© JHE 2020 J Hum Ecol, 72(1-3): 211-219 (2020)
PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
DOI: 10.31901/24566608.2020/72.1-3.3287

An Investigation into the Personality Profiles of Male Sexual Offenders in Limpopo Province

Patrick Maredi Mothapo, K. A. Nel and I. Govender

Department of Psychology, University of Limpopo, Polokwane, South Africa Kalafong Provincial District Hospital and University of Pretoria, South Africa

KEYWORDS Aggression. Anti Social Personality Disorder. Male Sexual Offenders. Personality Profiles. Psychopaths

ABSTRACT A critical component in the management of sex offenders is an understanding of their personality traits, which relates to their childhood development, as this could contribute to more effective treatment interventions. This study sought to determine the personality profiles, pertaining to psychopathology, indicators of attachment, aggressive and paranoid characteristics of male sexual offenders. The researchers conducted a cross-sectional survey at five correctional facilities. The data was collected from 112 sex offenders using the PAI questionnaire. Of the 112 participants, 87.5 percent were single and most of the offenders (56.3 %) did not have any psychopathology. Many sex offenders with Insecure Avoidant Attachment (25.0%) were from single parent families. Most of the respondents (51.8%) have paranoid characteristics, with no significant relationship between marital status and paranoid tendencies in male sex offenders. The most predominant type of attachment in male sex offenders is Insecure Avoidant Attachment with high levels of Personality Disorders in male sex offenders (Borderline and Anti-Social Personality Disorder). A high proportion of the sample displayed aggressive tendencies with those who were unemployed more likely to display more aggression. Respondents who were single displayed more psychopathology than those who were married.

INTRODUCTION

A critical component in the evaluation and management of sex offenders is an understanding of their personality traits, which relates to their childhood development, as this could contribute to more effective treatment interventions.

There have been many proposed integrated theories (Hall and Hirschman 1992). These theories regard sex offenders as a fairly heterogeneous group who conversely share personality characteristics and are reported as having dysfunctional family backgrounds (Simons n.d.). For this reason it was deemed appropriate to use Bowlby's (1973) Attachment theory as it surmises that all human beings, from birth, seek protection from their caregivers in order to fully develop an integrated personality underpinned by secure attachment.

There is extensive evidence that men who are sexually violent fail to form secure attachment with caregivers in childhood and have insecure, avoidant and disorganised attachment which results in relationship difficulties (Simons n.d.; Ward and Siegert 2002). If attachment is

Address for correspondence:

Indiran Govender

Professor

E-mail: Indiran.govender@gmail.com

insecure, children may exhibit hostility or aggression within their relationships, or seek intimacy in maladaptive ways (Ward and Siegert 2002).

In a community-based sample, adult attachment was significantly poorer among those who committed rape (Abbey et al. 2007). Attachment is thus crucial during childhood development as it helps in shaping personality as the individual develops (Jewkes et al. 2011).

Both men and women can perpetrate sexual violence (Sikweyiya and Jewkes 2009). However, the majority of sexual offences are committed by men (Steffensmeier et al. 2006; Lussier et al. 2015). In early research, Kalichman (1991) found that measures of psychopathy were similar in rapists. Rapists generally present with aggravated hostility and a need for immediate gratification (Lussier et al. 2011). Despite reporting some feelings of social alienation, rapists are significantly more likely to be married (Steffensmeier et al. 2006; Lussier et al. 2011).

Alcohol use is higher amongst rapists and are more likely to act in a violent or extreme manner while drinking (Becerra-Garcia et al. 2013; Jewkes et al. 2011).

Sexually violent men have been shown to be more likely to consider victims responsible for the rape and have little or no insight about the impact of rape on victims. In addition to these factors, sexually violent men are believed to differ from other men in terms of impulsivity and antisocial tendencies. Sexual violence is also associated with a preference for impersonal sexual relationships as opposed to emotional bonding (Jewkes et al. 2011).

Males with the following characteristics in their psychological profiles are more likely to rape: those with higher masculinity scores on psychometric assessment instruments, earlier age of first sexual experience, a greater number of sexual experiences, and low satisfaction with conventional sexual experiences (Becerra-Garcia et al. 2013).

Sex offenders with aggressive personality characteristics frequently use violence. It appears that for most rapists, their violent sexuality is a feature of their overall violent anti-social lifestyles and dysfunctional family backgrounds. They also have low self-esteem and difficulty controlling aggression (Gannon et al. 2008; Miller 2012).

Sex offenders seem to demonstrate deficits in their cognitive perspectives as measured by the Higher Order Cognitive Theory of Mind Tasks (Castellino et al. 2011), as well as emotional deficits measured via the Reading the Mind in the Eyes Task. Psychopathic offenders seem to recognize emotions but are not able to display empathy (Seidel et al. 2013). Moreover, these authors hypothesized that violent offenders display significantly decreased affective and physiological response to emotional stimuli. According to Miller (2012), personality characteristics associated with sexual offending include sexual preoccupation, excessive sex talk, promiscuity, difficulty managing emotions, lifestyle instability, impulsivity, dysfunctional family backgrounds and low-quality adult relationships.

In the early 1980's, Levin and Stava (1987) reviewed thirty six studies which compared the personality traits of sex offenders (rapists and child molesters) and violent nonsexual offenders. They found that both sex offender groups had lower levels of aggression and higher levels of guilt and inhibition than nonsexual offenders. They found that sexual offenders were more passive and submissive than other types of violent offenders.

Castellino et al. (2011) showed violent offenders (including sex offenders) displayed deficits in cognitive perspective taking and in displaying emotions. Psychopathic and violent offenders (of all types) seem able to understand the emotions of other people on a cognitive level but not on an emotional level. This is termed an *emotional paradox* in that psychopathic sex offenders can recognise emotions in others but are unable to show a compassionate response (Castellino et al. 2011; Elsegood and Duff 2010).

Sex offenders had higher rates of anxiety and depression than nonsexual offenders, while both rapists and nonsexual offenders had higher rates of Antisocial Personality Disorder. Francia et al. (2010) report the prevalence to be up to 70 percent in sex offenders compared to 1 percent in the general population.

Most sex offenders meet criteria pertaining to specific psychopathological disorders, as the act of sex offending is pathological in itself (Miller 2012). Even though sex offenders are aware that their actions are wrong, they continue perpetuating the crime as they derive pleasure and affirmation from it.

Psychopathy is a pattern of personality characteristics and socially deviant behaviors which includes affective, interpersonal and behavioral traits. Psychopaths have been described as having an inability to connect sexual behavior with feelings, such as warmth and tenderness, and display a lack of impulse control. The prevalence of psychopathy is generally higher in sexual offenders (Lilienfield 2005).

The presence of psychopathic traits may be important in understanding rape perpetration at sub-clinical levels which has been suggested by research in South Africa, where two traits related to psychopathy were measured and were significantly higher among men who had raped (Jewkes et al. 2011). Borderline and Anti-Social Personality Disorders are found in up to 7 percent of male sex offenders (Francia et al. 2010).

According to Crime Research and Statistics - South Africa, 5 686 rape cases were reported in Limpopo Province. However, it was estimated that many rapes in the province go unreported because of the stigma that is associated with sexual offences (Lenzenweger et al. 2012).

Sexual offenders frequently report severe disruption or changes to family structure during

childhood. In South Africa, in a general sample of adult men from the community, there was a bivariable association between raping, parental absence from the childhood home and perceiving fathers to be less kind than other men (Jewkes et al. 2011).

Little information exists regarding the personality profiles of sex offenders in Limpopo Province, South Africa. Most of the researchers' knowledge on the personality profiles of sexual offenders is based on American and British research (Simons n.d.; Kalichman 1991). Research in South Africa using the characteristics of twenty two serial rapists which were extracted from police files and then compared to the profiles of serial rapists internationally attempted to fill this gap (Woodhams and Labuschagne 2012). There were differences in perpetrator behaviour and victim profiles in the South African sex offenders. However, the sample size was small and only serial rapists were studied. Consequently, it was recommended that a more detailed study on the personality profiles of sex offenders in South Africa be conducted.

Objectives

This study sought to determine the personality profiles, pertaining to psychopathology, indicators of attachment, aggressive and paranoid characteristics of male sexual offenders.

METHODOLOGY

Study Design

This was a cross-sectional survey to investigate the personality profiles and psychopathology of male sex offenders.

Sampling Method

Limpopo Province has seven correctional facilities. Five correctional services participated in the study as they housed sexual offenders. A list of 2000 sexual offenders in these prisons was available. Purposive sampling was used. Many prisoners did not consent to participate. The final sample was 112 sex offenders from the 5 correctional service institutions broken down as follows 17 from Polokwane correctional facil-

ity, 65 from Modimolle correctional facility, 5 from Tzaneen correctional facility, 8 from Makhado correctional facility and 17 from Thohoyandou correctional facility. Paedophiles are a group that display different characteristics to male sexual offenders and were thus excluded.

Data Collection

The data was collected using the PAI questionnaire.

Procedure of Data Collection

The questionnaire took about 40 minutes to complete. Rooms with separate desks and chairs were made available at each facility so that respondents could complete the survey privately. Research assistants helped the respondents on two occasions with English understanding.

The Personality Assessment Inventory Questionnaire – PAI (Morey 2007)

The Personality Assessment Inventory (PAI) is a self-report measure of personality that consists of 344 items with 22 non-overlapping scales, including 4 validity scales, 11 clinical scales and 5 treatment indicator scales (Morey 2007). All of the scales were completed by participants in the research. The validity scales assess for inaccurate reporting of symptoms due to Inconsistency, Infrequency, Negative Impression, and Positive Impression. The clinical scales assess the following domains: Somatic Complaints, Anxiety, Anxiety-Related Disorders, Depression, Mania, Paranoia, Schizophrenia, Borderline Features, Antisocial Features, Alcohol Problems and Drug Problems, while the treatment indicator scales assess Aggression, Suicidal Ideation, Stress, Nonsupport and Treatment Rejection.

The PAI was standardised on adults 18 years and older. The PAI uses T-scores with a mean of 50 and a standard deviation of 10; a T-score of 70 or higher indicates an area of clinical concern. The PAI demonstrated median internal consistency alphas = Cronbach alpha's (α) of \geq .81 and \geq .86 across normative and clinical samples, respectively; median test-retest reliability was Cronbach alpha $(\alpha) = \geq$.83. Internal consistency or Cronbach alpha (α) is also known as internal

consistency and is an estimate of the reliability of test scores because inter - correlations amongst test items are maximised when all items measure the same construct (Porter 2007).

Although the PAI was not specifically designed to measure attachment, it was found that some questions were similar to those on the revised Hazan and Shaver (1987), Three category Measure of Attachment and Fraley et al.'s (2000) Close Relationships Revised (ECR-R) Adult Attachment Questionnaire.

In this study on the whole scale of the PAI Cronbach's Alpha (α) = \geq 0.986 which according to Kline (2000) is excellent. On the components related to attachment overall a Cronbach's Alpha (α) = \geq 0.929 with all components over Cronbach's Alpha (α) = \geq 0.70 which indicates overall excellent internal consistency.

Data Analysis

Descriptive statistics were used. A chi-square test was used to examine the association between two categorical variables and to evaluate tests of independence when using a cross-tabulation. The independent variable in this study is the sex offenders and the dependent variables are personality profiles, psychopathology and different types of attachment. The investigation used different correctional facilities in Limpopo Province, this enhanced internal validity.

Ethical Considerations

Ethical clearance was obtained from the University of Limpopo Ethics Committee and permission obtained from Limpopo Province's Department of Correctional Service. Informed consent was obtained from the participants.

RESULTS

Demographic Characteristics

The frequency distribution of the participants is presented in Table 1. Most of prisoners (58%) were from Modimolle correctional Centre, almost half of them of Pedi ethnicity and 65.2 percent were between ages of 20 – 29 years. Of the 112 participants, 87.5 percent were single and most of the offenders (56.3%) did not have any psychopathology.

Table 1: Characteristics of the sex offenders

	Frequency n=112	Percentage %
Correctional Centre		
Polokwane	17	15.2
Modimolle	65	58.0
Tzaneen	5	4.5
Makhado	8	7.1
Thohoyandou	17	15.2
Ethnicity		
Pedi	55	49.1
Tsonga	24	21.4
Venda	31	27.7
Coloured	2	1.8
Age		
< 20 years	5	4.5
21-29 years	73	65.2
30 – 39 years	20	17.9
40 – 49 years	10	8.9
50 + years	4	3.6
Marital status		
Single	98	87.5
Married	12	10.7
Divorced/Widower	2	1.8
Educational Level		
Grade 7	3	2.7
Grade 8	10	8.9
Grade 9	21	18.8
Grade 10	34	30.4
Grade 11	23	20.5
Grade 12	19	17.0
Post matric	2	1.8
Employment Status		
Unemployed	54	48.2
Employed	58	51.8
Psychopathology		
No-psychopathology	63	56.3
Psychopathology	49	43.8

Psychopathology

Table 2 shows there is no significant relationship between ethnicity and psychopathology, only between marital status and psychopathology.

Aggressive Characteristics

Table 3 indicates that most of the participants (55.4 %) did not have aggressive characteristics.

Aggression Related to the Demographics of the Sample

Table 3 reflects that there is no significant relationship between ethnicity and aggressive

Table 2: Chi-square analysis of psychopathology and demographics of the sample

	Value	Df	Asymptoti significanc (2-sided)
Ethnicity and Psychopatho	logy		
Pearson Chi-square	1.338a	3	0.72
Likelihood Ratio	1.351	3	0.71
Marital Status and			
Psychopathology			
Pearson Chi-square	5.838a	2	0.05
Likelihood Ratio	7.003	2	0.03
Educational Levels			
and Psychopathology			
Pearson Chi-square	4.823a	6	0.56
Likelihood Ratio	5.779	6	0.44
Employment and			
Psychopathology			
Pearson Chi-square	1.655a	1	0.19
Likelihood Ratio	1.658	1	0.19
Age and Psychopatholog	y		
Pearson Chi-square	2.005a	4	0.73
Likelihood Ratio	2.068	4	0.72

Table 3: Aggressive characteristics of the sex offenders

Aggressive characteristics	Frequ- ency	Per- centage	
Less aggressive Aggressive	62 50	55.4 44.6	
	Value	Df .	Asymptotic significance (2-sided)
Chi-square Analysis of			
Ethnicity and Aggress	ive		
Characteristics			
Pearson Chi-square	4.83		0.18
Likelihood ratio	5.63	8 3	0.13
Chi-square Analysis of			
Marital Status and			
Aggressive Characteris			
Pearson Chi-square	2.44		0.29
Likelihood ratio	3.21	1 2	0.20
Chi -square Analysis of			
Educational Level and			
Aggressive Characteris			
Pearson Chi-square		8aa 6	0.21
Likelihood ratio	9.12	3 6	0.16
Chi-square Analysis of			
Employment Level and			
Aggressive Characteris			
Pearson Chi-square	86.87		0.01
Likelihood ratio	5.91	4 1	0.01
Chi-square Analysis of			
Age and Aggressive			
Characteristics			
Pearson Chi-square	1.45		0.83
Likelihood ratio	1.48	8 4	0.82

characteristics, except between occupation and aggressive characteristics in sex offenders.

Male Sex Offenders and Paranoid Characteristics

Table 4 indicates that over fifty percent of the respondents (51.8%) have paranoid characteristics, with no significant relationship between marital status and paranoid tendencies in male sex offenders.

Table 4: Paranoid characteristics

Likelihood ratio			ge
Chi-square Analysis of Ethnicity and Paranoid Characteristics Pearson Chi-square Likelihood ratio Chi-square Analysis of Marital Status and Aggressive Characteristics Pearson Chi-square Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .		48.2 51.8	
Ethnicity and Paranoid Characteristics Pearson Chi-square Likelihood ratio Chi-square Analysis of Marital Status and Aggressive Characteristics Pearson Chi-square Likelihood ratio Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square Jikelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio Likelihood Ratio	lue	Df	Asymptotic signifi- cance (2-sided)
Characteristics Pearson Chi-square Likelihood ratio Chi-square Analysis of Marital Status and Aggre- ssive Characteristics Pearson Chi-square Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Pearson Chi-square Likelihood ratio Chi-square Analysis of Marital Status and Aggressive Characteristics Pearson Chi-square Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Likelihood ratio	074	. 2	0.99
Chi-square Analysis of Marital Status and Aggressive Characteristics Pearson Chi-square 2. Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square 4. Likelihood Ratio .	074 074		0.99
Marital Status and Aggressive Characteristics Pearson Chi-square 2. Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .	0 / 4	3	0.99
ssive Characteristics Pearson Chi-square 2. Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Pearson Chi-square 2. Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Likelihood ratio 3. Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .	847	a 2	0.24
Chi-square Analysis of Educational Level and Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .	618		0.16
Paranoid Characteristics Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Pearson Chi-square 3. Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Likelihood ratio 3. Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio .			
Chi-square Analysis of Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio	643		0.72
Employment and Paranoid Characteristics Pearson Chi-square Likelihood Ratio	665	6	0.72
Characteristics Pearson Chi-square Likelihood Ratio			
Pearson Chi-square . Likelihood Ratio .			
Likelihood Ratio .	5 O 4		0.44
	594		0.44
	338	1	0.56
of Age and Paranoid Characteristics			
	475	a 4	0.48
Likelihood Ratio 3.	713		0.45

Personality Disorders (Borderline and Anti-Social) of Male Sex Offenders

Table 5 indicates that 54.46 percent of the male sex offenders did not display Borderline PD characteristics.

Table 5: Borderline and anti social PD characteristics

Borderline Personality Disorder (PD) characteristics	Frequ- ency	Per- centage	
Borderline PD traits No borderline PD traits	5 1 6 1	45.54 54.46	
Anti-social Personality Disorder (PD) Characteristics	Value	Df	Asymptotic signifi- cance (2-sided)
Anti-social PD traits No anti-social PD traits	58 54	51.78 48.21	
Chi-square Analysis between Respondents with Anti-social and Borderline PDS and Those without Anti-social or Borderline PD Characteristics	Value	Df	Asymptotic signifi- cance (2-sided)
Pearson Chi-square Continuity correction Likelihood ration Fisher's Exact test	26.6 24.7 27.9	04 1	0.00 0.00 0.00 0.00

Fifty two percent of male sex offenders displayed Anti-Social PD characteristics, with a significant difference between those who have Borderline and Anti-Social traits and those who do not display these personality disorder characteristics (p=0.000). The result infers that the male sex offenders in the sample are significantly more likely to display Borderline or Anti-Social PD characteristics than those who do not (Table 5).

Male Sex Offenders and Secure Attachment

Table 6 indicates that majority of sex offenders with Insecure Avoidant Attachment (25.0%). were from single parent families.

Table 7 was used to determine relationships between the variable parents/caregivers and Insecure Avoidant Attachment. There was no significant relationship between the variables.

Furthermore, although there is no statistically significant relationship between the variables male sex offenders with single parents and no parents (no reliable caregivers), who display Insecure Avoidant Attachment are 57.1 percent of the present sample (Table 7).

Table 6: Sex offenders who display Insecure Avoidant Attachment (IAA)

Parents/ caregivers	Λ	lo indica tors of IAA in sample		Indica- tors of IAA in sample		Total
No parents/ reliable care- givers)		1 (9.8%)	23	(20.5%)	34	(30.4%)
Single parent families	30	(26.8%)	28	(25.0%)	58	(51.8%)
Mother and father	7	(6.3%)	13	(11.6%)	20	(17.9%)
Total	48	(42.9%)	64	(57.1%)	112	(100.0%)

Table 7: Chi-square analysis of parents/caregivers and insecure avoidant attachment

	Value	Df	Asymptotic significance (2-sided)
Pearson Chi-Square	3.898a	2	0.142
Likelihood Ratio	3.931	2	0.14
Linear-by-Linear Association	0.31	1	0.578
N of Valid Cases	112		

Chi-square analysis indicates that psychopathology is influenced by marital status. It further indicates that aggressive traits in male sex offenders are likely to be influenced by employment status. Male sex offenders were significantly more likely to display Anti-Social or Borderline Characteristics.

DISCUSSION

The finding that psychopathology is not found in all sex offenders in the sample is contrary to many international studies where psychopathology are reported in the entire sample (Miller 2013).

The majority of the respondents 56.3 percent did not display psychopathology. Psychopathology in male sex offenders is not influenced by ethnicity, age, education, and employment. However, it is influenced by marital status. In this study, sex offenders who were married, displayed less psychopathology that those who were single. This is not observed by international research, for instance, the Office of the Attorney General, USA reported that the major-

ity of sex-offenders are married however it is not reported whether they have psychopathology. Some type of psychopathology is found in male sex offenders but the marriage/constant partner variable is not reported (Jewkes et al. 2011; Miller 2012, 2013). This finding supports the assertion by Woodhams and Labuschagne (2012) that there are some differences in the personality profiles of South African sex offenders. The main attachment type, Insecure Avoidant Attachment is associated with individuals who have experienced parenting as avoidant and rejecting and, who as adults, avoid help seeking behaviour (Brown and Ward 2013). It is the predominant form of attachment found in male sex offenders who display some type of psychopathology (McKillop et al. 2012). The finding that Insecure Avoidant Attachment is the main attachment style is consistent with international research. It is a form of attachment that has recently been associated with psychosis and paranoia because of possible sexual or other abuse in childhood (Pickering et al. 2008). This, in turn, leads to the sexually abused child becoming a sex offender (Miller 2012).

In this study the majority of respondents (55.4%) did not display aggressive characteristics. Aggressive traits in male sex offenders are not influenced by ethnicity, age, education and marital status but were influenced by employment. Those who were unemployed were more likely to display aggression. Studies suggest that male sex perpetrators are likely to display aggression in sexual relationships (Simons n.d.). However, no research could be found that linked unemployment and aggressive characteristics in male sex perpetrators. Furthermore, attachment theory emphasises that inadequate parenting is important in the emergence and maintenance of antisocial behaviour and aggression in children from middle childhood through adolescence. Lack of parental involvement in the child's activities and inadequate supervision are strongly associated with externalised aggressive behaviours and Insecure Avoidant Attachment (Guttman-Steinmetz and Crowell 2006). Insecure Avoidant Attachment links to aggressive behaviours displayed by the sex offenders sample related to sexual offences.

Fifty two percent of the respondents displayed paranoid characteristics. Paranoid char-

acteristics in male sex offenders were not influenced by ethnicity, age, education, marital status and employment. Research suggests that paranoid characteristics are common in sexual offenders. (Gannon et al. 2008; Miller 2012) According to Pickering et al. (2008), Insecure Avoidant Attachment in childhood attachment can result in later deficits in interpersonal skills leading individuals to satisfy intimacy needs primarily through sexual activity. This appears to be the case with sex offenders and is supported by this study.

In this study Borderline Personality Disorder characteristics were found in 45.54 percent of the offenders compared to 0.2 to 1.8 percent in the general population (Widigier et al. 2006). Over half of the sample 51.78 percent displayed Anti-Social Personality Disorder characteristics. Male sex offenders were significantly more likely to display Anti-Social or Borderline Characteristics.

This supports international literature where approximately 70 percent of sex offenders display Borderline and Anti-Social Personality Disorders (Francia et al. 2010). This is far higher than in the general population (Lenzenweger et al. 2007).

Male sex offenders were unlikely to display secure attachment. The majority of sex offenders 57.1 percent, in this study, display Insecure Avoidant Attachment. This is supported by international studies where Insecure Avoidant Attachment is the predominant form of attachment in male sex offenders (Mckillop et al. 2012). It must be noted that there was no significant difference between Insecure Avoidant Attachment and male sex offenders who had no parents, had a single parent and who were brought up by both parents. Nonetheless, male sex offenders with single parents and no parents (no reliable caregivers) and displayed Insecure Avoidant Attachment made up 57.1 percent of the sample. This is a higher percentage than the 23 percent in the general population (Schofield and Beek 2014). This may be because many of the sex offenders had personality disorders and they were unable to form bonds from an early age and/or they had dysfunctional family backgrounds.

CONCLUSION

Generally, this study supports evidence that the most predominant type of attachment in male

sex offenders is Insecure Avoidant Attachment. Findings also support international studies, showing high levels of Personality Disorders in male sex offenders (Borderline and Anti-Social Personality Disorder). In terms of personality characteristics, a high proportion of the sample displayed aggressive tendencies with those who were unemployed more likely to display more aggression. However, indicators of psychopathology were not found in all sex offenders in the sample, which is contrary to various international studies, which found that sex offenders displayed psychopathology. Psychopathology was influenced by marital status. Respondents who were single displayed more psychopathology than those who were married. This finding supports South African studies, which found differences in the characteristics of South African sex offenders when compared to sex offenders internationally.

RECOMMENDATIONS

Sex offenders should be equipped with the skills to gain a better understanding of their personalities. This should be in accordance with the result of each sex offender's psychometric results. This may assist in preventing recidivism.

A more comprehensive study relating to the personality characteristics and attachment patterns of male sex offenders with a bigger, randomized sample will aid generalizability of the findings.

LIMITATIONS

There was no qualitative element in the study thus, sex offenders could not give a rationale as to their experiences. Purposive sampling made the findings of this study difficult to generalize. The PAI is not meant to measure attachment (although the Cronbach Alpha was good) thus use of a standardised attachment scale would have strengthened the attachment results.

REFERENCES

Abbey A, Parkhill MR, Clinton-Sherrod AM, Zawacki T 2007. A comparison of men who committed different types of sexual assault in a community sample. *Journal of Interpersonal Violence*, 22(12): 1567-1580. DOI: 10.1177/0886260507306489

Becerra-Garcia JA, Garcia LA, Egan V 2013. A controlled study of the Big Five Personality dimensions in sex offenders, non-sex offenders and non-offenders: Relationship with offending behavior and childhood abuse. *Journal of Forensic Psychiatry Psychology*, 24(2): 233-246. DOI: 10.1080/14789949. 764463 Bowlby J 1973. *Attachment and Loss. Vol 2: Separa-*

tion Anxiety and Anger. New York, NY: Basic books Brown R, Ward H 2013. Decision-making within a Child's Timeframe. An Overview of Current Research Evidence for Family Justice Professionals Concerning Child Development and the Impact of Maltreatment. London: Childhood Wellbeing Research Centre, Institute of Education. Report. From https://hdl.handle.net/2134/18187 (Retrieved on 4 June 2020).

Castellino N, Bosco FM, Marshall WL, Marshall L, Veglia F 2011. Mindreading abilities in sexual offenders: An analysis of theory of mind processes. *Conscious Cog*, 20(4): 1612 - 24. DOI: 10.1016/j.concog,2011. 08 011

Elsegood KJ, Duff SC 2010. Theory of mind in men who have sexually offended against children: A U.K. comparison study between child sex offenders and non-offender controls. Sexual Abuse: A Journal of Research and Treatment, 22(1): 112–131. DOI: 10.1177/1079063209359926

Fraley RC, Waller NG, Brennam KA 2000. An itemresponse theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78: 350-365. DOI: 10.1037//0022-3514. 78.2.350

Francia CA, Coolidge FL, White LA 2010 . Personality Disorder Profiles in Incarcerated Male Rapists and Child Molesters. American Journal of Forensic Psychology, 28: 55–58. From https://www.researchgate.net/publication/290248685_Personality_disorder_profiles_in_incarcerated_male_rapists_and_child_molesters/citations> (Retrieved on 10 June 2020).

Gannon TA, Collie RM, Ward T, Thakker J 2008. Rape: Psychopathology, theory, and treatment. *Clinical Psychology Review*, 28(6): 982–1008.DOI: 10.1016/j.cpr.2008.02.005

Guttman-Steinmetz S, Crowell JA 2006. Attachment and externalizing disorders: A developmental psychopathology perspective. *Journal of the American Academy of Child Adolescent Psychiatric*, 45(4): 440–451. DOI: 10.1097/01.chi.000019 6422. 42599.63

Hall GCN, Hirschman R 1992 . Sexual aggression against children. A conceptual perspective of etiology. *Crim Justice Behav*, 19(8): 23–28. DOI: 10.1177/009385 4892019001003

Hazan C, Shaver PR 1987. Romantic love conceptualized as an attachment process. *J Pers Soc Psychol*, 52: 511-524. DOI: 10.1037/0022-3514.52.3.511

Jewkes R, Sikweyiya Y, Morrell R, Dunkle K 2011. Gender inequitable masculinity and sexual entitlement in rape perpetration South Africa: Findings of a cross-sectional study. *PloS One*, 6(12): 36–40. DOI: 10.1371/journal.pone.0029590

Kalichman SC 1991. Psychopathology and personality characteristics of criminal sex offenders as a function of victim age. *Archives Sexual Behaviuor*, 20: 187-197. DOI: 10.1007/BF01541943

Kline P 2000. The Handbook of Psychological Testing. London, UK: Routledge.

Lenzenweger MF, Lane MC, Loranger AW, Kessler RC 2007. DSM-IV personality disorders in the National Comorbidity Survey Replication. *Biological Psychiatry*, 62(6): 553-564. DOI: 10.1016/j.biopsych. 2006.09.019.

Levin SM, Stava L 1987. Personality characteristics of sex offenders: A review. Archives of Sexual Behaviour, 16(1): 57-79.

Lilienfield S 2005. Psychopathic Personality Inventory-Revised. Lutz, Fl: Florida Psychological Assessment Resources, Inc.

Lussier P, Bouchard M, Beauregard E 2011. Patterns of criminal achievement in sexual offending: unravelling the "successful" sex offender. *Journal of Criminal Justice*, 39(5): 433–444. DOI: 10.1016/j.jcrimjus.2011.08.001.

McKillop N, Smallbone S, Wortley R, Andjic I 2012. Offenders attachment and sexual abuse onset: a test of theoretical propositions. *Sex Abuse*, 24(6): 591–610. DOI: 10.1177/1079063212445571.

Miller L 2012. Criminal Psychology: Nature, Nurture, Culture. Springfield, IL: Charles C. Thomas Publishing. From http://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p-863783 (Retrieved on 8 July 2020).

Miller L 2013. Sexual offenses against children: Patterns and motives. *Aggress Violent Behav*, 18: 506–519. DOI: 10.1016/j.avb.2013.07.006

Morey LC 2007. The Personality Assessment Inventory (PAI). 2nd Edition. Florida Ave, FL: Lutz.

Pickering L, Simpson J, Bentall R 2008. Insecure Avoidant Attachment predicts proneness to paranoia but not hallucinations. *Pers Individ Dif*, 44: 1212–1224. DOI: 10.1016/j.paid.2007.11.016

Porter S 2007. Validity, trustworthiness and rigour: Reassessing realism in qualitative research. *J Adv Nurs*, 60(1): 79-86. DOI: 10.1111/j.1365-2648.2007. 04360.

Schofield G, Beek M 2014. The Secure Base Model: Promoting Attachment in Foster Care and Adoption. London: BAAF.

Seidel EM, Pfagiban DM, Keckeis K, Wucherer AM, Jahn T, Lam C, and Derntl B 2013. Empathic competencies in violent offenders. *Psychiatry Res*, 210(3): 1168–1175. DOI: 10.1016/j.psychres. 2013.08.027.

Sikweyiya Y, Jewkes R 2009. Force and temptation: Contrasting South African men's accounts of coercion into sex by men and women. *Culture Health and Sexuality*, 11(5): 529-541. DOI: 10.1080/1369105 09029 12783.

Simons DA (n.d.). Sex Offender Typologies. In Sex Offender Management Assessment and Planning Initiative (Chap. 3). From http://www.smart.gov/SO-MAPI/sec1/ch3_typology.html (Retrieved on 11 July 2020),

Steffensmeier D, Zhong H, Ackerman J, Schwartz J, Agha S 2006. Gender gap trends for violent crimes, 1980 to 2003. *Feminist Criminology*, 1: 72-98. DOI: 10.1177/1557085195283953

Ward T, Siegert RJ 2002. Toward a comprehensive theory of child sexual abuse: A theory knitting perspective. *Psychology, Crime and Law,* (9): 319–351. DOI: 10.1080/10683160208401823

Widigier TA, Weissman MM 2006. Epidemiology of Borderline Personality Disorder. From http://ps.psychiatryonline.org/doi/abs/10.1176/ps.42.10.1015? journalCode=ps> (Retrieved on 8 July 2020).

Woodhams J, Labuschagne G 2012. A test of case linkage principles with solved and unsolved serial rapes. *J Police Crim Psych*, 27: 85-98. DOI: 10.1007/s11896-011-9091-1.

Paper received for publication in October, 2020 Paper accepted for publication in November, 2020