PSYCHOLOGICAL SEQUELAE OF SEXUAL ASSAULT IN PRISONER AND STUDENT SAMPLES

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VITA

Allison R. Kluz was born to Helen and Ted Kluz, in San Antonio, Texas on January 22, 1966. She received her education primarily in the Montgomery, Alabama School System, graduating from Lanier High School in June, 1984. She entered the University of Alabama in Birmingham in September of 1985, majored in psychology, and graduated with a B.S. in June 1989.

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THESIS ABSTRACT

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Recent studies suggest that victims of sexual assault are at risk to develop posttraumatic stress disorder, as well as to undergo changes in personality, social and behavioral functioning. The present study examined the existence and extent of sequelae associated with sexual assault. Four measures were employed by the study, which sampled females from correctional and university populations. The Sexual Experiences Survey served as a screening device; subject's responses on the instrument determined their classification as victims or nonvictims. Three remaining measures served as indicators of the aftereffects of assault: the MMPI-2, the Restriction

of Activities Questionnaire, and a DSM-III-R PTSD symptomatology checklist.

Results indicated several MMPI scales could identify women as prisoners or students, victims or nonvictims. Although no significant differences were found on the ROA or the checklist, subject's responses to a free response item included on the ROA indicated such free response items may be more relevant to studies such as the present one, rather than forced choice items. Repression is implicated as a possible contributor to the lack of significance in research findings, as well as the need for a increase in the number of free response items. Suggestions for further research are presented.

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CHAPTER I

INTRODUCTION

The Scope of Sexual Assault

Throughout history, rape has been a social problem of considerable magnitude (Koss, Gidycz, and Wisniewski, 1987; Burt, 1980). Although the last two decades have witnessed a substantial increase in the amount of research devoted to the detection, analysis and prevention of rape, much work remains to be done (Warshaw, 1989). Moreover, despite the attention rape has received in the past twenty years, particularly the coverage given to sexual assault by the media, the public remains hesitant to discuss the problem openly and most rapes remain unreported (Koss, 1983).

Research indicates that FBI reports grossly underestimate the incidence of sexual assault. For example, Russell (1982) reports that women are actually thirteen times more at risk than the Uniform Crime reports imply. She further concluded that an estimated 15-38% of adults were sexually abused as children. Furthermore, it is projected that 23-29% of adult women will experience at least one attempted or completed rape (Koss, Gidycz & Wisnieski, 1987).

As previously stated, victims are reluctant to report being raped. Koss (1985) found that only 5-8% of women who were raped filed an official report of the crime. Warshaw (1989) reports that most victims do not tell anyone about their experience. There seem to be many contributing factors associated with this reluctance to report rape including feelings of shame, guilt, self-blame, and lack of confidence in the criminal justice system.

Women are more likely to be raped by someone they know than by a stranger (Warshaw, 1989). However, acquaintance rapes are much less likely to be reported than rapes that are perpetrated by strangers (Koss, 1985). The under-reporting of acquaintance rape seems to be exacerbated by the tendency of women not to acknowledge the assault as rape. This is thought to be due in part to the social context surrounding acquaintance rape, e.g., a date, wherein expectations concerning sexual relations may be miscommunicated (Koss, 1985; Koss and Dinero, 1989; Warshaw, 1989).

Researchers have postulated that not only do acquaintance rape victims and victims of rape by a stranger perceive their experiences differently, but that the motives of the rapist differ in each situation. Burt (1980) asserts that stranger rape is inspired by a need for power, while acquaintance rape is sexually motivated. Not all theorists agree with this distinction. Malamuth (1983) contends that

acquaintance rape is motivated by the same need for power that compels predatory rapists. Although a discussion of the psychology of the perpetrator is beyond the scope of this paper, interested readers are directed to Denmark and Friedman (1985); Donnerstein and Berkowitz (1981); Donnerstein, Linz and Penrod (1987); Hall (1989); Malamuth (1981, 1983, 1988); Petterson and Bettina (1987); Teiger (1981); and Wolfe and Baker (1980).

Defining the Problem: Methodological Considerations

An important methodological consideration exists in conducting research with rape victims. Specifically, the operational definitions employed by researchers affect every facet of scientific inquiry, from survey instruments to reports of research findings. In reviewing rape studies the differing criteria of rape make comparisons among studies difficult. For example, some theorists contend that because rape is a concept grounded in criminal law, the proper way to define sexual assault is in legal terms. However, Koss (1985) asserts that such legal definitions are restrictive, and the failure to define rape more broadly results in the tendency to ignore the social and psychological effects of rape on its victims. Furthermore, Koss contends that most laws do not acknowledge spousal rape or they impose a minimum age limit of fourteen years on the classification of rape victims. The result of such policies, Koss argues, is

that entire classes of victims are excluded from legal reports.

Koss (1990) has also pointed out that the survey instruments provided the National Crime Survey, which are used by law enforcement agencies to create an annual index of the number of crimes committed each year, are flawed and that the questions are designed to tap aggravated assault rather than rape. Apparently, all items describe nonsexual criminal acts perpetrated against the interviewee in which guns, knives or other weapons were present. The single question designed to identify rape victims simply asks, "Were you assaulted in any other way?" Thus, in its current form the survey excludes all victims who experienced an unaggravated sexual assault. Koss (1990) states that the survey is further limited in that it lacks the ability to identify the victims of childhood sexual abuse.

This tendency of official surveys to exclude classes of victims has been a contributing factor to the development of the trend in rape research to "drop the legal baggage and formulate new definitions of sexual assault" (Ellis, 1989). As Koss (1990) explains, "for clinical purposes, rape can be viewed as the endpoint of sexual victimization, inasmuch as other experiences that are less extreme than rape may nevertheless be harmful, including coercive sexual contacts, sexual harassment, and attempted rape" (p. 376).

Although rape and attempted rape have been identified as severe stressors, there are individual differences in responses to trauma. As Mackey (1992) points out, "how does the victim, or researcher or observer, define and measure the severity of stress? What is severe to one person may not be to another." Furthermore, she states, "these terms are not uniformly operationalized in research studies" (p. 191). Regardless of whether or not concordance exists with regard to a formal definition of rape, "lesser degrees" of assault are widely recognized as having the potential to be psychologically traumatizing.

With this in mind, research instruments have been developed to tap into what might not be readily described as "rape". One such research instrument, The Sexual Experiences Survey (Koss & Oros, 1982), includes a continuum of sexually assaultive behaviors, beginning with verbal coercion and concluding with descriptions of more forceful acts, i.e., those which meet the legal definition of rape. Using a similar theoretical model, Russell (1984) included situations wherein victims were intoxicated, drugged, or otherwise helpless, and defined rape as oral, anal or vaginal contact, in which force was used.

One advantage of using inclusive definitions which are theory oriented rather than strictly forensic is that they enable one to identify women who would not otherwise label themselves as victims. The latter are women Koss refers to

as "unacknowledged victims" or "hidden victims" or what Weis and Borges (1973) refer to as "legitimate victims."

Again, although the variation in operational definitions makes it difficult to integrate the body of research that is accumulating on assault, using broader definitions allows for the acknowledgement and provision of treatment services for the sexually traumatized (Craig, 1990). Despite the failure of their experiences to meet the legal criteria of rape, victims are recognized as suffering intense psychological stress.

The Sequelae of Assault

The effects of traumatic stressors are recognized to be mediated by a number of factors: "pre-existing dispositional traits, developmental history and the multiple meanings ascribed to the experience by individuals and groups", (Ursano and Fullerton, 1990 p.1767). In studying the responses of individuals to severe stressors the impact of those stressors can be better understood, and effective therapeutic interventions can be applied (Jones & Barlow, 1990).

The Diagnostic and Statistical Manual of Mental Disorders-III-R (DSM-III-R, American Psychological Association, 1987) defines Posttraumatic Stress Disorder (PTSD) as behavioral, social and emotional abnormalities following the exposure to a recognizable stressor of

sufficient magnitude to evoke stress in almost anyone. According to Davison & Neale (1982), "An extremely traumatic event or catastrophe brings in its aftermath anxiety, depression, poor concentration, disturbed sleep, and a tendency to be easily startled"(p.147). Often intrusive memories will interrupt cognitive functioning, and individuals will feel disassociated from everyday activities. Nightmares are common. The course of the disorder may be delayed, chronic or acute, "and is apparently more severe and longer lasting when the disaster is man-made" (Davison & Neale, 1982, p.147). Although first identified in combat veterans, and referred to as shell-shock, battle fatigue, or combat neurosis, PTSD has been recognized in numerous other clinical populations including battered women (Walker, 1991; Houskamp and Foy, 1991), and incest victims (Mackey, 1992). These developments in research are important to the mental health profession; there are no other specified diagnostic criteria for the psychological problems experienced by victims. In fact, they are often "misdiagnosed with a host of other psychological problems such as bipolar affective disorder, personality disorder, or depression", (Mackey, 1992, p.193). Obviously, misdiagnoses will lead to inappropriate treatment of adjustment problems for individuals, failure to develop treatment programs, and a lack of social policy as the condition remains hidden.

As Solomon (1990) asserts, there has been relatively little scientific research in the area of domestic post-traumatic stress which is "probably attributable to the considerable denial regarding emotional consequences of catastrophic events" (p.1742). Similarly, Kramer and Green (1991) have observed "empirical studies which document the presence of PTSD in sexual assault victims have been sparse" (p.171). However, as previously stated, a better understanding of victim responses to severe stressors will enable caregivers to better implement effective treatments.

The psychological sequelae of rape vary in severity among individuals. Thus therapists should be sensitive to the range of individual responses to sexual assault. Studies undertaken with rape victims suggest the development of PTSD symptomatology may be a typical response in this particular population (Kiser, et.al. 1991). Kramer and Green (1991) explored the incidence of PTSD in a sample of 30 women who had experienced a sexual assault in the past six to eight weeks. Seventy-three percent (22 out of 30 women) met the full criteria for PTSD diagnosis. Kiser, et. al. (1991) also found a history of sexual abuse to be linked to psychiatric disturbances indicative of PTSD.

Jones and Barlow (1990) have suggested PTSD develops out of a complex interaction between biological and psychological factors, including the inability to cope with stress and perceived inadequate social support.

Specifically, the diagnosis of PTSD characteristically includes the presence of intrusive symptoms, particularly nightmares and flashbacks and upsetting memories of the perpetrator, details of the assault and the location. Jones & Barlow (1990) state that women cope with these intrusive symptoms by "detaching themselves from others, denying affect, and avoiding any stimuli which would trigger memories of the event" (p.301), thus coping by suppressing emotional reactions to internal and external stimuli.

However, a victim's responses to sexual assault can affect the supportiveness of her social environment. Winkel and Koppelaar (1991) found that a numbed style of self-presentation (feelings suppressed and controlled) as contrasted to an emotional style of self-presentation (emotional responses clearly observable) influence how others react to victims. Women who present themselves as numbed are much more likely to be blamed for their circumstances. Those who are obviously distressed are more likely to be seen as "victims". Ironically, social support is an important factor in the recovery of trauma, and women who are blamed tend to experience more severe symptoms of PTSD (Kramer and Green, 1991).

Different coping styles, then, are an important consideration for caregivers. Clinicians may underestimate the impact of rape on their clients if confronted with a numbed style of self-presentation. Again, recovery may be

hampered, because social support is diminished for those who are seen as not harmed. Furthermore, "numbed" survivors will conceivably find recovery more difficult because their environment may tend to be punitive rather than sympathetic.

Walker (1991), whose focus has been primarily aimed at treating battered women, also stresses the importance of supportive environments. PTSD in this population closely conforms to what clinicians have referred to in the past as "battered women syndrome", (Walker, 1991; Houskamp and Foy, 1991). Apparently, women who live with repeated violence manifest PTSD symptomatology. The clinical symptoms that they demonstrate are related both to prior trauma and intense anxiety as a function of the possibility of abuse re-occurring. Walker's clinical profile of the battered woman includes the tendency for a woman to become mildly dissociative as she reexperiences the trauma. Some display flat affect while others engage in tangentiality and thought derailment in an effort to control emotions during interviews, and avoid the intense anxiety that memories of the event produce (Walker, 1991).

Memories of traumatic events have been found to interfere with information processing skills, suggesting that intrusive cognitions affect other areas of cognitive functioning (McNally, Kaspi, Rieman, and Zertlin, 1990).

The effects of assault tend to be worse when the victim has a prior history of mental health problems (Jones and Barlow, 1991). It is important for clinicians to separate premorbid characteristics from PTSD, although those other mental health problems do not usually manifest themselves until months into the treatment (Walker, 1991). Walker writes, "there is always some permanent damage" (p.25); suggesting the aftereffects of sexual assault tend to be intractable to some extent.

Other PTSD criteria described in the DSM-III-R (APA, 1987) include depression, hypervigilance, and anxiety. Clinicians have added anger, resentment, denial and avoidance, all of which "may inhibit a victim's capacity to seek social support, engage in treatment, or cooperate in legal prosecution" (Jones & Barlow,1991, p. 323).

PTSD provides a reliable conceptual framework for describing women's responses to sexual assault and long-term abusive situations (Houskamp & Foy, 1991). Understanding victimization in this framework will help caregivers predict adaptive functioning and treat clients appropriately (Kramer and Green, 1991).

Personality Factors

The experience of sexual assault may manifest itself in a variety of clinical symptoms. As Kramer & Green (1991) assert, "The experiencing of intrusive and/or avoidant symptomatology as an early response to the assault may be

related to other forms of chronic pathology; for example, debilitating fears, agoraphobic behaviors or substance abuse" (p.171). Terr (1991) also refers to symptoms such as suicide attempts, self-destructiveness, substance abuse and unstable relationships with others.

One way clinicians have attempted to assess the effects of trauma on personality structure and the subsequent psychopathological responses to traumatic stress is through the use of the Minnesota Multiphasic Personality Inventory (which now revised, is referred to as the MMPI-2). The MMPI is the most widely used instrument for personality assessment and the detection of clinical abnormalities (Graham, 1990).

Rosewater, (1985) in studying the effects of long-term abuse, was able to identify battered woman syndrome using the MMPI. She reports the syndrome is indicated by MMPI scales measuring depression(scale 2), anger (scale 4), suspiciousness (scale 6), and confusion (scale 8). Walker (1991) has also used the MMPI with battered women and reports profile configurations are similar to those of rape victims; probably attributable to the fact that sexual abuse is often present in battered woman syndrome. However, in addition, victims of rape (scale F) endorse items indicative of severe anxiety and rumination. Similarly, Streit-Forrest and Goulet (1987) found four scales of the MMPI to be

elevated on profiles of rape victims: Denial, Hypochondriasis, Depression, and Conversion Hysteria.

Social, Emotional, and Behavioral Responses to Assault

Characteristic responses to sexual assault include the loss of trust and security, and feelings of violation (Dye & Roth, 1991). Women, due to the social structure particularly prevalent in Western culture, feel ashamed after an assault, rather than angry. This reaction is thought to be conditioned through socialization; i.e., women are taught to believe that they incite abuse (Brownmiller, 1975).

The threat of violence and the high incidence of assaults against women "imposes clear social constraints on women, constricts mobility and restricts patterns of social interaction," as well as freedom, political power and self worth (Sampselle et al., 1992, p.5). Lanza (1988) discovered a host of emotional, behavioral and interpersonal effects of assault in a group of psychiatric nurses who had sustained attacks from one or more patients. Although not explicitly stated in her research, the symptoms she identified as resulting from assault virtually replicate DSM-III-R PTSD diagnostic criteria (APA, 1987). Additionally, she found that post-assault functioning included a restriction in range of social activities.

In a study using the Rorschach, Leifer, Shapiro, Martone and Kassem (1991) discovered sexually abused girls

were found to show "more disturbed thinking, to experience a higher level of stress relative to their adaptive abilities, to describe human relationships more negatively, and to show more preoccupation with sexuality than non-victimized groups"(p.15). Similarly, Shapiro, Leifer, Martone, and Kassem (1990) discovered guardedness, defensiveness and depression in the self-reports of sexually abused girls.

Another response to victimization is the tendency toward substance abuse. In one survey, crime victims, particularly those who had experienced physical and sexual assault were 2.4 times more likely to have experienced somatic complaints, emotional distress, and self injurious behaviors. Furthermore, 80% of the victims were found to have PTSD (McCarthy, 1990).

In a study performed by Fitzpatrick & Boldizar (1991) 90 of 200 children showed a combination of symptoms ranging from nightmares and insomnia to emotional withdrawal after witnessing emotionally traumatic events such as violent criminal acts. Studies such as these suggest commonalities among the experiences of victims in general, whether they are incest victims, battered women, survivors of combat, or simply onlookers. An excellent discussion of psychological similarities among people experiencing traumatic events may be found in a literature review compiled by Jones and Barlow (1990).

Although attempting to identify predispositional variables is conceptually impossible without conducting a controlled longitudinal study, understanding sexual assault in terms of the sequelae associated with it is valuable insofar as such a framework can aid caregivers in educating and treating victims and further theoretical understanding. The reactions to severe stress discussed thus far have been consistently found in victimological research. In many instances reactions in victims are quite similar although intensity of those responses vary. Through research and experience, clinicians have identified factors important in recovery which also vary according to individual psychological makeup; for example, the perceived lack of control and lack of social support intensify PTSD symptoms (Jones and Barlow, 1990). The characteristic symptoms of denial and avoidance also inhibit a victim's capacity to seek either social or professional support. Furthermore, psychological fear and emotional constriction may lead to a restriction of social contacts and geographic and temporal freedom.

CHAPTER II

STATEMENT OF THE PROBLEM

Research indicates that rape victims are at risk to develop post-traumatic stress disorder, as well as to experience associated behavioral changes, e.g., increase their use of alcohol and/or drugs. However, a growing body of evidence also suggests that women who experience one or more sexual assaults (i.e., sexually coercive incidents wherein intercourse may be attempted but does not occur) may suffer the same symptoms of psychological distress as women whose experiences meet the legal definition of rape. Therefore, rather than focusing solely on legally defined rape, a study was designed to assess the psychological, social, and behavioral sequelae of sexual assault.

Specifically, several instruments were administered, including the MMPI-2, which was used to assess personality disturbance and psychopathology. Measures of the degree of sexual assault (e.g., forced sexual contact vs. legally defined rape) were administered, as was an indicator of PTSD symptomatology. Subjects were asked to complete a self-report questionnaire concerning the effect of sexual assault on their social behaviors.

Hypothesis 1

There is a significant relationship between population and MMPI-2 scale scores, i.e., the scale scores of prison subjects are expected to be elevated as compared to the scale scores of university subjects.

Hypothesis 2

There is a significant relationship between history of sexual assault and MMPI-2 scale scores, i.e., the scale scores of sexual assault victims are expected to be elevated as compared to the scale scores of nonvictims.

Hypothesis 3

There is a significant relationship between sexual assault and 'behavioral restriction'; specifically, assault victims are predicted to have limited their social behaviors as a result of the assault as compared to nonvictims who are predicted not to have experienced a limiting of social functioning.

Hypothesis 4

There is a significant relationship between history of assault and endorsement of PTSD symptomatology. Sexual assault victims are expected to respond positively to items indicative of post-traumatic stress syndrome as compared to nonvictims.

CHAPTER III

METHOD

Subjects

The sample consisted of 68 women, 32 of whom were inmates at a state correctional institution. The remaining 36 were undergraduate psychology students (see Table 1). Subjects were recruited through sign up sheets posted in both institutions. In addition, flyers were distributed in the prison. In the university, instructors announced the experiment in class and students were given the incentive of earning extra credit for participation.

Table 1 depicts sample characteristics based on group membership (prisoner vs. student). Mean ages of the two groups are reported, as well as frequency data for the remaining demographic variables.

A demographic profile of assaulted vs. nonassaulted women (as measured by the Sexual Experiences Survey, Appendix A) is presented in Table 2. As with the prisoner/student demographic analysis, mean age and demographic frequency data are reported.

Table 1.

SAMPLE CHARACTERISTICS

Demographic Variables	Prisoners (n=32)	Students (n=36)	Total (n=68)
Age*	31(8)	21(6)	
Marital Status			
Single	11(34%)	29(81%)	40(59%)
Married	8(25%)	7(19%)	15(22%)
Divorced/sep.	8(25%)	-0-	8(12%)
Widowed	3(9%)	-0-	3(4%)
Cohabitating	1(1%)	-----	1(1%)
Race/Ethnic Background			
White	15(47%)	26(72%)	41(60%)
Black	14(44%)	10(28%)	24(35%)
Hispanic	1(30%)	-0-	1(1%)
Oriental	-0-	-0-	-0-
American Indian	1(30%)	-0-	1(1%)

(Table continues)

Demographic Variables	Prisoners (n=32)	Students (n=36)	Total (n=68)
Religion			
Catholic	7(22%)	-0-	7(10%)
Protestant	7(22%)	11(31%)	18(26%)
Jewish	1(3%)	-0-	1(1%)
Other	16(50%)	21(50%)	37(54%)
None	-0-	4(110%)	4(6%)
Income			
$ 7,500 or less	7(22%)	1(3%)	8(12%)
$ 7,501-$15,000	12(38%)	3(8%)	15(22%)
$15,001-$25,000	8(25%)	6(17%)	14(21%)
$25,001-$35,000	1(3%)	7(19%)	8(12%)
$35,001-$50,000	1(3%)	8(22%)	9(13%)
$50,000+	2(6%)	10(28%)	12(17%)

*Means listed; standard deviations in parentheses. One case missing, due to incomplete data.

Frequency data reported for all other variables.

Table 2.

Sample Characteristics

Demographic Variable	Assaulted (n=44)	Non-Assaulted (n=23)
Age*	27.2(9)	23.5(7.9)
Marital Status		
Single	27(61%)	13(57%)
Married	7(16%)	8(35%)
Divorced/Sep.	7(16)	1(4%)
Widowed	3(7%)	----
Cohabitating	---	1(4%)
Race/Ethnic Background		
White	26(59%)	15(65%)
Black	16(36%)	8(35%)
Hispanic	1(2%)	---
Oriental	---	---
American Indian	1(2%)	---
R E L I G I O N		(Table continues)

Demographic Variable	Assaulted (n=44)	Non-Assaulted (n=23)
R E L I G I O N		
Catholic	5(11%)	2(90%)
Protestant	11(25%)	7(30%)
Jewish	1(2%)	---
Other	25(57%)	12(52%)
None	2(5%)	2(9%)
I N C O M E		
$ 7,500 or Less	7(16%)	1(4%)
$ 7,501-$15,000	10(23%)	5(22%)
$15,001-$25,000	9(20%)	5(22%)
$25,001-$35,000	5(11%)	3(13%)
$35,001-$50,000	6(14%)	3(13%)
$50,000+	7(16%)	5(22%)

*Means listed; standard deviations in parentheses. One case missing, due to incomplete data.

Frequency data reported for all other variables.

Instruments

Personality Measures In order to obtain measures of personality functioning, the MMPI-2 was used. The MMPI-2 consists of 567 items which comprise ten clinical scales and three validity scales. The clinical scales are as follows: Scale 1 (Hypochondriasis); Scale 2 (Depression); Scale 3 (Hysteria); Scale 4 (Psychopathic Deviate); Scale 5 (Masculinity-Femininity); Scale 6 (Paranoia); Scale 7 (Psychasthenia); Scale 8 (Schizophrenia); Scale 9 (Hypomania); Scale 0 (Social Introversion). The validity scales include the L Scale, which is designed to detect "faking good" or deliberate attempts to present a favorable impression; the F Scale which assesses test taking attitudes, specifically endorsements of items indicative of pathology; and the K Scale which is thought to indicate defensive responding. Additionally, a "Cannot Say" Scale is included with the validity triad and reflects the number of items not answered or those marked both yes and no.

Reliability and validity The internal consistency of the MMPI-2, as reported in the manual (Butcher, Dahlstrom, Graham, Tellegen and Kaemmer, 1989) ranges from -.05 to +.96 (based on data from a sample of 1,462 women). Most scales fall within the range of +.60 to +.87.

Scales 3, 5 and 9 appear to be the least consistent; specifically Scale (Hy) is reported to have an internal

consistency reliability of .56, Scale 5 (Mf) of .37; and Scale 9 (Ma) of .61. Scales 1, 7 and 8 have the highest consistency and their reliability is reported as follows; Scale 1 (Hg), .81; Scale 7 (Pt), .87; and Scale 8 (SC), .86.

As the authors of the manual contend, research based on the MMPI-2 is, at the present, limited. However, there is reported to be a high degree of concordance between the original and revised versions, and much research has accrued on the former. Furthermore, as Graham (1990) explains, the data that have been collected on the new version suggests "there are reliable extra-test correlates for the MMPI-2 clinical scales" and the correlates are quite consistent with those obtained for the original version (Graham, 1989, p.186).

Measurements of victimization Data concerning sexual assault were obtained using a shortened version of the Sexual Experiences Survey (SES, Koss and Oros, 1982). The SES is a self-report questionnaire that was developed to assess the extent of sexual victimization a woman has experienced (see Appendix A). Koss and Oros (1982) report an internal consistency reliability of .74 (for the complete 12 item SES).

Questions have been raised regarding the accuracy of self-report measures, an issue which has been examined by Koss and Gidycz (1985). The researchers tested concordance rate by first administering the SES and afterwards eliciting

verbal accounts of sexual experiences. They report the agreement rate between face-to-face interviews and the SES to be .73 ($p<.001$). Koss, Gidycz and Wisniewski (1987) replicated the procedure and report 93% of their participants' written responses coincided with their verbal responses. Subjects rated their honesty in responding at 95%.

The items of the SES require women to indicate the degree of sexual assault, if any, they have experienced. They are also asked to indicate how often the incident(s) occurred. Items on the SES include the following examples: "Have you had a man attempt sexual intercourse when you didn't want to by threatening you or using some degree of force (twisting your arm, holding you down, etc.) but intercourse did not occur?"

The format of the questionnaire allows researchers to classify respondents along several dimensions: no victimization, sexual assault, and rape ("rape" denotes experiences which meet forensic criteria).

Measures of behavioral effects of assault A survey was constructed by the experimenter to identify the effects assault has on socially related functioning and the magnitude of those effects (See Appendix B). For example, items ask whether or not a subject has experienced a change in her relationship with her family, or in the amount of make-up she wears.

There are basically three parts to the survey with a major portion of the instrument constructed on a 5 point Likert-type scale. Some items, such those described previously, deal with changes in behavior, while others ask subjects to indicate how anxious they would feel in certain situations or how often they find themselves engaging in avoidant behaviors. Anxiety and avoidance are considered hallmarks of PTSD.

Embedded in the survey is a thirteen item checklist which was developed to assess the degree to which subjects endorse PTSD symptomatology. Each item of the checklist represents one of the symptoms of PTSD as described in the DSM-III-R (APA, 1987). The items are also constructed on a Likert-type scale, with 0 representing "not at all" and 4 indicating "always". For instance, statements describing PTSD criteria include the following examples, "How often do you feel detached from others?" and "How often do you experience distressing memories which interfere with your activities?".

Finally, as a measure of coping skills and, in the case of assault victims, adaptive functioning, an item was included that requested women to specifically indicate what, if anything, they have done to prevent an assault from occurring, (e.g., carry a weapon).

Procedure

Upon arrival, subjects were seated and given a copy of the informed consent agreement developed for the study (Appendix C). Subjects were then given the opportunity to ask questions about the agreement. Most sessions began without delay, although the inmates usually had questions concerning the availability of results, particularly their MMPI-2 scores. Provisions concerning the disclosure of results were explained to those women, and all who inquired agreed to participate.

After subjects signed the informed consent agreement, the MMPI-2 was administered. The MMPI-2 was usually completed in one to two hours. When subjects indicated they had finished, they were given the Restriction of Activities questionnaire (which included PTSD items) and the survey of sexually assaultive experiences. Each woman was asked to take the sexual assault inventory first, which also included five questions measuring demographic variables.

All testing sessions were completed in less than two and a half hours. At the end of each session, subjects were thanked, debriefed and dismissed.

Chapter IV

Results

This chapter presents the statistical analyses, beginning with descriptions of the samples, followed by the MMPI-2 scale scores and then, the results obtained on the remaining dependent measures: the Sexual Experiences Survey, the checklist of Posttraumatic Stress Disorder symptomatology, and the Restriction of Social Behaviors Questionnaire.

Personality Measures

First, the supposition that there would be a significant relationship between population and MMPI-2 scale scores was tested. Specifically, it was hypothesized that the scale scores of prisoners would be elevated as compared to those of students. To accomplish this analysis, subjects' response to MMPI-2 items were converted into T-scores. Means and standard deviations for the total sample found on Table 3. Means and standard deviations for prisoner vs. student groups are found on Table 4. As noted on the two tables, analysis of variance, performed on each scale of the MMPI-2, yielded no statistically significant F values.

Similarly, the hypothesis that there would be a significant relationship between the assault/nonassault variable and MMPI-2 scale scores was tested. Means and standard deviations for the groups (victims vs. nonvictims) are found on Table 4. Again, as noted on the table, none of the F-tests yielded significant results.

Table 3.

Means and Standard Deviations

of MMPI-2 Scores For Total Sample (N=68)

SCALE	MEAN	STANDARD DEVIATION
	.2	1.1
L	50.2	10.4
F	62.6	20.0
K	43.4	11.2
1	54.0	10.8
2	52.3	12.1
3	48.8	11.6
4	58.7	11.4
5	57.3	11.4
6	57.1	15.0
7	57.9	12.5
8	61.3	14.3
9	64.4	14.7
0	52.6	11.1

TABLE 4.

MEANS AND STANDARD DEVIATIONS*

ON MMPI-2 SCALES**

OF ASSAULTED VS. NONASSAULTED PRISONERS AND STUDENTS

Scale	Prisoners Assaulted (n=24)	Prisoners Nonassaulted (n=7)	Students Assaulted (n=20)	Students Nonassaulted (n=16)
L	53 (12)	52 (14)	46 (8)	50 (7)
F	71 (25)	69 (25)	59 (11)	53 (13)
K	24 (12)	41 (10)	41 (11)	45 (9)
1	56 (12)	50 (10)	55 (11)	50 (8)
2	54 (16)	50 (6)	53 (11)	50 (10)
3	52 (13)	38 (4)	49 (10)	47 (10)
4	65 (9)	63 (12)	55 (11)	50 (13)

Table Continues

Scale	Prisoners Assaulted (n=24)	Prisoners Nonassaulted (n=7)	Students Assaulted (n=20)	Students Nonassaulted (n=16)
5	58 (11)	60 (12)	55 (12)	59 (11)
6	66 (16)	67 (17)	51 (10)	48 (7)
7	60 (16)	61 (9)	59 (9)	52 (11)
9	70 (13)	66 (15)	60 (14)	62 (16)
0	53 (11)	54 (9)	55 (11)	50 (12)

* Standard deviations listed under means.

**None of the F-tests were significant.

In the present study, the variable Rape refers to experiences which meet legal criteria and is indicated by a positive response to items 13 and 14 of the SES, Appendix A. The relationship between scale elevations on the MMPI-2 and the variable "rape" was tested only with prison subjects. The number of students who had indicated they were raped was too small for statistical analysis (n=3). No F-tests were significant.

Subsequent to ANOVA, further analyses regarding Hypotheses I and II were conducted. Specifically, multiple correlation was performed to determine whether MMPI-2 scales could reliably account for variance between assaulted from nonassaulted subjects. When adjusted for sample size, the assault/nonassault variable was found to account for none of the variance in MMPI-2 profiles ($R=.397$, $R^2=.158$, adjusted $R^2=.000$). Analysis of variance yielded an F ratio of 0.76, (p=n.s.).

In order to further test the degree of relationship between MMPI-2 scale scores and the variables assault vs. nonassault, univariate F-tests were conducted. Canonical loadings, or the correlations between specific scales and the assault/nonassault variable are found on Table 6. Scale 1 and Scale 3 were found to be significantly correlated with assault/nonassault status. Overall, the degree of relationship between MMPI-2 scales and assault vs.

nonassault status, when tested, yielded a canonical correlation of .47.

Discriminant analysis indicated 86% of Subjects were correctly classified by the MMPI-2 on the basis of population (prisoner vs. student). Seventy-five percent (75%) of the women were correctly classified by the MMPI-2 as assaulted or nonassaulted subjects.

Similarly, multiple correlation was performed to determine what percentage of the variance in MMPI-2 scores was accounted for by the variable "population" (prisoners vs. students). Forty-five percent of the total variance in scale scores was found to be attributable to group membership ($R=.744$, $R^2=.554$, adjusted $R^2=.447$). An analysis of variance yielded an F ratio of 5.16, ($p<.001$). Specifically, three scales were found to significantly distinguish group membership: the L Scale ($p<.002$); Scale 4 ($p<.002$) and Scale 6 ($p<.001$).

Discriminant analysis was performed subsequent to ANOVA. First, the degree of relationship between the variable population (prisoner vs. student) and MMPI-2 scale scores was assessed. An univariate F-test indicated four scales correctly classified Subjects: the F scale ($p<.007$); scale 4 ($p<.000$); scale 6 ($p<.000$); and scale 8 ($p<.017$). In further analysis the degree of relationship between MMPI-2 scale scores and population yielded a canonical correlation

of .732. See Table 5 for canonical loadings of specific scales.

Table 5

Correlations Between MMPI-2 Scales

and Group Membership-Prisoner vs. Student Groups

(Canonical correlation=.732)

Scale	Canonical loading (Nonstandardized)
L	.114
F	-.161
K	.028
1	-.339
2	-.207
3	-.509
4	-.202
5	.189
6	-.039
7	-.188
8	-.140
9	-.059
0	-.144
PK	-.138
PS	-.261

Table 6

Canonical Loadings for MMPI-2 Scales and Assault vs. Nonassault Status (Canonical correlation=.47)

Scale	Canonical loading (Nonstandardized)
L	.225
F	-.082
K	.272
1	.075
2	.034
3	.471
4	-.097
5	.054
6	-.105
7	-.292
8	-.220
9	.151
0	-.239

Scale	Canonical loading (Nonstandardized)
PK	-.265
PS	-.276

Sexual Assault Measure

The Sexual Experiences Survey served as a screening device, and based on their responses to the survey, subjects were classified as victims or nonvictims.

Table 7 gives the items included on the SES along with Cronbach's alpha and the item-to-total correlations.

Table 7

*Sexual Experiences Survey

(Cronbach's alpha = .892)

Item	Item-to-Total Correlation
Sex play subsequent to arguments/pressure	.593
Sex play through misuse of man's authority	.554
Sex play subsequent to physical force	.833
Attempted rape through physical force	.720
Attempted rape subsequent to man giving subject alcohol/drugs	.545
Sexual intercourse subsequent to man's continuous arguments/pressure	.623
Sexual intercourse through man's misuse of authority	.550
**Sexual intercourse subsequent to man giving subject alcohol/drugs	.727
**Physically forced sexual intercourse	.750

*See items 6-14, Appendix A.

**Satisfy forensic criteria for rape

The response frequencies for the Sexual Experiences Survey are presented on Table 8.

The items of the SES (Appendix A) describe acts which range from least extreme forms of forced sexual activity to descriptions of incidents which meet the legal criteria of rape. Forty-four subjects indicated they had experienced at least one of the incidents described in the questionnaire.

While questions 6 to 12 measure levels of sexual assault, the final two items of the inventory were developed to identify women whose experiences meet the forensic criteria of rape. Eighteen women indicated they had been raped; three of the eighteen reported experiencing a rape at least five times.

Table 8

Sexual Experiences Survey

Response Frequencies

N=68

Item Content	Response no	yes (1 time)	yes (2 times)	yes (3 times)	yes (4 times)	yes (5 times or more)
6. unwanted sexual activity through verbal pressure or coercion*	33(48%)	4(6%)	2(3%)	12(18%)	0.00	16(24%)
7. unwanted sexual activity subsequent to man's misuse of authority	53(78%)	5(7%)	2(3%)	1(1%)	1(1%)	5(7%)

Table continues

Item Content	Response no	yes (1 time)	yes (2 times)	yes (3 times)	yes (4 times)	yes (5 times or more)
8. unwanted sexual activity through physical force or threat of force	45(66%)	7(10%)	5(7%)	2(3%)	1(1%)	6(9%)
9. attempted rape	42(62%)	7(10%)	6(9%)	5(7%)	1(1%)	6(9%)
10. attempted rape subsequent to being given alcohol or drugs	50(74%)	3(4%)	2(3%)	3(4%)	1(1%)	8(12%)
11. unwanted intercourse subsequent to continual arguments and pressure	42(62%)	4(6%)	4(6%)	4(6%)	0.00	13(15%)

Table continues

Item Content	Response no	yes (1 time)	yes (2 times)	yes (3 times)	yes (4 times)	yes (5 times or more)
12. unwanted intercourse subsequent to a man's misuse of authority	59(87%)	2(3%)	0.00	2(3%)	1(1%)	2(3%)
13. unwanted intercourse subsequent to being given alcohol or drugs	52(76%)	5(7%)	1(1%)	2(3%)	4(6%)	2(3%)
14. intercourse through physical harm or threat of harm	46(68%)	6(9%)	6(9%)	2(3%)	1(1%)	3(5%)

*Numbering Denote content reflected in specific items, as numbered on the SES (See Appendix A).

Behavioral Measures

Table 9 gives the items included in the social behaviors questionnaire, along with Cronbach's alpha and the item-to-total correlations.

Table 9

*Restriction of Social Activities Questionnaire

(Cronbach's alpha=.879)

Item	Item-to-total correlation
Avoidance of risky situations	.542
Imagining an assault occurring	.590
Nervousness/anxiety related to images of assault	.506
Anxiety in situations perceived as risky	.249
Avoidance of certain types of men	.400
Doubting motives of others	.393
Change in relationship with spouse/partner	.350
Difficulty going to work	.606
Change in alcohol/drug use	.389
Fearful of strangers	.722
Not wanting to leave home/apartment/dorm	.637
Change in clothing style	.572
Change in relationship with family	.444

Item	Item-to-total correlation
Change in number of social engagements	.550
Change in amount of makeup use	.592
Change in relationship with coworkers	.658
Fearful of being alone	.573

The supposition that there would be a significant relationship between assault and restriction of social activities was tested (Hypothesis III). The instrument appears in Appendix B. Analysis of variance was computed in order to determine whether or not the experience of assault (including legally defined rape) significantly altered or impaired social functioning. ANOVA was performed on data from student subjects only, as prisoner data was not quantitatively robust enough to support statistical analysis of this nature. Assault was not found to account for a significant amount of variance in the restriction of activities scores.

However, some descriptive data supplied by the prisoners suggests that while the findings may not be statistically significant, there is, arguably, clinical significance. Informal, written commentary from the inmates suggest there is marked restriction in social functioning, at least in some women. A description of these accounts is obviously more pertinent to the Discussion Chapter; therefore, any other comments will be reserved for that section.

Measures of Posttraumatic Stress

The thirteen items of the checklist of PTSD symptomatology are found on Table 10. Cronbach's alpha and item-to-total correlations are included.

In addition to the MMPI-2 clinical scales, two supplementary scales were scored, the Posttraumatic Stress Disorder (PK) scale and the Posttraumatic Stress Disorder (PS) scale. As described in Graham (1990), the PK scale, developed by Keane, Malloy and Fairbank (1984), contains 49 items which were found to discriminate between sixty male combat veterans with PTSD and sixty male veterans who had been diagnosed with psychiatric disorders other than PTSD.

The PS scale, developed by Schlenger, Kulka, Fairbank, Hough, Jordon, Marmar & Weiss (1989), contains 60 items, 26 of which are found in the PK scale (Graham, 1990). The PS scale consists of items found to differentiate among Vietnam veterans diagnosed with PTSD, those diagnosed with clinical disorders other than posttraumatic stress, and those diagnosed with no clinical abnormalities.

In the present study, the correlation between scales PK and PS was found to be .96. However, the correlation is somewhat inflated as a function of item overlap; twenty-six (25%) of the total number of items (N=106) appear in both scales.

Correlations were run in order to test the agreement rate between the MMPI-2 supplementary PTSD scales and the

thirteen item PTSD checklist developed for use in the present study. The correlation between the checklist and the PK scale was found to be .34. Similarly, the correlation between the checklist and the PS scale is .39. Analysis of variance conducted between groups based on supplementary scale scores yielded no significant results.

Table 10

Checklist of PTSD Symptomatology*

(Cronbach's alpha=.954)

Item	Item-to-total correlation
Memories which interfere with activities	.897
Recurrent dreams about upsetting experience	.809
Re-experiencing upsetting event	.847
Unable to recall facts about event	.746
Detached from others	.706
Inability to experience certain emotions	.708
Feel future has been altered	.788
Irritability/anger	.785
Difficulty concentrating	.723

Table continues

Item	Item-to-total correlation
Easily startled	.685
Overly observant of others	.691
Attempt to avoid negative thoughts/feelings	.781
Attempt to avoid situations reminiscent of negative experience	.802

*See Appendix B, items 1-x

Scores on the PTSD checklist (Appendix B) were derived by summing the responses of subjects. An analysis of variance was performed to determine whether or not there was a significant relationship between endorsement of PTSD symptomatology and assault (Hypothesis IV). Analysis of variance yielded no significant relationship. However, analysis of variance was also performed on prison subjects whose experiences met the legal definition of rape (n=23). "Rape" as indicated by a "yes" response to questions thirteen and fourteen of the SES (Appendix A) was found to be significantly predictive of subjects' endorsement of PTSD symptomatology ($p<.031$). The student/rape sample was not large enough to analyze in this fashion.

Chapter V

Discussion

This chapter presents an interpretation of the results by describing the sample characteristics, then reviewing the data that bear on the hypotheses, discussing the ancillary analyses, and interpreting the results with reference to treatment implications and directions for future research.

Sample Characteristics

Demographic characteristics of the present sample were similar to those obtained in other studies (Koss, 1985, for example). The representativeness of the sample seems to be unhampered by the fact that half of the subjects were pooled from a female correctional population, which typically is over-represented by women in lower income brackets and minorities (Sampselle, Bernhard, Kerr, Opie, Perley and Pitzer, 1992). Furthermore, it is widely recognized in the literature which has accrued on violence against women, that assault, battering and incest occurs across all ethnic groups and economic classes (Babich and Voit, 1992).

The MMPI-2: University and Prison Differences

When empirically tested, the supposition that there is a significant relationship between population and MMPI-2

scale scores was partially supported. Specifically, three scales were found to be related to population, i.e., distinguished between prisoner and student subjects. Specifically, the scales found to elevated in the prison sample were the L Scale, Scale Four (Psychopathic Deviate), and Scale 6 (Paranoia). Interpretations of these scales reflect group trends, and cannot as such, be interpreted as would individual profile configurations. However, scale interpretations do represent mean scores for the groups, and are clinically significant, in that general interpretations can be made regarding average response tendencies, and the following interpretations are relevant to Hypothesis I.

The L Scale suggests a response pattern which signifies rigidity, defensiveness and repression. With regard to the prognosis for successful therapeutic intervention, the tendency for such respondents to have little insight into their actions and feelings makes predictions for success unfavorable. Scales 4 and 6 were, on the average, elevated in prison subjects as compared to the relatively nondramatic results obtained on student profiles, irrespective of sexual assault status. Scale 4 (Psychopathic Deviate) was developed "to identify patients who were psychopathic personality, asocial or amoral type" (Graham, 1990). While Graham further states the scale does not distinguish among particular 'types' of criminals, "subjects included in the original criterion group were characterized in their

everyday behavior by such delinquent acts as lying, stealing, sexual promiscuity, excessive drinking and the like." (p.62). Further descriptors of the personality type associated with this scale include: aggressive, antagonistic, delinquent, empty, bored, sarcastic and cynical. There is a characteristic lack of guilt associated with criminal behavior.

Due to the tendency of individuals who do not take responsibility for their behavior to be poor candidates for traditional verbal psychotherapy, patients who exhibit this pattern of MMPI-2 responses, and who are also victims of sexual violence, might, unfortunately, be difficult to treat. They tend not to be in touch with their actions and feelings, and have difficulty incorporating society's values into their own value system. Such women would be more inclined to aggress in indirect manipulative ways. They are also hesitant to work with another at developing insight. Typically they experience stormy family relationships, and such behavior is probably indicative of deficits in communication, which would also make the therapeutic process arduous (Graham, 1990).

Scale 6 (Paranoia), is designed to identify individuals who have a paranoid "disposition". Again, prognosis for therapy is thought to be poor for such individuals. Typically, elevations on this scale, indicate a response pattern characterized by hostility, suspiciousness,

guardedness, rigidity, and resentment. Again, family relations are poor. These traits are also indicated, and supported by, the presence of moderately elevated L Scale scores as found in the present study.

Upon further analysis, four scales were related to prisoners versus student status: The F Scale, Scale 8 (Schizophrenia) and Scales 4 and 6.

The F Scale, when moderately elevated in (nonpsychotic) subject profiles (Graham, 1990), indicates respondents who are unstable, dissatisfied, and restless. Again, understanding global personality characteristics is important in developing a course of therapeutic intervention.

MMPI-2 Scale Scores and Assault

As indicated in Hypothesis II, there was expected to be a significant relationship between MMPI-2 scale scores and the assault/nonassault variable. Data indicated such a relationship and the following scale interpretations are applicable. Scales 1 and 3 (Hypochondriasis and Hysteria, respectively) were found to distinguish between the profiles of assaulted and nonassaulted subjects. Specifically, Scale 1 defines a response pattern indicative of vague somatic complaints, cynicism, depression, hostility and repression. Scale 3 also indicates repression, lack of insight and aggressive behavior (with no understanding of its consequences). These results are somewhat supported by

various studies on personality type and victimization. Janoff-Bulman and Frieze (1983) found marked tendencies in victims toward mistrust cynicism, self-doubt, and repression. Similarly, Browne (1991) concluded from her research; "A conventional list of potential responses to victimization includes reactions of confusion, generalized anxiety, depression and despair." These symptoms of sexual victimization can only flourish in a firmament of long standing personality aberrations.

Indicators of Sexual Assault

The reliability of self-reports. In research such as this, where subjects are asked to disclose past experiences, particularly traumatic ones, questions are raised concerning the reliability of self-reports (e.g., paper-and-pencil tests).

For instance, victims of chronic violence and sexual abuse may be less likely to report their experiences accurately,perhaps as a result of their inability to acknowledge the assault themselves. The acknowledgment of oneself as a victim requires "significant and painful alterations in the victims' perceptions of the perpetrator and themselves." (Browne, 1991, p. 150).

A subject's denial of the existence or the extent of sexual trauma is a fundamental consideration in the

interpretation of self-report measures. As Browne (1991) explains:

> "Victims [of sexual abuse] talk about the devastation of trying to incorporate the realities of assault and the blatant disregard for their well-being into their images of parents, adult partners and significant others who profess to love them" (p.151).

Although the tendency to rationalize, minimize or deny such traumatic experiences certainly exists, the results of the present study concur with incidence figures reported in previous studies (e.g., Koss, 1985). The format of the Sexual Experiences Survey (SES) is highly descriptive and straightforward; a design which seems to work well with this type of study. Dill, Chu, Grob and Eisen (1991) used a survey similar to the SES and found that directly questioning subjects yielded results that are similar to those obtained in face to face interviews.

The results of the present study supported those of other studies which offer empirical evidence for the prevalence of sexual assault. Forty-four out of sixty-eight subjects (65%) indicated they had experienced at least one of the situations indicative of various degrees of assault described on the SES.

Sexual Assault Trauma and the Restriction of Social Activities

Although the Restriction of Activities survey was not statistically significant in detecting sexual assault status, the inventory has clinical utility. Researchers who

have used similar instruments (e.g., Lanza's "Assault Response Questionnaire", 1988) suggest measures such as the Restriction of Activities Questionnaire can be used to address areas of difficulty in post-assault adjustment. Whereas a subject may earn an unremarkable cumulative score on the ROA, there could conceivably be two or three areas of adjustment which are causing her intense problems. Therefore, while there was no significant differences in the restriction of activities scores among assaulted and nonassaulted subjects, most women indicated some change in their life functions. For example, twenty subjects reported that they usually or always avoided situations which reminded them of a bad experience. Thus, while the ROA may be helpful in providing clinicians with information to guide their efforts, it did not assess intensity of disturbance, and requires further development.

A discrepancy exists in the results of the present study between reports of sexual assault and the magnitude of the traumatic effects of assault. Although almost two-thirds of the women in this study reported experiencing at least one assault their behavioral responses to that experience may have been muted. That is, the responses are less intense than the nature of the trauma would lead one to expect. It is possible that the time which elapsed between the assault and the survey served to alter their recollection of the changes they experienced. Lanza (1988),

in a discussion concerning her Assault Response Questionnaire, stated that inventories such as the ARQ (and the ROA, in this instance) are best administered several days to one week after the assault. Within that time frame, there is sufficient time for the victim to distance herself, and the questionnaire is "less of an intrusion". However, when a greater amount of time has elapsed, recall becomes a problem, as does the tendency of a victims to minimize their psychological and behavioral responses to the experience.

Specifically, with regard to the present study, the structure of ROA items may not have afforded subjects an adequate opportunity to respond, and a greater number of free response items should have been included. Subjects were, however, encouraged to comment on the effects assault has on women in general and themselves specifically. "Assault" in this instance referred to both the possibility of victimization, or if victimization had occurred, the effects of that assault on future behavior. Comments written by a number of subjects provide compelling anecdotal evidence:

> "[Assault] doesn't affect it [behavior] at all in prison... you definitely should watch your behavior in the free world. A lot more things are apt to happen because the environment is not controlled. The risk affects you considerably more".
>
> "I enjoy going to the grocery store late at night when it's quiet and uncrowded, but I usually take one of my dogs. I've found that men seem to frequent the store to check out women. I have been followed in my local grocery store and had

men even approach my vehicle, and try to talk, and this is very irritating. I don't like to have to change my behavior and things I enjoy just because there are so many sexual deviants in the world. I very much resent it."

"When I go out I'm very choosy about whom I'm with. If I feel the least bit uneasy I only go where there is a crowd of people I know very well and that I trust. I never will let myself be put in a position with a man whom I don't trust."

"I think most are assaulted by our so-called friends."

"It [the possibility of assault] affects me highly."

"Two times in my past at college I was assaulted by a football player. Today I have no fear. He was my only fear and he was killed in a car accident."

"I stayed around groups of friends more after I was raped. I was intensely angry at a system that allowed someone like the man who raped me to walk the streets. I was his 24th known victim. It made me somewhat cynical at our legal system where the defendant had all the rights and victim had none, being nothing more than a witness for the state. My rape occurred in my apartment when I thought I was behind locked doors and windows. After the rape I was afraid to stay at home alone, even after I had moved from the apartment. If I heard noises outside my new home it scared me to death. I immediately surrounded myself with large dogs and a .38 revolver and took the dogs and gun with me to the door when I answered it."

"I changed completely. I started wearing makeup to cover bruises, scars and scratches. I quit wearing form-fitting clothes and gained 100 pounds. I couldn't look a man in the eyes. At first I wouldn't even let my husband touch me. When beginning to make love with husband, I fell limp, then had flashback of the guys who raped me one night in the alley behind my apartment. I also began to stutter and couldn't even say three words without stuttering. At work, I couldn't handle the horses that I trained and eventually ended up staying home from work. I gained the 100 pounds in 1 1/2 months because I'd hardly leave

> the house for exercise. To me, when I was raped, it really messed me up. When I finally got over it and let my husband make love to me, it ended up he raped me twice within two weeks."
>
> "It has made me not want to be close to anyone else. I can tell a person that I love them and not really mean it. It's like love does not really exist."
>
> "Very much. You have to watch everyone, everywhere you go; and to others you may seem paranoid, jumpy or even scared and being frightful of people certainly affects your behavior and doesn't allow you to do a lot of things men can do. Such as going off alone for a walk in the woods or going out on the town for some fun by yourself. Women are cheated in life by the physical and mental power men have over them. The risk of being sexually assaulted affects my behavior patterns greatly and keeps me from being myself."

Judging from the comments written by subjects, a revision to the ROA should include a greater opportunity for subjects to answer questions in free-response form. Questionnaires that contain mostly Likert-type items, while providing better quantification, are limiting in that they provide only superficial information. As Browne (1991), writes "It is the rare victim who actually does nothing. Most victims are involved in fairly intensive inner adaptations, even though they seem to the outside observer to be passive or acquiescent" (p.153).

Of course, if the ROA were used in a treatment setting, clinical interviews would serve to supplement questionnaire assessment. Perhaps, when used in conjunction with an interview, the ROA would be more apt to alert clinicians to

such inner adaptions, the effects of which are apparent in the following report:

> "I went from an open and free, loving person to one that is sheltered and distrusting. Before this, I was the type of person who didn't have a problem meeting strangers."
>
> The victim was not able to identify the perpetrator, and stated that for years she looked at men, imagining that they could be her assailant. She further stated "You think about it. It's not something you could ever forget."
>
> (Montgomery Advertiser, March 15, 1991, p.1A)

Sexual Assault, Rape, and Posttraumatic Stress

In the present study, no significant relationship was indicated between subjects self reports of Posttraumatic Stress Disorder and sexual assault, as postulated in Hypothesis IV. Again, attention should be paid to the possible denial and repression of symptoms which is theorized to occur in sexually assaulted women. As Housecamp and Foy (1991) write, "For women still in abusive situations, acknowledging the extent of psychological distress they are experiencing from the violence may create additional unwanted internal and psychosocial conflict."

Roth and Cohen (1986) suggest that denial of symptoms is an inherent component of the coping process. Specifically, they assert that the coping responses of rape victims may take one or both of two forms: "approach" and "avoidance". Approach refers to mechanisms which deal

actively with the perceived threat. 'Threat' in this instance, refers not only to the trauma rape exacts on a victims' belief system (e.g., the world is just) but also the possibility that is introduced of victimization reoccurring. Avoidance, indicates a turning away from the acknowledgement of stress. This may be accomplished through the use of defense mechanisms (e.g., suppression, denial) or the refusal to make actual changes regarding physical safety. Coping, according to Roth and Cohen (1986) actually involves both approach and avoidance.

As Dye and Roth (1991) postulate, the victim who chronically avoids acknowledging psychological or physical threat acknowledgment may fail to perceive real instances of threat, and/or the psychological effects of the incident(s). As a result, they may fail to take advantage of ways to escape further violence and/or resolve the psychological threat experience. Moreover, "it is suggested that [habitual] repression of trauma may eventually lead to severe symptom of cognitive intrusions and emotional numbness" (p.105).

Average or low scores obtained on the PTSD checklists of sexually assaulted women may be a result of emotional repression and denial of symptoms, as well as the tendency for victims to engage in self-blame and future research should consider a 'check' scale for repression. The tendency of the victim to blame herself may not only repress

the outward manifestation of the effects of assault but also lead clinicians to conclude that because the client is outwardly asymptomatic she has adjusted well (Dye and Roth, 1991).

The symptoms associated with the intense after effects of sexual assault may be manifested in ways not readily identifiable as sequelae. Furthermore, if a victim blames herself, she may tend toward self-destructive behaviors. Research has indicated that, in such an instance, psychological symptoms may be converted into self-defeating or self-injurious behavior patterns (Seagull and Seagull, 1991). These effects of assault may appear to be entirely unrelated, e.g., the exhibiting tendency to continuously initiate abusive, unhealthy relationships.

Conclusion

In summary, the following considerations exist in conducting research with sexual assault victims. First of all, the tendency which exists for victims to repress rape aftereffects demands that researchers use sensitive measures which provide victims a greater opportunity for disclosure via free response items. Furthermore, a scale should be incorporated into inventories measuring behavioral adaptations which provides a check for repression and denial of symptoms.

Additionally, item analysis of the MMPI-2 with regard to item endorsement of victims vs. nonvictims, although beyond the scope of the present study, may provide researchers (and clinicians) with a content scale indicative of sexual victimization.

The prevalence of sexual assault in Western culture continues to be a social problem of considerable magnitude. Further research into the devastating effects of sexual violence is a priority for social scientists. Only when the magnitude of its effects are identified, will sexual assault command the political and educational support it requires for its prevention.

APPENDICES

APPENDIX A

DEMOGRAPHIC SURVEY/SEXUAL ASSAULT QUESTIONNAIRE

Questionnaire

Please respond to the following:

1. How old are you? _____

2. What is your marital status? (Circle)

   Singled
   Married
   Divorced/Separated
   Widowed
   Cohabitating

3. What is your race/ethnic background?

   White/ Nonhispanic
   Black
   Hispanic
   Asian
   American Indian

4. In What religion were you raised?

   Catholic
   Protestant
   Jewish
   Other
   None

5. What is your best guess of your family's income last year? If married, still estimate the income of the family you grew up in.

   $7,500 or less
   $7,500 - $15,000
   $15,001 - $25,000
   $25,001 - $35,000
   $35,001 - $50,000
   Over $50,000

The next questions are about your sexual experiences.

6. Have you given in to sex play (fondling, kissing, or petting but not intercourse) when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?

yes no

If yes, how many times has it happened?

(Circle) 1 2 3 4 5+

7. Have you had sex play (fondling, kissing or petting, but not intercourse when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?

yes no

If yes, how many times has it happened?

(Circle) 1 2 3 4 5+

8. Have you had sex play (fondling, kissing, petting) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.)?

yes no

If yes, how man times has it happened?

(Circle) 1 2 3 4 5+

The following questions are about sexual intercourse.

By "sexual intercourse" we mean penetration of a woman's vagina by a man's penis, no matter how slight. Whenever you see the words <u>sexual intercourse</u>, please use this definition.

9. Have you ever had a man attempt sexual intercourse when you didn't want to by threatening you or using some degree of force (twisting your arm, holding you down, etc.) but intercourse did not occur?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

10. Have you had a man attempt sexual intercourse with you by giving you alcohol or drugs, but intercourse did not occur?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

11. Have you given in to sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

12. Have you had sexual intercourse when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor)?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

13. Have you had sexual intercourse when you didn't want to because a man gave you alcohol or drugs?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

14. Have you had sexual intercourse when you didn't want to because a man threatened you or used some degree of physical force (twisting arm, holding you down, etc.) to make you?

yes no

If yes, how many times has it happened?

1 2 3 4 5+

APPENDIX B

Restriction of Activities QUESTIONNAIRE

DSM-III-R CHECKLIST

Questionnaire

Please answer the following questions as honestly as possible.

Directions: Circle the appropriate answer or fill in the required information.

1. How often do you go out of your way to avoid risky settings or situations (in which a sexual assault could occur)?

0	1	2	3	4
never	one time a month or less	3-5 times a month	once a week	daily

2. How often do you imagine an assault occurring (in those places you avoid)?

0	1	2	3	4
never	one time a month or less	3-5 times a month	once a week	daily

3. How nervous or anxious do these images of sexual assault make you feel?

0	1	2	3	4
not at all anxious	a little anxious	somewhat anxious	frequently anxious	extremely anxious

4. If you had to enter these settings/situations, how anxious would you feel?

0	1	2	3	4
not all anxious	a little anxious	somewhat anxious	frequently anxious	extremely anxious

Think for a moment about the type of man you believe would be most likely to commit a sexual assault.

5. How often do you find yourself making an effort to avoid that type of man or men similar to him?

0	1	2	3	4
never	rarely	occasionally	usually	always

6. How often do you find yourself doubting the motives of others who "try to get to know you?"

0	1	2	3	4
never	rarely	occasionally	usually	always

7. Have you taken specific precautions to avoid being assaulted?

If yes, please specify: _____

_____

8. Have you enrolled in any classes that could help you protect yourself (self-assertiveness training, firearms training)?

If yes, please specify: _____

_____

9. If you haven't taken any preventative measures do you plan to in the future?

yes no

If yes, please specify: _____

_____

10. With regard to the potential risk of women to be sexually victimized how much do you think this possibility affects your social behavior (how much you date, who you date, activities you engage in, involvement at school)?

0	1	2	3	4
not at all	a little	somewhat	very much	extremely

Please circle the degree to which the following apply to you:

In the past year have you...

		Not at all	Slightly	Moderately	Intensely	Severely
a.	experienced a change in your relationship with your spouse/ partner	0	1	2	3	4
b.	experienced difficulty in going to work	0	1	2	3	4
c.	experienced a change in the amount of drugs/alcohol you use	0	1	2	3	4
d.	felt fearful of strangers	0	1	2	3	4
e.	not wanted to leave your home/apartment/ dorm	0	1	2	3	4
f.	changed your style of clothing	0	1	2	3	4
g.	experienced a change in your relationship with your family	0	1	2	3	4
h.	experienced a change in the number of social engagements you're involved in	0	1	2	3	4
i.	changed the amount of makeup you use	0	1	2	3	4
j.	experienced a change in your relationships with coworkers	0	1	2	3	4
k.	felt fearful of being alone	0	1	2	3	4

Now, please indicate how often you experience the following:

		Never	Rarely	Sometimes	Usually	Always
l.	distressing memories which interfere with your activities	0	1	2	3	4
m.	recurrent dreams about some experience that may have upset up	0	1	2	3	4
n.	have the feeling some experience is occurring all over again (include times when intoxicated or using drugs)	0	1	2	3	4
o.	are unable to recall important facts about stressful events	0	1	2	3	4
p.	feel detached from other people	0	1	2	3	4
q.	find yourself unable to experience some kinds of emotions,for example, loving feelings	0	1	2	3	4
r.	feel as if your future has been changed in some way, for example, you don't expect to get married, have a career, kids, etc.	0	1	2	3	4
s.	experience irritability or outbursts of anger	0	1	2	3	4
t.	have difficulty concentrating	0	1	2	3	4
u.	are easily startled	0	1	2	3	4
v.	are overly observant of others	0	1	2	3	4

		Never	Rarely	Sometimes	Usually	Always
w.	make an effort to avoid thoughts or feelings associated with some negative experience you've had	0	1	2	3	4
x.	avoid activities or situations that remind you of a negative experience you've had	0	1	2	3	4

APPENDIX C

INFORMED CONSENT AGREEMENT

INFORMED CONSENT AGREEMENT

You are invited to participate in a study of male/female relationships and the problem of sexual coercion. We hope your responses and this project will help us better understand the psychological experience of sexual assault and what counseling needs victims have. we also hope to learn how some assaults may be prevented or avoided.

You will be given an personality test (the MMPI-2) and two questionnaires. Some questions will be sensitive and personal; however, any responses you make will be kept completely confidential. Because your answer forms will be separated from this signed consent form, it will not be possible to relay any results to you personally.

The test and two questionnaires can be completed in one session which will last anywhere from one and a half to two hours. If you have any questions about your participation please feel free to ask them.

I, _____, agree to participate in the research conducted by Allison Kluz.
I understand that this participation is completely voluntary.
I can withdraw my consent at any time and have the results of my participation, to the extent that they can be identified as mine, removed from the records or destroyed.

My participation or withdrawal will in no way affect relations with Tutwiler or AUM.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE, HAVING READ THE INFORMATION PROVIDED ABOVE.

_____ _____
Signature of participant Date

_____ _____
Signature of investigator Date

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