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Treatment Preferences of Vietnam Veterans with Posttraumatic Stress Disorder

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This study attempted to examine patterns over time in treatment preferences of 65 veterans who completed a 4 month inpatient posttraumatic stress disorders (PTSD) program in order to reveal potentially more beneficial types of treatment. Veterans rated the severity of their symptoms and degree of benefit of 35 different treatment components at discharge, and at 4 and 12 months follow-up. Veterans rated their symptoms as having not changed at discharge, and worsening by 4 months. Veterans initially perceived components that were high in Vietnam content, exploratory in purpose, verbal in modality, and personally focused as most effective, but by 12-month follow-up they perceived these as less effective than components that were low in Vietnam content, educative, action oriented, and externally focused. These effects were strongest among veterans with higher levels of PTSD symptomatology. Combat exposure, childhood abuse, and race were generally not significant predictors of response. These results underscore the importance of further inquiry into the relative value of rehabilitative-oriented and psychotherapeutic-oriented treatments for veterans with severe and chronic PTSD.

KEY WORDS: PTSD; veterans; inpatient; treatment.

Outcome studies of intensive inpatient combat-related posttraumatic stress disorder (PTSD) units have generally relied on self-report measures of symptoms and social functioning, assessed at discharge and occasionally at follow-up some months later (Boudewyns, Hyer, Woods, Harrison, & McCranie, 1990; Hammarberg & Silver, 1994; Harmand, Starkey, &

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Ashlock, 1987; Johnson et al., 1996; Perconte, 1989; Scurfield, Kenderdine, & Pollard, 1990; Silver, Brooks, & Obenchain, 1995). In general, these studies have demonstrated the chronic nature of the illness in the veteran population, as improvements in condition at discharge return to baseline levels at follow-up. In these studies, however, the entire inpatient stay is necessarily conceptualized as the unit of intervention. Little attention has been given to the relative contribution of individual treatment components, or veterans' assessments of their efficacy, particularly at follow-up timepoints.

The multidimensional form of treatment provided by intensive inpatient PTSD programs, such as those in the Department of Veterans Affairs, make accurate assessment of individual treatment components extremely difficult. Indeed, such multidimensionality is viewed as one of the primary features of such programs (Department of Veterans Affairs, 1989). As clinical reports of these units attest, veterans receive, often simultaneously, psychodynamic psychotherapy, family therapy, recreation and creative arts therapies, rehabilitative and outward bound programs, psychoeducational and cognitive behavioral modules, and direct therapeutic exposure treatments (Arnold, 1985; Atkinson, Reaves, & Maxwell, 1988; Berman, Price, & Gusman, 1982; Johnson, Feldman, Southwick, & Charney, 1994; Sax, 1985; Scurfield, 1993; Silver, 1986). Conceptually, outcome is affected both by the global effect of hospitalization and the specific effects of each treatment component. In addition, nonrandom selection and patient factors (e.g., severe pathology, history of prior treatment) may greatly affect outcome. Other difficulties have included inadequate assessment of drop-outs from the programs, and reliance on measures taken at discharge, when the veterans may be in a uniquely sensitive state, presumably being influenced by social desirability factors as well as distressed by transitional pressures related to their return to the community.

These difficulties have prevented targeted evaluations of specific components within a comprehensive program. Boudewyns et al. (1990) randomly assigned half of their inpatients to receive direct therapeutic exposure, and on follow-up evaluations these veterans reported greater satisfaction with treatment than those who received only the standard inpatient treatment. Silver et al. (1995) studied the differential outcomes on self-report measures among three subgroups of patients who received either eye movement desensitization and reprocessing (EMDR), biofeedback, or relaxation as adjuncts to the standard program, and found that EMDR was more efficacious. A strategy not previously used, however, is the direct assessment of veterans' preferences for and judgments of the efficacy of each treatment component. The simultaneous provision of multiple treatment formats to the same clients offers an opportunity for direct comparisons, within the limitations of the patients' abilities of accurate assessment and

reporting. There are presumably many ways in which programs can improve the lives of PTSD patients, not only in symptom reduction, but in terms of social functioning, life satisfaction, or existential factors. Direct inquiry of the patients may elucidate aspects of recovery that standard methods of assessment minimize or overlook.

On the other hand, patients' ratings of treatment may be influenced by factors entirely unrelated to recovery, and instead reflect secondary personal gains, group dynamics, or political climate. Expectations of patients or the program staff, status or competency of the therapist, may have more bearing on patients' ratings than the inherent value of the component's applicability or efficacy. In addition, it is not clear how patients would indeed be able to differentiate the effects of multiple forms of treatment. Nevertheless, a close examination of such treatment preferences, particularly as they change over time, may provide clues to treatment effectiveness that can then be followed up in experimentally more rigorous studies.

Treatment components in intensive inpatient programs vary along numerous dimensions. In companion reports published in this Section, we have developed a number of categorical dimensions of inpatient treatment such as purpose, type, content, attentional focus, and modality (Johnson, Rosenheck, & Fontana, 1997; Johnson, Lubin, Hale, & James, 1997). In this manner, a wide range of different treatments can be reduced to a few salient dimensions of intervention. By examining a large number of components experienced by a large number of patients, overall patterns of response can perhaps be elucidated that bear on relevant and more generalizable treatment dimensions. It is likely that specific subgroups of veterans may have distinctly different patterns of treatment preferences, and therefore should be independently assessed. Significant patient factors that may be particularly relevant to a study of treatment preferences include, among others, severity of illness, race (Rosenheck, Fontana, & Cottrol, 1995), childhood abuse (Zaidi & Foy, 1994), and combat exposure (Keane et al., 1989). Contrasts of treatment preferences among these groups may aid in differential treatment planning.

In a companion article in this Section using this methodology, Johnson, Lubin et al. (1997) examined the immediate effects of one session of 15 treatment components within one specialized inpatient PTSD unit (SIPU), and found that components with an external rather than internal attentional focus, action rather than verbal format, and low rather than high Vietnam content resulted in significantly greater symptom reduction. These results were replicated on a second sample of veterans. However, these results were not correlated with the veterans' ratings of effectiveness of these treatment components at discharge. That is, veterans seem to be using different criteria than immediate effects of the treatment component when rating

effectiveness at discharge. This study was intended to examine veterans' ratings during the follow-up period, to track systematic changes in treatment preferences from discharge to 1 year later. The study assessed the treatment preferences of PTSD patients at discharge, and at 4 months and 12 months after treatment, to determine the critical factors underlying their preferences and the stability of these preferences over time, based on a categorical analysis of treatment components. Differences within important subgrouping of patients—severity of illness, race, combat exposure, and childhood abuse—were also analyzed.

Method

Subjects

Subjects included 65 Vietnam combat veterans in seven consecutive cohorts who completed the SIPU program from June, 1990 to December, 1992 . Veterans who dropped out of treatment (n=13) or who did not complete the follow-up assessments (n = 7) were not included in the study. Demographics of the sample included a mean age of 40.2 years, 85% White, 40% married, 30% divorced, 30% single, and 30% employed at time of admission. The subjects in this sample included 28 veterans from 3 cohorts studied in a previous report (Johnson et al., 1996), and 22 subjects from the 2 cohorts studied in a companion article in this Section (Johnson, Lubin et al., 1997).

Design

Veterans were asked to complete a questionnaire regarding their symptomatic improvement and their judgments of effectiveness of each treatment component within the program at discharge, and at 4 and 12 months after discharge. PTSD symptomatology, combat exposure, and childhood abuse, assessed at admission, and race, were used to divide the sample into subgroups for subsequent analyses.

Setting

This study was conducted on a multidisciplinary, specialized inpatient treatment program for Vietnam veterans. Veterans were admitted in cohorts of 12–14 every 4 months for a 15-week program. Rigorous screening procedures were employed prior to admission to identify veterans with

PTSD, based on DSM-III-R criteria, through clinical interviews and review of medical records. Combat experience was confirmed by review of their military files. Generally, veterans were required to have achieved a degree of stability in both their symptoms (e.g., no suicidal ideation for 60 days, sobriety for 90 days), social functioning (e.g., established living arrangement, family involvement in program), and previous outpatient treatment. Upon admission, all patients were removed from medications in order to assess their baseline clinical state and then to participate in a number of neuropsychiatric, psychophysiological, and psychological studies. The treatment program has been described elsewhere (Johnson et al., 1994; Johnson, Lubin et al., 1997).

Measures

Diagnosis. On admission, each veteran met criteria for PTSD on the Structured Clinical Interview for DSM III-R (Spitzer & Williams, 1985); the Mississippi PTSD Scale with a cutoff score of 107 (MISS, Keane, Caddell, & Taylor, 1988), and the Clinician Administered PTSD Scale (CAPS, Blake et al., 1990). Combat exposure was measured by the the Combat Exposure Scale (CES, Keane et al., 1989). The presence or absence of childhood physical and/or sexual abuse was determined during the evaluation interview through a series of questions regarding childhood trauma.

Program evaluation measures. On discharge, and at 4 months and 12 months follow-up, each veteran was administered the Program Evaluation scale, which consisted of a 14 item Symptom Improvement scale (1 = much worse, 3 = no change, 5 = much better), and a 36 item Treatment Components Effectiveness scale (1 = very unhelpful, 2 = unhelpful, 3 = helpful, 4 = very helpful), in which veterans rated the effectiveness of each treatment element in the program. The degree to which they were disturbed by thoughts about Vietnam during the past week was measured with a one item scale (1 = not at all disturbing, 10 = extremely disturbing). At the two follow-up points, veterans also rated their compliance with 10 behaviors taught in the program on a Skills scale (yes/no), and rated their overall Hopefulness (1 = totally hopeless, 10 = very hopeful). These scales were developed at our center for the purposes of this study, and their psychometric properties are not established.

Treatment components. Thirty five specific treatment components of the program were evaluated, as well as an overall program rating. These components included *Basic treatments* that offered standard forms of therapy and support (e.g., Individual therapy, Medications, Nursing staff, Overnight passes); *Thematic verbal group therapies* in which topics relevant to veterans'

problems were addressed in small group formats (e.g., Traumatic Memories, Drug and Alcohol, Anger Management, Autobiography, Life Focus, Finding Your Father, Planning for Future); *Family programs* that involved meetings with family members or addressing family problems (e.g., Family therapy, Family Day, Family Issues group); *Arts therapies* that utilized various arts media to aid in the veterans' self-expression and relaxation (e.g., Drama, Art, Music and Relaxation, Journal, Poetry, Vietnam Play); *Activity groups* that involved physical tasks (e.g., Community service, Workshop); and *Milieu events* such as meetings or ceremonies that were conducted in large groups (e.g., Community meeting, Visit to the Vietnam Memorial, Graduation ceremony, Phase meeting, Vietnam lecture, and the Chronic Illness lecture).

Categorization of components. In order to reduce the complexity of the data for analysis purposes, these groups were categorized according to five different dimensions (Fontana, Rosenheck, & Spencer, 1993; Johnson, Rosenheck, & Fontana, 1997, see this Section). *Type* was characterized as above: Basic, Thematic, Family, Arts, Activity, and Milieu. *Purpose* of the activity was categorized according to whether the group intended to explore the veterans' feelings about a topic [Exploratory], to provide the veterans particular knowledge or skills [Educational], to give the veterans practice in exercising specific skills in action [Behavioral Practice], or to inspire the veterans through a celebration of their progress and/or previous suffering [Ceremonial]. *Vietnam Content* was categorized according to the degree to which Vietnam or combat experiences were explicitly discussed [High, Mid, or Low Vietnam]. *Attentional Focus* was categorized according to whether the veterans were asked to focus their attention primarily on their inner thoughts [Internal], on interactions with other members in the group [Interpersonal], or on a task external to themselves and other group members [External]. *Modality* was dichotomized according to whether the veterans sat in chairs and verbally discussed a topic [Verbal], or engaged in bodily movement or action, such as role-playing or working with materials [Action].

Each treatment component was categorized within each of these dimensions by three members of the senior clinical staff. Interrater reliability on each categorization was moderate (all rs $> .80$). Differences were resolved by consensus.

Data Analysis

Two-factor repeated measures ANOVAs (Group × Timepoint) were used to evaluate Symptom Improvement, Component Effectiveness, Vietnam Thoughts, Skills Compliance, and Hopefulness over the three time

periods, for each independent between-subjects variable (Cohort, Race, PTSD severity, Abuse, Combat Exposure). PTSD severity and Combat Exposure were dichotomized into High and Low subgroups based on median splits of the admission scores on the CAPS and CES, respectively. Pearson product-moment correlations were used in comparing these variables with each other. Additional analyses of effects of patient variables (Cohort, Race, PTSD severity, Abuse, Combat Exposure) were conducted using three-factor repeated measures ANOVAs across the three timepoints for each Categorization (Type, Purpose, Vietnam Content, Modality, and Attentional Focus). Due to multiple comparisons, the significance value was set at $p < .01$.

Results

Cohort was not a significant factor for any of the dependent variables, and so was dropped from further analyses. Due to the $2^1/_2$-year span over which the program was studied, the lack of cohort effects suggests that the results were consistent across time and differences in group membership.

Patient-Related Variables

Table 1 lists the main effects of ANOVAs on the dependent measures across the three timepoints. Veterans rated their symptoms as having not changed by discharge, and worsening by 4 months. No further change occurred from 4 to 12 months, consistent with previous reports with this population (Fontana et al., 1993; Johnson et al., 1996). High PTSD-severity veterans reported significantly higher levels of symptomatology across all three timepoints, and there was a trend for White veterans to show more symptomatology than Black veterans. There were no significant differences between veterans who were assessed as abused and nonabused, or who had high and low combat exposure. Individual symptom items showing the greatest worsening after discharge tended to involve the morale dimension, and included: Ability to have loving feelings, $F(2,128) = 28.22, p < .0001$, Hope for the future, $F(2,128) = 28.40, p < .0001$, Feeling like one has come home, $F(2,128) = 22.61, p < .0001$, Depression, $F(2,128) = 17.12, p < .0001$, and Self-esteem, $F(2,128) = 16.55, p < .0001$. Core PTSD symptom items (e.g., flashbacks, anger, anxiety, sleep problems) showed nonsignificant variation across time. However, Vietnam Thoughts significantly increased from discharge to 12 months follow-up, and High PTSD and White veterans showed higher levels at all three timepoints.

Table 1. Means and Repeated Measures ANOVAs with Contrasts on Dependent Measures at Three Timepoints (N = 65)

	Means/*SD*			ANOVA				
				Time-point	PTSD Severity	Race	Abuse	CES
Measure	Discharge	4 mo.	12 mo.	$F(2,126)$	$F(1,63)$	$F(1,63)$	$F(1,63)$	$F(1,63)$
Patient-related variables								
Symptom Improvement	3.02[a] (.75)	2.39[b] (.85)	2.36[b] (.88)	31.54[e]	9.97[d]	4.20[c]	ns	ns
Vietnam Thoughts	7.78[a] (2.16)	8.45[a,b] (2.03)	8.63[b] (1.87)	5.29[d]	18.28[e]	7.18[d]	ns	ns
Skills Compliance	—	5.74 (.23)	5.63 (.23)	ns	ns	ns	ns	ns
Hopefulness	—	4.61 (1.88)	4.47 (2.40)	ns	23.47[e]	ns	ns	ns
Program-related variable								
Component Effectiveness	3.14[a] (.41)	2.75[b] (.51)	2.74[b] (.56)	27.41[e]	4.27[c]	ns	ns	ns

[a-b]Means with different superscripts are significantly different at p <.05.
[c]p <.05.
[d]p <.01.
[e]p <.001.

There were no significant differences in levels of Hopefulness or in compliance with relapse prevention skills between 4 and 12 months, though High PTSD veterans reported significantly lower levels of Hopefulness. Individual skills that were most likely to be complied with after treatment in the sample as a whole included: Seeing a Therapist (82%), Maintaining one residence (79%), Not blaming others (71%), and Taking medications (63%). Skills requiring practice, such as relaxation skills, anger management, and keeping busy, received less compliance. Utilization of these skills was moderately correlated with Hopefulness, r (65) = .40, p < .05, and perceptions of Component Effectiveness, r (65) = .47, p < .05, and negatively correlated with Symptoms, r (65) = -.50, p < .05.

Program-Related Variables

At discharge, veterans rated the combination of all 35 Treatment Components as helpful, but these ratings decreased significantly at 4 months and remained stable at these levels at 12 months. High PTSD veterans tended to rate the components as less helpful than Low PTSD veterans

Table 2. Repeated measures ANOVAs on Categories of Treatment Components (N = 65)

Category	Means/*SD*	F(Category)	*df*	F(Cat × Time)	*df*
Type		26.99[g]	(5,57)	2.53[f]	(10,114)
Basic	3.19[a] (.52)				
Milieu	2.96[b] (.63)				
Activity	2.86[c] (.72)				
Arts	2.85[c] (.62)				
Family	2.74[d] (.82)				
Theme	2.73[d] (.59)				
Purpose		6.00[g]	(3,61)	3.26[f]	(6,122)
Educational	2.97[a] (.52)				
Behavioral	2.88[b] (.54)				
Ceremonial	2.88[b] (.64)				
Exploratory	2.84[b] (.58)				
Vietnam content		6.08[f]	(2,62)	5.57[g]	(4,124)
High	2.96[a] (.63)				
Mid	2.86[b] (.58)				
Low	2.86[b] (.49)				
Attentional focus		1.35	(2,62)	4.30[f]	(4,124)
External	2.91 (.50)				
Interpersonal	2.89 (.56)				
Internal	2.87 (.58)				
Modality		1.15	(1,63)	3.05[e]	(2,126)
Verbal	2.90 (.54)				
Action	2.87 (.52)				

[a-d]Means with different superscripts are significantly different at $p < .05$.
[e]$p < .05$.
[f]$p < .01$.
[g]$p < .001$.

across all timepoints. Abuse, Race, and Combat Exposure were not significant factors.

Table 2 lists the results of two-factor, repeated measures ANOVAs of Component Categories × Timepoints. Veterans generally viewed the Basic and Milieu components as the most effective, and Thematic and Family components as less effective. A significant interaction between Category and Timepoint indicates that from discharge to 12-month follow-up, veterans' ratings of Basic and Activity components improved, Thematic and Arts components remained stable, and Family and Milieu components worsened.

In terms of Purpose, veterans rated Educational components as most effective, though at the discharge timepoint Exploratory components were rated the most helpful. The significant interaction demonstrates that from discharge to follow-up veterans' perceptions of Educational and Behavioral components improved, while their perceptions of Exploratory and Ceremonial components worsened.

Vietnam Content showed a very significant interaction effect, in which components Low in Vietnam content were rated less effective at discharge, but as most effective by 12-month follow-up.

Similarly, in terms of Attentional Focus, components with an External Focus were initially rated as less effective, but by 12-month follow-up were rated as the most effective.

Action-oriented components were rated as less helpful than Verbal groups at discharge, but as more helpful than Verbal groups at 12-month follow-up.

Effects of Level of PTSD, Race, Abuse, and Combat Exposure

Three-factor, repeated measures ANOVAs (Level × Category × Time-point) for each component category for each independent patient variable showed no significant effects for Race, Abuse, or Combat Exposure. However, High PTSD-severity veterans rated treatment components as significantly less effective than the Low PTSD group on most Component categories (p values for all Fs(1,63) $< .01$), *except* for External Focus, Low Vietnam Content, Educational and Behavioral Purpose, Action modality, and Activity type. This cluster of categories suggests that in low arousal, externally-focused and behaviorally oriented forms of treatment, differences between High and Low PTSD veterans is minimized. In contrast, exploratory, exposure-based, internally focused interventions tend to maximize differences between these veterans' subgroups, largely through lower ratings by the High PTSD veterans.

As a means of illustrating the main results of this study, we constructed two clusters of Treatment Component categories that characterize either a rehabilitation focus or a psychotherapeutic focus. The *Rehabilitation Cluster* includes Low Vietnam Content, Educational and Behavioral Purposes, External Attentional Focus, and Action modality; the *Psychotherapy Cluster* includes High and Mid Vietnam Content, Exploratory and Ceremonial Purposes, Internal and Interpersonal Focus, and Verbal modality. Figure 1 illustrates the shift in the veterans' preferences for these therapeutic elements from discharge to one year follow-up, as measured by their relative rankings during each time period (lower ranks indicate a better rating). At discharge, the veterans ranked the psychotherapeutic cluster as more effective, while at follow-up they ranked the rehabilitative cluster as having been more beneficial.

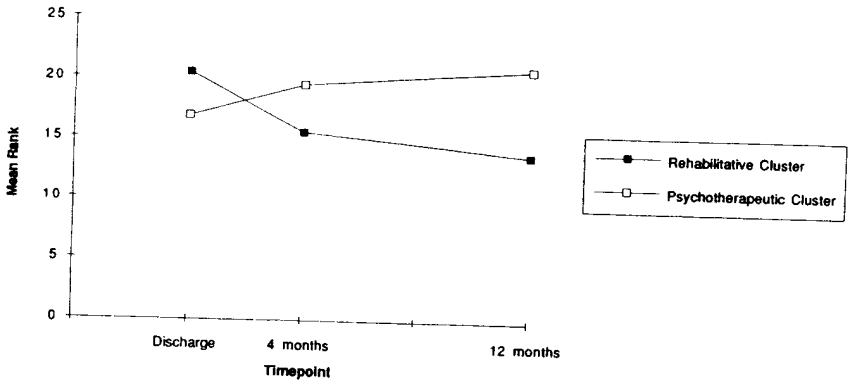

Fig. 1. Mean ranks of component clusters across time.

Discussion

The results of this study should be viewed as highly tentative, due to limitations in generalizability and validity. First, the study included only one inpatient treatment program. Second, veterans' self-reports were measured with scales whose psychometric properties have not been established. Third, veterans' self-reports may not be reliable or valid measures of actual outcome. Fourth, many potentially confounding variables (e.g., outpatient treatment, comorbidity, secondary gain) were not measured. The fact that the findings showed consistency over a $2^1/_2$-year time span and across all seven cohorts, however, indicates at least some degree of reliability.

This study documents that, for this sample, at 4 months after the program veterans perceived themselves to be symptomatically worse than at discharge, and suggests that at discharge they may have been reacting to the hopes and expectations for recovery raised by the program. The fact that significant changes had generally not occurred in their living situations or society may have provided a discouraging message to veterans leaving a supportive and hopeful environment. They were more likely to see a therapist, stay in one residence, and take their medications than practice specific skills designed to impact on their symptoms. These results are consistent with outcome data that show little therapeutic gain at 12-month follow-up in this population (Johnson et al., 1996), as well as a national comorbidity survey of the general population that indicated nearly a third of all people exposed to a qualifying traumatic event do not recover from PTSD, with or without treatment (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The veterans in this study sample are unfortunately likely to fall within this category of chronic illness.

Nevertheless, this study reveals a number of interesting patterns in the treatment preferences of the veterans that may aid in the design of empirical studies of treatment outcome, as well as having implications for clinical planning. The basic treatment modalities of individual and group therapy, medications, and nursing care were rated as most beneficial, despite the program emphasis on a number of the "specialized" trauma treatments. Ceremonial and family interventions were initially perceived as very powerful, but these interventions decreased in importance for the veterans over time. It may not be uncommon for these specialized programs to highlight or emphasize their unique treatment components over generic ones, yet this study suggests that such emphasis is not related to veterans' perceptions of benefit.

Significantly, veterans initially perceived that components high in Vietnam content, exploratory in purpose, verbal in modality, and personally focused were most effective, but gradually they perceived them as less effective than components low in Vietnam content, educative in purpose, action-oriented, and externally focused. For example, the Community Service group, which involved working on a construction project for a battered women's shelter, was ranked 30 (out of 35) at discharge. At 12-month follow-up, however, it was ranked 11. These results are strikingly consistent with the results of our earlier study (Johnson, Lubin, et al., 1997) which indicated that externally focused, action-oriented, and low Vietnam content components resulted in significantly greater symptomatic improvement across one session. One year after discharge, the veterans' perceptions of their relative value appears to have become more aligned with their immediate responses to the sessions. These effects were especially strong for veterans with higher levels of symptomatology.

It is possible that at discharge the veterans were not able to differentiate among the effects generated by each treatment component, and so attributed greater benefit to groups that were viewed by staff and veterans as more important. The veterans had understandably come to the program for work on themselves and their traumas, even though these groups may have been disturbing to them. The injunction, "no pain, no gain" was used by both staff and veterans to explain their distress after emotionally arousing groups. Only later, as they reflected on their experience, were they able to differentiate according to the relative impact of each component. As time progressed, the importance of basic treatment modalities such as individual and group therapy, nursing care, and medications, as well as educational, externally focused modalities, seemed to solidify in the veterans' perceptions.

Veterans who on admission had more severe PTSD symptomatology rated themselves as having the least benefit from the program. This is consistent with other reports that indicate that more severely disturbed veterans do worse in treatments (Johnson, Lubin, & Corn, in press). Non-White veterans reported more positive responses on the symptom measures in this study, suggesting that this treatment may have been more effective for them. However, the small number of non-White veterans in this sample makes this result tentative.

This study suggests a number of leads for further investigation: First, basic treatment services appear to be valued over specialized ones. It may be that the differentiated "themes" of specialized groups are not as important as the basic contact, support, and even solacing functions served by the therapeutic staff, other veterans, and shelter of the hospital. Second, educative, action-oriented, non-exposure-based treatments, such as might be found in rehabilitative forms of treatment, may have more long-lasting value than introspective, trauma-related components for this population, a result found in other chronic psychiatric populations (Paul & Lentz, 1977). This appears to be especially relevant to veterans with more severe symptomatology. In fact, the data indicate that treatments in the psychotherapeutic cluster (i.e., introspective, exposure-based) may have a negative impact on more severely disturbed PTSD patients. Recommendations for future treatment program design may be substantially influenced by further data that shows this distinction to be important. Third, childhood abuse and combat exposure may be less relevant to treatment response than previously considered (Herman, 1992; McCann & Pearlman, 1990). These factors are of etiological importance to the development of PTSD, but are less directly related to current level of distress, which is presumably determined by many additional factors. It is possible that the veteran's capacity to attend to treatment procedures, tolerate intense affect evoked by these procedures, and utilize methods of relaxation, self-soothing, or forgiveness may be more sensitive predictors of therapeutic response than either source or amount of the traumatic experience (e.g., combat or childhood abuse). Trauma-related variables may have more impact on therapeutic response among populations who were more recently traumatized than the combat veterans in this study.

The study of inpatient treatment for combat-related PTSD is aided by surveys of veterans' treatment preferences. In this study, significant patterns emerged which suggest that rehabilitative treatments of chronic combat-related PTSD may hold some promise, particularly for more severely distressed patients.

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