

Vietnam Combat Veterans With Posttraumatic Stress Disorder: Analysis of Marital and Cohabiting Adjustment

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Help-seeking Vietnam combat veterans with a diagnosis of Posttraumatic Stress Disorder (PTSD; $n = 21$) were compared with help-seeking combat veterans without evidence of PTSD ($n = 18$) and help-seeking veterans with minimal combat experience ($n = 21$) on indexes of cohabiting and marital adjustment. Also, premilitary adjustment was assessed and validated by relative's reports. The PTSD group reported significantly more problems than did the other groups with self-disclosure and expressiveness to their partners, physical aggression toward their partners, and global relationship adjustment. The PTSD group did not differ from the other groups on measures of intimacy and affectionate behavior. The findings were not attributable to premilitary adjustment, response style, or demographic factors. The results were compared with findings of previous studies and discussed in terms of their implications for assessment, treatment, and future research.

The 3rd edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980) includes combat-related stress disorder within the diagnostic category of Posttraumatic Stress Disorder (PTSD). An expanding body of controlled research on PTSD has emerged using veterans of the Vietnam conflict (Fairbank, Langley, Jarvie, & Keane, 1981). These investigations have focused on (a) delineating the extent and severity of symptomatology and maladjustment among Vietnam veterans (e.g., Egendorf, Kaduschin, Laufer, Rothbart, & Sloan, 1981; Penk et al., 1981), (b) ad-

ressing the controversial issue of etiological factors (e.g., Foy, Sippelle, Rueger, & Carroll, 1984; Frye & Stockton, 1982), and (c) identifying reliable methods of assessment (e.g., Malloy, Fairbank, & Keane, 1983; Blanchard, Kolb, Pallmeyer, & Gerardi, in press).

Most of this research illuminates the individual psychological problems of Vietnam veterans, whereas only limited attention has been given to the interpersonal aspects of the disorder. However, there is good reason for a closer examination of the interpersonal concomitants of PTSD among combat veterans. Wilson (1978) found that combat veterans reported more difficulty with intimacy and social conflict than did noncombat Vietnam veterans and non-Vietnam veterans. Egendorf et al. (1981) found that Vietnam combat veterans reported greater hostility and social isolation than did other groups of Vietnam-era veterans. Penk et al. (1981) found that combat veterans, compared to noncombat veterans, reported symptoms consistent with a diagnosis of PTSD, including more difficulties with emotional expressiveness, temper control, trust, and marital problems.

The only study aimed at identifying specific types of interpersonal problems among Viet-

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nam veterans was that of Roberts et al., (1982). Among veterans seeking help for substance abuse, those with symptoms of PTSD were compared to non-PTSD combat veterans and noncombat veterans on measures of social adjustment. Problems with intimacy and sociability were found to be particularly characteristic of veterans with PTSD. Higher scores on several Minnesota Multiphasic Personality Inventory (MMPI) subscales of social maladjustment (e.g., Paranoia, Family Problems, and Manifest Hostility) also were associated with the PTSD group of veterans.

The association between PTSD and marital or cohabitating (i.e., dyadic) adjustment has not been empirically explored. Based on previous research findings and reported clinical observations (Williams, 1980), several dimensions of dyadic functioning among Vietnam veterans warrant closer examination: (a) perceived degree of intimacy in the relationship, (b) expressiveness and self-disclosure, (c) expression of hostility, and (d) general dyadic adjustment. The purpose of the present study was to examine the dyadic adjustment of help-seeking Vietnam-era veterans along these dimensions with the expectancy that veterans currently exhibiting symptoms of PTSD, in contrast to other Vietnam-era veterans, would report a greater degree of dyadic problems and maladjustment.

Previous research in this area has failed to control for premilitary adjustment or to cross validate subjects' self-report of premilitary history. The present study checked veterans' self-report with the report of a close relative. In addition, some recent reports (e.g., Sparr & Pankratz, 1983) have described cases of fictitious PTSD among patients who had never been in Vietnam or in the military service. Such reports highlight the importance of verifying historical information. In the present study, self-report of military history was compared with military document information, to guard against subject misrepresentation.

Method

Subjects

The subjects for the study were 60 male Vietnam-era veterans voluntarily seeking psychiatric services at a Los Angeles area Veterans Administration Medical Center. These subjects (a) served in the military from 1965 to

1975, (b) were currently married, cohabitating, or separated within a year of the study, and (c) had a primary diagnosis other than schizophrenia or substance abuse. The latter were excluded in order to avoid the possibility of having subjects in the control groups whose PTSD was masked by substance abuse. Subjects were placed into one of three groups based on degree of combat experience and presence-absence of significant PTSD symptomatology (the group assignment criteria are discussed in more detail in the following section). Twenty-one combat veterans were classified as PTSD positive and 18 combat veterans as PTSD negative. The 21 veterans who experienced no combat exposure or minimal combat exposure were placed in the minimal combat group. The predominant hospital diagnoses for the latter two groups were major depressions, adjustment disorders, and personality disorders.

Table 1 shows the demographic, marital, and military characteristics of the sample. It was expected that Vietnam-era veterans who were seeking help at a Veterans Administration hospital would be relatively homogeneous with respect to most control variables. An across-group comparison on these variables showed that this was the case, as there were no significant differences between groups on these variables (F tests were used for continuously scaled data and chi-squares for categorical data).

Instruments

Subjects were individually administered an extensive structured interview and self-report instruments designed to assess dyadic functioning. The structured interview provided information regarding demographic variables, premilitary and military adjustment, and marital history. In addition, it contained an index of combat experience and the symptom checklist.

Premilitary Adjustment Index. The premilitary history data were organized and condensed into the Premilitary Adjustment Index (Foy et al., 1984), which consists of 19 items covering family stability, school achievement, legal problems, and social activity. All items were scored in a dichotomous manner (i.e., positive vs. negative adjustment). A median split was used to determine cutoff points for continuously scaled items. A subject's score on the index was the number of items scored in the direction of positive adjustment.

We asked all of the veterans who participated in the study for permission to contact a relative by telephone in order to cross-validate the premilitary history data. We received permission from all of the subjects and successfully contacted a relative for 82% of the sample (PTSD group = 81%; non-PTSD group = 83%; and minimal combat group = 91%). Siblings were the preferred relative because it was felt that they would be likely to know more about difficulties with drugs, school problems, arrests, and so forth, and would be more likely to accurately report this information than would the veteran's parents. The majority of the cross-validation information was obtained from veterans' brothers and sisters (PTSD group = 88%; non-PTSD = 93%; and minimal combat group = 79%). The remainder was obtained from subjects' mothers. Relatives were administered the premilitary history section of the interview. The data were scored in a dichotomous manner analogous to the veterans' interview data.

Kappa coefficients (Cohen, 1960) were computed for the degree of agreement between veterans and relatives for each item on the premilitary history section of the interview. An item was included on the final version of the Premilitary Adjustment Index if the kappa coefficient was equal to or exceeded .60, and thus reflected a reasonable degree of veteran–relative agreement regarding the subjects' premilitary behavior. Table 2 shows the items that were included on the Premilitary Adjustment Index and those that were excluded.

Combat exposure scale. Degree of combat exposure was assessed by means of a scale similar in content to that used in previous research (Foy et al., 1984; Egendorf et al., 1981). The combat exposure scale employed in the present study consisted of 11 items indicating the

frequency of combat experiences such as direct combat involvement, observation of or responsibility for the deaths of American and enemy soldiers and civilians, and danger of being killed or wounded. Items were scored from *never* (1) to *very often* (5). Veterans who did not serve in Vietnam were given a score of zero. A principal components analysis (varimax rotation) of the items on the scale showed that all items loaded highly on a single dimension accounting for 79% of the variance and suggesting that the scale assessed a unitary dimension of combat stress for this sample.

PTSD diagnostic scale and group assignment. PTSD status was determined on the basis of responses to a symptom checklist used in previous research to identify Vietnam veterans with symptoms of PTSD (Foy et al.,

Table 1

Demographic, Military, and Marital Characteristics of Veterans Varying in Combat Experience and Posttraumatic Stress Disorder

| Variable | PTSD+ | PTSD- | Minimal combat | Variable | PTSD+ | PTSD- | Minimal combat |
|--------------------------------------|-------|-------|----------------|---------------------------------------|-------|-------|----------------|
| <i>n</i> | 21 | 18 | 21 | Number of children at home | | | |
| Age (yrs) | | | | <i>M</i> | 1.00 | 0.61 | 0.80 |
| <i>M</i> | 34.71 | 33.44 | 33.40 | <i>SD</i> | 1.18 | 0.84 | 0.98 |
| <i>SD</i> | 2.57 | 2.64 | 3.32 | Military (%) branch | | | |
| Race (%) | | | | Army | 62 | 61 | 67 |
| White | 52 | 66 | 62 | Marines | 38 | 17 | 14 |
| Hispanic | 24 | 6 | 14 | Navy | 0 | 17 | 10 |
| Black | 19 | 28 | 24 | Air force | 0 | 5 | 9 |
| Other | 5 | 0 | 0 | Draft type (%) | | | |
| Education (%) | | | | Enlisted | 71 | 72 | 85 |
| Finished high school | 57 | 61 | 66 | Drafted | 29 | 28 | 15 |
| Did not finish high school | 43 | 39 | 34 | Age entered service (yrs) | | | |
| Employment (%) | | | | <i>M</i> | 19.38 | 19.39 | 18.48 |
| Employed | 86 | 67 | 67 | <i>SD</i> | 2.06 | 2.50 | 1.25 |
| Unemployed | 14 | 33 | 33 | Discharge type (%) | | | |
| Patient Status (%) | | | | Honorable | 75 | 83 | 86 |
| Inpatient | 48 | 44 | 38 | Other | 24 | 17 | 14 |
| Outpatient | 62 | 56 | 62 | Disability (%) | | | |
| Marital Status (%) | | | | Compensation | 50 | 38 | 42 |
| Married | 62 | 45 | 57 | Noncompensation | 50 | 62 | 58 |
| Cohabiting | 10 | 33 | 29 | Disability rating (%) | | | |
| Separated | 28 | 22 | 14 | <i>M</i> | 28.00 | 31.00 | 24.00 |
| Length of current relationship (yrs) | | | | <i>SD</i> | 30.11 | 38.17 | 21.87 |
| <i>M</i> | 5.67 | 5.88 | 6.14 | Combat exposure scale (summary score) | | | |
| <i>SD</i> | 4.59 | 4.68 | 4.86 | <i>M</i> | 32.80 | 30.39 | 5.04 |
| Number of marriages | | | | <i>SD</i> | 6.70 | 5.17 | 6.46 |
| <i>M</i> | 1.76 | 1.27 | 1.24 | | | | |
| <i>SD</i> | 1.34 | 0.67 | 0.57 | | | | |

Note. PTSD = Posttraumatic Stress Disorder.

1984; Stampler & Sippelle, 1981). This measure consisted of 43 items covering a wide range of adjustment problems and psychological symptoms. Seventeen items were included that are characteristic of PTSD according to DSM-III criteria (e.g., nightmares, sleep disturbances, and intrusive memories). The remaining items assessed problems of a more general nature (e.g., excessive eating, marked self-consciousness). Each item was rated from *not a problem* (1) to *an extreme problem* (5). Of the 17 PTSD-diagnostic items, 5 were strongly associated with interpersonal and dyadic difficulties (e.g., "inability to make or keep friends", "feeling emotionally numb"). In order to avoid overlap between the method of subject assignment and the content of the criterion measures, those items assessing emotional/social constriction were not used to distinguish PTSD positive and negative combat veterans.

The group assignment formula was designed to be in accord with that described in DSM-III for a PTSD diagnosis (Foy et al., 1984). Subjects were placed in the PTSD-positive group if they (a) received a total score of 23 or more on the combat exposure scale (indicating a

significant degree of exposure to combat stressors), (b) maximally rated (i.e., *an extreme problem*) a symptom-checklist problem indexing "reexperiencing of the trauma" (e.g., nightmares, intrusive memories), and (c) maximally rated two symptom checklist problems reflecting DSM-III's group of additional symptoms (e.g., startle responses, sleep disturbance, survivor guilt). Subjects were placed in the PTSD-negative group if they received a combat exposure scale score of 23 or more, but did not maximally rate either a "reexperiencing of the trauma" symptom-checklist item or two from the group of additional symptoms items. Subjects were placed in the minimal combat group if they scored 18 or less on the Combat Exposure scale.

Subsequent to assigning subjects to groups, the PTSD-positive subjects were examined in regard to whether they met the full set of DSM-III diagnostic criteria. It was found that 85% also had rated one or more of the items assessing emotional/social constriction as an extreme problem. Thus, the majority of PTSD-positive subjects in the present study met the full set of DSM-III criteria for a diagnosis of PTSD.

Table 2
Premilitary Adjustment Index Items

| Item | Scoring |
|--|--|
| Included | |
| 1. Did subject live with both parents until age 16? | Yes/No |
| 2. Number of residents lived in until age 16. | Number |
| 3. Occurrence of parental problems with alcohol? | Yes/No |
| 4. Occurrence of parental emotional problems? | Yes/No |
| 5. Occurrence of major medical problems in family of origin? | Yes/No |
| 6. Occurrence of major financial problems in family of origin? | Yes/No |
| 7. Rating of relationship quality with father between ages 6-18. | Rated 2 (poor) to 14 (excellent) |
| 8. Contact with mental health professional prior to military? | Yes/No |
| 9. Years of education? | Number of years |
| 10. Occurrence of serious discipline problems in school? | Yes/No |
| 11. Did subject fail any grades? | Yes/No |
| 12. Occurrence of drug abuse? | Yes/No |
| 13. Problems with authorities due to fighting? | Yes/No |
| 14. Was subject expelled from any school? | Yes/No |
| 15. Number of arrests or legal problems? | Number |
| 16. Number of girls dated prior to military? | Number |
| 17. Longest period of time subject was with one girl? | Rated 1 (none) to 5 (>2 yrs) |
| 18. Number of good friends while a teenager? | Rated 1 (none) to 8 (>10) |
| 19. Rating of involvement in high school activities? | Rated 1 (<i>never</i>) to 7 (<i>extremely</i>) |
| Excluded | |
| 1. Number of cities lived in until age 16? | Number |
| 2. Rating of relationship quality with mother between ages 6-18? | Rated 2 (poor) to 14 (excellent) |
| 3. Grades earned during last two years of high school? | Rated 1 (F's) to 8 (A's) |
| 4. Did subject play hooky frequently? | Yes/No |
| 5. Was subject sent to the principal often? | Yes/No |
| 6. Feelings of being unreasonably punished by authorities? | Yes/No |
| 7. Occurrence of alcohol abuse problems prior to military? | Yes/No |
| 8. Number of steady girlfriends prior to military? | Rated 1 (none) to 4 (>4) |
| 9. Number of friends between ages 6-12? | Rated 1 (none) to 8 (>10) |
| 10. Overall happiness as a child? | Rated 1 (<i>very unhappy</i>) to 5 (<i>very happy</i>) |

Dyadic adjustment indexes. Intimacy with the partner was measured by the Personal Assessment of Intimacy in Relationships (PAIR; Schaeffer & Olson, 1981), a 36-item instrument with five subscales: (a) emotional intimacy (e.g., "My partner listens to me when I need someone to talk to"), (b) social intimacy (e.g., "We enjoy spending time with other couples"), (c) sexual intimacy (e.g., "I am satisfied with our sex life"), (d) recreational intimacy (e.g., "We like playing together"), and (e) intellectual intimacy (e.g., "My partner helps me clarify my thoughts"). Subjects rate each item on a 5-point scale from *strongly agree* (1) to *strongly disagree* (5). The measure also includes six items from a measure of social desirability (Edmonds Conventional Scale; Edmonds, 1967). Cronbach alpha reliability coefficients were at least .70 for each of the subscales, and test-retest reliabilities exceeded .75. Validity testing consisted of examining the PAIR's correlations with the Moos Family Environment Scales (Moos, 1974). Eighteen out of 20 hypothesized correlations were significant in the predicted direction (Schaeffer & Olson, 1981).

The expression of anger in the dyad was measured by the Active Expression of Hostility Scale, which was developed and used in a national study of the adjustment of Vietnam veterans and their peers (Egendorf et al., 1981). Ten items such as "yell or shout" and "hide your anger" were rated on a 5-point scale ranging from *never* to *very often*. The scale was found to have reasonably good internal consistency (alpha coefficient = .69) and was significantly associated with combat experience. The original scale was modified in the present study by asking the veteran how he behaved when he was angry at his partner. In addition to the summary score on the Expression of Hostility Scale, four items concerning verbal expression of anger and three items concerning physical aggression were examined separately.

The Self-Disclosure Questionnaire (Jourard, 1971) was used to assess the tendency to reveal information about oneself to a partner. The measure used in the present study differed from the original in length (20 items) and rating scale (a 6-point scale ranging from *I have lied or misrepresented myself* [1] to *I have disclosed fully on this topic* [6]). It has been shown, however, to correlate .91 with the original scale and the split-half and test-retest reliabilities exceeded .85 (Panyard, 1971). Whereas the Self-Disclosure Scale measures global expressiveness in a "Have you ever _____" fashion, the Verbal Expressiveness Scales (Friedland, 1982) measure the degree of day-to-day expressiveness in a couple's interactions. Ratings are made on an 8-point bipolar scale of the relative likelihood of two exclusive types of verbal behavior. One pole is anchored by a description of verbal involvement with a partner (e.g., "Talk about the activities I did during the day"), whereas the other pole is anchored by a description of noninvolvement with a partner (e.g., "Not say much about my day"). Two aspects of expressiveness and involvement were investigated: (a) interactions on a "typical evening" (11 items) and (b) interactions after a "stress-filled day" (7 items). Internal consistency coefficients were .75 and .81, respectively. The scales were found to be significant predictors of relationship satisfaction.

The Dyadic Adjustment Scale (Spanier, 1976) is a 32-item measure of relationship satisfaction with four subscales: (a) dyadic consensus (13 items), (b) affectional

expression (4 items), (c) dyadic satisfaction (10 items), and (d) dyadic cohesion (5 items). The measure is a widely used measure of relationship satisfaction, and the wording is appropriate for cohabitating couples. The coefficient alpha for the measure is .96, and it has been shown to discriminate between distressed and nondistressed couples in a number of studies (Weiss & Margolin, 1977).

Validity Checks

Validity checks were conducted concerning actual service in Vietnam and combat experience. First, all of the subjects were asked to bring or mail a copy of their discharge papers (Form DD214) to the researchers. Forty-eight subjects (80%) complied with the request. Of these, 100% of the veterans who reported service in Vietnam presented discharge papers that confirmed their self-report as evidenced by recorded decorations (e.g., Vietnam Service Medal, Vietnam Campaign Medal) or areas of overseas service. In addition, discharge paper information indicating combat participation (e.g., Combat Infantry Badge, Purple Heart, Silver or Bronze Stars, infantry or artillery Military Occupation Specialty) was identified for 76% of the PTSD-positive group and for 89% of the PTSD-negative group. It should be noted in this regard that the absence of such information on the discharge papers does not necessarily imply an inaccurate report of combat participation. It is possible that the information was lacking, improperly recorded, or that the soldier did not receive decorations for combat participation. Regardless, the cross check of the veterans' self-report provided by the discharge papers indicated that the Vietnam veterans were, in fact, Vietnam veterans and that the majority of combat veterans were combat participants.

Results

The PTSD-positive group was compared with the PTSD-negative and minimal combat groups on the measures of relationship adjustment. The comparisons were made using multivariate analyses of variance (MANOVAS) for the total scores on the criterion measures. Both multivariate analyses comparing PTSD-positive veterans with the other groups were significant in the expected direction. For the PTSD-Positive \times PTSD-Negative comparison, the MANOVA yielded a Wilks lambda = .766, $F(6, 51) = 2.59, p < .03$. The PTSD-Positive \times Minimal Combat comparison yielded a Wilks lambda = .631, $F(6, 51) = 4.98, p < .001$.

Group differences on the subscales of the criterion measures were examined using separate one-way analyses of variance (ANOVAS). All statistically significant omnibus F s were analyzed using Tukey's Honestly Significant Difference test for pairwise comparisons between the group means. The means and

standard deviations for each group on the criterion measures, along with the *t* values for the pairwise comparisons, can be found in Table 3. Only the PTSD-Positive \times PTSD-Negative and PTSD-Positive \times Minimal Combat groups are presented in the table because none of the comparisons between minimal combat and PTSD-negative groups were statistically significant.

It was expected that veterans with PTSD would report less frequent intimate activity and affectionate behavior with their partners than the PTSD-negative and minimal combat veterans. However, the results from the five subscales of the PAIR failed to confirm this hypothesis. There were no statistically significant differences for any of the PAIR subscales. In addition, the results on the PAIR Conventionality subscale indicated that there were no differences between groups in terms of response style. Thus, there was no evidence found for the contention that the groups differed in their tendencies to look good or look bad on the criterion measures.

Results from the Expressiveness and Self-Disclosure scales indicated that the groups did differ in terms of their daily expressiveness on typical days, $F(2, 57) = 8.80, p < .01$, and on stressful days, $F(2, 57) = 17.51, p < .001$, and on their general level of self-disclosure, $F(2, 57) = 6.72, p < .01$. Pairwise analyses indicated that the PTSD group reported significantly less verbal involvement with their mates on both typical days and stressful days, as well as a lower level of general self-disclosure than did both comparison groups. Thus, the results strongly supported the hypothesis that less expressiveness and self-disclosure with partners is characteristic of the close relationships of veterans with PTSD.

Significant group differences were found for the Expression of Hostility summary score, $F(2, 57) = 4.33, p < .05$, and the subscale of physical aggression, $F(2, 57) = 7.30, p < .01$. The multiple comparison tests indicated that PTSD-positive veterans reported higher levels of general hostility and physical aggression toward their partners than did the PTSD-negative veterans. The PTSD-Positive \times Minimal Combat group comparison did not reach statistical significance. Also, the results for the verbal aggression items were not significant.

The analyses of the summary score for the Dyadic Adjustment Scale and the subscales showed significant group differences for the total score, $F(2, 57) = 4.59, p < .05$; the Consensus subscale, $F(2, 57) = 4.35, p < .05$; and the Cohesion subscale, $F(2, 57) = 6.82, p < .01$. Pairwise analyses indicated that the PTSD-positive veterans reported less dyadic adjustment, consensus, and cohesion than did both comparison groups. These findings supported the hypotheses that PTSD-positive veterans would evidence greater relationship maladjustment than would other Vietnam-era veterans. The results on the Consensus and Cohesion subscales paralleled the findings on the Expression of Hostility and Expressiveness measures, which indicated greater conflict and less partner involvement associated with the relationships of PTSD-positive veterans.

As a cross-validation of the discriminant analysis reported by Foy et al. (1984), their function was used to classify the subjects in the present study. The symptom checklist items entered as discriminant variables in their study included tension/anxiety, disgust, alcohol abuse, suicidal thoughts, hostility, marital problems, depression, and irritability. For the subjects in the present study, their discriminant function resulted in a correct classification rate of 75.4% (PTSD negative = 83.7%; PTSD positive = 59.0%), which supports the validity of the Foy et al. (1984) discriminant function.

Analyses of variance were performed on the Premilitary Adjustment Index summary scores derived from the veterans' report and on those derived from the relative reports. There were no significant differences between groups on either index. In addition, the Premilitary Adjustment Index was examined as a covariate with each of the dependent measures of dyadic functioning. The analyses of covariance did not significantly change the findings for any of the dependent variables.

Discussion

It was found that help-seeking Vietnam combat veterans with PTSD differ from PTSD-negative and minimal combat veterans in being less self-disclosing and expressive to their partners, and in having greater difficulty adjusting to marital and cohabitating rela-

Table 3
Group Comparisons on Measures of Dyadic Functioning

| Measure | PTSD+ (<i>n</i> = 21) | PTSD- (<i>n</i> = 18) | Minimal combat (<i>n</i> = 21) | PTSD+ × PTSD- | PTSD+ × Minimal Combat |
|-------------------------------|---------------------------|---------------------------|------------------------------------|--------------------|---------------------------|
| Pair scales (intimacy) | | | | | |
| Emotional | | | | | |
| <i>M</i> | 12.38 | 14.27 | 13.71 | | |
| <i>SD</i> | 4.02 | 4.17 | 4.05 | <i>ns</i> | <i>ns</i> |
| Recreational | | | | | |
| <i>M</i> | 18.62 | 17.77 | 18.38 | | |
| <i>SD</i> | 4.39 | 4.76 | 3.94 | <i>ns</i> | <i>ns</i> |
| Social | | | | | |
| <i>M</i> | 15.71 | 15.28 | 13.38 | | |
| <i>SD</i> | 5.64 | 4.74 | 3.87 | <i>ns</i> | <i>ns</i> |
| Sexual | | | | | |
| <i>M</i> | 17.43 | 17.11 | 18.33 | | |
| <i>SD</i> | 5.06 | 5.43 | 5.00 | <i>ns</i> | <i>ns</i> |
| Intellectual | | | | | |
| <i>M</i> | 18.23 | 17.44 | 16.85 | | |
| <i>SD</i> | 4.23 | 5.75 | 5.14 | <i>ns</i> | <i>ns</i> |
| Conventionality | | | | | |
| <i>M</i> | 18.71 | 17.67 | 17.71 | | |
| <i>SD</i> | 4.95 | 5.08 | 6.00 | <i>ns</i> | <i>ns</i> |
| Self-disclosure | | | | | |
| <i>M</i> | 71.67 | 82.94 | 87.10 | <i>t</i> = -2.50* | <i>t</i> = -3.56** |
| <i>SD</i> | 15.80 | 15.79 | 10.08 | | |
| Expressiveness scales | | | | | |
| Typical day | | | | | |
| <i>M</i> | 33.33 | 46.05 | 45.95 | <i>t</i> = -3.57** | <i>t</i> = -3.67** |
| <i>SD</i> | 13.47 | 12.12 | 8.91 | | |
| Stressful day | | | | | |
| <i>M</i> | 18.67 | 34.33 | 33.81 | <i>t</i> = -5.07** | <i>t</i> = -5.11** |
| <i>SD</i> | 11.72 | 9.29 | 9.22 | | |
| Expression of hostility scale | | | | | |
| Total score | | | | | |
| <i>M</i> | 28.05 | 20.95 | 25.71 | <i>t</i> = 2.90** | <i>ns</i> |
| <i>SD</i> | 13.47 | 12.12 | 8.91 | | |
| Verbal | | | | | |
| <i>M</i> | 11.38 | 8.61 | 10.19 | <i>ns</i> | <i>ns</i> |
| <i>SD</i> | 4.26 | 5.08 | 4.36 | | |
| Physical | | | | | |
| <i>M</i> | 5.95 | 2.61 | 4.25 | <i>t</i> = 3.82** | <i>ns</i> |
| <i>SD</i> | 3.55 | 2.00 | 2.26 | | |
| Dyadic adjustment scale | | | | | |
| Total | | | | | |
| <i>M</i> | 90.15 | 108.33 | 106.46 | <i>t</i> = 2.56** | <i>t</i> = 2.49* |
| <i>SD</i> | 24.64 | 16.32 | 18.15 | | |
| Consensus | | | | | |
| <i>M</i> | 40.76 | 48.77 | 48.52 | <i>t</i> = 2.47* | <i>t</i> = 2.48* |
| <i>SD</i> | 11.84 | 7.50 | 9.46 | | |
| Affection | | | | | |
| <i>M</i> | 7.81 | 8.67 | 8.24 | <i>ns</i> | <i>ns</i> |
| <i>SD</i> | 2.56 | 1.72 | 2.75 | | |
| Satisfaction | | | | | |
| <i>M</i> | 29.29 | 34.39 | 34.52 | <i>ns</i> | <i>ns</i> |
| <i>SD</i> | 6.60 | 5.17 | 5.91 | | |
| Cohesion | | | | | |
| <i>M</i> | 12.29 | 16.50 | 15.28 | <i>t</i> = 3.54** | <i>t</i> = 2.62** |
| <i>SD</i> | 3.91 | 3.88 | 3.32 | | |

* *p* < .05. ** *p* < .01.

tionships. In addition, the results indicate that the combat veterans with PTSD are more expressive of hostility and prone to physical aggression than are the PTSD-negative combat veterans. These differences do not appear to be attributable to premilitary adjustment, demographic variables, socially desirable or undesirable response styles, or to the presence of a dyadic member with psychological problems. Combat selection factors could not account for the differences between PTSD-positive and PTSD-negative combat veterans.

The present findings generally support the DSM-III definition of PTSD as including components of constricted responsiveness and reduced involvement with the external world. Also, the results are in concert with other studies that indicate poor social involvement and interpersonal difficulties among Vietnam combat veterans (Egendorf et al., 1981; Penk et al., 1981) and survivors of other traumatic experiences such as major floods (Erikson, 1976) and tornadoes (Penick, Powell, & Sieck, 1976). However, the present findings show that the presence of PTSD is more strongly associated with problematic social functioning than with combat experience, *per se*. This finding is consistent with the results of other studies that have distinguished between combat veterans on the basis of PTSD and have found more serious symptomatology (Stampler & Sippelle, 1981) and specific types of interpersonal maladjustment (Roberts et al., 1982) among PTSD combat veterans.

Previous reports (Penk et al., 1981; Wilson, 1978) that combat veterans have special difficulties expressing positive emotions were not supported by the present study. There were no differences between the groups in the frequency of the veteran's affectional behavior as measured by the Emotional Intimacy subscale of the PAIR or the Affection subscale of the Dyadic Adjustment Scale. This finding contradicts the DSM-III account and various clinical descriptions of the disorder, indicating that traumatized veterans are unable to feel emotional and social intimacy. This finding does not necessarily suggest that veterans with PTSD do not have problems in this regard, but that they are not distinguished from other clinical groups on this dimension. It is possible that the lack

of group differences observed in the present study is a result of a limited range in the frequencies of affectionate and intimate behavior, which are characteristically low for all three groups (see, e.g., Schaeffer & Olson, 1981).

Several other findings also bear comment. First, the cross-validation of the Foy et al. (1984) discriminant analysis of the symptom checklist items not specifically indicative of DSM-III PTSD criteria yielded a reasonable correct classification rate. This finding provides cross-validating evidence that PTSD-positive combat veterans report higher levels of undesirable arousal and depression, and further highlights the association between PTSD and marital difficulties. Second, the present investigation identified *hostility* as a symptom that discriminates between PTSD-positive and PTSD-negative veterans and found that the frequency of hostile expressiveness and physical aggression toward relationship partners was higher for the PTSD-positive veterans than for the PTSD-negative veterans. These results are convergent with both clinical descriptions of combat-related PTSD (American Psychiatric Association, 1980; Horowitz & Solomon, 1975) and controlled studies (Egendorf et al., 1981) that have associated the disorder with high levels of hostility and violence.

The results of the present study do not necessarily extend to veterans who seek help outside the Veterans Administration system (e.g., at outreach centers) or to Vietnam veterans who do not seek help. The findings also should be considered in terms of the inherent limitations of the retrospective design and self-report format. The use of more diagnostically homogeneous comparison groups would also be an interesting endeavor for research examining correlates of PTSD. In the present study, the PTSD-negative and minimal combat groups were diagnostically heterogeneous. The use of homogeneous comparison groups could address other questions: Do the dyadic relationships of patients diagnosed PTSD differ in specific ways from those of patients with other types of anxiety or depressive disorders, or from veterans who specifically seek help for marital problems?

In terms of treatment, the results of this study indicate that marital or relationship

counseling can be an important and necessary adjunct to other therapeutic modalities used in the treatment of PTSD. The findings regarding more limited communication with relationship partners and more frequent physical aggression among PTSD-positive veterans suggest that these veterans may underutilize or reject potentially helpful social resources. Mental health practitioners who work with Vietnam-era couples and families should be aware of the possible contribution of PTSD to the presenting problems. Assessment of combat exposure and PTSD symptomatology during the initial phases of problem identification and treatment planning may be beneficial in calling early attention to the presence of PTSD-related problems within the relationship or family system.

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