0022-3018/92/1801-2748$03.00/0
THE JOURNAL OF NERVOUS AND MENTAL DISEASE
Vol. 180, No. 12
Printed in U.S.A.
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War Zone Traumas and Posttraumatic Stress Disorder Symptomatology[1]

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The diagnosis and clinical understanding of posttraumatic stress disorder (PTSD) rests upon the explicit identification of traumatic experiences that give rise to a well-defined constellation of symptoms. Most efforts to investigate the characteristics of these experiences have attempted to specify war zone stressors as objectively as possible. In this study, we add specification of the psychological meaning of war zone stressors to their objective specification. Eleven traumas are organized in terms of four roles that veterans played in the initiation of death and injury; namely, target, observer, agent, and failure. These roles can be ordered in terms of the degree of personal responsibility involved in the initiation of death and injury. The relationships of these roles to current symptomatology were examined in combination with a set of objective measures of war zone stressors. The sample consisted of the first 1709 Vietnam theater veterans who were assessed in a national evaluation of the PTSD Clinical Teams initiative of the Department of Veterans Affairs. Results show that having been a target of others' attempts to kill or injure is related more uniquely than any other role to symptoms that are diagnostic criteria for PTSD. On the other hand, having been an agent of killing and having been a failure at preventing death and injury are related more strongly than other roles to general psychiatric distress and suicide attempts. These results support the interpretation that roles involving low personal responsibility for the initiation of traumas may be connected most distinctively to symptoms diagnostic of PTSD, whereas roles involving high personal responsibility may be connected as much to comorbid psychiatric symptoms, including suicidal behavior, as to PTSD.

—*J Nerv Ment Dis* 180:748–755, 1992

The diagnosis of posttraumatic stress disorder (PTSD) is based on the premise that traumatic experiences, defined as experiences that are "outside the range of usual human experience and that would be markedly distressing to almost anyone," are oftentimes associated with a characteristic constellation of symptoms involving a) intrusive recollections of the traumatic experience, b) numbing and/or avoidance, and c) hyperarousal and/or confusion (American Psychiatric Association [APA], 1987, p. 250). A major feature of PTSD, and the one that differentiates it most strongly from all other DSM-III psychiatric disorders, is the requirement that an identifiable trauma be associated temporally with the onset of symptoms. A comprehensive understanding of the diversity and intensity of traumas, therefore, is central to the empirical study of PTSD and to the planning of its clinical treatment.

The most common approach to understanding war zone traumas has utilized measures of combat and other stressors that are specified as objectively as possible (Keane et al., 1989; Laufer et al., 1981, 1985a). Typically, they have been based upon questions such as, "Did you receive friendly or hostile incoming fire?" (Laufer et al., 1981) or "How often did you fire rounds at the enemy?" (Keane et al., 1989).

The focus of the objective approach on the specification of stressors exclusively in environmental terms has struck other investigators as incomplete (*e.g.*, Lazarus and Folkman, 1984; Wilson, 1989). These investigators espouse an interactionist approach that asserts that stress or trauma is necessarily a product of both the person and his/her environment. Historically, the desirability of including the personal meaning of stressors as part of their specification has been a persistent theme in the discussion of war traumas. In one of the earliest studies of war zone stress, Grinker and Spiegel (1945) noted, "The reactions to the stimuli of combat depend upon the meaning given to these stimuli in terms of recognizing them as a threat and of feeling confident of the ability to neutralize the threat" (p.

[1]An earlier version of this paper was presented at the Annual Meeting of the International Society for Traumatic Stress Studies, New Orleans, LA, October 1990.

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We would like to thank Helen Spencer, M.A., from the Northeast Program Evaluation Center, for her assistance in managing the data base and in preparing the data for analysis, and Paul Errera, M.D., Laurent Lehmann, M.D., Gay Koerber, M.A., and Robert Murphy, from the Mental Health and Behavioral Sciences Service at VACO, for their support of the PTSD Clinical Teams evaluation. We would also like to express our appreciation to all the staff who contributed data from the individual PTSD Clinical Team sites.

122). More recently, in a major treatise examining the stressor criterion for diagnosing PTSD, Breslau and Davis (1987a) called for increased consideration of the subjective meaning of traumatic events.

The DSM-III-R (APA, 1987) incorporates both approaches in its conception of trauma. It accommodates the objective approach by its definition of traumas as events that are universally distressing. The interactionist approach is represented by its inclusion of "serious threat" as an integral element in its examples of events that qualify as traumas. Threat is a psychological appraisal that necessarily involves the interaction of an environmental event and a cognitive analysis of the implications of the event for physical and psychological well-being.

Recently, some investigators began to introduce psychological meaning into their conceptualization and measurement of trauma. For example, Green and her colleagues (1989) have incorporated the notions of threat, loss, and grotesqueness into their conceptions of trauma (Lindy et al., 1984). In a similar vein, Wilson and Krauss (1985) had veterans rate combat events in terms of their fear of being killed or injured or by having them consider the dangerousness of these events.

We have sought to expand the understanding of war zone stressors by specifying the psychological meaning of traumas and by examining the extent to which this specification adds to our ability to account for the severity of current symptoms of PTSD. We identified 11 experiences that have been reported frequently in the literature as being traumatic by Vietnam combat veterans. Our conception of psychological meaning is that it is a cognitive-affective complex, consisting of both ideational (*i.e.*, threatening) and emotional (*i.e.*, distressing) components. For example, the prospects of being killed or injured is one set of circumstances that define the threatening nature of the environmental stressor, received incoming fire. Furthermore, it is necessary to the traumatic nature of the prospects of being killed or injured that there also be marked distress. Although it is possible that a variety of emotions might be experienced, we believe that extreme fear or terror is typical. In this example, therefore, the psychological meaning would be terror about being killed or injured.

A major dimension of psychological meaning that can be examined through these 11 experiences is the degree of personal responsibility for the initiation of death and destruction that is implied in each one. Personal responsibility specifically (Haley, 1974; Smith, 1985) and moral conflict generally (Wilson, 1989) have been identified by clinicians as important features of the trauma evoked by war zone stressors. The prospect of being killed, while terrifying, typically entails a low level of personal responsibility for its initiation. In contrast, failing to fulfill one's duties and responsibilities, although involving less exposure to objective danger, is highly guilt arousing and entails a high level of personal responsibility for its initiation.

Our goal, then, has been to extend the understanding of the traumatic characteristics of war zone stressors and their relationships to current symptomatology by integrating their psychological meaning into their conceptualization and measurement. The success of our efforts can be evaluated by comparing the ability of our interactive measures to add to the statistical prediction of the severity of current PTSD and associated psychiatric symptoms beyond the prediction that is possible from objective measures alone. Our hypotheses were a) that a set of interactive measures that incorporate psychological meaning will add substantially to the variance in current symptomatology that is accounted for by a traditional set of objective measures, and b) that the interactive set will reveal a differentiated pattern of relationships with PTSD and associated psychiatric symptoms according to the level of personal responsibility theoretically involved.

Methods

The data were drawn from an evaluation of the PTSD Clinical Teams program of the Department of Veterans Affairs, a national network of 44 specialty clinics that was authorized by Public Law 100-404 and implemented in 1989 for the treatment of veterans suffering from PTSD. This paper is based on data from the first 1709 Vietnam theater veterans who provided complete information regarding their war zone experiences and current symptomatology. Vietnam theater veterans are defined as those serving in Vietnam, Laos, or Cambodia or their surrounding waters or airspace for any period from 1964 through 1975. Veterans typically reported 1970 (SD = 3.89) as the year in which they first experienced stress reactions to the war. There were no significant differences in ethnicity, age, education, or occupation between those providing complete data and those not doing so. This sample represents 89% of all Vietnam theater veterans who were seen by the PTSD clinical teams (62.8% white, 20.5% black, 14.0% Hispanic, and 2.6% other). They averaged 42.7 (SD = 3.3) years of age and 12.9 (SD = 2.2) years of education. Ninety-five percent were diagnosed clinically with PTSD, and 89% had received prior psychiatric treatment for either emotional problems or substance abuse. The data were obtained from the War Stress Interview-Part 1 (WSI-1), a structured interview that was administered by clinicians at intake. Relevant measures from the WSI-1 are described below.

Variables

Objective traumatic measures. The set of objectively

specified traumatic experiences was composed of three variables: combat exposure, witnessing abusive violence, and participating in abusive violence. Combat exposure (COMBAT) ($\bar{X} \pm$ SD, 10.94 + 2.51) was measured by the Revised Combat Scale (Laufer et al., 1981). Witnessing (WITNESS) and participating (PARTIC) in abusive violence were measured according to the convention used by Laufer and his colleagues (1985a). Abusive violence refers to any aggression that is outside the traditional rules of warfare, such as torturing prisoners, mutilating enemy bodies, or raping or killing civilians. Witnessing and participating were coded as mutually exclusive dichotomous categories. Therefore, all veterans reporting that they participated in abusive violence were coded as participating, regardless of whether they reported witnessing it as well. Thirty-four percent of the sample reported participating in abusive violence, and another 39% reported witnessing it.

Interactive traumatic measures. On the basis of the literature (*e.g.*, Brende and Parson, 1985; Hendin et al., 1985; Laufer, 1988; Lifton, 1988; Lindy, 1988; Shatan, 1985; Smith, 1985), our own clinical interviews, and pilot testing with veterans, we compiled a list of 11 experiences that represent both a variety of circumstances of distressing war zone experiences and a range of personal responsibility for their initiation. The 11 experiences, as they were presented to clinicians, are listed in Table 1. At the time that the program evaluation was being designed, several consultants and more than a few participants in the evaluation felt very strongly that *direct* inquiry into these experiences might be disruptive to the development of clinical rapport, particularly because of the implications of personal responsibility and because the WSI-1 was administered in the first or second session of the clinical evaluation process. Therefore, instead of formally questioning veterans on the psychological meaning of their war experiences, we employed a technique that had been devised for the rating of serious life events by clinicians (Weiss et al., 1984). Clinicians were asked to indicate whether each of the 11 experiences was distressing and/or disabling to each veteran at the present time, based upon all the information from the WSI-1 interview. This technique has the compensatory advantage of capitalizing on clinical acumen and insight into that which is currently distressing and/or disabling veterans.

Our theoretical interest in the issue of personal responsibility led us to organize the 11 experiences in terms of four roles that veterans played in the initiation of death and injury.[4] These roles and their component experiences are presented in Table 1. Their alpha coefficients, indicating the internal consistency of the components composing them, are generally comparable to the alpha obtained for the Revised Combat Scale (alpha = .63) with this same sample. While these values constitute acceptable internal consistency for investigative purposes, a higher level would be desirable before an attempt is made to make precise differentiation among individuals clinically.

TABLE 1
Trauma Categories

	Coefficient Alpha
Target of Killing	NA
Terror about being killed or wounded	
Observer of Killing	.58
Horror at witnessing atrocities or the results of atrocities	
Horror at exposure to the death and dismemberment of others	
Horror at the continual stream of human remains to be processed	
Agent of Killing	.63
Guilt over killing others	
Guilt over enjoying the excitement of killing others	
Guilt or self-loathing over participating in atrocities	
Failure at Preventing Killing	.52
Guilt over failing to fulfill duties or responsibilities in the war	
Guilt over accidentally contributing to the death of a buddy or other American	
Feelings of inadequacy, guilt, or grief over the inability to effectively treat and save the wounded	
Grief or anger over the death of a buddy or buddies	

1. Target of Killing. The first role is that of having been a target (TARGET) of others' attacks. Fifty-eight percent of the veterans were described as currently being adversely distressed and/or disabled by this trauma. This role is measured by a single experience, "terror about being killed or wounded." We consider it to involve low personal responsibility, because it entails having been the recipient of actions committed by others that one actively tried to avoid.

2. Observer of Killing. The second role is that of having been an observer (OBSERVER) of others' attempts to kill or injure (alpha = .58). It is measured as the sum of three experiences, "horror at witnessing atrocities or the results of atrocities," "horror at exposure to the death and dismemberment of others," and "horror at the continual stream of human remains to be processed" (1.65 $\pm$ 1.04). This is also considered a

[4]Other investigators have found the constructs of role and personal responsibility to be helpful in articulating the differences in meaning among traumatic experiences as well. For example, in a conceptual treatment very similar to ours, Wilson et al. (1989) distinguish between different types of "psychological involvement" that are elicited by exposure to atrocities, depending upon a person's "role" in the commission of the acts. In the terminology of these authors, the key distinction between the roles of witness and participant derives from the fact that in the former the person's relationship to the act is "indirect," whereas in the latter the person's relationship is that of an "agent," who "actively chooses" to commit the act.

low responsibility role, because the initiative for killing and injuring rests with someone else.

3. Agent of Killing. In a third role, the veteran acted himself as the agent (AGENT) of attempts to kill or injure others (alpha = .63). The role of agent is measured as the sum of three experiences, "guilt over killing others," "guilt over the enjoyment of killing others," and "guilt or self-loathing over participating in atrocities" (1.09 ± 1.06). This role appears to involve a higher degree of responsibility than the role of observer, because actions were more subject to veterans' initiation and control.

4. Failure at Preventing Killing. The final role involves the perceptions of having been a failure (FAILURE) at preventing the death or injury of others (alpha = .52). It is measured as the sum of four experiences, "guilt over failing to fulfill duties or responsibilities," "feeling inadequate to effectively treat or save the wounded," "grief or anger over the death of a buddy," and "guilt over accidentally contributing to the death of a buddy or another American" (1.63 ± 1.10). We believe that this experience of having personally failed to prevent the death or injury of others entails the highest level of personal responsibility.

Symptomatology. The PTSD symptoms and diagnosis were assessed by clinician interview of the veteran concerning the 17 symptoms diagnostic of PTSD according to the DSM-III-R (APA, 1987). They were coded for intensity from 0 to 2 according to the criteria employed by the Structured Clinical Interview for Diagnosis (Spitzer and Williams, 1985). Those veterans achieving a rating of 2 for at least one intrusive (INTRU), three numbing (NUMB), and two hyperarousal (HYPER) symptoms were diagnosed as positive for PTSD (DXPTSD). Application of this criterion resulted in 78.3% of the sample being diagnosed with PTSD. In addition to deriving a diagnosis of PTSD, the ratings for each of the three clusters of PTSD symptoms were summed to produce scores for hyperarousal (8.47 ± 1.92), intrusion (6.28 ± 1.91), and numbing (10.53 ± 2.90).

Two self-report indices of non-PTSD symptoms that are associated with PTSD but are not formal criteria for diagnosis according to the DSM-III-R were included for purposes of comparison. The first is the psychiatric component of the Addiction Severity Index (McLellan et al., 1985), which provided a measure of general psychiatric distress (PSYCH. .60 ± .20). The PSYCH scores can range from .0 to 1.0. They have been found to have an interrater reliability of .93, and correlations of .38 with the Beck Depression Inventory (Beck et al., 1961) and .50 with the Hopkins Symptom Checklist (Derogatis et al., 1974). The second is number of suicide attempts (SUICIDE), which provided a measure of extreme behavioral manifestation of distress (1.12 ± 1.92). The SUICIDE scores ranged from .0 to 8.0 in the current sample.

Data Analysis

The objective and interactionist approaches were evaluated statistically by least squares multiple regression analyses on the sets of measures separately and combined.[5] The REGRESSION procedure from the SAS package was used to perform the calculations (SAS, 1988). The proportions of variance accounted for (R^2) are presented so that the magnitude of association can be compared across approaches. Individual relationships are presented in the form of beta (standardized regression) coefficients in order to permit comparison among variables. Differences between pairs of beta coefficients (in their unstandardized form) were tested for statistical significance according to the procedure described by Pedhazur (1982). In all cases, $p < .05$ was the minimum probability accepted for significance.

Results

Bivariate correlations among the objective and interactive measures are presented in Table 2. Inspection of the table shows that they range from −.57 for WITNESS and PARTIC to .54 for PARTIC and AGENT, indicating moderate relationships among some of the measures. Ideally, the independent variables in a regression analysis would be independent of each other. While these relationships indicate some collinearity among the independent variables, it is not of such a magnitude as to bias the error estimates seriously.

Comparison of the Objective and Interactive Sets of Traumatic Experiences

The R^2s, or proportions of variance accounted for, for sets of objective and interactive traumatic experiences are presented separately and combined in Table 3. The set of objective experiences is composed of COMBAT, WITNESS, and PARTIC; the set of interactive experiences consists of TARGET, OBSERVER, AGENT, and FAILURE; and the combined set is composed of all seven experiences.

In all instances, the interactive set accounted for more variance in symptomatology than the objective set did. When the two sets were combined, the interactive set added substantially to the variance accounted for by the objective set.

[5]Alternatively, logistic regression could have been used in the analysis of DXPTSD. Least squares regression was chosen instead for two reasons. First, it was desirable to have the output of the analysis in the form of standardized regression coefficients and R^2s so as to be directly comparable to the output for the other symptom measures. Second, none of the values of the least squares regression coefficients approached the limits of ±1, so that the least squares analysis could be used without introducing any serious distortion due to the dichotomous nature of DXPTSD.

TABLE 2
Bivariate Correlation Matrix of Objective and Interactive Trauma Variables

	COMBAT	WITNESS	PARTIC	TARGET	OBSERVER	AGENT	FAILURE
COMBAT	—						
WITNESS	.05*	—					
PARTIC	.26****	−.57****	—				
TARGET	.05*	.02	−.01	—			
OBSERVER	.20****	.16****	.18****	.10****	—		
AGENT	.33****	−.17****	.54****	.05*	.36****	—	
FAILURE	.15****	.03	.05*	−.03	.33****	.21****	—

*$p < .05$; **$p < .01$; ***$p < .001$; ****$p < .0001$.

TABLE 3
Coefficients of Multiple Determination (R^2s) for Symptom Prediction by Objective, Interactive, and Combined Sets of Trauma Variables[a]

Trauma Set	Symptoms					
	HYPER	INTRU	NUMB	DXPTSD	PSYCH	SUICIDE
Objective	.05	.07	.03	.02	.02	.01
Interactive	.08	.10	.10	.05	.06	.02
Combined	.09	.12	.10	.06	.06	.03

[a]All multiple correlation coefficients (Rs) are significant at $p < .001$.

Relationships among Individual Trauma Measures and Symptomatology

Beta coefficients for the individual trauma measures of both sets combined are presented in Table 4. When considered in combination with all other trauma categories, COMBAT made a significant contribution to two symptoms, namely, intrusion and suicide. In the latter case, the relationship was negative, indicating that suicide attempters were exposed to less combat. WITNESS made significant positive contributions to hyperarousal, numbing, diagnosis of PTSD, and psychiatric distress. In general, participation in abusive violence made the strongest contribution of any of the objective measures. PARTIC made significant contributions to hyperarousal, intrusion, diagnosis of PTSD, and psychiatric distress.

Among the objective measures, the betas for PARTIC were significantly larger ($p < .05$) than those for COMBAT for all symptom variables; and for all symptom variables other than DXPTSD and PSYCH, the betas for PARTIC were significantly larger than those for WITNESS.

Having been a target made a significant contribution to each PTSD symptom and to diagnosis of PTSD, but not to either non-PTSD symptom. Moreover, TARGET's contributions to hyperarousal and diagnosis of PTSD were significantly larger ($p < .05$) than those of any other interactive trauma. Having been an observer made significant contributions to each PTSD symptom and to psychiatric distress, but not to diagnosis of PTSD or to suicide. In contrast, having been an agent or a failure made significant contributions to all symptoms, PTSD as well as non-PTSD. In fact, the contributions of AGENT and FAILURE to suicide were significantly larger than those of TARGET and OBSERVER.

Discussion

In this study, the interactive set of trauma measures, based on clinicians' assessments, accounted for more variance in symptomatology than the objective set did. Furthermore, when the two sets were considered together, the proportion of variance accounted for over and above that due to the objective set alone was substantial. This suggests that the explicit inclusion of psychological meaning expanded the representation of the traumatic impact of the war zone stressors that was implicit in the objective measures but which was being obscured.

TABLE 4
Beta Coefficients for Individual Trauma Variables

Trauma	Symptoms					
	HYPER	INTRU	NUMB	DXPTSD	PSYCH	SUICIDE
COMBAT	.03	.11****	−.05	.00	−.03	−.05*
WITNESS	.07*	.04	.07*	.07*	.07*	.02
PARTIC	.14****	.12***	.05	.11**	.10**	.07
TARGET	.15****	.09***	.09***	.13****	.02	−.02
OBSERVER	.09***	.10****	.13***	.05	.10***	−.03
AGENT	.08**	.07*	.14***	.07*	.08**	.09**
FAILURE	.07**	.13****	.13***	.08***	.11****	.11****
R^2	.09	.12	.10	.06	.06	.03

*$p < .05$; ** $p < .01$; ***$p < .001$; ****$p < .0001$.

The combined sets of objective and interactive measures accounted for 6% to 12% of the variance in PTSD symptomatology. The magnitude of effects reported in the literature between war zone stressors and PTSD ranges from 5% or less (*e.g.*, Kadushin et al., 1981; Keane et al., 1989; Laufer et al., 1985b) to a high of 35% (*e.g.*, Breslau and Davis, 1987b; Foy et al., 1984; Green et al., 1989). Although precise comparison across studies is not possible because of differences in samples and instruments, the variance accounted for in the present study falls within the range generally reported in the literature. Regardless of the particular study consulted, however, it is clear that there is still ample room for improvement in the specification of war zone traumas and for inclusion of other military and extramilitary factors in accounting for the presence and severity of current symptomatology.

Although combat exposure was correlated significantly with each of the symptoms bivariately, its unique contribution in accounting for variance in symptomatology was considerably less when it was considered in the context of other trauma measures. In most cases, the unique contribution of objective war zone stressors seemed to be captured more fully by abusive violence, especially participation in these acts. Combat exposure, however, still made a unique contribution to intrusive PTSD symptoms.

The roles that veterans played in the initiation of traumatic experiences differed in their relevance to various types of symptomatology. Having been a target was related significantly to all categories of PTSD symptoms, but it was not related significantly to either category of non-PTSD symptoms, despite their often observed association with PTSD. Furthermore, having been a target of others' attempts to kill or injure oneself was related more significant than any other role to hyperarousal and PTSD diagnosis. Thus, it is being terrified of being killed that appears to be the subjective experience of war that is associated most uniquely and strongly with PTSD.

Conversely, guilt over having been either an agent of death and injury or a failure at preventing death and injury to others appears to be particularly relevant to other aspects of veterans' distress that have often been observed to be associated with PTSD. Each of these roles was related more significantly to suicide than was the role of either having been a target or an observer of death and injury. Viewed in terms of our classification of personal responsibility, PTSD appears to be connected most specifically to traumas low in personal responsibility for their initiation, whereas psychiatric symptoms and suicide appear to be connected more specifically to traumas high in personal responsibility. Having been an agent and/or a failure seems to be especially relevant in accounting for the presence and severity of psychiatric comorbidity with PTSD.

A word is in order regarding three limitations of the study. First, it would have been optimal to have obtained veterans' own judgments of their exposure to the various traumas directly, in addition to their clinicians' judgments. As we mentioned above, there was strong opposition to our asking veterans directly. Haley (1974) has pointed out that the greatest difficulty experienced by mental health professionals in treating Vietnam veterans with PTSD is facing their own vengeful and murderous impulses. As mental health professionals become more acceptant of this fact and more able to deal with these impulses and related affects, there should be less resistance to asking veterans directly to report on them and the events evoking them. For the present, our study should be considered a pilot study regarding the psychological meaning of war zone traumas.

Second, the veterans' reports of war zone experiences on which clinicians based their judgments were retrospective by approximately 20 years. It is unknown how accurately veterans' current recollections mirror the actual experiences at the time of occurrence. It seems to us, however, that current symptomatology is likely to be driven more by the nature of these recollections now than by strictly veridical renditions of the historical events. Therefore, our main purpose was to examine the extent to which the current psychological meaning of war traumas contribute to the current severity of PTSD and associated symptoms.

Finally, the fact that this was a treatment-seeking sample raises the question of its generalizability to all Vietnam theater veterans. It should be noted that we are interested in war zone experiences that continue to bother veterans. Therefore, among veterans who are not currently seeking treatment, our results would potentially apply only to those who are bothered by their experiences. This number might be as large as 350,000, however, according to estimates of PTSD incidence and treatment seeking reported by the National Vietnam Veterans Readjustment Study (Kulka et al., 1988).

Conclusions

The major conclusions to be drawn from this study can be stated as follows. First, the results support Laufer's contention that expanding the range of traumatic experiences beyond exposure to combat in its traditional form to include exposure to abusive violence increases our understanding of current symptoms of PTSD substantially (Laufer et al., 1984, 1985a, 1985b). Second, specification of the psychological meaning of traumatic experiences expands our understanding of differential patterns of relationships between traumatic experiences and symptoms. Having been a target of others' attempts to kill or injure appears to be related

more uniquely to PTSD symptoms and diagnosis than any other category of traumatic experiences. On the other hand, having been an agent of killing or a failure at preventing killing oneself appears to be related as strongly to suicidal behavior and general psychiatric distress as to PTSD.

The diversity of relationships between different war traumas and symptoms provides the basis for drawing some tentative conclusions regarding treatment alternatives. Exposure to combat made a unique positive contribution only to PTSD intrusive symptoms, and having been a target made unique contributions only to PTSD symptoms. These findings suggest that having been a target of others' attempts at killing may be a specific aspect of combat that tends to be associated with PTSD in particular. If this is the case, circumscribed interventions, such as exposure therapy or other deconditioning approaches that focus on the environmental events themselves, might be especially well suited to countering the pathogenic effects of these types of traumatic experiences.

Conversely, witnessing and participating in abusive violence and having been an observer, an agent, or a failure at preventing death made unique contributions to general psychiatric distress and/or suicidal behavior as well as to PTSD. The pervasiveness of these relationships suggests that the difficulties associated with these traumatic experiences are more multidimensional and are likely to require a broader range of therapeutic interventions. This possibility suggests further that the pathogenic effects of exposure to abusive violence and to roles involving moderate to high levels of personal responsibility for the initiation of traumas may pose the most complex and difficult therapeutic challenges.

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