

# Posttraumatic Stress Disorder Following Political Imprisonment: The Role of Mental Defeat, Alienation, and Perceived Permanent Change

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An interview study of 81 former political prisoners investigated whether posttraumatic stress disorder (PTSD) is related to the way individuals process the prison experience. In contrast to participants without PTSD, those with chronic or remitted PTSD were more likely to perceive mental defeat and an overall feeling of alienation from other people. Chronic PTSD was also related to perceived negative and permanent change in their personalities or life aspirations. The groups did not differ in their attempts to gain control during imprisonment. Evidence for a relationship between political commitment and PTSD was mixed. The results suggest that mental defeat, alienation, and permanent change are related to PTSD after interpersonal trauma and may need to be addressed in treatment.

Posttraumatic stress disorder (PTSD) is a common psychological consequence of traumatic events that involve threat to life or physical integrity (American Psychiatric Association, 1994). Particularly high PTSD rates have been observed after traumatic events that were intentionally inflicted by other people such as physical and sexual assault or torture (Norris, 1992; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). The present study investigates cognitive factors that may be predictive of PTSD following political imprisonment involving torture. Several studies have established that PTSD and other psychological problems are common reactions to political persecution and torture (e.g., Basoglu, 1992; Somnier & Genevke, 1986; Turner & Gorst-Unworth, 1993), but little is known about why some people develop PTSD and others do not.

## Predictors of PTSD After Interpersonal Violence

Previous theoretical and empirical work on assault and torture suggests that the way people process and interpret the trauma and its consequences may be important in the development or maintenance of PTSD (e.g., Ehlers & Clark, in press; Foa & Riggs, 1993; Janoff-Bulman, 1992; Lebowitz & Roth, 1994; McCann &

Pearlman, 1990; Resick & Schnicke, 1993). Five cognitive concepts that are of particular interest for PTSD in political prisoners are described in the following paragraphs.

## *Mental Defeat*

Ehlers, Clark, et al. (1998) proposed that one important dimension of trauma that is intentionally inflicted by other people is the perceived threat to one's psychological integrity, that is, the threat to the perception of oneself as an autonomous human being. Mental defeat during sexual or physical assault predicted chronic PTSD (Dunmore, Clark, & Ehlers, 1997, 1999a, 1999b) and was related to poor response to exposure treatment (Ehlers, Clark, et al., 1998). Mental defeat is defined as the perceived loss of all autonomy, a state of giving up in one's own mind all efforts to retain one's identity as a human being with a will of one's own. People who experience mental defeat differ in how they describe this experience. Common examples include the feeling that one is not a human being any longer (e.g., "I am an object," "I was destroyed as a human being"), not having a will of one's own any longer (e.g., "He could tell me to jump off a building and I'd jump off a building"), not caring about oneself any longer (e.g., "I don't really care whether I die or not"), or having a complete breakdown of all inner resistance to the perpetrator (e.g., "I was like a ball that they played with. I let everything happen to me from outside").

Mental defeat seems to be a relevant concept in the study of political prisoners because one of the goals of torture is to break the will of the tortured person (Duncan, 1996). It is important to note that mental defeat is not identical with actions of defeat. For example, many prisoners in the present study conceded defeat and signed false confessions, but this was rarely experienced as mental defeat. It was usually described as a decision that was made with the intention to bring the interrogations to an end. Similarly, some prisoners asked their torturers to kill them, went on hunger strike,

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or tried to commit suicide as an act of resistance rather than mental defeat.

Mental defeat is related to, but not identical with, the concept of perceived uncontrollability, which is thought to be of crucial importance in the etiology of PTSD (Basoglu & Mineka, 1992; Foa, Zinbarg, & Rothbaum, 1992). Tortured people may feel completely out of control and hopeless (e.g., "There is nothing I can do; he is going to kill me") but may still retain the sense that they have a will of their own and that their value system is unaffected by the perpetrator; they may even get some satisfaction from facing death with an unbroken spirit (i.e., uncontrollability, but no mental defeat). On the other hand, although mental defeat is often accompanied by a feeling of complete hopelessness, some people state that they could have done something to influence the situation but that they broke down and ceased to care what happened to them (i.e., some controllability, with mental defeat). Similarly, there is a relationship of mental defeat with humiliation in that mental defeat can occur in moments when a person feels completely humiliated. However, many people are able to retain their sense of being human beings (with their own intention and goals) when being humiliated. The writer Anne Michaels captured this in her novel *Fugitive Pieces* when she wrote, "We look for the spirit precisely in the place of greatest degradation" (Michaels, 1998, p. 167) and "If the Nazis required that humiliation precede extermination, then they admitted exactly what they worked so hard to avoid admitting: the humanity of the victim. To humiliate is to accept that your victim feels and thinks, and that he not only feels pain but knows that he's being degraded" (p. 166). It is only when people resign to the humiliation and give up in their own mind all efforts to retain their identity as human beings with a will of their own that they experience mental defeat.

### *Control Strategies*

Interview studies have shown that torture and assault survivors differed widely in the extent to which they tried to gain some control in the traumatic situation (e.g., Burgess & Holstrom, 1976). Basoglu and Mineka (1992) gave some impressive examples of torture victims who tried to achieve some degree of control, even at the expense of further punishment. Planning in one's mind or engaging in attempts to exert control may protect the tortured person from the full impact of the uncontrollable torture situation. Basoglu and Mineka (1992) proposed that the common denominator of different forms of torture is to induce loss of control in the victims, while at the same time maximizing unpredictability. They pointed out that the effects of uncontrollable and unpredictable stress in animals resemble the symptoms of PTSD, that is, high levels of conditioned fear accompanied by general anhedonia.

In line with the protective role of attempts to exert control over the traumatic situation, Ehlers, Clark, et al. (1998) observed that women who engaged in mental planning during rape—defined as thoughts or planning in one's mind of how to minimize physical or psychological harm, make the experience more tolerable, or influence the response of the assailant (e.g., "I think that if I bite him, he will release his grip," "I did not look at him so that I would not recognize him and he would not have to kill me")—showed better outcome with exposure treatment than women who did not show any mental planning or who reported mental defeat.

In the first study on mental defeat, Ehlers, Clark, et al. (1998) assessed mental defeat on a continuum with mental planning. A few of the cases suggested, however, that mental defeat was related to poor treatment outcome regardless of how much mental planning the women had shown for other times during the rape. For this reason, and because mental defeat is not identical with perceived uncontrollability, mental planning and mental defeat were analyzed separately in subsequent studies. Dunmore et al. (1997) found that both mental defeat and mental planning distinguished between assault victims with chronic PTSD and those who had recovered from PTSD. In a prospective study, however, mental defeat but not mental planning predicted PTSD at 6 and 9 months after the assault (Dunmore et al., 1999b).

### *Alienation and Permanent Change*

A further important aspect of interpersonal violence that may be predictive of PTSD may lie in its negative effects on victims' interpersonal relationships. Saporta and van der Kolk (1992) reviewed clinical descriptions and evidence that trauma disrupts attachment. There is accumulating evidence that perceived negative responses from other people in the immediate aftermath of the trauma are related to chronic PTSD after assault (Davis, Brickman, & Baker, 1991; Dunmore et al., 1997, 1999a, 1999b; Ulman, 1996). Ehlers, Clark, et al. (1998) found that an overall feeling of alienation resulting from negative experiences with other people after rape, or a perceived inability to relate to other people, was related to poor response to exposure treatment.

Besides alienation from other people, alienation from oneself and one's life goals may play a role in chronic PTSD. Some trauma victims report that the trauma caused a permanent change for the worse in their personality or destroyed their former lives completely. Such perceived permanent change predicted chronic PTSD in assault victims (Dunmore et al., 1997, 1999a, 1999b) and was related to poor outcome in exposure treatment of rape victims (Ehlers, Clark, et al., 1998).

### *Political Commitment*

Basoglu and colleagues have suggested that political commitment may be an important protective factor in torture (Basoglu et al., 1994, 1996, 1997). They found a relatively low prevalence of PTSD among tortured political activists (18%; Basoglu et al., 1994). This compares with a prevalence of 39% in a probably comparable sample of tortured nonpolitical prisoners (Paker, Paker, & Yüksel, 1992). A subsequent direct comparison of tortured political activists with tortured nonactivists confirmed that the former group showed lower levels of psychopathology, even though they were more severely tortured (Basoglu et al., 1997). Basoglu et al. (1996) presented data suggesting that the protective effects of political commitment may be mediated by lack of beliefs concerning a "benevolent state." Immunization by mastery of previous adverse experiences with the authorities and psychological preparedness for torture may also play a role (Basoglu & Mineka, 1992; Basoglu et al., 1997).

### *Political Imprisonment in East Germany*

Between 1949 and 1989, approximately 200,000 people were imprisoned for political reasons in East Germany during the so-

cialist regime of the "German Democratic Republic." They suffered various forms of physical and psychological maltreatment during imprisonment (Bauer, Priebe, Häring, & Adamczak, 1993; Maercker & Schützwohl, 1996, 1997), including beatings, life threats, being confined in darkness, or witnessing torture of others. Many of these former prisoners still suffer chronic psychological problems. Maercker and Schützwohl (1996, 1997) found that 30% of 146 former political prisoners suffered from PTSD in the mid-1990s. The lifetime prevalence was 60%.

Former East German political prisoners included many people who did not directly oppose the political system. Reasons for imprisonment included being overheard when making critical remarks about the regime or not reporting others to the authorities. Other prisoners had shown more direct opposition, for example, by conscientious objection to military service, application for an exit visa, escape attempts, participation in the peace movement, or participation in demonstrations against the Berlin Wall.

### Aims of the Present Study

On the basis of previous studies of assault and torture victims, we hypothesized that chronic PTSD in former East German political prisoners would be related to the experience of mental defeat during imprisonment, few attempts to exert control, an overall feeling of alienation from other people during imprisonment and immediately afterward, the perception of permanent change in one's personality or life aspirations, and low political commitment before imprisonment. In a pilot study, we developed a rating manual for these concepts. In the main study, raters who were not aware of the participants' PTSD status used the manual to rate transcripts of interviews with three groups of former East German political prisoners: those who suffered from chronic PTSD at the time of the assessment (chronic PTSD group), those who had initially had PTSD after release from prison but had recovered (remitted group), and those who had never met diagnostic criteria for PTSD (no-PTSD group).

## Method

### Participants

The present sample was randomly drawn from 146 participants in an interview study investigating the long-term psychological effects of political imprisonment (Maercker & Schützwohl, 1997). These participants had responded to articles in newspapers or newsletters from former political prisoners or from human rights organizations. All participants had been rehabilitated by the German courts after the political changes of 1989. The sample was representative of the East German population in terms of education (Statistisches Amt der DDR, 1989) and equivalent to the political prisoners of 1960 in terms of professional status (Fricke, 1979). As could be expected, these political prisoners were more likely to be divorced (24% vs. 8%) and unemployed (22% vs. 14%) at the time of the study than the East German population in general (Statistisches Amt der DDR, 1989; Statistisches Bundesamt, 1996). A comparison with 21 former political prisoners, who had initially been interested in participating in the study but did not attend the interview, indicated that participants had somewhat less severe reexperiencing and hyperarousal symptoms than dropouts ( $p < .05$  on the Impact of Event Scale—Revised [IES-R]; Weiss & Marmar, 1996).

The pilot study comprised 14 participants. Six participants met DSM-III-R criteria for chronic PTSD. Eight participants had never had PTSD. The groups were comparable with respect to age at imprisonment,

$t(5,25) = .71, p > .50$ ; duration of imprisonment,  $t(12) = .48, p > .64$ ; and gender,  $\chi^2(1, 14) = 3.11, p > .07$ , but for the chronic PTSD group less time had passed since release from prison (19 vs. 30 years),  $t(12) = 2.56, p = .025$ .

The main study comprised 81 participants. Of these, 32 had chronic PTSD, 20 had experienced PTSD after release from prison but had recovered, and 29 had never had PTSD. Table 1 shows demographic characteristics for this sample. The groups were comparable in gender ratio, age at imprisonment, duration of imprisonment, and time since release from prison.

### Symptom Measures

**PTSD diagnosis.** DSM-III-R criteria for PTSD were assessed with the German version of the Anxiety Disorders Interview Schedule (ADIS-R; DiNardo & Barlow, 1988), the Diagnostisches Interview bei psychischen Störungen (DIPS; Margraf, Schneider, Ehlers, DiNardo, & Barlow, 1991). Participants reported their symptoms for two time points, after release from prison and currently. The German version of the ADIS-R shows good interrater reliabilities (Yule  $Y = .77$ ; Margraf et al., 1991). Interviewers were clinical psychologists who had received extensive training in conducting the DIPS.

**PTSD severity.** The revised Impact of Event Scale (IES-R; Weiss & Marmar, 1996) assessed current severity of PTSD symptoms. It includes a hyperarousal scale in addition to the intrusion and avoidance subscales of the original scale. The German translation of the IES-R was validated by Maercker and Schützwohl (1998).

**Depression.** Depressive symptoms at the time of the interview were assessed with the Beck Depression Inventory (BDI; Beck & Steer, 1987; German translation: Hautzinger et al., 1992).

Table 1 shows that the chronic PTSD group had significantly higher scores on the IES-R and the BDI than the no-PTSD and remitted groups, who did not differ from each other on these scales.

### Severity of Maltreatment Questionnaire

To obtain an assessment of the objective and subjective severity of the traumatic stressors encountered during imprisonment, participants of the main study answered a questionnaire about the arrest and imprisonment. The questionnaire included a checklist of 10 forms of maltreatment and torture (e.g., dark or isolation confinement, physical maltreatment) that participants may have experienced during imprisonment. The severity of maltreatment was operationalized as the total number of maltreatments experienced. This was done separately for detention while awaiting trial and for punitive prison after sentence. There were no group differences on these measures. To rule out the possibility that the total score may have obscured differences on the individual maltreatment variables, additional group comparisons were performed for each of the different forms of maltreatment (for detention and punitive prison combined). Only one nonsignificant trend emerged (see Table 1) in that participants in the chronic PTSD group tended to endorse psychological maltreatment (threats against self or family, verbal abuse) more frequently. In addition, two aspects of subjective trauma severity were assessed: unpredictability (Basoglu & Mineka, 1992) and perceived threat to life in detention and in punitive prison (March, 1993). For the remitted group the arrest had been more unexpected than for the no-PTSD group. In addition, there was a nonsignificant trend for the chronic PTSD group to rate more persistent perceived threat to their lives while in punitive prison than participants in the other groups.

### Semistructured Interview and Rating Manual

The semistructured interview lasted approximately 2 hr (range = 45 min to 4 hr). It was divided into six parts. First, participants were asked to

Table 1  
*Sample and Imprisonment Characteristics*

| Measure  | Chronic<br>PTSD<br><i>n</i> = 32 | Remitted<br>PTSD<br><i>n</i> = 20 | No<br>PTSD<br><i>n</i> = 29 | $\chi^2$ or <i>F</i> | <i>dfs</i> and/or <i>n</i> | <i>p</i> |
|--|----------------------------------|-----------------------------------|-----------------------------|----------------------|----------------------------|----------|
| % men  | 75                               | 85                                | 86                          | 1.48                 | 2, <i>n</i> = 81           | >.47     |
| Severity of PTSD symptoms (IES-R)                      |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 73.0 <sub>a</sub>                | 45.6 <sub>b</sub>                 | 34.5 <sub>b</sub>           | 24.87                | 2, 74                      | <.001    |
| <i>SD</i>  | 19.2                             | 23.4                              | 22.0                        |                      |                            |          |
| Depression (BDI)                                       |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 21.5 <sub>a</sub>                | 13.2 <sub>b</sub>                 | 9.4 <sub>b</sub>            | 10.36                | 2, 72                      | <.001    |
| <i>SD</i>  | 13.5                             | 7.1                               | 6.4                         |                      |                            |          |
| Age at arrest  |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 25.8                             | 22.1                              | 26.6                        | 1.67                 | 2, 75                      | >.19     |
| <i>SD</i>  | 9.2                              | 5.7                               | 9.6                         |                      |                            |          |
| Duration of imprisonment (months)                      |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 33.4                             | 33.4                              | 33.6                        | 0.00                 | 2, 75                      | >.99     |
| <i>SD</i>  | 42.3                             | 33.6                              | 31.8                        |                      |                            |          |
| Time since release (years)                             |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 21.3                             | 28.7                              | 22.3                        | 2.57                 | 2, 75                      | .08      |
| <i>SD</i>  | 12.1                             | 11.2                              | 11.8                        |                      |                            |          |
| Severity of maltreatment detention                     |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 3.9                              | 2.8                               | 3.4                         | 1.14                 | 2, 73                      | >.32     |
| <i>SD</i>  | 2.6                              | 2.4                               | 2.1                         |                      |                            |          |
| Severity of maltreatment punitive prison               |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 4.1                              | 3.3                               | 3.2                         | 0.82                 | 2, 73                      | >.44     |
| <i>SD</i>  | 2.8                              | 2.9                               | 2.7                         |                      |                            |          |
| % isolation confinement                                | 90                               | 72                                | 82                          | 2.69                 | 2, <i>n</i> = 76           | >.26     |
| % dark confinement                                     | 32                               | 18                                | 28                          | 1.19                 | 2, <i>n</i> = 73           | >.55     |
| % detention  | 53                               | 39                                | 31                          | 3.00                 | 2, <i>n</i> = 74           | >.22     |
| % physical maltreatment                                | 84                               | 74                                | 77                          | 0.83                 | 2, <i>n</i> = 76           | >.65     |
| % psychological maltreatment                           | 94                               | 74                                | 70                          | 5.69                 | 2, <i>n</i> = 77           | .06      |
| % witness of physical maltreatment                     | 60                               | 63                                | 65                          | 0.18                 | 2, <i>n</i> = 75           | >.91     |
| % witness of psychological maltreatment                | 55                               | 44                                | 39                          | 1.58                 | 2, <i>n</i> = 73           | >.45     |
| % threatened with death penalty                        | 13                               | 6                                 | 8                           | 0.78                 | 2, <i>n</i> = 74           | >.67     |
| % witness of unnatural death                           | 20                               | 17                                | 12                          | 0.74                 | 2, <i>n</i> = 74           | >.69     |
| % threatened by other prisoners                        | 61                               | 39                                | 62                          | 2.81                 | 2, <i>n</i> = 75           | >.24     |
| Arrest unexpected <sup>a</sup>                         |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 2.7 <sub>a,b</sub>               | 1.7 <sub>a</sub>                  | 3.2 <sub>b</sub>            | 3.31                 | 2, 75                      | .04      |
| <i>SD</i>  | 2.2                              | 0.8                               | 2.2                         |                      |                            |          |
| Perceived threat to life, detention <sup>b</sup>       |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 3.5                              | 2.7                               | 2.5                         | 1.54                 | 2, 73                      | >.22     |
| <i>SD</i>  | 2.3                              | 2.1                               | 2.1                         |                      |                            |          |
| Perceived threat to life, punitive prison <sup>b</sup> |                                  |                                   |                             |                      |                            |          |
| <i>M</i>   | 3.5                              | 2.3                               | 2.2                         | 2.91                 | 2, 72                      | .06      |
| <i>SD</i>  | 2.4                              | 1.9                               | 2.0                         |                      |                            |          |

Note. Means with different subscripts are significantly different, Tukey test. PTSD = posttraumatic stress disorder.

<sup>a</sup> Scale from 1 (*totally unexpected*) to 7 (*knew that would be arrested*). <sup>b</sup> Scale from 1 (*never*) to 7 (*always*).

describe their situation before their arrest and the circumstances that had led to the arrest. Second, they described the conditions of detention and how they had coped with them. Third, they described the conditions of punitive prison and how they had coped with them. Fourth, they described their experiences after discharge from prison. Fifth, they commented on the meaning the imprisonment had for them now. Sixth, they described their thoughts and feelings during the worst moment during imprisonment. Interviewers were instructed to demonstrate nonverbally that they were listening attentively (e.g., nodding, "hmm") but to refrain from influencing the answers to the interview questions by direct questions or strong nonverbal reactions (such as expressions of horror or surprise). Participants could take as long as they wanted to answer the questions. Interviewers received training in conducting the interviews.

On the basis of interviews from the pilot study, the rating manual developed by Ehlers, Clark, et al. (1998) was adapted for rating the

cognitive concepts from the interview transcripts (Ehlers & Boos, 1996). A new rating of political commitment before arrest was added. Another important addition was that an *autonomous frame of mind* was defined as the opposite pole of mental defeat. The rating manual defines each of the concepts and gives a list of criteria. Each criterion is illustrated with examples of verbatim statements. Raters are instructed to read the transcripts once to familiarize themselves with the conditions of imprisonment and the participants' personal styles of speech. They then carefully analyze the text for evidence for and against the different concepts and write down the relevant statements. Finally, they review the evidence for and against each of the concepts and give an overall rating on the scales, described next.

*Mental defeat versus autonomous frame of mind.* Mental defeat is defined as the perceived loss of all psychological autonomy. Indicators of mental defeat included statements by participants stating that:

1. They felt that they were destroyed as human beings or felt so degraded that they ceased to be human beings (e.g., "From a psychological point of view, I was destroyed as a human being." "They took away my human dignity and I was suddenly nothing," "One is really a nothing at this moment, a nothing").

2. They felt totally at the will of the perpetrators so that they did not have a will of their own any longer (e.g., "These intelligent people crawl into your mind so that you have the impression you are completely empty inside, and they make you the complete opposite of what you were before").

3. They gave up in their own minds and experienced a breakdown of all psychological resistance (e.g., "Like a living coffin, I had finished my life," "I broke down like a pitiful picture of misery, phlegmatic, not caring about anything").

4. They gave up caring about themselves and wished to die (in their own minds, not statements or actions intended to resist or influence the perpetrators, e.g., saying "kill me," or going on a hunger strike).

5. They accepted the accusations of being a criminal (e.g., "I started to believe that I had done something terrible").

Mental defeat is rated conservatively and rated only if participants give up, in their own mind, their identity as a person (with their own intentions and goals) and experience this as a mental death or defeat.

Autonomous frame of mind is the opposite pole of mental defeat. People with an autonomous frame of mind reported that throughout imprisonment they retained a sense of freedom of mind and that their will, convictions, or character were unshakable ("They did not succeed in converting me to socialism," "I knew I would make it through this experience"). These people often felt superior to the prison guards on a moral level (e.g., "You should be ashamed of yourself"). Other indicators are that they remained convinced that the political system would change (e.g., "One day you will be held responsible for this") and that they would be rehabilitated, or that they regarded the prison situation with some humor.

Evidence for mental defeat versus an autonomous frame of mind is rated on a 5-point rating scale from +2 (*mental defeat at some stage during imprisonment*) to -2 (*clear evidence for autonomous frame of mind throughout imprisonment*). Interrater reliability was good ( $r = .79$ ,  $\kappa = .87$ ;  $N = 30$  interviews, two raters blind to PTSD status). The results of the pilot study indicated that participants with chronic PTSD were more likely to have experienced mental defeat than those without PTSD,  $t(12) = 5.60$ ,  $p < .001$ .

*Control strategies.* This rating was similar to the concept of mental planning in the Ehlers, Clark, et al. (1998) study. Because the political prisoners described many actions, we renamed the concept to reflect both mental and behavioral control efforts. Control strategies are defined as planned actions or planned mental activities that have the goal of improving the situation or making it more tolerable, or of providing satisfaction. Examples of planned actions include attempts to escape, organizing appeals, smuggling, bribing prison guards, communicating with other prisoners by a knocking code, hunger strike, disobedience, resistance during interrogations, or inventive activities such as carving chess figures from one's bread to play with during isolation confinement. Examples of planned mental activities include elaborate fantasies that make the situation more tolerable (e.g., a sportsman fantasized about participating in the Olympic Games), intellectual challenges (e.g., memorizing a dictionary), and analyzing the interrogation strategies for the purpose of thwarting them. Evidence for control strategies is rated on a 5-point scale from 0 (*no evidence for planned actions or planned mental activities*) to 4 (*many clear examples for planned actions or planned mental activities throughout imprisonment*). Interrater reliability was satisfactory ( $r = .83$ ,  $\kappa = .74$ ). The pilot study did not show significant differences on control strategies between participants with and without PTSD,  $t(12) = 1.34$ ,  $p = .20$ .

*Overall feeling of alienation.* This rating assesses the extent to which participants experienced an overall feeling of alienation during imprisonment and in the weeks and months immediately afterward. This can be the

result of perceived negative experiences with other people (e.g., other prisoners or family, e.g., "My own father despised me") or of a perceived inability to establish satisfactory contact with other people (e.g., "I tried to have minimal contact with others"). Individuals with an overall feeling of alienation feel that their contact with others is disturbed or they feel unable to relate to them. Descriptions of positive contact with other people is taken as evidence against alienation. Evidence for and against an overall feeling of alienation is rated on a 5-point rating scale from +2 (*strong evidence for an overall feeling of alienation*) to -2 (*no evidence for an overall feeling of alienation and strong evidence against alienation*). When reviewing the evidence for the global rating, raters are instructed to take its importance for the person (e.g., importance of the relationship before the trauma) into account. Interrater reliability was satisfactory ( $r = .78$ ,  $\kappa = .67$ ). The results of the pilot study indicated that participants with chronic PTSD were more likely to have experienced an overall feeling of alienation than those without PTSD,  $t(5.79) = 3.62$ ,  $p = .012$ .

In the main study, the ratings of overall feeling of alienation showed a small biserial correlation with the *DSM-III-R* symptom of estrangement from others (as assessed with the DIPS) for the time after release from prison ( $r = .22$ ,  $p = .049$ ) and a trend for a correlation with present estrangement ( $r = .20$ ,  $p = .078$ ).

*Permanent change.* This rating assesses the extent to which participants perceived that the imprisonment led to a negative and permanent change in their personality or permanently disrupted their life goals. Participants scoring high on permanent change reported that their personality or their life was irreversibly damaged by the imprisonment (e.g., "This is not repairable; this goes too deep"). They could not relate to the life they led and the person they were before imprisonment (e.g., "I will never live like I lived before . . . I will never be the person I was"). Their lives seem failed or spoiled (e.g., "I have lived my life in vain. It would have been better if they had killed me in prison"). Symptom descriptions (e.g., sleep problems, anxiety) do not count as evidence for permanent change. Descriptions that the participant could continue their old lives after release from prison or that they regarded the imprisonment as an experience from the past are taken as evidence against permanent change. Evidence for permanent change is rated on a 5-point scale ranging from 0 (*no negative changes in personality or life goals; experience from the past*) to 4 (*serious damage to personality or life goals*). Interrater reliability was lower than desirable ( $r = .67$ ,  $\kappa = .64$ ). Discrepancies between the raters arose primarily from differences in evaluating long-term physical consequences of the imprisonment. The manual states that these should only be rated as evidence for permanent change if they are experienced as severely disabling and if they are undoubtedly a consequence of the imprisonment. One of the raters was too liberal in evaluating these physical consequences. Anke Ehlers checked the ratings (with condition masked) against the rating manual and decided that the results of the more conservative rater who followed the manual more closely were used for the analysis. The results of the pilot study indicated that participants with chronic PTSD were more likely to report perceived permanent change than those without PTSD,  $t(5.43) = 3.33$ ,  $p = .018$ .

*Political commitment.* This rating assesses the degree to which participants opposed the East German political system (German Democratic Republic). Evidence was taken from the political attitudes and activities that participants described for the time before their arrest. Activities that directly led to the arrest were given particular emphasis. Participants who were clearly opposed to the political system and were imprisoned because they actively participated in an oppositional group or because they were conscientious objectors to military service received the highest ratings. Participants who opposed the political system but did not engage in any activities to change the system (e.g., participants who were imprisoned because they wanted to leave the country for personal reasons) received intermediate scores. Participants who did not oppose the political system were classified as nonpolitical. A common reason for arrest in this group was that they had been overheard in expressing dissatisfaction with or

Table 2  
Group Differences in the Cognitive Variables

| Variable             | Chronic PTSD<br>( <i>n</i> = 32) |           | Remitted PTSD<br>( <i>n</i> = 20) |           | No PTSD<br>( <i>n</i> = 29) |           | <i>F</i> | <i>df</i> | <i>p</i> |
|----------------------|----------------------------------|-----------|-----------------------------------|-----------|-----------------------------|-----------|----------|-----------|----------|
|                      | <i>M</i>                         | <i>SD</i> | <i>M</i>                          | <i>SD</i> | <i>M</i>                    | <i>SD</i> |          |           |          |
| Mental defeat        | 0.91 <sub>a</sub>                | 1.22      | 0.20 <sub>a</sub>                 | 0.95      | -0.79 <sub>b</sub>          | 0.94      | 19.39    | 2,78      | <.0001   |
| Control strategies   | 2.38                             | 1.29      | 1.80                              | 1.51      | 2.66                        | 1.23      | 2.49     | 2,78      | >.08     |
| Alienation           | 0.28 <sub>a</sub>                | 1.22      | -0.10 <sub>a</sub>                | 1.71      | -1.24 <sub>b</sub>          | 0.91      | 11.50    | 2,78      | <.0001   |
| Permanent change     | 2.66 <sub>a</sub>                | 1.23      | 1.95 <sub>a,b</sub>               | 1.39      | 1.48 <sub>b</sub>           | 1.40      | 4.96     | 2,66      | <.01     |
| Political commitment | 1.10                             | 1.16      | 1.55                              | 1.32      | 1.76                        | 1.15      | 2.31     | 2,76      | >.10     |

Note. Means with different subscripts are significantly different, Tukey test. PTSD = posttraumatic stress disorder.

making critical remarks about some of the life circumstances in East Germany. Political commitment was rated on a 4-point scale from 0 (*unpolitical*) to 3 (*political activist*). Interrater reliability was good ( $r = .87$ ,  $\kappa = .79$ ). The pilot study did not show significant group differences in political commitment,  $t(11) = 1.44$ ,  $p = .18$ .

### Procedure

Interviews conducted as part of Maercker and Schützwohl's (1997) study were chosen randomly for the present study and were transcribed verbatim. The rating manual was written in German, and the raters were native German speakers. For the main study and for the assessment of interrater reliability, transcripts were analyzed without knowledge of PTSD status.

## Results

### Group Comparisons

Table 2 shows the group comparisons for the main study on the five cognitive scales. ANOVAs showed that, as in the pilot study, the groups differed significantly on mental defeat, overall feeling of alienation, and permanent change but not on control strategies and political commitment. Tukey tests showed that the PTSD groups (chronic PTSD and remitted PTSD) were more likely to have experienced mental defeat and an overall feeling of alienation than those without PTSD. Participants with chronic PTSD also scored higher on permanent change than participants without PTSD.

### Correlations

Table 3 shows the correlations between the cognitive scales and the number of PTSD symptoms (DIPS) at present and after release from prison, current PTSD symptom severity as measured by the IES-R, and current depression as measured by the BDI. Mental defeat, an overall feeling of alienation, and permanent change correlated with all PTSD measures. Alienation and permanent change also correlated with depression. For political commitment, there were trends for correlations with the IES-R and BDI. Control strategies were unrelated to the symptom measures.

For comparison, Table 3 also shows the correlations between measures of objective and subjective trauma severity and the PTSD severity measures and BDI. The global severity of maltreatment measures tended to correlate with the symptom measures,

and psychological maltreatment correlated with all current symptom measures. Perceived threat to life in punitive prison correlated with all symptom measures, and perceived threat to life in detention tended to correlate with PTSD symptom severity. Unpredictability of the arrest did not correlate with symptom measures.

Table 4 shows the intercorrelations of the cognitive scales. An overall feeling of alienation correlated moderately with mental defeat and permanent change. Political commitment showed small negative correlations with mental defeat, alienation, and permanent change. Control strategies were not related to any other variable.

To rule out the hypothesis that individual differences in the cognitive scales reflect differences in objective or subjective

Table 3  
Correlations Between the Cognitive Scales, PTSD, and Depression

| Measure                                   | No. of PTSD symptoms after release (DIPS) | No. of PTSD symptoms at present (DIPS) | IES-R at present | BDI at present |
|---|---|--|------------------|----------------|
| Mental defeat                             | .47***                                    | .43***                                 | .42***           | .18            |
| Control strategies                        | -.13                                      | .06                                    | -.17             | .03            |
| Alienation                                | .43***                                    | .45***                                 | .34**            | .31**          |
| Permanent change                          | .33***                                    | .40**                                  | .42***           | .55***         |
| Political commitment                      | -.17                                      | -.08                                   | -.22†            | -.20†          |
| Severity maltreatment, detention          | .28*                                      | .25*                                   | .32**            | .14            |
| Severity maltreatment, punitive prison    | .22†                                      | .23†                                   | .18              | .40***         |
| Psychological maltreatment                | .38***                                    | .17                                    | .43***           | .25*           |
| Unexpectedness of arrest                  | .17                                       | .06                                    | -.02             | .09            |
| Perceived threat to life, detention       | .15                                       | .24**                                  | .31*             | .09            |
| Perceived threat to life, punitive prison | .27*                                      | .33**                                  | .33**            | .42***         |

Note: PTSD = posttraumatic stress disorder; DIPS = German version of the Anxiety Disorders Interview Schedule—Revised; IES-R = Impact of Event Scale—Revised; BDI = Beck Depression Inventory.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 4  
Intercorrelations Between the Cognitive Scales

| Scale                   | 1 | 2    | 3      | 4      | 5       |
|-------------------------|---|------|--------|--------|---------|
| 1. Mental defeat        | — | -.05 | .41*** | .16    | -.24*   |
| 2. Control strategies   |   | —    | -.14   | -.02   | .06     |
| 3. Alienation           |   |      | —      | .38*** | -.30*** |
| 4. Permanent change     |   |      |        | —      | -.21†   |
| 5. Political commitment |   |      |        |        | —       |

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

trauma severity, we performed further correlation analyses to explore whether the cognitive scales were related to any of the variables listed in Table 1. Mental defeat and an overall feeling of alienation were unrelated to all of these conditions. Control strategies were related to isolation confinement ( $r = .23, p = .046$ ) and witnessing unnatural death ( $r = .24, p = .040$ ). Permanent change correlated with severity of maltreatment during detention ( $r = .25, p = .050$ ) and in punitive prison ( $r = .28, p = .029$ ) and with physical maltreatment ( $r = .26, p = .033$ ), psychological maltreatment ( $r = .37, p = .002$ ), witnessing psychological maltreatment ( $r = .25, p = .050$ ), and perceived life threat in punitive prison ( $r = .25, p = .039$ ). Political commitment correlated with severity of maltreatment during detention ( $r = .34, p = .004$ ), duration of imprisonment ( $r = .33, p = .004$ ), and witnessing physical maltreatment ( $r = .24, p = .043$ ).

#### Multiple Regression Analyses

Multiple regression analyses tested the following questions: How much variance of chronic PTSD severity does the combination of the five cognitive variables explain, and do these variables explain variance over and above measures of objective and subjective stressor severity? As a combined measure of PTSD severity at the time of the study, the number of *DSM-III-R* PTSD symptoms patients had at the time of the study (DIPS) and IES-R scores were z-transformed and averaged. In the first multiple regression analysis, the five cognitive variables were entered simultaneously. They explained 45.2% ( $R^2$ ) of the variance of PTSD severity (multiple  $R = .67$ , adjusted  $R^2 = .41$ ,  $F[5, 61] = 10.07, p < .001$ ). Mental defeat ( $B = .27, \beta = .38, T = 3.67, p < .001$ ), alienation ( $B = .16, \beta = .25, T = 2.29, p = .025$ ), and perceived permanent change ( $B = .20, \beta = .31, T = 3.04, p = .003$ ) explained unique variance. In the second multiple regression analysis, the measures of objective and subjective severity were forced into the equation in the first step (severity of maltreatment during detention and in punitive prison, psychological maltreatment, unexpectedness of imprisonment, and perceived threat to life during detention and in punitive prison). These variables explained 27.6% ( $R^2$ ) of the variance of PTSD severity (multiple  $R = .52$ , adjusted  $R^2 = .19$ ,  $F[6, 48] = 3.05, p = .013$ ). In the second step, the five cognitive variables were entered simultaneously. This led to a significant increase in the variance explained ( $R^2$  change = .31,  $F[5, 43] = 6.61, p < .001$ ). On the basis of the six trauma severity and five cognitive variables, 59.1% of the variance of PTSD severity could be explained (multiple  $R = .77$ , adjusted  $R^2 = .49$ ,  $F[11, 43] = 5.64, p < .001$ ). Mental defeat ( $B = .27, \beta = .39, T = 3.47, p = .001$ ), perceived permanent change ( $B = .18, \beta = .28, T = 2.25,$

$p = .030$ ), and perceived threat to life in punitive prison ( $B = .14, \beta = .36, T = 2.54, p = .015$ ) explained unique variance.

## Discussion

### Mental Defeat

Consistent with previous data on sexual and physical assault (Dunmore et al., 1999a, 1999b; Ehlers, Clark, et al., 1998), the present study showed that the experience of mental defeat during political imprisonment clearly distinguished between survivors with and without PTSD and correlated with PTSD severity. Mental defeat was unrelated to all aspects of severity of maltreatment assessed. Therefore, the group differences in mental defeat are not due to differences in stressor severity. In the regression analyses, mental defeat emerged as a unique predictor of PTSD symptom severity. It is important to note that it predicted PTSD symptom severity over and above perceived threat to life. These results are in line with our hypothesis that perceived threat to one's psychological autonomy is an important aspect of the psychological severity of trauma that is intentionally inflicted by other people. This aspect of interpersonal trauma is not acknowledged in *DSM-IV* (American Psychiatric Association, 1994), which places the emphasis on threat to life or physical integrity. The manual developed for the present study provides an operational definition of the concept that makes it possible to subject it to further empirical tests.

The lack of correlations between mental defeat and aspects of stressor severity in the present study does not imply that mental defeat is independent of stressor severity in general. Mental defeat is expected to occur only during traumatic events of sufficient severity and duration. In a study of rape victims, we found that mental defeat was correlated with duration of the traumatic event (Ehlers, Clark, et al., 1998). Other aspects of traumatic situations, such as the intentional harm by others, humiliating acts, frequency of uncontrollable maltreatments, or prolonged sleep deprivation, may also influence the probability of experiencing mental defeat, but data are lacking at this stage. Nevertheless, all of the data collected to date show that mental defeat predicts PTSD over and above what can be predicted from stressor severity and is thus not just an epiphenomenon of extreme stress.

As mental defeat is a relatively new concept, its relationship with other theoretical concepts that are relevant in explaining PTSD needs further investigation. An example is the relationship with perceived uncontrollability. Theoretical considerations and preliminary empirical findings suggest that these concepts should be distinguished. Mental defeat goes beyond perceived uncontrollability over one's environment because people can retain the sense that they have a will of their own (inner autonomy) in uncontrollable situations. The negligible and nonsignificant correlations between mental defeat and depression, and between mental defeat and control strategies, are in line with the hypothesis that mental defeat and uncontrollability should be distinguished. Mental defeat has a closer relationship with perceived uncontrollability over one's own emotions, physiological responses, thoughts, and actions (see Jones & Barlow, 1990); however, we still think that the concepts can be distinguished. Many people described how during a traumatic event they felt totally out of control over their emotions and got extremely distressed, they could not control their

thoughts and could not think properly, or they could not control their behavior and froze. However, this perceived uncontrollability does not mean that they experienced mental defeat, that is, thought they were not human beings any longer without a will of their own. In support of the validity of the mental defeat concept, Dunmore et al. (1999a, 1999b) found that in assault victims, mental defeat predicted PTSD symptoms over and above what could be predicted from perceived uncontrollability over the situation and over their own response during the assault.

It is conceivable that mental defeat bears some relationship to "giving up" observed in animals after prolonged unpredictable and uncontrollable shock. Basoglu and Mineka (1992) concluded from reviewing animal studies using a social defeat paradigm that "the amount of physical torture *per se* may be less predictive than is the victim's psychological state of resistance and fighting back versus giving up and conceding defeat" (p. 193). This giving up may be more important for the development of PTSD than efforts to control the situation. The results of the present study clarified that in humans, actions of submission cannot be interpreted on their own; whether or not the tortured person perceives defeat has to be taken into account.

Furthermore, there are parallels between the concept of mental defeat versus autonomous frame of mind and clinical descriptions of how concentration camp survivors coped with their horrendous experience (Améry, 1966; Eitinger, 1980; Frankl, 1985; Niederland, 1968) as well as some aspects of the psychoanalytic literature on "soul murder" (Saporta & van der Kolk, 1992; Shengold, 1989). It is, however, interesting to note that in the present study, none of the participants reported the indicators of a resilient frame of mind described by Frankl (1985), that is, finding inner freedom through meditation or religion, or seeing the hopeless situation as a challenge and discovering meaning in suffering.

### *Control Strategies*

Control strategies were not related to PTSD. This finding was somewhat surprising given the many examples of very elaborate attempts to exert some control during imprisonment, such as resistance strategies during interrogation (e.g., hunger strike) or keeping a spider for a pet during isolation confinement. The negative results are in line, however, with a recent prospective study in which mental planning did not predict chronic PTSD after assault (Dunmore et al., 1999b).

The reasons for the negative results are unclear at this stage. One problem in assessing control strategies in the current study may have been that the interviews asked participants about coping strategies and elicited relatively little information about the thoughts that accompanied the control strategies. More information on the intention of the actions may have given a clearer group distinction. For example, escape attempts may have in some cases represented actions of desperation rather than attempts to beat the system. It may also be important to ascertain whether or not the control strategy was successful in creating some sense of control or satisfaction; this was not assessed in a systematic way. Another problem in rating control strategies is that the imprisonment was a prolonged traumatic experience that included different traumatic situations. Nearly all participants reported some control attempts. It is possible that the overall level of control attempts during

imprisonment is less predictive of PTSD than failure to control some of the traumatic situations.

### *Overall Feeling of Alienation and Permanent Change*

Consistent with our hypothesis, an overall feeling of alienation from other people was related to PTSD after political imprisonment. Alienation significantly predicted PTSD severity over and above what could be predicted by the other cognitive variables. It is important to note that the overall feeling of alienation measured in this study goes beyond the *DSM-IV* symptom of estrangement from others. It reflects how globally trauma victims feel unable to relate to others. The correlation between scores on the overall feeling of alienation scale and the *DSM* estrangement symptom was low and thus does not explain the relationship of an overall feeling of alienation and PTSD in general. The same result was obtained by Ehlers, Clark, et al. (1998).

Perceived permanent change was related to chronic PTSD and to depression. It predicted unique variance of PTSD severity in the multiple regression analyses. The results are in line with Foa, Ehlers, Clark, Tolin, and Orsillo (1999), who found that alienation and permanent change distinguished between traumatized people with and without PTSD, using a new self-report measure. The results on perceived permanent change correspond to Maercker's findings (Maercker, 1998; Maercker & Park, 1998) that a sense of coherence (Antonovsky, 1987) and personal growth were related to good adjustment after political imprisonment. The relationship of these variables with perceived permanent change needs to be investigated.

When interpreting the results for perceived permanent change, one has to bear in mind that many trauma victims do objectively suffer negative long-term consequences and that these are related to chronic PTSD. For example, Ehlers, Mayou, and Bryant (1998) found that persistent health problems predicted chronic PTSD after motor vehicle accidents. Such negative long-term consequences of trauma may serve as chronic reminders that make it difficult to put the trauma in the past. Examples from the present study include that many of the prisoners suffered from chronic health problems, and that all participants were subjected to permanent restrictions on employment possibilities after release from prison. Thus, these people had objectively suffered a change for the worse in their life circumstances. However, it is important to note that these objective chronic problems were not restricted to those participants who continued to suffer from PTSD. Thus, objective long-term consequences and their interpretation may both contribute to maintaining PTSD symptoms after the original trauma is over.

### *Political Commitment*

Political commitment did not discriminate between the three groups. However, the correlation analyses showed a trend for correlations between political commitment and better long-term outcome in the IES-R and BDI scores. The latter finding is consistent with work from Basoglu's group (Basoglu et al., 1994; 1996, 1997). The size of the effect may have been smaller than in Basoglu's studies because only a small proportion of the participants were political activists. It is possible that the protective role of political commitment is only evident at extreme levels. Furthermore, it is conceivable that our rating system was not the optimal

way of assessing political commitment and thus underestimated the effects of this variable. For example, participants who were imprisoned because they had applied for an exit visa were given a moderate rating. For some of these participants, this may have reflected a political statement as well as a decision made for private reasons.

### *Limitations*

The present study does not allow causal interpretations because of its retrospective nature. It is possible that memory biases influenced the participants' accounts of their mental state during imprisonment and its immediate aftermath. Longitudinal studies are needed to test whether mental defeat, alienation, and permanent change predict PTSD after interpersonal traumatization. It is encouraging that a first prospective study of assault victims has supported the predictive role of these variables (Dunmore et al., 1999b). Prospective studies of torture victims are needed. It would also be interesting to study whether mental defeat, an overall feeling of alienation, and permanent change predict PTSD after other trauma (e.g., disaster or life-threatening illness).

The retrospective nature of the study may have compromised the accuracy of diagnosing remitted PTSD because many years had elapsed since imprisonment. Although all participants who were diagnosed as having chronic PTSD reported that they had met PTSD criteria after release from prison, we cannot determine how stable their symptoms had been between release from prison and assessment for the study. However, it is unlikely that such symptom fluctuations would have increased the relationship between the cognitive variables and PTSD. Again, only prospective longitudinal studies can circumvent the problems of retrospective symptom assessment.

It is conceivable that some of the effects of objective conditions of imprisonment on PTSD were underestimated in the present study because the assessment was retrospective and participants' responses could not be assessed for stability and validity. However, it is unlikely that there was a systematic effect that obscured group differences in stressor severity. Furthermore, the study replicated previous results on stressor severity. The lack of group differences in the number of maltreatments and low correlations with PTSD severity replicate results of a study of tortured Turkish political prisoners by Basoglu and Paker (1995). The study also replicated the relationship of perceived threat to life and PTSD, one of the most consistent findings in PTSD research (March, 1993). It would be desirable to include in future studies further aspects of stressor severity such as the unpredictability and uncontrollability of the maltreatments received (Basoglu & Mineka, 1992).

An inevitable limitation was that the study relied on volunteers who were willing to talk about their experience. Although the demographic characteristics indicated that participants were largely representative of the former East German political prisoners, there was some indication that more symptomatic prisoners were more reluctant to attend the interview. On the other hand, it is also possible that former prisoners who still suffered from the consequences of imprisonment were more interested in volunteering for the study. It remains unclear how such selection biases could have influenced the results. It is, however, very unlikely that

a restriction in the range of PTSD severity would have inflated the relationship of the cognitive variables with PTSD.

### *Possible Mechanisms and Implications for Treatment*

If future studies confirm the role of mental defeat, alienation, and permanent change in the onset and/or maintenance of PTSD, the mechanisms of these relationships need to be studied. We hypothesize that the concepts can be understood within theories that emphasize the personal meaning (appraisal) of the trauma and/or its sequelae in the onset and maintenance of PTSD (e.g., Ehlers & Clark, in press; Ehlers & Steil, 1995; Foa & Riggs, 1993; Resick & Schnicke, 1993). People who have experienced mental defeat are more likely than those who did not experience it to interpret the trauma as revealing something negative about themselves (e.g., that they are inferior, not worthy, or unable to cope with future adverse events) and may thus be unable to see that the trauma was a time-limited past event that does not necessarily have global implications for themselves or the future. An overall feeling of alienation reflects generalized negative appraisals of interactions with others during the imprisonment and its aftermath, and perceived permanent change is an example of negative appraisals of trauma sequelae such as initial PTSD symptoms or difficulties encountered when released from prison.

How do negative appraisals of the traumatic event and/or its sequelae lead to PTSD symptoms? Ehlers and Clark (in press) suggested that persistent PTSD occurs only if individuals process the traumatic experience in a way that produces a sense of a serious current threat. The model proposes that two key processes lead to a sense of current threat: (a) excessively negative appraisals of the trauma and/or its sequelae, and (b) the nature of the trauma memory. Once activated, the perception of current threat is accompanied by intrusions and other reexperiencing symptoms, symptoms of arousal, and strong emotions such as anxiety, anger, shame, or sadness.

How are the negative appraisals and the PTSD symptoms maintained? Ehlers and Clark (in press) hypothesized that the perceived threat motivates a series of cognitive and behavioral responses that are intended to reduce distress and perceived threat but have the consequence of preventing cognitive change and therefore maintain the disorder. The choice of these responses in turn depends on the nature of the appraisals. For example, people who experienced mental defeat may avoid thinking or talking about the event and suppress thoughts and intrusive images related to the event. Cognitive avoidance and thought suppression have been shown to predict chronic PTSD (e.g., Ehlers, Mayou, & Bryant, 1998).

Similarly, people who experience alienation are likely to withdraw from social situations and are thus less likely to receive social support, to correct negative beliefs about themselves and others, and to benefit from the therapeutic effects of talking about their emotions with others (e.g., Pennebaker, 1989). People who perceive themselves as permanently changed will adjust their behavior accordingly and will not make any efforts to reclaim their lives. They may also ruminate excessively over the consequences of the trauma for their current situation. Rumination has been shown to predict chronic PTSD (Ehlers, Mayou, et al., 1998).

In addition to the effects of mental defeat on the appraisal of the traumatic event, retrieving the memory of mental defeat may directly interfere with recovery in the natural course of the disorder

as well as in exposure treatment (Ehlers, Clark, et al., 1998). It may be retraumatizing in that traumatic memories in PTSD are experienced as something happening in the "here and now" and as "true" (Ehlers & Clark, in press), so that reexperiencing would recreate the feeling that one is not a human being any longer. This would be more difficult to disconfirm than other intrusions (e.g., "I am dying") and may thus be very resistant to change.

If the importance of mental defeat, alienation, and permanent change is supported by further research, they will need to be addressed in the treatment of victims of interpersonal violence. PTSD patients who experience mental defeat may benefit from cognitive therapy, which encourages them to reevaluate the implications of mental defeat for their view of themselves. Those who experience an overall feeling of alienation or permanent change are likely to benefit from interventions that encourage them to reestablish contact with friends and family and to take up activities again that they used to enjoy before the trauma ("reclaiming your life"; Ehlers & Clark, in press).

## References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Améry, J. (1966). *Jenseits von Schuld und Sühne: Bewältigungsversuche eines Überwältigten* [Beyond guilt and atonement: Coping attempts of the overpowered]. Munich, Germany: Szczytny Verlag.
- Antonovsky, A. (1987). *Unravelling the mystery of health*. San Francisco: Jossey-Bass.
- Basoglu, M. (Ed.). (1992). *Torture and its consequences*. Cambridge, England: Cambridge University Press.
- Basoglu, M., & Mineka, S. (1992). The role of uncontrollable and unpredictable stress in posttraumatic responses in torture survivors. In M. Basoglu (Ed.), *Torture and its consequences* (pp. 182–228). Cambridge, England: Cambridge University Press.
- Basoglu, M., Mineka, S., Paker, M., Aker, T., Livanou, M., & Gök, S. (1997). Psychological preparedness for trauma as a protective factor in survivors of torture. *Psychological Medicine*, 27, 1421–1433.
- Basoglu, M., & Paker, M. (1995). Severity of trauma as predictor of long-term psychological status in survivors of torture. *Journal of Anxiety Disorders*, 9, 339–350.
- Basoglu, M., Paker, M., Özmen, E., Tasdemir, Ö., Sahin, D., Ceyhanli, A., Incesu, C., & Sarimurat, N. (1996). Appraisal of self, social environment, and state authority as a possible mediator of posttraumatic stress disorder in tortured political activists. *Journal of Abnormal Psychology*, 105, 232–236.
- Basoglu, M., Paker, M., Paker, Ö., Özmen, E., Marks, I., Incesu, C., Sahin, D., & Sarimurat, N. (1994). Psychological effects of torture: A comparison of tortured with matched nontortured political activists in Turkey. *American Journal of Psychiatry*, 151, 76–81.
- Bauer, M., Priebe, S., Häring, B., & Adamczak, K. (1993). Long-term sequelae of political imprisonment in East Germany. *Journal of Nervous and Mental Disease*, 181, 257–263.
- Beck, A. T., & Steer, R. A. (1987). *Beck Depression Inventory: Manual*. San Antonio, TX: Psychological Corporation.
- Burgess, A. W., & Holstrom, L. L. (1976). Coping responses of the rape victim. *American Journal of Psychiatry*, 133, 413–418.
- Davis, R. C., & Brickman, E., & Baker, T. (1991). Supportive and unsupportive responses of others to rape victims: Effects on concurrent victim adjustment. *American Journal of Community Psychology*, 19, 443–451.
- DiNardo, P., & Barlow, D. H. (1988). *Anxiety Disorders Interview Schedule—Revised (ADIS-R)*. Albany, NY: State University of New York at Albany.
- Duncan, F. (1996). *A glimpse of hell: Reports on torture worldwide*. London: Biddles.
- Dunmore, E., Clark, D. M., & Ehlers, A. (1997). Cognitive factors in persistent vs. recovered post traumatic stress disorder: A pilot study. *Behavioural and Cognitive Psychotherapy*, 25, 147–159.
- Dunmore, E., Clark, D. M., & Ehlers, A. (1999a). Cognitive factors involved in the onset and maintenance of posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, 37, 809–829.
- Dunmore, E., Clark, D. M., & Ehlers, A. (1999b). *A prospective investigation of the role of cognitive factors in persistent posttraumatic stress disorder after physical or sexual assault*. Manuscript submitted for publication.
- Ehlers, A., & Boos, A. (1996). *Rating Manual zu den Konstrukten Sich-Aufgeben, generelles Gefühl der Entfremdung gegenüber anderen Menschen, Planen, irreversible Veränderung und Politische Überzeugung bei politisch Inhaftierten* [Rating manual for the constructs mental defeat, overall feeling of alienation, control strategies, permanent change, and political commitment]. Unpublished manuscript, University of Oxford, Oxford, UK.
- Ehlers, A., & Clark, D. M. (in press). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*.
- Ehlers, A., Clark, D. M., Dunmore, E. B., Jaycox, L., Meadows, E., & Foa, E. B. (1998). Predicting the response to exposure treatment in PTSD: The role of mental defeat and alienation. *Journal of Traumatic Stress*, 11, 457–471.
- Ehlers, A., Mayou, R. A., & Bryant, B. (1998). Psychological predictors of chronic PTSD after motor vehicle accidents. *Journal of Abnormal Psychology*, 107, 508–519.
- Ehlers, A., & Steil, R. (1995). Maintenance of intrusive memories in posttraumatic stress disorder: A cognitive approach. *Behavioural and Cognitive Psychotherapy*, 23, 217–249.
- Eitinger, L. (1980). Jewish concentration camp survivors in the post-war world. *Danish Medical Bulletin*, 27, 232–235.
- Foa, E. B., Ehlers, A., Clark, D. M., Tolin, D. F., & Orsillo, S. M. (1999). The Posttraumatic Cognitions Inventory (PTCI): Development and validation. *Psychological Assessment*, 11, 303–314.
- Foa, E. B., & Riggs, D. S. (1993). Post-traumatic stress disorder in rape victims. In J. Oldham, M. B. Riba, & A. Tasman (Eds.), *American Psychiatric Press review of psychiatry* (Vol. 12, pp. 273–303). Washington, DC: American Psychiatric Press.
- Foa, E. B., Zinbarg, R., & Rothbaum, B. O. (1992). Uncontrollability and unpredictability in post-traumatic stress disorder: An animal model. *Psychological Bulletin*, 112, 218–238.
- Frankl, V. E. (1985). *Man's search for meaning*. New York: Washington Square Press.
- Fricke, K. W. (1979). *Politik und Justiz in der DDR. Zur Geschichte der politischen Verfolgung 1945–1968*. [Politics and justice in the GDR. On the history of political persecution 1945–1968]. Cologne, Germany: Wissenschaft und Politik.
- Hautzinger, M., Bailer, M., Worall, H., & Keller, F. (1992). *Das Beck Depressionsinventar: BDI* [The Beck Depression Inventory: BDI]. Bern, Switzerland: Huber.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Jones, J. C., & Barlow, D. H. (1990). The etiology of post traumatic stress disorder. *Clinical Psychology Review*, 10, 299–328.
- Lebowitz, L., & Roth, S. (1994). "I feel like a slut": The cultural context and women's response to being raped. *Journal of Traumatic Stress*, 7, 363–390.
- Maercker, A. (1998). Extremlastungen ohne psychische Folgeschäden: Salutogenetische Konzepte und Befunde [Extreme stress without psychological damage: Salutogenetic concepts and findings]. In W. Schüffel (Ed.), *Handbuch der Salutogenese: Konzept und Praxis* [Handbook of

- salutogenesis: Concept and practice] (pp. 341–351). Wiesbaden, Germany: Ullstein Medical.
- Maercker, A., & Park, C. (1998). *Posttraumatic personal growth and its relation to coping and symptomatology*. Unpublished manuscript, Dresden University of Technology, Germany.
- Maercker, A., & Schützwohl, A. (1996). Posttraumatische Belastungsstörung bei ehemaligen politischen Inhaftierten der DDR: Symptomatik, verursachende und aufrechterhaltende Faktoren [Posttraumatic stress disorder in former East German political prisoners: Symptoms, causal and maintaining factors]. In S. Priebe, D. Denis, & M. Bauer (Eds.), *Eingesperrt und nie mehr frei: psychisches Leiden nach politischer Haft in der DDR* [Locked up and never free again: Psychological distress after political imprisonment in East Germany] (pp. 45–56). Darmstadt, Germany: Steinkopff.
- Maercker, A., & Schützwohl, M. (1997). Longterm effects of political imprisonment: A group comparison study. *Social Psychiatry and Psychiatric Epidemiology*, *32*, 435–442.
- Maercker, A., & Schützwohl, M. (1998). Erfassung von psychischen Belastungsfolgen: Die Impact of Event Skala—revidierte Fassung (IES-R) [Assessment of psychological consequences of stress: The revised Impact of Event Scale]. *Diagnostica*, *44*, 130–141.
- March, J. S. (1993). What constitutes a stressor? The “A” criterion issue. In R. T. Davidson, & E. B. Foa (Eds.), *Posttraumatic stress disorder and beyond* (pp. 37–56). Washington, DC: American Psychiatric Press.
- Margraf, J., Schneider, S., Ehlers, A., DiNardo, P., & Barlow, D. (1991). *DIPS: Diagnostisches Interview bei psychischen Störungen—Interviewleitfaden*. [DIPS: Diagnostic interview for psychological disorders—Interview schedule]. Berlin, Germany: Springer.
- McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*. New York: Brunner/Mazel.
- Michaels, A. (1998). *Fugitive pieces*. London: Bloomsbury.
- Niederland, W. G. (1968). Clinical observations on the “survivor syndrome.” *International Journal of Psycho-Analysis*, *49*, 313–315.
- Norris, F. H. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. *Journal of Consulting and Clinical Psychology*, *60*, 409–418.
- Paker, M., Paker, Ö., & Yülksel, S. (1992). Psychological effects of torture: An empirical study of tortured and non-tortured non-political prisoners. In M. Basoglu (Ed.), *Torture and its consequences* (pp. 72–81). Cambridge, England: Cambridge University Press.
- Pennebaker, J. W. (1989). Confession, inhibition, and disease. *Advances in Experimental Social Psychology*, *22*, 211–244.
- Resick, P. A., & Schnicke, M. K. (1993). *Cognitive processing therapy for rape victims: A treatment manual*. Newbury Park: Sage.
- Resnick, H. S., Kilpatrick, D. G., Dansky, B. S., Saunders, B. E., & Best, C. L. (1993). Prevalence of civilian trauma and posttraumatic stress disorder in a representative sample of women. *Journal of Consulting and Clinical Psychology*, *61*, 984–991.
- Saporta, J. A., & van der Kolk, B. A. (1992). Psychobiological consequences of severe trauma. In M. Basoglu (Ed.), *Torture and its consequences* (pp. 151–181). Cambridge, England: Cambridge University Press.
- Shengold, L. (1989). *Soul murder: The effects of childhood abuse and deprivation*. New Haven, CT: Yale University Press.
- Somnier, F. E., & Genefke, I. K. (1986). Psychotherapy for victims of torture. *British Journal of Psychiatry*, *149*, 323–329.
- Statistisches Amt der DDR (Ed.). (1989). *Statistisches Jahrbuch 1989 der DDR* [Statistical year-book 1989 for the German Democratic Republic]. Berlin, Germany: Author.
- Statistisches Bundesamt (Ed.). (1996). *Statistisches Jahrbuch 1996 für die Bundesrepublik Deutschland* [Statistical year-book 1996 for the Federal Republic of Germany]. Stuttgart, Germany: Metzler-Poeschel.
- Turner, S. W., & Gorst-Unworth, C. (1993). Psychological sequelae of torture. In J. P. Wilson & B. Raphael (Eds.), *International handbook of traumatic stress* (pp. 703–713). New York: Plenum.
- Ulman, S. E. (1996). Correlates and consequences of adult sexual disclosure. *Journal of Interpersonal Violence*, *11*, 554–571.
- Weiss, D. S., & Marmar, C. R. (1996). The Impact of Event Scale—Revised. In J. P. Wilson, & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 399–411). New York: Guilford Press.

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