

Posttraumatic Stress Disorder Among Israeli Ex-Prisoners of War 18 and 30 Years After Release

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Background: The psychological responses to captivity were measured in a sample of former prisoners of war (POWs) 18 and 30 years after release from captivity.

Method: 209 Israeli veterans of the 1973 Yom Kippur War (103 ex-POWs and 106 controls) who had taken part in a previous study conducted in 1991 participated in the current study conducted in 2003. The study assessed current rates of posttraumatic stress disorder (PTSD), changes in PTSD over time, and the contribution of captivity severity (objective and subjective), sociodemographic variables, and psychological appraisal and coping with captivity to predicting PTSD using standardized self-report questionnaires.

Results: Twenty-three percent of the ex-POWs met PTSD criteria and were 10 times more likely than controls to experience deterioration in their psychological condition in the 12-year interval between the 2 assessments. Almost 20% of ex-POWs who did not meet PTSD criteria in 1991 met criteria in the current assessment, in comparison to almost 1% of the controls. Current PTSD was predicted by younger age at the time of captivity, by loss of emotional control and higher subjective appraisal of suffering in captivity, and by a greater number of PTSD symptoms in the 1991 assessment.

Conclusion: It is important to follow up and offer treatment to former POWs. Special attention should be paid to those who lost emotional control in captivity and to those who felt that the conditions of their captivity were severe.

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War captivity is one of the most traumatic events perpetrated by human beings. Usually coming on the heels of brutal combat, it consists of multiple, repeated, and prolonged traumatic acts.^{1,2} Most prisoners of war (POWs) are held in solitary confinement, at times blindfolded and handcuffed, in small and filthy cells, and are subjected to deliberate and systematic violence, including physical torture, deprivation of basic needs, and deliberate humiliation. A considerable body of empirical research on POWs has consistently found that captivity produces deep and long-lasting psychological,³ somatic,⁴ and functional injuries.⁵

Posttraumatic stress disorder (PTSD) rates between approximately 2 to 5 decades after captivity range along a wide spectrum, from 5% to 88%. Most studies have found that substantial proportions of former POWs carry their wounds with them for a very long time.^{6–8} Little, however, is known about the course of the PTSD over those years.

The literature on the longitudinal effects of war captivity offers 3 alternative perspectives. One is that time is a healer: as the years pass, any detrimental impact of the captivity will weaken, and more ex-POWs will recover partly or in full. This view is supported by previous findings of declines in the levels of depression and anxiety among former POWs after approximately a decade,⁹ as well as findings of fewer PTSD symptoms some 50 years after captivity than in the first year postcaptivity, as reported retrospectively.^{10,11}

The second view is that PTSD is a chronic ailment, in which symptoms will intensify with the passage of time, with the natural decline in the individual's physical and mental condition over the years. This view gains some support from a recent study that found increased PTSD over a 4-year period among former American POWs.⁶

The third view is that, other than an initial decline in psychological distress relatively soon after the captivity, no clear pattern is discernible. This view stresses the labile quality of PTSD and the ability of events in the individual's outer and inner life to trigger its recurrence or intensification after periods of latency or remission.¹² Like the previous view, this perspective too expects a rise in distress over time, when age-related stressors like retirement, deteriorating health, and loneliness make the individual vulnerable,¹³ but this view expects more idiosyncratic changes, depending on events in the individual's environment and personal life.

With the state of our knowledge today, we cannot know which of these views is most correct. Too few studies tracing the longitudinal effects of captivity have been carried out, most of which have assessed recovery and other changes in PTSD symptomatology through retrospective self-reports. In addition, the observed variability in the aftermath of captivity, both between and within groups, is not as well understood as we would like. Previous studies identified various risk factors for postcaptivity residuals in the objective characteristics of the experience. The location and duration of the captivity and harshness of the exposure were all found to be associated with posttraumatic outcomes.^{7,14}

Yet another variable that has been associated with post-captivity mental health is assessment of the harshness of the conditions.¹⁵ These findings are in line with the contention that subjective appraisal plays a significant role in coping with stressful events.¹⁶ Folkman et al.'s theory¹⁷ claims that during exposure to stressful events, some people tend to evaluate the situation as challenging and themselves as having effective coping resources to deal with it, while others tend to evaluate situations as more stressful and uncontrollable, and themselves as lacking adequate or effective coping resources. Therefore, the need to assess both objective and subjective measures of captivity is called for.

The individual's feelings and behavior in captivity have also been implicated in subsequent adjustment. The findings, however, are inconclusive. Experimental and empirical evidence has shown that feelings of control,¹⁸ faith, reality testing, denial, rationalization, humor,¹⁹ and active problem-focused coping²⁰ promote better mental health after release. On the other hand, apathy, withdrawal, emotional constriction, and emotion-focused coping have been found to decrease anxiety and stress during captivity.²¹⁻²³ Moreover, little is known about the relative contribution of the various factors implicated in postcaptivity mental health or whether factors important in the short term are similarly important to long-term psychological outcomes.

In light of the above views, this study has 3 main aims: (1) to assess current rates of PTSD among former POWs and comparable controls, (2) to follow changes in their PTSD over time, and (3) to ascertain the contribution of

sociodemographic variables, severity of the captivity, and psychological appraisal and coping in captivity to predicting long-term posttraumatic sequelae. The study was carried out on Israeli POWs of the 1973 Yom Kippur War and comparable controls using a prospective, longitudinal design, with measurements taken in 1991 and 2003, 18 and 30 years after the POWs' release.

METHOD

Participants and Procedure

The study participants were 209 Israeli veterans of the 1973 Yom Kippur War: 103 ex-POWs and 106 controls. All the participants had taken part in an earlier study of POWs conducted in 1991.⁸ Using updated Israel Defense Forces (IDF) files, we phoned those participants and, after explaining the purpose of this study, asked them to take part again. The questionnaire was administered in their homes or in another location of their choice. Before filling out the questionnaire, the participants signed an informed consent form.

Prisoners of war. According to Israel's Ministry of Defense records, 240 POWs were taken from the Israeli Army land forces during the Yom Kippur War (October 1973). Of the 164 POWs who participated in the previous study,⁸ 10 could not be located, 4 had died, and 6 could not participate due to a deteriorated mental status. Of the remaining 144 POWs, 103 participated in this study, constituting a 71.5% response rate.

Controls. For the previous study,⁸ a control group of 280 combat veterans of the same war matched with the ex-POWs in personal and military background was sampled from IDF computerized data banks. Of 185 men who participated in the previous study, 41 could not be located and 1 had died. Of the remaining 143 controls, 106 participated in this study, constituting a 74.1% response rate.

Measures

PTSD Inventory. PTSD was measured using the PTSD Inventory.²⁴ This is a self-report scale based on DSM-III-R criteria,²⁵ which was the standard used at the time of the first measurement in 1991.⁸ To enable comparison, the same inventory was employed in the second measurement in 2003; the inventory consists of 17 statements corresponding to the 17 PTSD symptoms listed in the DSM-III-R.²⁵ For each statement, subjects were asked to indicate whether or not they had experienced the symptom in the previous month. The inventory enables measuring both the number and intensity of PTSD symptoms, as well as identifying the symptoms in each symptom cluster (intrusion, avoidance, and hyperarousal).

The DSM-IV²⁶ moved the "physiological reactivity to resembling events" symptom of the DSM-III-R from the hyperarousal cluster (criterion D) to the intrusion cluster (criterion B) and added the criterion of distress/disability

as criterion F. In order to conform to the updated definition, we analyzed both the raw 1991 data and the current data in accord with the DSM-IV symptom clusters.

We also assessed distress and disability. Distress was assessed using the Global Severity Index of the commonly used Symptom Checklist-90 (Revised),²⁷ in which a score of 1.26 or over corresponds to the levels of clinical distress commonly observed in treatment seekers. Disability was defined as dysfunction at work and was measured by a question asking about the respondents' employment in the previous year. Responses could range from "no job" to "full-time job."

Internal consistency among the 17 items for both measurements was high (Cronbach $\alpha = 0.87$ for 1991 and 0.95 for 2003). The scale was also found to have high convergent validity when compared with diagnoses based on structured clinical interviews.²⁴

Captivity severity. Captivity severity was assessed in 1991 by 2 measures. The first was a subjective measure of physical and psychological suffering, in which the respondents were asked to rate on a scale of 1 to 5 the severity of the physical abuse, mental abuse, and humiliation to which they had been subjected. The score for each respondent was calculated as the mean endorsement for the 3 forms of abuse. The second was weight loss in captivity, a commonly used objective measure of the hardship of captivity. Participants were asked to report how much weight they had lost.

Psychological coping with captivity. In the absence of a valid and reliable standardized measure, we constructed a 24-item self-report questionnaire based on a thorough literature review and clinical interviews with ex-POWs. Factor analysis with varimax rotation yielded 3 main factors that explained 30.66% of the variance. Factor 1 explained 10.89% of the variance (Cronbach $\alpha = 0.72$) and consisted of 8 items describing active coping (e.g., "I played mental games to pass the time."). Factor 2 explained 10.25% of the variance (Cronbach $\alpha = 0.65$) and consisted of 8 items describing detachment (e.g., "I closed myself off from the world."). Factor 3 explained 9.52% of the variance (Cronbach $\alpha = 0.66$) and consisted of 8 items describing loss of emotional control (e.g., "I felt I was going crazy.").

RESULTS

The findings are organized in 3 parts: (1) current PTSD rates among the ex-POWs and controls, (2) changes in PTSD (rates, severity, and symptom profiles) over time in the 2 groups, and (3) predictors of current PTSD.

Current PTSD Rates

Significantly, more ex-POWs ($N = 23$ of 99, 23.2%) met DSM-IV symptom criteria for PTSD 30 years after the Yom Kippur War than non-POW controls ($N = 4$, 3.8%) ($N = 205$, $\chi^2 = 16.70$, $df = 1$, $p < .001$).

Table 1. Mean (SD) Number of Posttraumatic Stress Disorder Symptoms According to Study Group Among Former Israeli Prisoners of War and Controls in 1991 and 2003

Symptom	Prisoners of War (N = 103)		Controls (N = 106)	
	1991	2003	1991	2003
Total posttraumatic stress disorder symptoms	2.97 (3.67)	4.83 (4.55)	1.73 (2.72)	1.14 (2.59)
Intrusion symptoms	1.04 (1.40)	1.38 (1.67)	0.50 (1.01)	0.26 (0.67)
Avoidance symptoms	0.77 (1.28)	1.63 (1.73)	0.50 (1.10)	0.41 (1.26)
Hyperarousal symptoms	1.17 (1.68)	1.82 (1.83)	0.73 (1.34)	0.47 (1.08)

When the F criterion was also applied (i.e., distress or difficulties in functioning), rates dropped to 20.2% ($N = 20$ of 99) in the POW group and 2.8% ($N = 3$) in the control group, but the between-group difference remained significant ($N = 205$, $\chi^2 = 15.29$, $df = 1$, $p < .001$).

Changes in PTSD Over Time

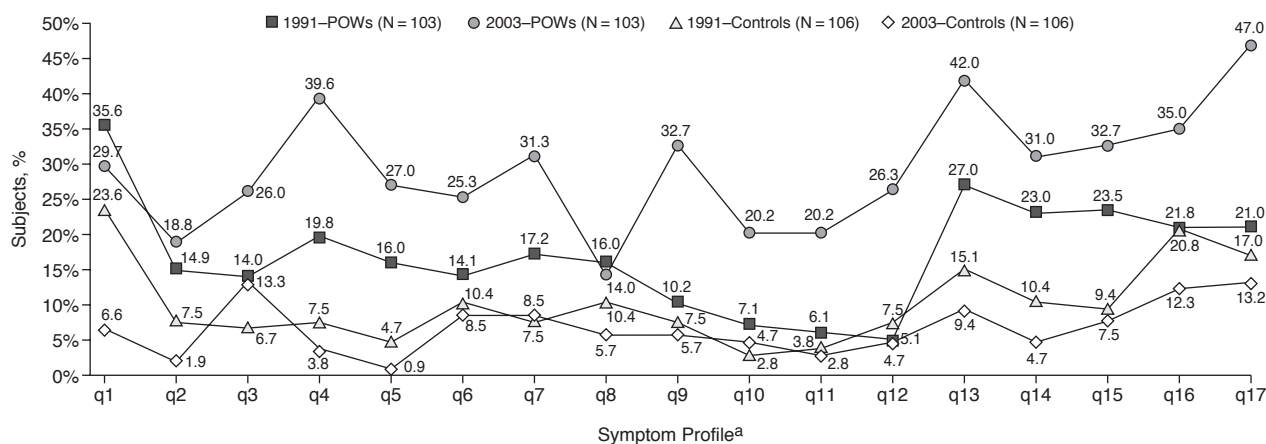
PTSD rates. The psychological status of 78.8% of the POW group did not change over time: 77.8% ($N = 77$ of 99) met PTSD criteria at neither time of measurement; 1.0% ($N = 1$ of 99) met PTSD criteria at both times. The psychological status of 21.2% of the POW group did change, mostly for the worse. Eighteen (18.2%) of 99 men did not have PTSD at the first measurement but did at the second. Conversely, 3.0% ($N = 3$ of 99) had PTSD at the first measurement but not at the second. The results of the sign test revealed that the rate of deterioration in the POWs is significantly higher than their rate of recovery.

The mental status of 97.2% of the control group did not change: 95.3% ($N = 101$) met criteria for PTSD at neither measure; 1.9% ($N = 2$) met the criteria at both. Of the remaining 2.8%, whose mental status did change, 0.9% ($N = 1$) met the criteria at the second assessment but not at the first, and 1.9% ($N = 2$) met the criteria at the first assessment but not at the second. What is clear from this comparison is that the percent of deterioration among the POWs is much higher.

PTSD severity. Table 1 presents the mean number of PTSD symptoms endorsed by each study group at each measurement, as well as the mean number of symptoms endorsed in each symptom cluster.

A multivariate analysis with repeated measures with the number of PTSD symptoms as the dependent variable was carried out to ascertain the impact of time on the PTSD in the 2 study groups. The analysis revealed a significant effect of time ($F = 5.98$, $df = 1,207$; $p < .05$) and a significant interaction effect between time and group ($F = 22.09$, $df = 1,207$; $p < .001$). To locate the source of the interaction, a paired t test using the Bonferroni cor-

Figure 1. Symptom Profiles of Israeli Ex-Prisoners of War (POWs) (N = 103) and Controls (N = 106) According to Study Group and Time of Measurement



^aq1 = recurrent and intrusive recollections of the event; q2 = recurrent distressing dreams of the event; q3 = acting or feeling as if the traumatic event were recurring; q4 = intense psychological distress at exposure to cues that remind one of the traumatic event; q5 = physiologic reactivity on exposure to cues that remind one of the traumatic event; q6 = efforts to avoid thoughts, feelings, or conversations associated with the trauma; q7 = efforts to avoid activities, places, or people that arouse recollections of the trauma; q8 = inability to recall an important aspect of the trauma; q9 = diminished interest or participation in significant activities; q10 = feeling of detachment or estrangement from others; q11 = restricted range of affect; q12 = sense of a foreshortened future; q13 = sleep difficulties; q14 = irritability or outbursts of anger; q15 = difficulty concentrating; q16 = hypervigilance; q17 = exaggerated startle response.

Table 2. Variables Predicting Posttraumatic Stress Disorder Distress Levels in 2003 Among Former Israeli Prisoners of War (N = 103)

Variable	β	SD	β
Step 1 ^a			
Age	-0.04	0.01	-0.28**
Subjective suffering	0.25	0.09	0.30**
Loss of emotional control	0.39	0.15	0.27**
Step 2 ^b			
Age	-0.04	0.01	-0.27**
Subjective suffering	0.20	0.09	0.24*
Loss of emotional control	0.21	0.16	0.15
Posttraumatic stress disorder distress level in 1991	0.06	0.02	0.30**

^aChange in R² for step 1: 30.1% (F = 11.77, df = 3,75; p < .001).

^bChange in R² for step 2: 6.1% (F = 11.61, df = 4,75; p < .001).

*p < .05.

**p < .001.

rection was performed. The test showed a significant increase in the number of total PTSD symptoms among the POWs (N = 103, t = 4.77, p < .05), but no significant change among the controls (N = 106, t = 1.61).

Similarly, a series of separate multivariate analyses with repeated measures with the number of intrusion, avoidance, and hyperarousal symptoms as the dependent variables (see Table 1) revealed a similar trend. There was a significant increase in the number of intrusion, avoidance, and hyperarousal symptoms among the POWs, but no significant change among the controls.

Symptom profiles. The symptom profile reflects the percentage of respondents who endorse having had each symptom in the previous month. Figure 1 presents the

symptom profiles of the POW and control groups at both measurements.

As can be seen among the ex-POWs, the rate of positive endorsement of all but 1 (symptom 8: "There are things about the captivity that I find hard to remember.") rose over time. A sign test revealed that in 11 of the 17 symptoms (symptoms 3, 4, 5, 7, 9, 10, 11, 12, 13, 16, and 17), the increase was statistically significant (p < .05). In contrast, in the control group, the rate of endorsement of most of the symptoms (other than symptoms 3, 7, and 10) decreased. A sign test revealed that the decrease was statistically significant in only 1 symptom: recurrent and intrusive recollections of the event (p < .05).

Predictors of Current PTSD

A hierarchical stepwise regression was conducted to examine the predictors of the current number of PTSD symptoms. In the first step, we entered background variables of age, rank, and years of education as queried in 1991, as well as the severity of the captivity (subjective appraisal of suffering and weight loss) and psychological coping in captivity (active coping, detachment, loss of emotional control). In the second step, we entered the level of PTSD symptoms in 1991. Table 2 presents the significant β coefficients of the regression model.

The total set of variables explained 36.2% (adjusted R²) of the variance. As can be seen in Table 2, 3 variables in the first step made significant contributions to the explained variance: age (6.2%), subjective suffering in captivity (18.2%), and loss of emotional control in captivity (5.7%). Older POWs tended to have fewer PTSD symp-

toms than younger ones. Conversely, the higher the subjective suffering and the greater the loss of emotional control, the more PTSD symptoms the subjects had. The 1991 PTSD distress level, entered in the second step, also made a significant contribution (6.1%). More PTSD symptoms at the first measurement predicted more symptoms 12 years later. The other variables did not enter significantly into the equation.

CONCLUSION

Prevalence of PTSD

The findings show that 3 decades after their release from captivity, 23% of former Israeli POWs still meet criteria for PTSD. This figure points both to the resilience of 77.8% of the former POWs who did not meet PTSD criteria, and to the long-lasting psychological damage of captivity to the remaining one fifth.

The POWs' current PTSD rates are lower than those found in most previous studies of POWs. The rates are higher than the PTSD rates of 5%⁹ and 15%¹¹ that were found among American POWs in World War II several decades postwar, but those rates are on the low end. Most reports of World War II POWs note rates of 30% to 76% 40 to 50 years postwar,^{12,14,28,29} and studies of POWs of the Korean conflict report rates over 80% 40 and 50 years postwar.¹⁴ The lower rates in the present study can be attributed to the shorter duration and lesser severity of the Israeli soldiers' captivity. The Israeli prisoners were held for between 6 weeks and 8 months; the American POWs were held in the Far East for several years, during which time they were subjected to prolonged and repeated torture and exposed to extremely harsh physical conditions and deprivation.^{14,29}

The current PTSD rate in the POW group is around 7 times the rate among the non-POW controls. The question is why the psychological damage of captivity should be so much more enduring than that of combat, which is itself pathogenic.³⁰ Three main explanations may be offered. The simplest is perhaps the special hardships of captivity: the torture, humiliation, and isolation that are part and parcel of war captivity³¹ but not of combat.

Beyond the hardships themselves, however, is the fact that they are personal.¹ This is the second possible explanation. The threat of combat to the life and physical integrity of the soldier is a relatively impersonal threat, in that it is directed toward whoever is in the line of fire, not at any particular soldier. Thus, there is no affront to the soldier's personhood, even if he or she is injured. The trauma of captivity, however, occurs within the relationship between the captives and their captors. The special torments of captivity are part of a planned and concerted effort to "break" the particular individuals and are intentionally inflicted on them by persons they get to know and may relate to on a daily basis.

The third possible explanation is the doubling of the traumatic experience with captivity. For most POWs, the trauma of captivity follows on the heels of the trauma of combat. Captivity thus extends the duration of the traumatic experience, further drawing on the soldier's already depleted coping resources.³ As is well known, the longer a traumatic experience lasts, the more severe the ensuing psychopathology is likely to be.² Beyond this, however, captivity is a distinct, separate traumatic exposure, in addition to the trauma of combat. The cumulative damage of multiple traumas is known to be more severe than the damage of a single trauma.¹

Changes Over Time

The findings show that PTSD followed a different course among the ex-POWs and combat controls. The ex-POWs were 10 times more likely than the controls to experience deterioration in their psychological condition in the 12-year interval between the 2 assessments. Almost 20% of ex-POWs who did not meet PTSD criteria 18 years after their release met it at the 30-year mark, in comparison to less than 1% of the controls. The ex-POWs also showed a statistically significant increase in the endorsement of each of the PTSD symptom clusters (intrusion, avoidance, and hyperarousal), as well as a statistically significant increase in their endorsement of 11 of the 17 symptoms queried and a statistically nonsignificant rise in all but 1 of the others. Among the non-POW controls, in contrast, there was no change in the endorsement of the 3 symptom clusters, along with a downward trend in their endorsement of most of the individual symptoms, which reached statistical significance with regard to recurrent and intrusive recollections. These findings clearly show that time exacerbates the detrimental effects of war captivity.

The increase in PTSD in the ex-POWs is consistent with the findings of increased PTSD rates and symptom level over a 4-year measurement interval among older American ex-POWs,⁶ but differs from findings of reports of decreased PTSD symptoms over time.^{10,11} The differences are probably related to the times of measurement. A previous study⁶ found a U-curve pattern, with high PTSD rates immediately after captivity, followed by a gradual decline and then, from midlife onward, a rise in rates. It may be conjectured that our first assessment, taken 18 years after the prisoners' release, fell within the lower part of the curve, and our second assessment, 12 years later, reflected the rising rates as the men aged.

The ex-POWs' heightened PTSD, in terms of both rate and intensity, 30 years after their release may be related to either or both the aging process and the unremitting threat of war and terror in Israel. At our second assessment, the men were in their late 50s through early 60s. This is a high-risk time of life for both delayed onset and reactivation of PTSD. Midlife generally entails some reduction

in activity and a shift from planning to reminiscence and from occupation with current events to the review and rethinking of one's life. The altered perspective may bring forgotten or suppressed traumatic memories to the foreground.¹³ Aging also inevitably entails many losses and exit events, from retirement through illness. Such losses may be particularly distressing for former POWs, and may remind them of their misery and helplessness in captivity.

With regard to the second explanation, the second assessment took place at the height of the second intifada, when suicide bombings and drive-by shootings created tremendous insecurity and fear among most Israelis. These events, regularly reported on television, may also have reawakened the dormant traumatic contents among the ex-POWs by reminding them of their misery and helplessness in captivity.

Given the study design, it is impossible to know whether the 20% rise in the POWs' PTSD reflects reactivation or delayed onset. Previous studies report delayed onset PTSD in 11%³² to 20%^{33,34} of various traumatized groups.

Along with the psychopathology found in this study, we should also note the resilience of the study participants. The non-POW veterans had very low rates of PTSD both 18 and 30 years after the war. Even though all of them had seen combat, most continued to serve in active reserve duty through age 45, and all, like the rest of the Israeli population, were exposed to the ongoing threat of terror, which has the capacity to reawaken earlier traumas. Among the ex-POWs, the PTSD rates were considerably higher, but the vast majority did not meet PTSD criteria at either time of assessment. The high level of resilience in both groups lends further support to Bonanno's³⁵ conclusions from his review of the literature that resilience in the face of trauma is more common than is often believed.

Predictors of Current PTSD

Current PTSD, 30 years after the Yom Kippur War, was predicted by younger age at the time of captivity, by loss of emotional control and higher subjective appraisal of suffering in captivity, and by a greater number of PTSD symptoms in the 1991 assessment. The latter 2 variables predicted PTSD at the 18-⁵ and 30-year marks.

The finding on age is consistent with other findings showing that the younger one is when exposed to a traumatic event, the more likely it is that one will have PTSD later in life.^{7,28} The reasons may lie in young people's relative lack of life experience and coping resources or in the impressionability of youth.

Loss of emotional control was identified by the POWs' outbursts of intense rage (against captors, fellow prisoners, and the Israeli authorities), the feeling of going crazy, and feelings that everyone had forgotten and abandoned them. Although the men who responded with these behaviors cannot be retrospectively diagnosed as having suf-

fered an acute combat stress reaction (CSR) in captivity, the behaviors strikingly resemble the symptoms of this reaction.²⁴ The finding is consistent with earlier findings showing that failure to cope effectively in the short term often produces adverse effects in the long term.³⁶ Two nonexclusive explanations may be offered. One is that the emotional breakdown in captivity, whether it is identified as a CSR or not, may be an indication of prior vulnerability. The other is that the breakdown probably contributes to the captive's subsequent distress. Coming atop the stress of captivity, the breakdown yet further erodes the individual's coping resources. With fewer resources, the individual is even less able to cope with subsequent stress and, as Hobfoll et al.³⁷ point out, thus likely to fall into "loss cycle" or "loss spiral."

While weight loss, an objective measure of captivity severity, did not predict current PTSD, higher appraisal of suffering in captivity did. These findings are in line with other studies that found subjective exposure to be more strongly implicated in posttraumatic symptoms than objective exposure.³⁸ Unfortunately, it is very difficult, if not impossible, to know how much the assessments reflected personal differences in tolerance of suffering and how much they reflected actual differences in captivity conditions.

The contribution of PTSD in 1991 to PTSD 12 years later highlights the long-lasting nature of PTSD. The finding is consistent with Gold et al.'s³⁹ finding that PTSD among World War II and Korean conflict POWs contributed to the prediction of PTSD 20 years later, as well as to findings among other traumatized populations.

The study suffers from 2 main limitations: a nearly 30% attrition rate and the use of self-report measures. Both of these limitations are unavoidable in a study of this sort. The attrition rate is actually not at all high considering the 12-year gap between assessments. Appraisal of captivity severity could not be assessed by any methods but self-report measures. Moreover, objective information about conditions in war captivity is obviously difficult, if not impossible, to obtain.

In addition, we cannot know whether and how the postwar environment affected the findings. The second assessment was made only shortly after the peak of the second intifada, in which frequent and deadly suicide attacks were the order of the day. However, the striking resilience found in both study groups suggests that the psychological impact of the violence was more moderate than might have been expected.

The study makes an important contribution to our knowledge of the consequences of war captivity and has practical implications for our treatment of released POWs. It shows high levels of resilience, along with serious emotional impairment in almost one fifth of the former POWs. It shows that former POWs are more likely than non-POW combat soldiers to suffer from reactiva-

tion or delayed-onset PTSD as they age. Finally, it shows that breakdown in captivity and assessment of captivity severity contributed to PTSD both 18 and 30 years after release. In practical terms, the findings mean not only that it is important to follow up and offer treatment to former POWs, but also that special attention should be paid to those who lost emotional control in captivity and to those who felt that the conditions of their captivity were severe.

Disclosure of off-label usage: The authors have determined that, to the best of their knowledge, no investigational information about pharmaceutical agents that is outside US Food and Drug Administration-approved labeling has been presented in this article.

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