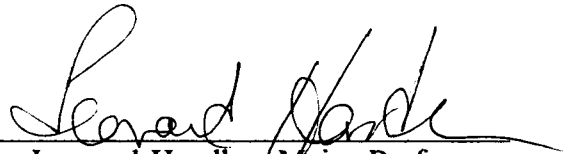


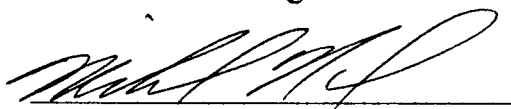
To the Graduate Council:

I am submitting herewith a thesis written by Dawn L. Gable entitled "Comparing the Rorschachs and the MMPI-2's of Assaulted and Non-Assaulted Females on Variables Associated with PTSD." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology.



Dr. Leonard Handler, Major Professor

We have read this thesis
and recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor and
Dean of The Graduate School

**COMPARING THE RORSCHACHS AND THE MMPI-2S
OF ASSAULTED AND NON-ASSAULTED FEMALES ON VARIABLES
ASSOCIATED WITH PTSD**

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Dawn L. Gable
August, 1995

DEDICATION

**This thesis is dedicated
to the memory of my mother
Mary Emma Bauer Lightcap**

**who gifted with me with a love of learning
and a passion for education**

ACKNOWLEDGEMENTS

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ABSTRACT

Previous studies have indicated a high prevalence of posttraumatic stress disorder (PTSD) among civilian survivors of trauma. Among the psychometric instruments used to assess the characteristics of subjects diagnosed with PTSD are the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and the Rorschach Inkblot Test. However, few studies have employed both instruments to assess PTSD symptomatology in a civilian group of trauma survivors, and no single study has used both instruments to assess PTSD symptoms in female survivors of physical assault (i.e., battering or rape) or to discriminate between assault survivors and non-assaulted subjects in a female clinical population. This study investigated the abilities of the two tests to differentiate assaulted females ($n=12$) from non-assaulted females ($n=20$) in a group of subjects from a clinical population. It also sought to determine if subjects in the assaulted group were more likely than subjects in the non-assaulted group to exhibit a pattern of scores indicative of PTSD on either MMPI-2 or Rorschach variables. Multivariate analyses indicated that neither instrument differentiated between the two groups on variables associated with PTSD or revealed a significantly different pattern of scores for assaulted women when compared to non-assaulted women. T-tests performed on individual variables suggest that, on some Rorschach variables, the response of subjects in assaulted group was different than the non-assaulted group.

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LIST OF ABBREVIATIONS

PTSD	Post Traumatic Stress Disorder
MMPI-2	Minnesota Multiphasic Personality Inventory-2
DSM-III	Diagnostic and Statistical Manual of Mental Disorders, 3rd Ed., Revised
MPD	Multiple Personality Disorder
DD	Dissociative Disorder
Hs	Hypochondriasis
D	Depression
Pd	Psychopathic deviate
Pa	Paranoia
Pt	Psychasthenia
Sc	Schizophrenia
Pk	PTSD subscale
Hy	Hysteria
Si	Social isolation
Pa1	Persecutory ideas
PaO	Paranoia-Obvious
Pa2	Poignancy
Pa3	Naivete
PaS	Paranoia-Subtle
R	Repression
A	Anxiety
Cyn	Cynicism

CHAPTER 1

INTRODUCTION

Clinical observations indicate that civilians who have experienced severe trauma may display acute and chronic emotional and behavioral disturbances similar to those exhibited by combat veterans (Dickstein, 1988; Kohn, 1987; Liem, O'Toole & James, 1992; Starr, 1990). A number of studies have been undertaken to examine differences in characteristics between individuals who have undergone noncombat trauma and those who have not.

West, Fernandez, Hillard, Schoof and Parks (1990) interviewed thirty women at a shelter for battered women, using instruments to diagnose depression, post-traumatic stress disorder (PTSD), and degree of violence experienced. Of the thirty subjects, fourteen met the criteria for PTSD.

Housekamp and Foy (1991) assessed twenty-six women who contacted domestic violence clinics over a six month period, collecting data on exposure to violence, PTSD symptoms, and childhood abuse. Subjects were assessed as positive for PTSD if they met full criteria according to the Diagnostic and Statistical Manual of Mental Disorders, 3rd ed, revised, (DSM-III-R; American Psychiatric Association, 1987) and as PTSD partial if they met two of the three diagnostic categories (reexperiencing of the trauma, avoidance of associated stimuli or general numbing, and increased arousal). Results indicated that 45% of the subjects met the full criteria for PTSD and an additional 24% were partially symptomatic for the disorder. In a discussion of the long-term effects of childhood sexual

abuse, Blake-White and Kline (1985) note that victims of incest often exhibit the PTSD symptoms of reexperiencing of the trauma, intrusive memories, feelings of detachment, and an exaggerated startle response.

In addition to the studies that have used structured and unstructured interviews to diagnose and describe PTSD in various groups, a number of researchers have utilized personality measures to assess PTSD symptomatology in civilian trauma victims. Two of the tests often used for this purpose are the Rorschach Inkblot Test and the MMPI-2. For example, Armstrong and Lowenstein (1990) administered the Rorschach to 14 patients diagnosed with Multiple Personality Disorder (MPD) or Dissociative Disorder Not Otherwise Specified (DD). All subjects had experienced severe trauma in childhood. Although no attempt was made to diagnose PTSD among these subjects, the authors reported that a high percentage demonstrated posttraumatic reactions to stimuli that they associated with their abuse experiences. Further, the content of the responses was similar to those given by war veterans with PTSD in that, compared to Exner's standard database, there was a high number of blood and anatomy responses.

On two of the Rorschach scores measuring reality testing (X+ % and M-), the MPD/DD subjects did not differ significantly from scores of schizophrenic patients found in Exner's database; however, their developmentally advanced human movement scores (M+) did not suggest the developmental arrest that is found in the schizophrenic sample. Further, although their reality testing was unusual (Xu%), it was not severely distorted (X-%). Capacity for self-observation (Form Dimension) was greater for the MPD/DD group

than for both schizophrenics and normals. Lambda scores showed a trend for greater sensitivity to inner and outer complexity.

In a validation of the PTSD subscale of the MMPI, Koretzky and Peck (1990) compared 18 outpatients (15 males, 3 females) diagnosed with PTSD following life-threatening experiences (such as violent criminal victimization and train accidents) with 27 control subjects (17 males, 10 females) who did not meet the criteria for a PTSD diagnosis, although more than half had suffered life-threatening events and were being treated for resulting symptoms. Results showed scores similar to those of veterans diagnosed with PTSD for the subjects previously diagnosed with PTSD. There were significant differences between the PTSD group and the No-PTSD group on the MMPI scales F, K, Hypochondriasis (Hs), Depression (D), Psychopathic deviate (Pd), Paranoia (Pa), Psychasthenia (Pt), and Schizophrenia (Sc), as well as on the PTSD subscale (Pk).

In a study of battered women who had killed their abusers, Kaser-Boyd (1993) used the Rorschach to assess psychological functioning. A comparison of the scores of the subjects with the normative scores in Exner's sample of 600 nonpatient adults revealed that, as a group, the battered women showed a tendency to over-simplify a stimulus-demand situation (Lambda scores greater than .85). Significantly fewer blends and low Zf scores indicated a less flexible cognitive style, and low Zd scores suggested difficulty in accurately scanning and integrating the environment. Other differences were a more passive coping style than the normative scores (a lower ratio of active to passive movement scores as opposed to more frequent active movement scores given by normals), some problem with reality testing (lower X+% and higher X-%), and fewer resources for

problem-solving (significantly lower M, a score which is associated with higher order reasoning and conceptualization, and problem-solving abilities). The author reports that the findings suggested dynamics similar to those found in studies of Vietnam veterans with diagnoses of PTSD.

A comparison of the standard scales of the MMPI scores of ten battered women in an acute distress shelter with a matched control group of ten women selected from the community revealed significant differences on eight of the ten scales (Gellen, Hoffman, Jones & Stone, 1984). Abused women scored significantly higher on the Hs, D, Hy (Hysteria), Pd, Pt, Sc, and Si (Social isolation) scales. The authors interpreted these elevations as indicative of character pathology. However, given that the subjects were residing at an acute distress shelter, it is at least as likely that the testing measured distress associated with the acute trauma to which the battered group had been exposed rather than personality traits. Evidence for this alternative explanation is suggested by the fact that the elevations on the Hs, D, Hy, Pd, Pt, Sc, and Si scales are remarkably similar to findings in studies of combat veterans diagnosed with PTSD following their exposure to war trauma. (Perconte & Goreczny, 1990; Sutker, Bugg & Allain, 1991).

Khan, Welch and Zilmer (1993) studied the MMPI-2 profiles of 31 women residing in a shelter for victims of domestic violence. They found that the majority of women had elevated profiles indicating a high degree of distress, anxiety and psychological disturbance. The most frequent code types included some combination of scales Pd, Pa, Sc, and Si, with low scores on scale K. They report that they found no evidence to support the idea that battered women exhibit dependent, passive, or inactive personality

traits, although there was some indication of coping problems, a sense of inadequacy, and a potential for inappropriate judgments (e.g., low scores on K and ego strength and elevated Pd, Pa, and Sc scales). They also found that a majority of the women (68%) scored high on both MMPI-2 PTSD scales (P_k and P_s), indicating symptomatology concordant with PTSD. A regression analysis that indicated length of abuse was associated with degree of symptomatology supports the theory that the MMPI-2 elevations represent reactions to acute stress rather than inherent character traits. It is possible that other interpretations of this effect might be valid. However, since no attempt was made to retest the women after the acute phase of distress had passed, this explanation remains the most parsimonious.

Although both the Rorschach and the MMPI-2 have been used to successfully differentiate between traumatized and non-traumatized groups, no published research was found which had compared the success of the two instruments in differentiating battered from non-battered women. This study examined the degree of congruence between Rorschach and MMPI-2 scores found by previous research to be associated with PTSD for a clinical group of women who had experienced adult assaultive trauma (battering and/or rape) and a clinical comparison group who had not. It also investigated the relative abilities of the two tests to differentiate the assaulted group from the non-assaulted group.

An attempt was made to determine if individuals who have suffered a traumatic physical assault exhibit a pathological pattern of responses that is discreet from the pattern exhibited by individuals experiencing distress not associated with assault. A comparison of scores of a group of assaulted women applying for mental health services with scores

from a normative database or with scores from a sample from the general community would make this discrimination impossible, since it could not be confirmed that individuals in the comparison groups were experiencing acute distress not related to assault. Therefore, both groups were selected from a clinical sample. Since all assessments were administered at the beginning of treatment to women who had presented themselves to the clinic for services, it can be assumed that all women in both groups were experiencing some degree of acute distress. In this way this study avoided as much as possible some of the confounding factors present in a number of the studies discussed above.

The following hypotheses were explored:

1. For the MMPI-2 profiles, the mean scores of the group of assaulted women will be elevated on scales F, Hy, D, Hs, Pd, Pa, Pt, Sc, and Si. The elevations will be significantly higher than the mean scores for the non-assaulted group.
2. There will be significant differences between the two groups. on the following MMPI-2 subscales: A, R, ANG, CYN, Ps and Pk.
3. There will be significant differences between the two groups on the following Rorschach variables: X+ %, X- %, Xu%, F+ %, D, Adjusted D, Lambda, Zd, Zf, Sex, Blood and Anatomy.
4. The Pk and Ps PTSD subscales on the MMPI-2 will correlate with Rorschach variables associated with PTSD.

CHAPTER 2

METHOD

Subjects

The charts of all female patients who had applied for services at a university clinic were examined for completed and scored Rorschach and MMPI-2 protocols and history of abuse. Fifty-seven women were found to have complete Rorschachs and MMPI-2s.

Of the 57, twelve women were found to have experienced adult assaultive trauma. Of these twelve, five had been victims of only one type of trauma (four had experienced battering, one had been raped). The rest had experienced multiple trauma (child physical abuse and rape, N=1; child physical abuse and battering, N=2; child sexual abuse and battering, N=2; child physical and sexual abuse and battering, N=1; child physical abuse, battering, and rape, N=1). However, none were currently living in an abusive situation.

The social histories and the progress notes of the remaining 45 women were examined for any indications of possible abuse. Eighteen women who had no history of adult abuse, but had experienced either physical or sexual abuse in childhood were excluded from the study. Three others were eliminated due to inadequate social histories, one was eliminated because her therapist suspected the possibility of abuse, and three others because their social histories suggested the possibility of abuse. The remaining females formed a comparison group of 20 that, as far as it was possible to determine, appear to be free from the experience of sexual or physical abuse or rape in both adulthood and childhood.

There were no significant differences between the two groups on age, IQ or income. The mean age for the group of assaulted women was 26.67 years (s.d. = 11.07) and the mean age for the non-assaulted group was 29.15 (s.d. = 8.84). Most subjects in both groups were socioeconomically disadvantaged, with incomes at or below \$10,000 per year. The mean IQs were 107 (s.d. = 7.11) for the assaulted group and 101 (s.d. = 9.91) for the non-assaulted group.

Procedure

Since archival data were used, no subjects were contacted personally. Rorschach and MMPI-2 variables that have been suggested by the literature to correlate with PTSD or with the experience of trauma were gleaned from the protocols. All Rorschach protocols had been scored by advanced graduate students according to the Exner system, and all MMPI-2s had been scored on a computerized program.

The Rorschach variables that were selected were those that have been found by previous research to be consistently related to PTSD symptoms (i.e., X+ %, Xu %, X- %, F+ %, D, Adjusted D, Lambda, Zd, and Zf) and are thought to reflect stress and coping capacity, and cognitive style. Further, the content scores Sex, Blood, and Anatomy, found in earlier studies to be connected with the experience of trauma, were included in this investigation.

The MMPI-2 clinical scales and the L, F and K scales have been utilized repeatedly in the assessment of battered women as well as subjects diagnosed with PTSD. Further, a number of subscales appear to be salient to the experience of trauma, specifically, Anger (ANG), Anxiety (A), Cynicism (CYN) and Repression (R) as well as

the PTSD subscales Pk and Ps. To explore questions raised by the initial stage of data analysis, the following subscales were also examined: Pa1 (Persecutory ideas), Pa2 (Poignancy), Pa3 (Naivete), PaO (Paranoia Obvious), PaS (Paranoia Subtle), R (Repression), A (Anxiety), ANG (Anger), CYN (Cynicism), Pk, and Ps. Multivariate analyses were performed on the L, F and K and clinical scales of the MMPI-2 and on the variables from the Rorschach to determine overall significant differences between the two groups on each instrument. Individual variables were submitted to f-tests to explore possible trends worthy of future research. To guard against the possibility of random significance, a significance level of $p < .01$ was set as a criteria. Finally, a Pearson correlation analysis was run to investigate possible correlations between the selected Rorschach variables and the Pk and Ps subscales on the MMPI-2.

CHAPTER 3

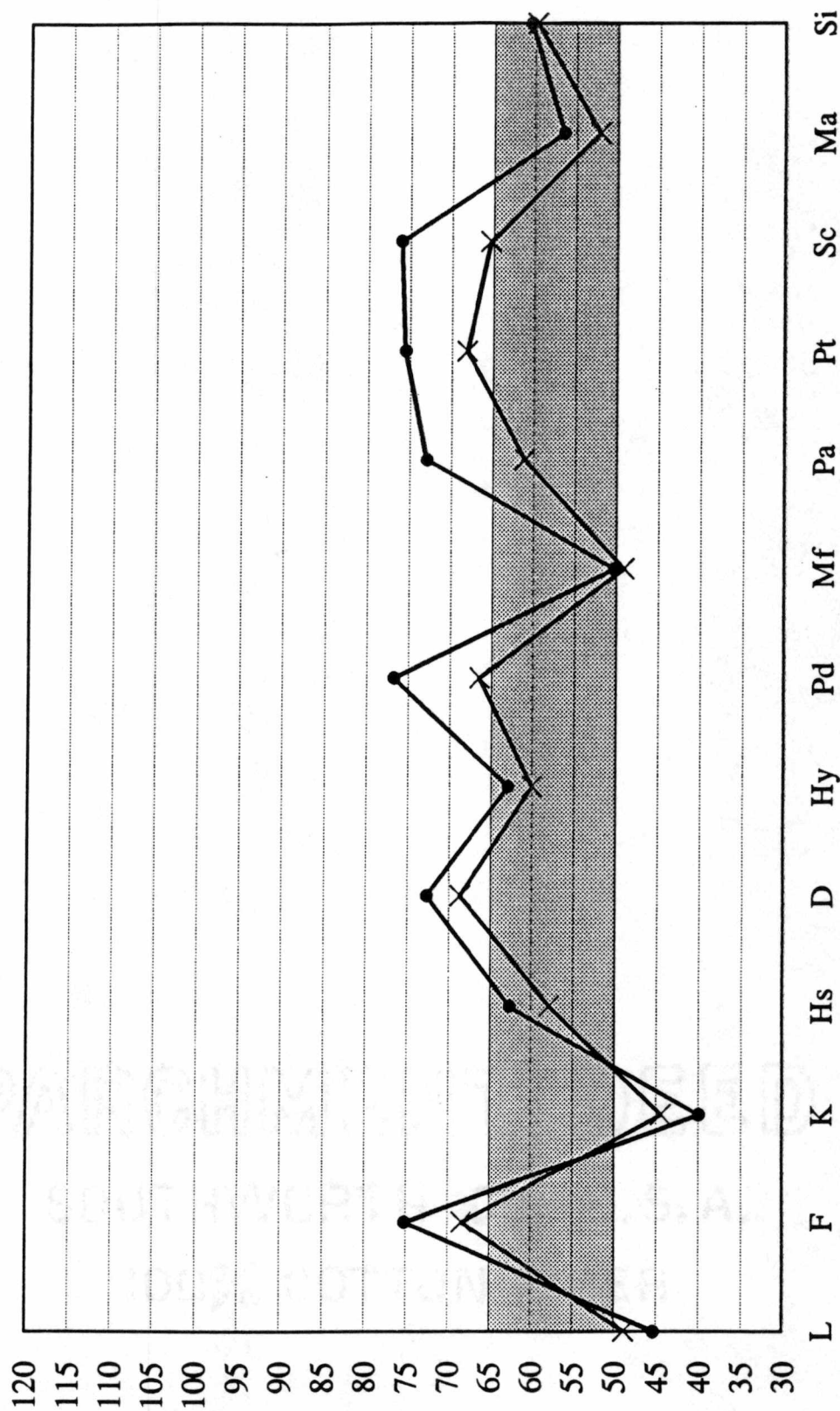
RESULTS

MMPI-2

Generally, the first hypothesis was not supported by the findings. A multivariate analysis indicated that the pattern of elevations on the MMPI-2 for assaulted women was not significantly different from the mean scores of non-assaulted women ($F=1.24$; $df=13, 18$; $p=.33$). Mean scores below the T-score of 50 on the L and K scales, and above 65 on the F scale were found for both groups. This configuration is typically interpreted as an indication that the individual is admitting to personal difficulties, is seeking help, and is unsure of his or her abilities to handle these problems (Greene, 1980).

Further, both groups had elevated scores on the D, Pd, Pt, and Sc scales, indicating a high level of general dissatisfaction, anxiety and distress among members of both groups. The means for both groups fell within the normal range on scales Hs, Hy, Ma (Hypomania), and Si. (See Figure 1).

Both groups had mean Mf scores between 48 and 50, a score which suggests an orientation toward a less traditional, non-stereotypical feminine role (Greene, 1980; Reilley & Reilley, 1991). This finding is worthy of mention due to its contradiction of the popular notion that abused women exhibit a passive, dependent and overly submissive character style (Dickstein, 1988; Freize & McHugh, 1992; Finn, 1985; Bowen, 1982), a notion which persists even in the face of mounting evidence to the contrary (Gondolf & Fisher, 1988; Campbell, 1989).



•—• ASSAULTED GROUP MEAN ✕ — ✕ NON-ASSAULTED GROUP MEAN

Fig. 1. MMPI-2 mean profiles for assaulted and non-assaulted females.

The only clinical scale on which the mean for the assaulted group was elevated into the clinical range while the mean for the non-assaulted group fell within the normal range was the Paranoia scale. Interpretation of this scale is complicated due to its lack of dichotomy (Reilley & Reilley, 1991). Because of this difficulty, and because of the clinically significant difference on this scale between the two groups, two-tailed t-tests were run on all paranoia subscales to determine which factors were most influential in elevating the score for the assaulted group.

The findings from these analyses suggested a specific pattern of responses the resulted in elevated Pa scores for subjects in the assaulted group. The assaulted group scored higher ($p < .02$) than the non-assaulted group on both Pa1 and PaO. There were no differences on subscales Pa2, Pa3, or PaS. Thus it appears that the elevated mean Pa score resulted from women in the assaulted group endorsing such items as "I have no enemies who really wish to harm me," and "I believe I am being plotted against," in the deviant direction.

The second hypothesis of this study predicted that subscales relevant to the experience of abuse (A, R, ANG, CYN, Pk and Ps) would produce significantly different mean scores for the two groups of subjects. Both groups scored a mean well into the clinical range on both PTSD subscales (Pk and Ps). Although the assaulted group showed a trend toward higher scores, ($p < .04$ on the Ps scale and $p < .07$ on the Pk scale) the difference did not meet the criteria of $p < .01$ for significance. There were statistically significant differences on the R subscale, with the assaulted group scoring lower than the other group ($p < .003$). Further, there was a trend toward significance on the Cyn

subscale ($p < .08$) and on the A subscale ($p < .02$), with the assaulted group scoring higher. No difference was found on Ang. (See Table 1).

When the scores for the basic scales of the MMPI-2 were examined individually, no one code type predominated for either of the groups. However, various combinations of scales D, Pt, and Pd were most frequent for both groups. Additionally, among the codetypes for the assaulted group, scales Pa and Sc appeared five times; and in the non-assaulted group, scale Si appeared five times. In the assaulted group, one subject had no elevations on clinical scales, and in the non-assaulted group, four had no elevations on clinical scales. Finally, when the Pk and Ps scores for all subjects were examined, it was found that all members of the assaulted group and 45% (9) of the non-assaulted group had scores in the clinical range.

Rorschach

The third hypothesis predicted that significant differences between the two groups across Rorschach variables associated with PTSD. A multivariate analysis revealed no significant differences between the two groups across the Rorschach scores ($F=1.27$; $df=6, 24$; $p=.31$). An exploratory analysis using t-tests raised intriguing questions that merit further investigation. Good form quality, ($F+ \%$ and $X+ \%$) is indicative of capacity for appropriate reality testing. It has been suggested that $F+ \%$ lower than 60% suggests serious psychopathology (Exner, 1986). When variables indicative of cognitive ability and reality testing were analyzed in this study, it was found that the assaulted group had a higher mean score for $F+ \%$ (a trend toward significance at .08) and a lower $Xu\%$ ($p < .08$). There were no significant differences for $X+ \%$ or $X- \%$. However, both

Table 1. F-test results for MMPI-2 scales for assaulted and non-assaulted females.

MMPI-2 VAR	ASSAULTED GROUP		NON-ASSAULTED GROUP		T-VAL	P-VAL
	MEAN	ST.DEV.	MEAN	ST. DEV.		
L	45.33	(8.47)	48.85	(9.71)	-1.04	.31
F	75.17	(21.68)	68.30	(19.62)	.92	.36
K	40.00	(9.99)	44.45	(9.16)	-1.29	.21
Hs	62.58	(15.52)	57.75	(15.34)	.86	.40
D	72.67	(11.90)	68.65	(18.79)	.66	.51
Hy	62.92	(17.62)	60.00	(15.28)	.49	.63
Pd	76.75	(13.81)	66.45	(15.70)	1.94	.07
Mf	50.25	(10.15)	49.10	(8.28)	.33	.73
Pa	72.92	(15.77)	61.10	(12.49)	2.35	.03
Pt	75.58	(15.38)	68.10	(16.20)	1.29	.21
Sc	76.08	(15.21)	65.35	(16.80)	1.86	.08
Ma	56.42	(10.69)	52.05	(11.06)	1.09	.28
Si	60.42	(11.38)	59.70	(15.35)	.14	.89
Pa1	71.58	(22.39)	56.20	(12.22)	2.53	.02
Pa2	65.00	(11.87)	59.40	(11.95)	1.29	.21
Pa3	45.83	(11.13)	49.45	(11.42)	- .88	.39
PaO	72.50	(19.65)	59.10	(12.20)	2.39	.02
PaS	55.50	(8.50)	52.68	(8.54)	.27	.79
A	72.50	(9.12)	63.25	(12.40)	2.42	.02
R	43.00	(9.41)	55.00	(11.42)	-3.22	.003
Es	30.33	(13.50)	39.45	(15.88)	-1.76	.09
Ang	68.08	(12.01)	61.35	(11.03)	1.54	.14
Cyn	58.50	(11.45)	51.95	(9.06)	1.74	.08
Pk	79.42	(14.39)	69.20	(15.53)	1.89	.07
Ps	79.92	(12.96)	69.10	(14.85)	2.16	.04

NOTE: All t-tests are two-tailed.

groups scored in the pathological range (below 80%) for X+ %, thought to be a measure of perceptual and mediational conventionality (Exner, 1986). Finally, when number of responses was controlled for, the assaulted group was found to have a somewhat higher M- score ($p < .08$), suggesting greater distortion in their perceptions of the intentions of others.

When variables connected with coping ability were analyzed, it was found that the assaulted group had higher (though not significantly so) Adjusted D scores ($p < .05$) than the non-assaulted group, with D and Adjusted D at above 2 and 1 respectively for the assaulted group, and below 1 for the non-assaulted group on both variables. The D score suggests resources available for coping with stress, while Adjusted D measures ability to cope when current stress is factored out. Scores at or above 0.0 for both D and Adjusted D indicated adequate resources, while negative scores suggest that internal resources are being overtaxed (Exner, 1986). (See Table 2).

There were no significant differences for Lambda. Both groups had Lambda scores suggesting high sensitivity to the environment (.54 for the assaulted group and .63 for the non-assaulted group).

Regarding variables that indicate cognitive complexity and suggest a flexible approach to problem-solving, there were no differences in mean Zd or Zf scores. The scores for both groups signify an ability for accurately scanning and integrating of the environment and the capacity to engage in creative problem-solving.

When the two groups were compared on content scores associated with the experience of trauma, no significant differences for frequency of Blood or Anatomy were

Table 2. T-test results for Rorschach variables for assaulted and non-assaulted females.

RORSCHACH VAR	ASSAULTED GROUP		NON-ASSAULTED GROUP		T-VAL	P-VAL
	MEAN	ST.DEV.	MEAN	ST. DEV.		
F+ %	.64	(.23)	.48	(.25)	1.83	.08
X+ %	.53	(.12)	.51	(.12)	.57	.57
Xu %	.14	(.09)	.23	(.15)	-2.13	.04
X- %	.31	(.12)	.25	(.16)	1.08	.29
M-	1.91	(1.22)	.95	(1.61)	1.82	.08
Zf	13.55	(11.41)	13.85	(5.76)	-.10	.92
Zf	1.27	(4.21)	-1.20	(6.80)	1.25	.22
Sx	1.50	(1.41)	.32	(.67)	2.77	.01
Bl	.13	(.35)	.26	(.56)	.05	.96
An	1.63	(2.0)	1.63	(1.92)	-.40	.70
D	.27	(2.10)	-.70	(2.00)	2.15	.04
Adj D	.82	(1.08)	-.10	(1.29)	2.17	.04
Lambda	.54	(.48)	.63	(.38)	-.59	.56

NOTE: All t-tests are two-tailed.

T- and P-values are based on analyses made after Rorschach scores were controlled for R.

found. There was, however, a significant difference in Sex responses, with the assaulted group giving significantly more ($p < .01$) responses with a sexual content.

The Pearson correlation analysis of Rorschach variables with the Pk and Ps subscales of the MMPI-2 revealed no significant correlations between the two instruments on these variables. Thus, the fourth hypothesis was unsupported. (See Table 3).

Table 3. Pearson correlations of selected Rorschach variables with MMPI-2 PTSD subscales Pk and Ps.

Rorschach Variables	Pk	Ps
D	-.044	-.031
Adj. D	-.031	.018
M-	.453	.442
X+ %	-.352	-.343
F+ %	.124	.027
X-%	.359	.391
Xu %	-.226	-.233
Zf	.030	.101
Zd	.037	.183
Lambda	.232	.306
Sx	.036	-.029
Bl	-.63	-.576
An	-.157	-.348

CHAPTER 4

DISCUSSION

The findings of this study do not support earlier research using the MMPI-2 in that there were no significant differences between the assaulted and the non-assaulted groups across the clinical scales of the MMPI-2. Further, the only scale on which the mean score of the assaulted group was elevated into the clinical range and the mean score of the non-assaulted group was not in the clinical range was the Paranoia scale. As stated previously, all subjects in both groups had recently presented themselves for treatment at a psychological facility at the time of testing. This suggests that the elevations on a number of the MMPI and MMPI-2 profiles of traumatically assaulted women found in this and previous studies (Gellen et al., 1984; Khan et al., 1993) may represent a common reaction to distress rather than demonstrate a pattern of character pathology typical of assaulted women per se. These results suggest that the MMPI-2 is not an effective instrument for differentiating between women who have been assaulted and women who have not when both groups are in acute distress.

The differences on the Pa scale, and particularly the Pa1 and Pao subscales suggest that these scales may be more effective in discriminating assaulted from non-assaulted women than is a general pattern of elevations across a number of scales. The high Paranoia scores may reflect some distortions in perceptions of the intentions of others. Support for this interpretation may be seen in the higher number of M- responses on the Rorschach. However, given the recent history of these women, the elevated scores may also be seen as evidence of adaptive coping defenses necessary in a world they have only

recently left. Further, endorsement of items such as the examples given earlier may reflect an accurate appraisal of their experience rather than a distortion of reality.

In line with this reasoning is the fact that the assaulted group did not exhibit the suspiciousness and guardedness that would be expected in individuals with paranoid personality characteristics. Rather, the L-F-K configuration for both groups indicated an openness to admitting problems, and the significantly lower Repression mean for the assaulted group suggests that the women in the assaulted group were less guarded than the women in the non-assaulted group. However, as was the case for the MMPI-2, the Rorschach manove yielded no evidence for group differences across the identified Rorschach variables.

Regarding detection of PTSD among the subjects, about half of the non-assaulted group scored in the clinical range on the two MMPI-2 PTSD scales (Pk and Ps), as did all members of the assaulted group. This is a higher incidence than would be expected, since previous studies have found the prevalence of this disorder among assaulted women to be between 29% and 79% (Kilpatrick, Saunders, Amick-McMullen, Best, Veronen & Resnick, 1989; Housekamp & Foy, 1991). Further, care has been taken to ensure that, as much as possible, the non-assaulted group is clean for assaultive abuse experiences, leading to the expectation that the mean for that group on both PTSD subscales would fall within the normal range. Because the data are archival and none of the subjects had been individually assessed specifically for symptoms of PTSD, it is impossible to say how many met the DSM-III criteria for the disorder. Watson, Juba, Anderson and Manifold (1990) found that, although the Pk scale was highly accurate in differentiating patients with PTSD

symptomatology from non-PTSD patients, it was a poor identifier of past exposure to trauma. Our findings suggest either that the Pk and Ps subscales tend to over-diagnose PTSD in a female clinical population, or that women in acute distress tend to endorse items suggestive of PTSD symptomatology even when there has been no exposure to assaultive trauma.

A question worthy of future research is the capacity for coping among the members of the assaulted group suggested by a few of the Rorschach scores. For example, the high D and Adjusted D scores for this group indicate that they have more than adequate resources for managing stress. Further, the higher F+ % and the lower Xu% for the assaulted group suggests that they have some capacity for appropriate reality testing, despite their higher M-.

Regarding cognitive style, the assaulted group did not demonstrate a tendency toward rigidity in thinking. Both groups had Zd and Zf scores that showed an ability to accurately scan the environment, to engage a flexible approach to problem-solving, and to reason in a cognitively complex manner. Additionally, the low Lambda scores manifest a psychological readiness to engage with the stimulus field. Thus, it appears that the women in the assaulted group were not less flexible in cognitive style, poorer in coping skills or less able in problem-solving strategies than the group of non-assaulted women, deficits often attributed to battered women.

The failure of either the Rorschach or the MMPI-2 to differentiate assaulted from non-assaulted women in this study may support the contention that psychopathology in victims of abuse may be a consequence of the pathogenic family environment rather than

of the abuse itself (Nash, Husley, Sexton, Harralson & Lambert, 1993). If this is the case, then chaotic patterns in the families of both groups may have resulted in similar scores for both groups. The fact that both groups were taken from a clinical population lends some credence to this possibility, and further study is necessary to examine this question.

The lack of correlation between the two PTSD subscales of the MMPI-2 and the Rorschach variables associated with PTSD could be interpreted to mean that either one or both instruments did not accurately measure posttraumatic symptomatology for this group of subjects. Alternatively, it could suggest that the two instruments measure aspects of posttraumatic symptomatology that are unrelated to each other. It could also indicate that the two methods of gathering data (objective versus projective) were not consistent in degree of success for these subjects. Finally, the lack of correlation could simply be an artifact caused by the small sample and by the possibility that none of the subjects met the full criteria for PTSD.

The small sample size is an evident limitation of this study. Further, the assaulted group was not homogeneous in experience of assault. Additionally, since all members of the assaulted group were no longer experiencing assault, this group may not be representative of battered and/or raped women still living in abusive situations, and this may account for the fact that this study failed to replicate the significant differences found in battered women in previous studies. It may be that these women constitute a group with greater inherent resources, as evidenced by their ability to change their situations or it may be that the process of change led to the development of coping resources.

Nevertheless, the surprising trends in certain areas and the lack of significant

differences in others suggest that further research may reveal previously overlooked cognitive and coping strengths in survivors of rape and battering and may discount some of the negative characteristics attributed to female survivors of abuse.

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VITA

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