Recidivism in Convicted Rapists

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Abstract

Factors associated with recidivism in 86 men convicted of rape were compared. These men had been out of prison for up to 12 years (mean 7.6 years). The majority of men had been assessed in a sexual behavior clinic of a general psychiatric hospital, at the time of their conviction. Almost 50 percent of the group had committed some offense by the fifth year out of prison. The recidivism rates for sexual, violent, and any criminal recidivism were 16%, 26% percent and 53% percent respectively. The ability to predict sexual and violent recidivism in this population of rapists was rather poor. More sexual recidivists compared with nonrecidivists had been removed from their family home prior to age 16.   Violent recidivists compared with nonrecidivists were also more frequently removed from their homes prior to 16 years of age, and they showed significantly more problems with alcohol. In terms of any criminal recidivism, those that recidivated compared to those that did not, were younger and scored higher on the Michigan Alcohol Screening Test (MAST). They also had more previous charges and/or convictions for violent offenses and more charges and/or convictions for any criminal acts. The combination of age and MAST scores was able to predict 92.6% of the nonrecidivists and 53.3% of the recidivists. The outstanding feature of the total group of rapists was their poor sexual adjustment as indicated on the Derogatis Sexual Functioning Inventory, on which they scored at approximately the seventh percentile of the population at large. There was also an indication that rapists have problems with hostility, as measured by the Buss-Durkee Hostility Inventory. Furthermore, the range of scores on the MAST indicated that the total group of rapists have serious problems with alcohol. The inability of phallometric assessments and psychopathy as measured by the Psychopathy Checklist-R to predict recidivism are discussed.

Traditionally, rape has referred to forced penile-vaginal penetration without consent. The legal requirement to demonstrate forced vaginal penetration was sufficiently problematic to the Canadian courts that the law was changed and the offense of rape no longer exists. Three different crimes of sexual assault (common assault, assault with weapon or causing bodily harm, aggravated assault) each based on the amount of force used in the assault were instituted as replacement to rape, and forced penile-vaginal penetration is not a requirement for these offenses [1]. Since this paper will be dealing with considerable research from Canada, as well as other countries, in the present paper the terms rape and sexual assault will be used interchangeably.

Reports indicate between 10% and 20% of adult females have been victims of sexual assault[2,3]. Official accounts are likely an under representation in that evidence suggests as few as 8% of rape victims report the offense[4,5]. The magnitude of these numbers indicate there are a significant number of men who perpetrate this type of sexual violence. Several large surveys from the United States, New Zealand and South Africa reveal from 4 to 7% of men admit committing acts amounting to rape or attempted rape[6]. In the Canadian federal correctional system, which houses criminals with sentences of more than two years, over 50% of the 3,875 sex offenders have been convicted of sexual assault against women[7]. Aside from the resounding emotional damage to victims, their families and communities at large, these offenses represent a tremendous financial burden to society. Freeman-Longo and Knopp[8] have estimated the judicial costs alone for a single sexual offender, to be approximately $200,000, while those for a life conviction exceed $600,000. The large numbers of sexual offenders and the psychological and financial consequences they pose, have raised serious public policy questions concerning their management by the criminal justice and health care systems.

A number of recent studies have endeavored to identify variables which accurately predict recidivism for various categories of sex offenders. The hope has been such information might lead to increased efficiency in the sentencing of offenders, assist in the development and

prescription of appropriate intervention programs and provide guidance in setting conditions of parole. The importance of such empirically based information is highlighted by the relative inability of clinical judgement to accurately predict recidivism[9,10,11].

Several reports have addressed methodological issues related to recidivism research and will not be detailed here[10,12,13,14]. Definition of recidivism, length of follow-up, population samples, and whether or not offenders have participated in treatment programs have been implicated as important factors that influence recidivism rates. Quinsey et al [14] suggest ideal recidivism studies would have follow-up periods of at least five years and would define recidivism to include rearrests and reconvictions for sexual and nonsexual offenses. To illustrate, Hanson & Bussière [10], in a recent meta-analysis, reported very different recidivism rates for rapists when sexual, violent nonsexual or any type of offense were compared. Two recent studies provide good examples of such research. Rice, Harris & Quinsey[15] examined recidivism in 54 rapists from a maximum security psychiatric facility over a follow-up period of approximately 64 months. The failure rates for sexual offenses, for violent offenses or for any offenses were 28%, 43%, and 53% respectively. Sexual recidivism and violent recidivism were predicted by phallometrically measured interest in nonsexual violence and degree of psychopathy. Proulx, Pellerin, Paradis, McKibben, Aubut & Ouimet[16], in a less secure psychiatric facility which includes outpatients, reported reoffense rates for sexual, for any violent and for any criminal offense to be 21%, 36% and 51%, for a group of 113 rapists. Although, none of the variables in this study were related to sexual reoffending, age and history of violence were related to violent reoffending. The number of previous criminal charges and age were predictive of recidivism for any criminal offense.

In virtually all studies of recidivism in rapists, the predictor variables have been static. That is, they are historical and unchangeable factors such as age, demographics and offense history, at the time of the index offense. These factors cannot be affected by personal maturity, treatment or other vehicles of change. As a result ,there has been a call for the study of the role

of dynamic factors in recidivism. There has been some suggestion that motivation for, or completion of treatment[12] may be dynamic factors that moderate recidivism[10]. However this research is fraught with methodological difficulty making interpretation tentative[10].

The present study attempts to add to the body of literature related to recidivism in rapists. Logistics permitted only the one-time evaluation of static variables and measures of psychological functioning. The major difference in the present investigation is related to the subjects under consideration. To date, most studies have examined subjects who are presently incarcerated, or just released from correctional institutions, including maximum security psychiatric hospitals. Thus, the resulting data may not be representative of all rapists coming to the attention of the courts, and may be a less accurate reflection of recidivism factors for all apprehended rapists. In the present investigation a group of consecutive court referrals to a large Canadian clinic were studied. Approximately sixty-three percent of these men were assessed either before their conviction or sentencing dates, and thirty-three percent shortly after their release. A variety of well known and validated psychological tests were used, in addition to DSM psychiatric diagnoses, phallometric assessments and documented police records.

It is recognized the recidivism criteria presently utilized undoubtedly underestimate the true rate of reoffending. Consequently any references to absolute recidivism rates should be considered underestimates. To counter the fact only a minority of such acts come to the attention of the criminal justice system, in the present investigation any charge or conviction was counted as an indication of criminal activity.   Recidivism was divided into three categories in a fashion similar to other recent studies, in which sexual recidivism was defined as any charge or conviction for a sexual offense, after the index offense. Violent recidivism included any charge or conviction for nonsexual violent, or sexual offenses, and criminal recidivism was defined as any charge or conviction noted in the police records. A cumulative hierarchy in which each additional category subsumes that of the previous was adopted to account for plea bargaining distortions and to allow comparison with previous recidivism research with rapists [15, 16].

Method

<u>Subjects</u>

All of the 85 subjects were assessed at the Royal Ottawa Hospital, Sexual Behaviors Clinic, between 1982 and 1992. This clinic serves as the major assessment unit for Eastern Ontario and as a teaching hospital for the University of Ottawa. All subjects were 18 years of age or older at the time of their offense, and had coerced or forced sexual activity on an unrelated female aged sixteen or over.

<u>Procedures</u>

The assessment process at the SBC routinely includes several components. Upon arrival at the clinic, a psychiatric interview was conducted by a staff psychiatrist. After a second interview, a diagnosis was made according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-III and DSM-III-R , American Psychiatric Association, 1980 and 1987 respectively), and the subject's written consent was obtained for completion of all questionnaires and phallometric testing, and to use the results in research. Demographic and personal history data collected are presented in Table 1. The perpetrator's degree of sexual violence in the index offenses was rated by the clinician on an incremental three-point scale (called the Sexually Aggressive Scale, (SAS): (a), attempt or touching (fondling, masturbation, and/or kissing), (b), serious assault (genital and/or anal and/or oral penetration), (c), sexual assault with excessive violence (use of violence, weapons, and/or mutilation of body). Corroborating information was generally available from police reports and witness statements. The diagnoses were made prior to phallometric or psychological testing.

<u>Sexual Functioning</u>

The Derogatis Sexual Functioning Inventory (DSFI) is a self-report designed to assess general and specific dimensions of sexual functioning with higher scores reflecting better functioning[19,20]. Therefore, the DSFI collects information using numerous items at once in order

to grasp "the fundamental components judged essential to effective sexual behavior" (Derogatis, 1980, p.117). The 10 sub-scales are Information, Experience, Sexual Drive, Sexual Attitude, Psychological Symptoms also known apart from the DSFI as the Brief Symptom Inventory (BSI), Affect, Gender Role Definition, Sexual Fantasy, Body Image, and Satisfaction. The Sexual Functioning Index (SFI), is a global measure derived by summing the 10 subtest scores and thus provides an overall measure of an individuals' level of sexual functioning.

The DSFI has been used with large non forensic samples but its use with sex offenders is limited. In Pawlak, Boulet, & Bradford (1991) using the DSFI, extrafamilial child molesters endorsed more fantasy themes than did the incestuous offenders. However, incestuous offenders scored higher on experience and satisfaction. There is some suggestion sex offenders show high levels of sexual dissatisfaction [22]. In an unpublished study at our clinic, all DSFI subscales except the Sexual Fantasy, distinguished a group of rapists who admitted to their crimes from a non offender comparison group. In each instance the comparison group indicated better functioning[23].

Hostility

The Buss-Durkee Hostility Inventory (BDHI) is a self-report which contains 75 True-False statements which provide a measure of seven constructs representing general hostility. Higher scores indicate the respondent has endorsed more hostile items. The BDHI consists of five assault subscales: Assault, Indirect Aggression, Irritability, Negativism, Verbal Aggression, Resentment, and Suspicion. An additional construct captured by the BDHI is Guilt, reflecting the degree of guilt feelings reported by the subject. This scale is part of the inventory but not included in the Total Score. There is a substantial body of construct validation evidence to support this widely used inventory[24,25,26,27]. A total score of 38 and above is considered high according to Buss and Durkee (1957). Research has found that among sex offenders, BDHI scores for violent rapists have been significantly higher than those for non offending controls[28]. In an unpublished study at our clinic, comparing a group of rapists who admitted to their crimes

and a normal control group, the scales of Indirect Aggression, Irritability, Resentment, Suspicion, Guilt and the Total Score distinguished the two groups. In each instance rapists rated themselves as demonstrating more hostility[23].

Alcohol Abuse

The Michigan Alcoholism Screening Test (MAST) , a 24-item self report inventory, is used to identify incidence or behaviors indicative of alcohol abuse[29,30,31]. The validity and reliability of this instrument are well established [29,30]. The internal consistency has a reported overall alpha coefficient of 0.87 and a validity coefficient of r=0.79 (gamma = 0.95), and is relatively unaffected by age or denial of socially unacceptable characteristics[32,33]. Total scores of five or six are considered suggestive of alcohol problems and a score of seven or more is considered strongly indicative of alcohol abuse [34]. The MAST has been found to correlate with DSM III R criteria for alcohol dependence[32]. The MAST has been extensively used as a screening tool for alcoholism, and many studies have utilized samples of sex offenders[28,34,35,36].

Psychopathy

The Psychopathy Checklist-Revised (PCL-R) consists of 20 clinical rating scales designed to assess behaviors and personality characteristics considered fundamental to psychopathy[37]. Rigorous testing has indicated that the PCL-R is a psychometrically sound instrument; the reported alpha coefficient, aggregated across seven samples of incarcerated males from Canada, the U.S. and England was .87[38]. Valid PCL-R ratings can be made on the basis of high quality archival information[39,40]. The PCL-R is beginning to receive widespread use in sex offender research[40,41]. The existence of two factors was replicated using various samples: 1)the degree of personality, interpersonal, and affective traits deemed significant to the construct of psychopathy; and 2) the degree of antisocial behavior, unstable, and corrupted lifestyle [42,43]. In Hare et al. (1990), using five prison samples (N=925) and three forensic samples (N=356), the correlation between the two factors averaged .48. Previous studies have found the interrater reliability and internal consistence of both factors to be high despite the small number

of items per factors[37,42,43].

In the present investigation, the PCL-R was completed from descriptive material contained in institutional files by two research assistants. The PCL-R was scored only from files where there were high quality archival data, by two individuals fully trained in its use [37]. A random sample of 100 clinic files were independently rated by each researcher, resulting in satisfactory interrater reliability correlation r=.88, p<.0001.

Measurement of Sexual Arousal

Changes in penile circumference in response to audio/visual stimuli were measured by means of an Indium-Gallium strain gauge and monitored by a Farrell Instruments CAT200. These data were then processed in an IBM compatible computer for storage and printout.

Stimuli Presentation: The order of stimulus presentation, held constant for all subjects, was computer controlled using MPV-Forth version 3.05 software provided by Farrell Instruments. Videotapes were presented first, followed by a set of slides. Finally, subjects were presented with one or more of three series of audiotapes, according to the nature of the subject's sexual offense. Only the results of arousal to the audiotape stimuli will be presented in the present paper. The audiotapes consisted of 120 second vignettes which described sexual activities varying in age, gender, and degree of consent, coercion and/or violence portrayed. Each subject was presented with a full set containing one vignette from each category following instructions to respond normally, that is to allow himself to become aroused if he felt aroused[44]. A second set was presented with instructions to "suppress" their arousal, however these data will not be reported.

The audiotape series used to identify sexual attraction to rape included two scenarios of two minute duration for each of three categories: 1) consenting sex with adult female; 2) rape of adult female; 3) non-sexual assault of adult female. The Rape Index was computed by dividing the response to the rape stimulus by the response to the adult consenting stimulus. The Assault Index was computed by dividing the response to the non-sexual assault stimulus by the response

to an adult consenting stimulus.

Criminal Offense History

Offense information was gathered from the Canadian Police Information Center (CPIC), a national data base of criminal charges and convictions including INTERPOL reports from the Royal Canadian Mounted Police. CPIC records contain the individual's criminal history and include details such as the date of charge or conviction, the nature of the offense, the disposition of the incident (i.e., convicted, charges withdrawn, stay of proceedings, etc.) and sentence/penalty imposed in cases of convictions.   In order for an offender to be considered eligible for recidivism, he must have been free to commit a crime; he could not have been incarcerated or in secure custody for reasons of mental illness. When there was evidence an offender was incarcerated but a release date was unavailable from CPIC records, or from the federal and provincial correctional systems, the CPIC record was used to estimate the first day of eligibility. This date was calculated based upon an offender having served two-thirds of his sentence (i.e., mandatory release). The offender then remained "at risk" until the date he was charged or convicted of a new offense, as indicated by the CPIC record.

Treatment of Data

Prior to performing statistical tests, the data were screened to ensure assumptions underlying tests were not violated. Outlying cases were detected by using a criterion of plus or minus three standard deviations from the mean, or by visual inspection of normal probability plots. Values of outlying cases were adjusted upwards or downwards according to the direction of the problem. This method is appropriate when case retention is desirable and does not unduly influence the group mean[45]. The values presented in the tables are based on after transformation scores.

<center>Results</center>

The follow-up period for the population of rapists ranged up to 12 years after the conviction for the index offense with an average of 7.6 (SD = 3.5) years.

Sexual Recidivism

As indicated in Table 1 the only significant difference between recidivists and nonrecidivists was that a significantly greater proportion of recidivists were removed from their homes prior to sixteen years of age (Placed Outside of the Home, 75.0% vs. 34.8% respectively). As revealed in Table 2, the non recidivists, compared with the recidivists, rated themselves higher on the Body Image of the DSFI (43.5 vs. 38.0) and significantly lower on the Negativism factor of the BDHI (1.9 vs. 2.7).

Violent Recidivism

As indicated in Table 1, the only difference between recidivists and non recidivists was a trend indicating a greater proportion of the former were removed from their homes prior to sixteen years of age (Placed Outside of the Home, 60.0% vs. 33.9% respectively). As revealed in Table 2, the recidivists, compared with the non recidivists, rated themselves higher on the Gender Role Definition of the DSFI (45.0 vs. 40.9) and on the Assault factor of the BDHI (5.5 vs. 4.1). The recidivists also admitted to more problems with alcohol as indicated by a mean score of 30.3 on the MAST compared with the non recidivists who scored 10.9.

Criminal Recidivism

As indicated in Table 1, the recidivists were younger at the time of their index offense compared with the nonrecidivists (27.4 vs. 31.9 years). Table 2 reveals the recidivists, compared to the nonrecidivists, scored higher on the Indirect Aggression item of the BDHI, and rated themselves as having a greater problem with alcohol on the MAST (21.9 vs. 9.1). The CPIC revealed recidivists also had, on average, significantly more Violent offenses (2.3 vs. 1.3), and more offenses of any type on record, prior to the index offense (Criminal: 7 vs. 4.7).

The small number of significant differences between recidivists and non recidivists in the

sexual and violent categories precluded an attempt to determine which combination of factors meaningfully predicted reoffending. However, the ordinal factors discriminating between the groups were utilized in a step-wise discriminant function analysis to assess the combination of factors that most successfully distinguished between groups in terms of criminal recidivism (Age, MAST, CPIC Violent, CPIC Criminal). The loading matrix of correlations between predictors and discriminant functions suggested the best combination of predictors for distinguishing between recidivists and nonrecidivist were Age and MAST. The result was a significant discriminant function $\_^2$ (2, $\underline{N}$= 42) = 8.97, p<.011. The procedure correctly classified 78.6% of the original group, 92.6% of the nonrecidivists and 53.3% of the recidivists. This represents a rate of improvement over chance (RIOC) of 26.8% for the nonrecidivists and 19.16% for the recidivists.

Figure 1 describes the survival rates of the rapists. The follow-up ranged up to 12 years, averaging 7.6 ($\pm$ 3.8) years. The percentage of men who had been charged or convicted of a sexual, violent or criminal offense by the 12th year was 16, 26 and 53 respectively. As revealed by the figure by the end of the 3rd year recidivism rates for sexual, violent and any criminal acts were approximately 10.5%, 16.3% and 39.5% respectively. By the end of the 5th year the corresponding failure rates were 14%, 21%, and 47.7%.

Discussion

The nature of the population considered in the present study is central to the discussion of the findings. To date, the majority of recidivism studies have utilized samples from maximum security psychiatric hospitals, or prisons. In the present study subjects were 86 consecutive referrals to a sexual behavior clinic, in a forensic unit of a large general psychiatric hospital, who had been convicted of rape. Since 63% of these men were assessed prior to sentencing for sexual assault, the group is much more representative of the wide array of men processed through the courts than previous publications. It is noteworthy, in the present group of offenders only 75%

were imprisoned for their offense, 23% were given suspended sentences or placed on probation, 1% were sentenced to intermittent jail, and 1% were given a fine.

Any discussion of sexual offenses or recidivism must be prefaced with a comment about the fact a substantial proportion of sex offenses remain unreported [5]. Therefore, it is expected the present recidivism rates are very conservative. It is important to recall recidivism was defined as any charge or conviction in the present investigation.   The rates for sexual, violent and overall criminal recidivism were 16%, 26% and 53%, respectively.   In two other Canadian reports of recidivism in rapists, in which the offenses constituting sexual, violent and any recidivism was the same as that employed in the present study, but only convictions were considered for recidivism, the rates were higher - 28%, 43%, 53%[15] and 21%, 36% and 51% [16.]. The mean number of previous charges and convictions for all crime in Proulx et al [16] was approximately 15 for recidivists and 7.9 for non recidivists, while the corresponding figures reported by Rice et al [15] , 11 and 6, were about twice as high as for subjects in this study (7,4). Given subjects in these other studies were incarcerated in maximum security psychiatric hospitals it should not be surprising they also appeared to be more criminally entrenched than the present group of men.

The predominant feature of the data for our total group of rapists is their relatively poor personal history in a wide array of domains, albeit they are quite similar to other rapist populations [15,40,16]. The average number of years of education of rapists in this, and the other populations, is considerably lower than other Canadians of similar age, 85% of whom graduate from high school[46]. In addition, the proportion of individuals who have been in a marital or common-law relationship is also much lower than the national rate for Canadian men, which is approximately 75% [47]. For subjects in the present study, the rates of family violence, parental separation, physical and sexual abuse, and the number of men removed from their homes before age sixteen, are also disturbing.

The ability to predict sexual and violent recidivism in this population of rapists was rather poor, and in general, replicates the results of Proulx et al [16] who found no differences between

those who reoffended sexually and those who did not. The sexual and violent recidivists in the present study were removed from their homes at almost twice the rate as nonrecidivists. In addition, the violent recidivists scored significantly higher on alcohol problems as rated by the MAST, than those who did not reoffend. The statistically significant differences found on the DSFI and the BDHI, must be viewed with caution. The lack of converging findings from other categories on these tests suggests they may be spurious.

In terms of any criminal recidivism, several items discriminated between those who reoffended and those who did not. Of note, the recidivists were younger, had more alcohol abuse in their lives, had committed more violent acts, and had a history of being charged with more general criminal offenses. These findings are generally similar to those reported by others [10,15,16]. In the present study, the combination of age and MAST scores was able to predict 92.6% of the nonrecidivists and 53.3% of the recidivists. However, one should view this ability with some caution if considering prediction in other populations. There is considerable evidence such statistical modeling is highly sensitive to the particular population under consideration [10,14,48].

Psychometric tools have generally shown an inability to discriminate between recidivists and nonrecidivists in sex offenders [9,10,16,22]. Therefore the inability of the DSFI and the BDHI to identify recidivists should not be surprising, because these tests were not designed to be used with forensic populations. It is possible such tests tap necessary conditions for sexual aggression to occur, but that they may be insensitive to other factors, such as cognitive distortions, availability of victims and substance abuse, that need to be present. These factors may act as disinhibitors allowing sexual offenses to occur. As an example, although not differentiating between recidivists and non recidivists, the average DSFI, Sexual Functioning Index scores of 34, for the total group of rapists in the present study, places them in approximately the 7th percentile of the population at large [49]. This suggests the sexual functioning of rapists is far from normal. In addition, several of the items on the BDHI are in the clinical range (5.6 on Assault, 4.1 on Suspicion and 4.9 on Guilt), suggesting rapists may have ingrained problems with

hostility. The range of scores on the MAST also indicate that rapists have serious problems with alcohol, since scores higher than seven are considered highly indicative of alcoholism [32,34].

The ability of phallometric measures to distinguish between rapists and normal controls and/or other sex offenders has been questioned[50,51]. Factors related to stimulus sets, procedures, statistical transformations and subject selection, have been implicated in the conflicting findings [52]. Phallometric assessment has also failed to be a meaningful predictor of recidivism for rapists [10]. Of the two other Canadian recidivism studies with rapists one reported that phallometric scores were related to recidivism [15] and the other was unable to replicate this [16]. Differences in measurement procedures may have lead to these discrepant findings but more likely, dissimilarities in the populations contributed to the difference. Less expected was the inability of psychopathy as measured by the PCL-R to distinguish between recidivists and non recidivists in the present group of rapists. The PCL-R has been found to predict recidivism in a number of offender populations [48], and it has been sensitive to recidivism in populations of child molesters and rapists [10,14,15]. The inability of the PCL-R to predict recidivism in the present population may be due to the distribution of scores. Rice et al (1990) reports mean PCL-R scores of 21.53 and 15.73 for recidivists and non recidivists, in their population of rapists. In the present study the corresponding PCL-R scores were 26.7 and 23.3. It is not clear why our population, which should be less pathological, were rated higher on psychopathy. The inability of DSM diagnoses to distinguish recidivists from non recidivists replicates the findings of others[14,15] and may speak to the fact such diagnoses are not sensitive to factors related to recidivism in this population

A shortcoming in the present investigation was that only static features, were considered in relation to recidivism. Recently, there has been interest in the role of dynamic features, such as treatment response, in recidivism [10,54]. Unfortunately, the evaluation of the influence of treatment on recidivism rates, was beyond the scope of the present study. Nevertheless, the results are quite revealing. In the present investigation, because most of the rapists were assessed prior to incarceration, as opposed to after being imprisoned, they are a more representative group

than rapists used in most investigations. The results make it clear that even though this group of

rapists is less mentally ill than those from maximum security psychiatric hospitals, and are less

criminogenic than those from the federal penitentiary system, as a group they are very

problematic. Almost 50% of this group recidivated by the end of the 5th year. They seem to

share a very disturbed childhood, marked by violence, family disruption and removal from the

home, considerable alcoholism, difficulty with hostility, poor sexual functioning, and a great deal

of psychopathy. It is also evident they have a substantial criminal history. In general, the results

support the greater body of literature that suggests it is difficult to find factors that predict any

type of recidivism in rapists, other than those related to general criminality[10,16]. There are a few

reports of other factors, such as deviant sexual arousal, that have shown such an ability, but these

come from men in a maximum security psychiatric hospital, suggesting such variables are only

useful with the most disturbed groups of rapists.

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Table 1. Demographic Characteristics, Self-Reports and File Information Describing Rapists.*

Variables	Sexual Recidivism (a)		Violent Recidivism (b)		Criminal Recidivism (c)		t or χ^2	df	p<
	yes	no	yes	no	yes	no			
Age	29.1 ± 9.7 (14)	29.6 ± 8.3 (71)	28.5 ± 8.2 (22)	29.9 ± 8.6 (63)	27.4 ± 6.5 (45)	31.9 ± 9.8 (40)	c, -2.48	83	.015
IQ	89.1 ±17.5 (13)	88.8 ± 13.1 (48)	90.6 ±16.1 (18)	88.1 ± 13.1 (43)	89.1 ± 13.6 (36)	88.5 ± 14.7 (25)			
Education	9.0 ± 4.0 (13)	10.1 ± 2.7 (65)	9.1 ± 3.4 (20)	10.2 ± 2.8 (58)	9.7 ± 2.8 (43)	10.1 ± 3.2 (35)			
Ever Married **	28.6 (4)	34.7 (25)	31.8 (7)	34.4 (22)	28.9 (13)	39.0 (16)			
Stranger Relationship to Victim	72.7 (8)	41.8 (23)	58.8 (10)	42.9 (21)	55.6 (20)	36.7 (11)			
History of Drug Abuse	61.5 (8)	66.2 (45)	57.1 (12)	68.3 (41)	72.7 (32)	56.8 (21)			
History of Suicidal Behavior	7.7 (1)	36.4 (24)	25.0 (5)	33.9 (20)	31.0 (13)	32.4 (12)			
History of Violence	46.2 (6)	62.5 (40)	50.0 (10)	63.2 (36)	65.1 (28)	52.9 (18)			
Family History of Drug Abuse	0 (0)	6.5 (4)	0 (0)	7.4 (4)	0 (0)	11.4 (4)			
Family History of Mental Illness	16.7 (2)	23.4 (15)	25.0 (5)	21.4 (12)	27.5 (11)	16.7 (6)			
Family History of Violence	66.7 (6)	55.6 (30)	60.0 (9)	56.3 (27)	66.7 (20)	48.5 (16)			
Family History of Criminality	0 (0)	8.1 (5)	0 (0)	9.3 (5)	5.6 (2)	8.3 (3)			
Intact Family	50.0 (6)	52.9 (36)	50.0 (10)	53.3 (32)	50.0 (20)	55.0 (22)			
Physical Abuse <16	55.6 (5)	41.1 (23)	53.3 (8)	40.0 (20)	53.3 (16)	34.3 (12)			
Sexual Abuse < 16	14.3 (2)	36.1 (26)	22.7 (5)	35.9 (23)	28.9 (13)	36.6 (15)			
Placed Outside of the Home < 16	75.0 (6)	34.8 (23)	60.0 (9)	33.9 (20)	48.6 (17)	30.8 (12)	a, 4.83	1	.028

							b, 3.42	1	.064

* The number of subjects in analyses may differ due to missing or uninterpretable data..

** In all tables, for categorical data the percentage of subjects is presented first followed by the number of subjects in brackets.

Table 2. Psychological Test Scores for Rapists.

Variables		Sexual Recidivism (a)		Violent Recidivism (b)		Criminal Recidivism (c)		t	df	p<
		yes	no	yes	no	yes	no			
DSFI	Information	37.9 ±11.5 (14)	38.2 ±10.8 (67)	38.6 ±11.2 (21)	38.0 ±10.8 (60)	39.0 ±10.1 (43)	37.2 ±11.7 (38)			
	Experience	41.2 ± 9.4 (14)	44.5 ±10.9 (67)	43.0 ±10.4 (21)	44.3 ±10.9 (60)	42.3 ±10.7 (43)	45.8 ±10.5 (38)			
	Sexual Drive	53.0 ±11.6 (14)	50.4 ±11.7 (66)	54.5 ±10.9 (21)	49.6 ±11.7 (59)	52.8 ±11.5 (42)	48.7 ±11.6 (38)			
	Sexual Attitude	38.7 ± 7.9 (14)	40.8 ±10.7 (67)	39.1 ± 9.1 (21)	40.9 ±10.7 (60)	40.1 ± 9.9 (43)	40.8 ±10.7 (38)			
	Psychological Symptoms	43.9 ± 9.2 (14)	43.4 ±14.9 (66)	41.6 ±10.0 (21)	44.1 ±15.2 (59)	42.8 ± 2.3 (43)	44.2 ±15.9 (37)			
	Affects	38.1 ±10.8 (14)	39.6 ±12.3 (65)	38.3 ±10.7 (20)	39.7 ±12.5 (59)	39.5 ±12.6 (42)	39.1 ±11.5 (37)			
	Gender Role Definition	45.4 ± 9.1 (14)	41.2 ± 7.5 (65)	45.0 ± 7.9 (20)	40.9 ± 7.7 (59)	42.8 ± 8.4 (42)	41.0 ± 7.4 (37)	b, 2.03	77	.046
	Sexual Fantasy	43.5 ±12.9 (14)	46.1 ±11.4 (66)	45.1 ±11.4 (20)	45.8 ±11.8 (60)	45.0 ±10.2 (42)	46.3 ±13.1 (38)			
	Body Image	38.0 ± 7.6 (14)	43.5 ± 9.5 (64)	39.8 ± 7.1 (20)	43.4 ± 9.9 (58)	42.1 ± 8.5 (41)	42.9 ±10.4 (37)	a, -2.01	76	.049
	Satisfaction	48.9 ±11.6 (14)	50.8 ± 8.2 (65)	50.4 ±10.7 (20)	50.6 ± 8.2 (59)	50.8 ± 9.0 (41)	50.2 ± 8.8 (38)			
	Sexual Functioning Index	33.2 ±11.1 (14)	35.1 ±14.4 (62)	34.7 ±12.3 (20)	34.8 ±14.4 (56)	34.8 ±13.8 (40)	34.8 ±14.1 (36)			
BDHI	Assault	5.6 ± 3.1 (14)	4.2 ± 2.5 (66)	5.5 ± 2.9 (20)	4.1 ± 2.5 (60)	4.6 ± 2.8 (42)	4.3 ± 2.5 (38)	b, 2.13	78	.036
	Indirect Aggression	4.7 ± 2.4 (14)	4.4 ± 2.3 (66)	4.4 ± 2.4 (20)	4.4 ± 2.3 (60)	4.0 ± 2.2 (42)	5.0 ± 2.4 (38)	c, 1.95	78	.055
	Irritability	4.6 ± 3.1 (14)	4.6 ± 3.0 (66)	4.6 ± 2.8 (20)	4.7 ± 3.1 (60)	4.5 ± 2.9 (42)	4.8 ± 3.2 (38)			
	Negativism	2.7 ± 1.1 (14)	1.9 ± 1.4 (66)	2.5 ± 1.2 (42)	1.9 ± 1.4 (60)	2.0 ± 1.3 (42)	2.0 ± 1.5 (38)	a, 2.11	78	.038
	Verbal Aggression	7.8 ± 2.8 (14)	6.5 ± 2.5 (66)	7.4 ± 2.5 (20)	6.5 ± 2.6 (60)	6.6 ± 2.7 (42)	6.9 ± 2.5 (38)			
	Resentment	2.8 ± 2.4 (14)	3.1 ± 2.3 (66)	2.7 ± 2.4 (20)	3.2 ± 2.3 (60)	2.7 ± 2.1 (42)	3.3 ± 2.4 (38)			
	Suspicion	4.1 ± 2.7 (14)	4.1 ± 2.8 (66)	3.9 ± 2.6 (20)	4.2 ± 2.9 (60)	4.4 ± 2.6 (42)	3.7 ± 2.9 (38)			
	Guilt	4.9 ± 2.2 (14)	4.8 ± 2.5 (66)	5.1 ± 2.2 (20)	4.8 ± 2.5 (60)	4.8 ± 2.2 (42)	4.9 ± 2.7 (38)			

Total Score	32.3 ±11.9 (14)	28.7 ±12.1 (66)	30.9 ±10.8 (20)	28.9 ±12.5 (60)	28.8 ±10.6 (42)	30.0 ±13.7 (38)			
MAST	26.3 ±17.9 (3)	12.6 ±13.9 (40)	30.3 ±15.8 (6)	10.9 ±12.4 (37)	21.9 ±16.7 (15)	9.1 ±10.9 (28)	b, 3.45 c, 2.68	41 20.5	.001 .014
PCL-R Factor 1	9.8 ± 4.4 (13)	10.1 ± 3.5 (63)	10.6 ± 3.9 (21)	9.9 ± 3.6 (55)	10.4 ± 3.3 (42)	9.71 ± 4.1 (34)			
Factor 2	11.8 ± 4.4 (12)	11.5 ± 4.7 (53)	12.2 ± 4.4 (19)	11.3 ± 4.7 (46)	12.5 ± 4.3 (36)	10.4 ± 4.8 (29)			
Total Score	25.2 ± 8.4 (13)	25.2 ± 8.3 (65)	26.1 ± 8.2 (21)	24.8 ± 8.3 (57)	26.7 ± 7.2 (43)	23.3 ± 9.1 (35)			

Table 3. Degree of sexual violence used in the index offense, number of DSM diagnoses, phallometric responses and offense history of rapists.

Variables	Sexual Recidivism (a)		Violent Recidivism (b)		Criminal Recidivism (c)		t or _²	df	p<
	yes	no	yes	no	yes	no			
Sexually Aggressive Scale									
Attempt or Touching: Fondling, masturbation, and/or kissing	38.5 (5)	13.2 (9)	25.0 (5)	14.8 (9)	14.3 (6)	20.5 (8)			
Serious Assault: Genital and/or anal and/or oral penetration	7.7 (1)	14.7 (10)	5.0 (1)	16.4 (10)	9.5 (4)	17.9 (7)			
Assault with Excessive Violence: Use of violence, weapons, and/or mutilation of body	53.8 (7)	72.1 (49)	70.0 (14)	68.9 (42)	76.2 (32)	61.5 (24)			
Number of DSM Diagnoses*	.9 ± 1.1 (14)	.9 ± 1.4 (72)	.6 ± 1.0 (22)	1.0 ± 1.5 (64)	.7 ± 1.2 (45)	1.1 ± 1.5 (41)			
Phallometric Responses									
Rape Index	.6 ± .7 (13)	.7 ± .7 (68)	.6 ± .7 (21)	.7 ± .7 (60)	.6 ± .58 (42)	.7 ± .74 (39)			
Assault Index	.3 ± .4 (13)	.2 ± .3 (67)	.3 ± .4 (21)	.2 ± .3 (59)	.2 ± .34 (42)	.2 ± .31 (38)			
Highest Rape or Assault Index	.6 ± .7 (13)	.7 ± .7 (68)	.6 ± .7 (21)	.7 ± .7 (60)	.6 ± .58 (42)	.7 ± .74 (39)			
Number of Previous Offenses (CPIC) **									
Sexual	.9 ± 1.2 (14)	.4 ± .9 (71)	.6 ± 1.1 (22)	.4 ± .9 (63)	.6 ± 1.0 (45)	.3 ± .8 (40)			
Violent	2.5 ± 2.7 (14)	1.7 ± 2.4 (71)	2.2 ± 2.7 (22)	1.7 ± 2.4 (63)	2.3 ± 2.8 (45)	1.3 ± 1.9 (40)	c, 2.04	78.3	.022

Criminal	6.0 ± 6.1 (14)	5.9 ± 6.3 (71)	6.1 ± 6.2 (22)	5.8 ± 6.3 (63)	7.0 ± 6.5 (45)	4.7 ± 5.7 (40)	c, 1.71	84	.045

* Individual DSM categories were also analyzed without significant findings

 ** one-tailed t-tests

Figure 1. Survival rates for rapists