reliability or validity of this system.

Some research suggests that identifying specific personality variables amongst adolescent offenders is a more effective way of predicting future offending than other variables such as age and number of prior offences (Steiner, Cauffman, & Duxbury, 1999; Stefurak, Calhoun, & Glaser, 2004). Researchers also note that matching interventions with personality characteristics may provide a more effective way of rehabilitating offenders than generic interventions (Worling, 2001; Goldstein & McGinnis, 1997). Subsequently, several researchers have attempted to form personality-based typologies of adolescent sexual offenders using standardised psychometric measures. Smith, Monastersky and Deisher (1987) used a factor-analysis of the MMPI to identify a four-factor solution that accounted for 79.9% of the variance in their sample of youths who were involved in a community sexual offending treatment programme. Two of the subtypes included normal range profiles, and another two contained abnormal range profiles. In contrast to the researchers' initial expectations, analyses did not yield any relationship between MMPI group membership and victim characteristics such as age or gender. Additionally, Smith et al. (1987) found few differences in the reasons for treatment referral, offenders' historical and background variables, or their clinical presentations.

In a replication of the Smith et al. (1987) study, Worling (2001) established a personality typology of adolescent sexual offenders using the California Personality Inventory. Worling also observed four distinct subtypes of offenders whom he labelled antisocial/ impulsive, overcontrolled/reserved, unusual/isolated, and confident/ aggressive. Consistent with the Smith et al. (1987) study, Worling identified two relatively healthy personality-based groups and two more pathological profile types. Within the healthier groups, one profile type was over-controlled and socially withdrawn, which Worling called overcontrolled/ reserved. The second group was described as honest and outgoing adolescents who are prone to aggression toward others, referred to as the confident/aggressive group. Within the more pathological types, one group was antisocial and prone to act out with minimal provocation, which Worling called the antisocial/impulsive group. The other pathological group was emotionally disturbed and insecure, referred to as the unusual/isolated group.

Only one other published study was located that has utilised the Millon Adolescent Clinical Inventory (MACI) as a means of classifying adolescents involved in a treatment programme for sexual offending. Similar to the current study, Richardson, Kelly, Graham and Bhate (2004) conducted a cluster analysis of the MACI personality pattern scales and identified five prototypes of offender. Labelled normal, antisocial, submissive, dysthymic/inhibited and dysthymic/negativistic, the groups represented a broad range of behavioural and psychopathological concerns. Richardson et al.'s (2004) examination of the relationship between personality characteristics and the nature of offending did not yield any significant links between specific profiles and offence characteristics. The small group sample sizes however limited the power of such analyses.

A small number of studies have observed a relationship between personality and specific offending behaviours and victim characteristics. A study by Herkov, Ginther, Thomas and Myers (1996) analysed the MMPI responses of 61 adolescent sexual offenders who had been classified according to whether they had committed vaginal rape, sexual molestation, or anal rape. The researchers found that those youths who had committed anal rape scored higher on the Schizophrenia scale of the MMPI than did the vaginal rape and sexual molestation offenders. This scale is characterised by social alienation and poor interpersonal relationships. The anal rape group also scored higher on the Psychopathic Deviate scale and had younger victims than the other groups. Herkov et al. concluded that those adolescents who engage in anal rape show a "more severe degree of psychological maladjustment" (p.88), their victim choice and choice of sexual act correlating strongly with an extremely poor social awareness and a lack of social skills (Herkov et al., 1996).

Using the Millon Clinical Multiaxial Inventory (MCMI), Carpenter, Peed and Eastman (1995) found that adolescents who had offended against children (less than 12 years of age) scored significantly higher on the Schizoid, Avoidant, and Dependent scales, compared to adolescents who offended against their peers (victims at least 13 years of age). In contrast to the older-age victim group, the child-victim group also scored within the clinically significant range on the Dependent scale. The researchers did not observe a significant difference between the two groups on the Histrionic and Narcissistic scales, while both groups scored within the clinical range on the Antisocial Personality scale. Additionally, Carpenter et al. (1995) found that peer offenders displayed more narcissistic traits, whereas the child offenders showed more schizoid, avoidant and dependent traits. The researchers concluded that while conduct disorder was a significant aspect of the personalities of the members of each group, those offenders whose victims were children were more likely to have difficulty relating to peers and may feel more comfortable with less mature youth.

Hunter, Figueredo, Malamuth, and Becker (2003), observed that youth who sexually offend against prepubescent children display greater deficits in psychosocial functioning than those who victimise pubescent females. Child victimisers were less aggressive in their sexual offending and more likely to offend against people to whom they were related. The researchers found that those offenders with prepubescent victims view themselves as socially inadequate and anticipate peer ridicule and rejection. These youths acknowledge their dependence on adults and their preference for the company of younger children.

Available research also suggests that there are similarities as well as differences in the profiles of adolescents

who commit sexual offences compared to those adolescents who offend in aggressive but non-sexual ways. Hastings, Anderson and Hemphill (1997) assessed daily stress, coping behaviours, problem behaviours and cognitive distortions in a sample of adolescent sexual offenders, conduct-disordered youths and a control group of adolescent non-offenders. The three groups reported similar overall levels of stress and positive self-cognitions. However, the adolescent sexual offenders and conduct-disordered youths reported more negative self-cognitions than the control group. The conduct-disordered youths also scored higher than the adolescent sexual offenders and the control group on avoiding problems. Furthermore, the conduct-disordered youth reported violence and aggression as being common amongst their family and peer groups, while the sexual offenders described their developmental histories as being more likely to involve maltreatment and sexual abuse.

Valliant and Bergeron (1997) compared adolescent sexual offenders, general offenders and non-offenders on psychometric tests to assess differences in their general intelligence, personality, and criminal attitudes. On the MMPI clinical scales, the sexual- and general-offenders scored higher than the non-offenders on Psychopathic Deviate, Paranoia and Schizophrenia scales. Additionally, these two offender groups scored higher on the Antisocial Tendencies, Chemical Abuse, Thought Disturbance, and Self-Depreciation measures among the Harris-Lingoes scales. The researchers suggest these characteristics are congruent with their hypothesis that offender populations have a number of antisocial personality characteristics that highly influence their criminal intentions. Valliant and Bergeron found the sexual offender group to be less thought-disordered than the general-offender population but described the sexual offenders as a "sub-group of perpetrators who are resentful and isolated individuals with internalised assaultive tendencies" (p486).

In a longitudinal study, Elliot (1994) reported that rape is often the final step in a progressive sequence of violent criminal activity. Aggravated assault preceded rape in 92% of cases and robbery preceded rape in 72% of cases. The rapists in this study had committed virtually every form of violent offence; the usual sequence of criminal behaviour progressed from aggravated assault to robbery to rape. Elliot observed one subset of sexually aggressive offenders who were characterised by a "core antisocial character structure in which sexual aggression is only one facet of a lifestyle in which the individual opportunistically exploits others for personal gain and gratification" (p.11).

The current study attempted to identify a typology of adolescent sexual offenders using the MACI. In accordance with previous research (O'Brien & Bera, 1986; Smith et al., 1987; Worling, 2001; Richardson et al., 2004) and the clinical experience of those working with this population, three basic categories were hypothesized: one characterised by an internally focussed, self-critical orientation, another characterised by an externally focussed, hostile orientation, and a third displaying comparatively few symptoms of clinical concern.

Method

Participants

The participants in this study were male adolescents (N = 25) taking part in a community treatment programme for adolescent sexual offenders. The mean age of the 25 participants was 15.4 years, with a range from 13 to 17 years. Adolescents referred to this programme have committed a range of sexual offending, although the majority have been found to engage in hands-on sexual acts including vaginal and anal penetration and oral-genital contact. For the current study, additional demographic or offence data was not available.

Instruments

The MACI (Millon, 1993) is a 160-item self-report inventory for adolescents between the ages of 13 and 18. It uses a true or false format, and is designed to assess personality patterns, significant personal concerns and clinical symptoms in adolescents. The MACI contains 12 personality pattern scales related to the Axis II personality disorders classified in the DSM-IV and designed to reflect the personality styles derived from Millon's personality theory. The personality pattern scales are labelled Introversive, Inhibited, Doleful, Submissive, Dramatizing, Egotistic, Unruly, Forceful, Conforming, Oppositional, Self-Demeaning, and Borderline Tendency. The MACI also provides clinical information through expressed concerns and clinical syndromes scales to assist in the diagnosis of adolescent psychopathology (Richardson et al., 2004). The eight expressed concerns scales assess significant developmental problems and reflect the adolescent's perception of their difficulties. The expressed concerns scales are labelled Identity Diffusion, Self-Devaluation, Body Disapproval, Sexual Discomfort, Peer Insecurity, Social Insensitivity, Family Discord, and Childhood Abuse. Seven MACI scales measuring clinical syndromes identify acute and serious behavioural and emotional concerns correlated with DSM-IV problem descriptions (American Psychiatric Association, 1994). The clinical syndromes scales are labelled Eating Dysfunctions, Substance Abuse Proneness, Delinquent Predisposition, Impulsive Propensity, Anxious Feelings, Depressive Affect, and Suicidal Tendency.

Raw scores for each of the MACI scales are converted to base rate scores from 0 to 115. Base rate scores above 75 indicate that a characteristic is clinically present for a given subject; scores above 85 indicate that the characteristic is clinically prominent. There are three additional scales that serve as validity indexes: Desirability (denying or minimising emotional problems), Debasement (complaining excessively, exaggerating, or fabricating emotional problems) and Disclosure (willingness to self-disclose). The MACI derives its norms from a sample of adolescents in clinical settings. Actuarial base rate standardisation was used to generate the standard scale scores of the MACI, so that the frequency of significant scale elevations are tied to observed frequencies of the various diagnoses and clinical syndromes in adolescent

clinical populations. Standardisation takes into account both age and gender. The MACI is a widely used personality measure for adolescent clinical populations (Salekin, Larrea, & Ziegler, 2002). Millon (1993) reported acceptable internal consistency and test-retest reliability estimates, and adequate validation for this instrument. Subsequent studies have consistently reported sound psychometric properties for the MACI, with internal consistency figures ranging from .71 to .93 across the various scales (Blumentritt, VanVoorhis, & Wilson, 2004; Pinto & Grilo, 2004; Salekin, 2002; Velting, Rathus, & Miller, 2000). In line with common clinical practice, base rate scores rather than raw scores were used in the current study.

Procedure

The MACI was administered to participants as part of the routine assessment conducted by the treatment programme. Tests were hand scored by programme staff and entered into a computer database. From this database, participants' base rate scores for each scale were obtained.

Data Analysis

The 12 personality pattern scales of the MACI were entered into a hierarchical cluster analysis using Ward's clustering method, a commonly used procedure for forming hierarchical groups of mutually exclusive subsets (Ward, 1963, Borgen and Barnett, 1987). Ward's method involves the organisation of data into a proximity matrix, before combining groups to derive the least possible within-group variance and highest possible between-group variance. This procedure has been used by previous researchers who have investigated the classification of groups of adolescents through the MACI (Stefurak et al., 2004; Richardson et al., 2004). The current analysis resulted in a three-cluster solution. This was deemed to provide an optimal balance between within-cluster homogeneity and between-cluster heterogeneity. Once cluster group membership had been established for each participant, the groups were then compared by their mean scores on each of the personality pattern scales through a series of one-way ANOVAs with the scales of the MACI as dependent variables and cluster groupings as independent variables. Tukey post hoc *t* tests were conducted to determine which cluster groups were statistically different on each scale. Additional description and support for the distinctive features of the cluster groupings was provided by comparing mean scores on each of the expressed concerns and clinical syndromes scales of the MACI using ANOVA and Tukey post hoc *t* tests.

Results

The Ward's cluster analysis of the 12 MACI personality pattern scales revealed a distinctive three-group solution. Examination of scale elevations within each of the three groups suggested the labels of antisocial (N=11), inadequate (N=7) and normal-range (N=7). Examination of the mean scale scores and subsequent ANOVAs for the expressed concerns and clinical syndromes scales provided support for the distinctive characteristics of the three groups. Table 1 provides the MACI Personality pattern scale means, standard deviations, and ANOVA results for each group. Table 2 provides the same information for the MACI expressed concern and clinical syndrome scales.

As can be seen in Table 1, the highest elevations for the antisocial group were on the Unruly and Oppositional scales, with the mean elevation on the Unruly scale being significantly higher than either of other two groups. For the inadequate group, the highest elevations were on the Introversive, Inhibited and Self-Demeaning scales, with mean elevations on these scales significantly higher than either of the antisocial or normal-range groups. For the normal range group, no personality

Table 1. Mean base rate Millon Adolescent Clinical Inventory (MACI) Personality patterns scale scores and standard deviations

	Antisocial (n=11)		*Inadequate* (n=7)		*Normal-Range* (n=7)		ANOVA	
MACI Scale	M	SD	M	SD	M	SD	*F*	*p*
1 Introversive	61.27*a*	7.43	73.14*b*	13.93	49.14*a*	15.74	6.92	.01
2A Inhibited	56.45*a*	11.25	77.00*b*	11.63	46.71*a*	19.64	8.49	.00
2B Doleful	61.09*a*	15.15	73.14*a*	10.09	36.86b	20.56	9.78	.00
3 Submissive	47.91*a*	11.47	50.00*a*	14.57	60.71*a*	8.83	2.68	.09
4 Dramatizing	51.45*a*	5.84	29.29*b*	17.80	57.57*a*	6.32	14.17	.00
5 Egotistic	47.64*a*	8.04	25.86*b*	10.95	56.43*a*	11.47	18.02	.00
6A Unruly	85.00*b*	10.51	60.57*a*	12.43	54.29*a*	17.00	14.09	.00
6B Forceful	67.00*a*	11.31	51.43*a*	25.14	27.29*b*	11.72	12.59	.03
7 Conforming	37.18*a*	6.94	33.43*a*	15.76	58.86*b*	6.62	13.58	.00
8A Oppositional	75.91*a*	3.33	73.00*a*	15.51	47.86	17.31	12.11	.00
8B Self-Demeaning	56.91	14.83	75.14	11.71	21.86	11.45	29.96	.00
9 Borderline	56.18*a*	16.58	62.14*a*	10.87	25.43*b*	10.24	15.24	.00

Note: Mean cluster scores that share a common superscript in each row indicate differences were not significant at the $p < .05$ level on Tukey post hoc tests.

pattern scale means reached a clinically significant level of elevation.

Examination of Table 2 reveals that the primary elevations on the expressed concerns and clinical syndrome scales for the antisocial group were on Family Discord, Delinquent Predisposition, and Impulsive Propensity. For the inadequate group, primary elevations were on Self-Devaluation, Peer Insecurity, Depressive Affect and Childhood Abuse. For the normal range group, there were again no scales that reached a clinically significant level of elevation on average.

The personality pattern elevations exhibited by the antisocial group reflect tendencies to act out in an aggressive and unpredictable manner. Such youth are typically asocial and unemotional and lack the desire or skills required to form close, affectionate relationships. Essentially, this profile is consistent with a clinical diagnosis of conduct disorder; a propensity to humiliate and dominate is prominent (American Psychiatric Association, 1994). Given that the antisocial group's mean score on the Delinquent Predisposition scale is 20 base rate points higher than either of the other two identified groups, this result suggests more generally disruptive and diverse offending than either the inadequate or normal-range type adolescents. The offending of this group is in the context of a generally more antisocial lifestyle. Additionally, the mean Substance Abuse Proneness scale score for this group was 70.09, pointing to maladaptive patterns of drug and alcohol use.

In contrast, the personality pattern elevations presented in Table 1 for the inadequate group reflect youth who internalize distress and experience significant emotional, cognitive or behavioural dysfunction. Adolescents with such profiles are described as irritable while exhibiting a propensity to be self-debasing and pessimistic. This group's scale elevations reflect chronic dysthymic traits. This pattern is associated with those who, although they may desire the company of peers and want to form relationships, have typically learned it is better not to trust the friendship of others for fear of rejection (Millon, 1993). As shown in Table 2, a striking feature of the profile presentation of this group was a mean Childhood Abuse scale score of 74.29, which is 16 base rate points higher than either of the antisocial and normal-range groups. This outcome indicates that a high number of this group report being victims of significant physical, sexual and verbal abuse at the hands of parents or family members (Millon, 1993).

The profile of the normal-range group highlights the relative lack of significant elevation on any of the personality pattern, expressed concerns, or clinical syndrome scales. These youth could best be described as exhibiting an anxious and dependent desire to follow rules and meet the expectations of others. Based on the slight mean elevation shown on the Sexual Discomfort scale, members of this group endorsed items associated with the experience of sexual maturation as confusing and uncomfortable (Millon, 1993).

Discussion

Results of the cluster analysis provide support for the hypothesised three-group typology of adolescent sexual offenders. In particular, the cluster groupings suggest the presence of a hostile and aggressive profile type, a self-depreciative and internalising profile type, and a third type that displays few

Table 2. Mean base rate Millon Adolescent Clinical Inventory (MACI) Expressed Concerns and Clinical Syndromes scale scores and standard deviations

	Antisocial (n=11)		*Inadequate* (n=7)		*Normal-Range* (n=7)		ANOVA	
MACI Scale	M	SD	M	SD	M	SD	*F*	*p*
A Identity Diffusion	63.36*a*	17.79	72.14*a*	9.35	38.14*b*	16.60	9.19	.00
B Self-Devaluation	58.64	21.50	87.42	20.87	22.14	7.40	21.28	.00
C Body Disapproval	36.27	18.35	59.43	19.11	14.29	12.83	11.99	.00
D Sexual Discomfort	51.00*a*	10.94	54.57*ab*	13.07	66.14*b*	12.67	3.48	.05
E Peer Insecurity	51.55*a*	25.04	85.00*b*	22.08	48.29*a*	16.44	6.23	.01
F Social Insensitivity	68.73*a*	19.00	52.71*a*	13.11	62.29*a*	10.18	2.29	.13
G Family Discord	79.00	11.20	69.29	24.20	59.43	20.20	2.53	.10
H Child Abuse	58.00*ab*	30.65	74.29*b*	12.49	32.29*a*	27.25	4.70	.02
AA Eating Dysfunctions	26.91*a*	13.35	53.29*b*	24.54	9.29*a*	7.18	13.29	.00
BB Substance Abuse	70.09	30.97	56.57	27.69	36.71	22.46	3.05	.07
CC Delinquent Predisp.	80.91*a*	21.67	57.71*b*	16.00	63.29*ab*	10.16	4.30	.03
DD Impulsive Propensity	83.09*a*	17.15	72.86*a*	18.82	41.29*b*	22.39	10.43	.00
EE Anxious Feelings	42.18a	14.54	57.71*a*	22.80	62.00*a*	12.68	3.53	.05
FF Depressive Affect	66.27	18.91	92.71	17.41	41.14	16.79	14.45	.00
GG Suicidal Tendencies	42.27	17.35	67.71	28.17	15.86	15.44	11.25	.00

Note: Mean cluster scores that share a common superscript in each row indicate differences were not significant at the $p < .05$ level on Tukey post hoc tests

characteristics of clinically significant elevation. The scale elevations exhibited on the expressed concerns and clinical syndromes scales of the MACI provide further distinctions between the groups identified from the initial clustering of the personality pattern scales.

Antisocial group. The personality pattern profile exhibited by the antisocial group is reflective of youth who are prone to act out in an aggressive and unpredictable manner with a tendency to dominate and abuse the rights of others. The low mean scores on the Conforming and Submissive scales displayed by this group would suggest that these offenders have a poor understanding of social rules and are not concerned as to how other people interpret their behaviours (Millon, 1993).

The scale profile exhibited by the antisocial group indicates a propensity to act out in sexually and physically aggressive ways with minimal provocation. These adolescents are prepared to ignore others' wellbeing in order to meet their own ends. The poor social awareness and lack of self-insight of these adolescents suggests that they feel unwilling or unable to express basic levels of empathy and concern for their victims (Millon, 1993). Given the high levels of substance abuse reported by members of this group, the antisocial behaviours of these adolescents may be more directly related to the disinhibitory effects of substance abuse. However, in light of the relatively low frequency with which intoxication has been previously reported as an immediate precipitant of sexual offending among adolescents, substance abuse may be an outcome of the violent social environments that frequently accompany drug cultures (Worling, 2001).

These results are consistent with previous studies of personality-based typologies of adolescent sexual offenders. The predominant mean scale elevations on the Unruly, Forceful, Oppositional, Social Insensitivity and Family Discord scales exhibited by our antisocial group were consistent with those exhibited by Richardson et al.'s (2004) antisocial prototype derived from the MACI, and show several of the features of Worling's (2001) antisocial/impulsive and confident/aggressive offender types based on the CPI. Worling's model describes these particular adolescents as exhibiting a range of generally delinquent traits, and demonstrating a propensity to consistently violate social norms. The high mean Family Discord scale score observed for the antisocial group in our study is consistent with Worling's finding that youth with these traits typically come from dysfunctional family backgrounds where antisocial attitudes and behaviours are fostered in the home. Aspects of the MMPI-based typology proposed by Smith et al. (1987) are also consistent with the features observed among members of the current antisocial group. Smith et al.'s abnormal offenders for instance, were similarly shown to be exhibiting chronic antisocial traits in the form of poor self-control, impulsivity, feelings of distrust, and a propensity to act out.

Inadequate group. The personality pattern profile exhibited by the inadequate group is reflective of youth who are chronically insecure and avoidant of interpersonal contact. These adolescents have a typically pessimistic and gloomy outlook, see themselves as worthless, and have learned it is better not to trust the friendship of others for fear of rejection (Millon, 1993). The expressed concerns and clinical syndromes scale elevations exhibited by the inadequate group provide support for the hypothesis that members of this group predominantly internalize their distress and experience significant feelings of guilt, despair and worthlessness. These adolescents display chronic poor self-esteem and find little in themselves to admire. While such adolescents may want to form peer relationships, their poor sense of self-worth and difficulty engaging with others on an emotional level means they are socially isolated, lonely and pessimistic about the future. Our finding that members of this group frequently report having been the victims of significant physical, sexual or verbal abuse at the hands of family members is consistent with previous research showing adolescents who are the victims of sexual abuse tend to show more psychopathology and emotional instability and interpersonal problems than non-abused offenders (Cooper et al., 1996; Langevin, 1992).

In contrast to the sexual offending of the antisocial group, which may be an extension of a generally delinquent lifestyle, the low Delinquent Predisposition, Social Insensitivity and Substance Abuse scores and high Peer Insecurity and Self-Devaluation scores exhibited by the inadequate group suggests that the offending of these adolescents is motivated by other factors. Specifically, given their chronic social isolation and poor self-esteem, these adolescents may offend out of a desire to alleviate feelings of loneliness and obtain some degree of interpersonal intimacy. Given their lack of social skills, it is possible that these adolescents seek out friendship and relationships with younger children who do not require the same level of emotional engagement, social understanding and sophistication as teenage peers do. Additionally, younger children are less likely to judge or question the adolescent, offering him a heightened sense of power, control and importance. Children also present the offender with the opportunity to engage in sexual acts and achieve the type of sexual gratification he desires but is unable to consensually obtain from peer relationships.

The MACI profile description of our inadequate group is consistent with Richardson et al.'s most internalising prototype. Characterised by elevations on the Introversive, Inhibited, Self-demeaning, Self-Devaluation, Peer Insecurity and Depressive Affect scales, Richardson et al.'s dysthymic/inhibited adolescent was described as displaying the same lack of self-confidence, propensity to withdraw from social contact and depressed affect. Worling's (2001) two comparatively withdrawn offender types also bear a number of similarities with the Inadequate group identified in the current study. Worling describes the unusual/isolated offender as having a peculiar presentation with awkward personality features, while the overcontrolled/reserved offender exhibits the same shy, rigid and cautious interpersonal style. Worling similarly suggests the offending of these adolescents may be initiated as a result of their shy and rigid interpersonal style and lack of access to intimate interpersonal relationships. Smith et al.'s (1987) overcontrolled offender displays the same socially depressed presentation and propensity to devalue

one's self-worth which was identified as part of the inadequate offenders presentation in the current study. O'Brien and Bera's (1986) description of the unsocialised child sexual exploiter as expressing a need to offend for the purposes of gaining greater feelings of self-importance and intimacy, also appears consistent with the socially impaired presentation suggested by the Inadequate offender.

Normal-range group. Of the three identified groups, the normal-range adolescents had the lowest mean scores on the Delinquent Predisposition, Social Insensitivity and Substance Abuse scales, highlighting the comparative lack of hostility, aggression, and violation of behavioural norms of these youth. The normal-range group of adolescents presented as the least pathological of the three groups and had no scale scores in the range "of clinical concern". The personality profile of this group of adolescents is reflective of a desire to behave in a comparatively pro-social manner and "do the right thing" (Millon, 1993). The normal-range group did, however, have the highest overall mean scores on the Anxious Feelings and Sexual Discomfort scales, suggesting these youth likely have a greater sense of unease about their offending and are comparatively more likely to show guilt, remorse and embarrassment for what they have done. It has been suggested that these youth are more likely to commit hands-off and non-penetrative offences such as stealing underwear (O'Brien and Bera, 1986).

The normal-range group of offenders described in this study adds support to the hypothesis put forward by researchers and clinicians that for some adolescents their sexual offending may be motivated by pubescent curiosity and confusion rather than the result of antisocial or psychopathological factors (O'Brien and Bera, 1986; Richardson et al., 2004). O'Brien and Bera (1986) for instance describe the naïve experimenter subtype as having satisfactory social skills and peer relationships with little previous history of acting out. These authors suggest that this type of adolescent typically offends against children under six, without the use of force or threats. Richardson et al.'s normal prototype meanwhile was described as exhibiting no major personality concerns. The relatively low mean scores on the Family Discord and Child Abuse scales exhibited by the normal-range group support anecdotal evidence from clinicians who work with this population that these particular adolescents typically come from intact and supportive families that regard the offending of the adolescent as a serious concern.

Implications for Treatment

Currently most adolescent sexual offender treatment programmes use a one-size-fits-all approach that involves the use of cognitive-behavioural techniques conducted in groups (Davis and Leitenberg, 1987, Veneziano and Veneziano, 2002). In light of the three-group personality typology identified in the current study, an approach focussed on the specific needs of individual clients could potentially be more effective than interventions that attempt to address needs that certain offenders may not have. For instance, given the antisocial offender's propensity for rule violation and the endorsement of anti-social beliefs, it is hypothesised that an intervention that addresses his pervasive delinquent tendencies may provide an effective approach. Specifically, traditional sexual-offender relapse prevention treatment may not be effective without also addressing treatment areas for general juvenile delinquency, such as the development of prosocial attitudes and interpersonal skills (Worling, 2001) Anti-authority attitudes and disregard for the approval of others may make developing and maintaining a therapeutic alliance more of a challenge with this group than other types of adolescent offenders.

Adolescents displaying traits consistent with the inadequate profile may benefit from interventions that address the role that their shy and rigid interpersonal orientation and limited access to intimate relationships may be playing in the initiation and maintenance of their offending behaviours (Steiner et al, 1999; Worling, 2001). Worling (2001) suggests these adolescents would likely benefit from education that fosters skills such as starting a conversation, asking a question, and introducing one's self. Furthermore, in contrast to the antisocial offenders, it is hypothesised that this group would be in less need of treatment aimed at generic delinquency issues such as addressing pro-criminal attitudes. To the degree that this group is less rebellious and may exhibit more dependent features, this dependency and responsiveness to approval may provide mechanisms for engaging the offender in the therapeutic process.

In response to the dysfunctional family environments that were reported by both the antisocial and inadequate groups, it is suggested that family interventions addressing attitudes toward child maltreatment, violence against women, and male-modelled antisocial behaviours may be of therapeutic benefit (Hunter et al., 2003). Additionally, Veneziano and Veneziano (2002) suggest the often blurred or inadequate boundaries within such families may also need to be addressed. Such interventions may help to foster more appropriate parent-child-sibling relationships thereby reducing the continued risk of intergenerational abuse.

Although this study produced findings relevant to the improved understanding of adolescent sexual offenders as a heterogeneous population, several limitations are noted. Foremost, the generalisability of this study's findings is limited by the use of a sample size of 25 participants. The lack of information available about victim age, offending behaviours, family history and non-sexual offending, prevented the examination of hypotheses about the relationships between offender type and offence characteristics. Information about the family backgrounds of the adolescents in our sample would have allowed a more detailed examination of the role of maladaptive family relationships in the development of sexual offending behaviours. Specifically, such information would have allowed us to test the hypothesis that adolescent sexual offenders are frequently the victims of both physical and sexual violence in the home (Ryan et al., 1987; Davis and Leitenberg, 1987). The use of a single self-report measure was another recognised limitation of the current study. Future studies that include diverse sources of information can provide a more complete picture of the

nature of identified subgroups among adolescent sexual offenders.

The current study contributes to the research literature on adolescent sexual offenders in several ways. It provides a delineation of personality based subtypes that corroborates findings from the limited number of previous studies using standardized personality measures with this population. It represents the first such study with a New Zealand sample. It thereby supports the concept that while adolescent sexual offenders in this culture are a heterogeneous group, consistent subtypes within the population can be identified. Further research into these subtypes may suggest specific aetiologies and clinical characteristics with important implications for assessment, treatment, and perhaps, eventually, prevention.

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