

JARI SALO

Personality and Posttraumatic Adjustment

The role of representations, adult attachment, coping, and treatment types

ACADEMIC DISSERTATION

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Finally, I stand humbly before the men who participated in this study. They decided to trust us and shared their unique experiences for the benefit of science. I can only hope that this study will give something back to them and all trauma survivors alike.

There is so much injustice in the world – and not only in countries and cultures far away, but surrounding each one of us. I thank all of you who have fought, and continue to fight, for justice and equal rights for all. Thank you.

Helsinki, April 2009

Iari Salo

Abstract

This study focuses on psychological processes and mental health of Palestinian former political prisoners who have faced severe traumatic experiences in forms of torture and other ill-treatment. The main aim of the present study was to examine why other political trauma victims survive from their traumatic experience quite well while others continue to suffer extensively. Consequently, first, the role of central personality structures, i.e., self- and other representations and working models of adult attachment, was examined in relation to posttraumatic adjustment (articles I, II). Second, the use and compatibility of dispositional and situational coping strategies and their association to mental health was studied (article III). Third, the role of self- and other representations in predicting successfulness of individual and group treatment was examined (article IV). The participants were Palestinian men from the Gaza Strip who had been imprisoned during the first Intifada, the national uprising for independence in 1987–1993.

The main results suggest, that even among these of highly traumatized men, there was a group of individuals whose internal view of self and others was worthy, capable and benevolent and that these positive internal representations or secure attachment working models acted as protective factors in terms of recovering trauma, both in terms of lesser amount of PTSD symptoms and more posttraumatic growth. Furthermore, active and constructive dispositional coping style was related to better mental health. Finally, the protective importance of these personality structures was reversely true in that the men with shattered representations needed most intensive, individually tailored treatment in order to recover and heal. More dramatically, men with negative mental representations did not recover at all when they participated in less intensive group treatment.

Thus, the findings of this study strongly suggest that assessing central personality structures and processes, i.e. self- and other representations, attachment styles and coping strategies, provides significant understanding in helping the victims of torture and ill-treatment.

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Original publications

This review is based on the following original publications and together with them constitutes the academic dissertation of the author.

Article I

Salo, J., Punamäki, R-L., & Qouta, S. (2004). Associations between self and other representations and posttraumatic adjustment among political prisoners. *Anxiety, Stress and Coping*, 17(4), 421–439.

Article II

Salo, J., Qouta, S., & Punamäki, R-L. (2005). Adult attachment, posttraumatic growth and negative emotions among former political prisoners. *Anxiety, Stress and Coping*, 18(4), 361–378.

Article III

Punamäki, R-L., Salo, J., Komproe, I., Qouta, S., El-Masri, M., & de Jong, J.T.V.M. (2008). Dispositional and situational coping and mental health among Palestinian political ex-prisoners. *Anxiety, Stress and Coping*, 21(4), 337–358.

Article IV

Salo, J., Punamäki, R-L., Qouta, S., & El Sarraj, E. (2008). Individual and group treatment and self and other representations predicting posttraumatic recovery among former political prisoners *Traumatology*, 14(2), 45–61.

In the text the publications are referred to by Roman numerals I–IV.

Year 2008 was the 60th anniversary of the Universal Declaration of Human Rights. The Declaration proclaims in Article 5 that "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment", and in Article 18 that "Everyone has the right to freedom of thought, conscience and religion". However, violations of these Articles and other human rights are still common worldwide: in 2007 there were documented acts of torture and ill-treatment in at least 81 countries, and 45 countries detained prisoners of conscience (Amnesty International, 2008). Therefore, we need to understand how victims of human rights violations can be helped to deal with their traumatic experiences. This study focuses on psychological processes and mental health of Palestinian former political prisoners who have faced severe traumatic experiences in forms of torture and other ill-treatment.

Political imprisonment, torture and ill-treatment are overwhelming, traumatic experiences, that often lead to variety of signs of posttraumatic distress. Torture is likely to shatter the fundamental aspects of individual's well-being: the belief that the world and people are benevolent and the self worthy and capable of actively cope with stressful events (Janoff-Bulman, 1992). Nevertheless, both research and clinical experience have shown that there are significant individual differences in recovery from trauma. Further, there is even an on going debate on whether or not rehabilitation and treatment of torture survivors is beneficial at all, and if they are, for whom and on what basis (Basoglu, 2006). Consequently, in terms of predicting better recovery and planning effective treatment models it is vital to understand the underlying personality factors and mechanisms related to the individual variation.

Thus, the objective of the present study is to examine how central personality structures and processes, namely, self-and other representations, adult attachment styles, and coping strategies, are involved in the posttraumatic recovery process.

Trauma and its consequences

Imprisonment and torture

Torture is systematic process in which the perpetrator causes the victim physical and psychological suffering in order to achieve political, economic or social objectives. Physical, sexual and psychological torture methods are carried out by public authority in order to get information for instance about resistance activities and opposition networks, and to frighten, degrade and humiliate supporters of the resistance (Amnesty International, 2008; Graessner, Gurris, & Pross, 2004; IRCT, 2006; United Nations, 1987; Quiroga & Jaranson, 2005).

Physical torture methods include for example beating and burning the victim, sexual abuse, electric shocks, sensory overload, and preventing physiological basic needs and hygiene. Psychological torture involves methods such as humiliation, witnessing the torture of other victims, threatening and fake executions (see e.g. Basoglu, 1992; Borchelt, Fine, & Pross, 2005). In consequence, imprisonment and torture can cause fundamental, long-term psychological changes to the victim, that can persist even throughout the lifespan (Basoglu, Jaranson, Mollica, & Kastrup, 2001; Basoglu et al., 1994; Bichescu et al., 2005; Maercker & Schutzwohl, 1997; Mollica, McInnes, Poole & Tor, 1998; Turner & Gorst-Unsworth, 1993).

Psychological and somatic distress

Symptoms of posttraumatic stress disorder (PTSD) are most often studied consequences of imprisonment and torture (for a review see Quiroga & Jaranson, 2005). Typical posttraumatic stress includes symptoms in three clusters: first, intrusive re-experiencing and recollection of the

traumatic scene as flashbacks and nightmares, second, attempts to avoid issues reminding of trauma, leading to avoidant behaviour and emotional numbing, and third, generalized vigilance for threatening cues leading to hyperarousal symptoms, e.g. sleep difficulties and exaggerated startle reactions (American Psychiatric Association, 2000). Victims of torture and ill-treatment typically experience all the symptoms of PTSD. However, the intrusive re-experiencing and states of hyperarousal are especially prominent, whereas the avoidant symptoms are not always as strongly present (Ramsay et al., 1993; El Sarraj. Punamäki, Salmi, Summerfield, 1996).

In addition to PTSD symptoms, torture survivors typically show high levels of somatic symptoms (Emmelkamp, Komproe, Van Ommeren, & Schagen, 2002; Silove, Steel, McGorry, Miles, & Drobny, 2002). Somatic complaints include diversified aches and pains such as back or teeth pains, stomach, heart and hearing problems, and high blood pressure. In addition, torture survivors suffer from psychosomatic symptoms such as lack of appetite, nausea and trembling. The reason for the considerable number of somatic and especially pain symptoms among torture survivors relate to the their exposure to physical ill-treatments such as beating of the soles of the feet, long standing in burdening positions and crucification (Basoglu, 1992; Williams & Amris, 2007).

Posttraumatic growth

In order to help trauma survivors to heal, it would be utmost important to not only focus on symptom reduction, but also to emphasize the positive aspects and possibilities in their experiences. As counterintuitive it may sound, there is robust empirical evidence showing that traumatic experiences may indeed result in beneficial transformations in survivors' appraisals of the self, others and life in general. People have reported personal growth, better relationships with others and spirituality after natural disasters and accidents (Joseph, Williams, & Yule, 1993), rape and sexual abuse (Burt & Katz, 1987; McMillen, Zuruvian, & Rideout, 1995), loss and bereavement (Calhoun & Tedeschi, 1989; McCrae & Costa, 1993), and serious illness (Collins, Taylor, & Stokan, 1990; Schwarzberg, 1993). The positive after effects of trauma has been conceptualized as posttraumatic growth (Tedeschi, Park, & Calhoun, 1998).

Among tortured political prisoners there are findings and observations of posttraumatic growth, in that survivors may feel stronger, wiser, more self-confident and they may find new altruistic characteristics in themselves. Kira et al. (2006) found in a sample of 501 Iraqi immigrants that tortured persons had more posttraumatic growth, were more resilient and socioculturally adjusted than persons with traumatic, but non-torture history. Punamäki (1986) interviewed Palestinian women who had faced severe losses such as imprisonment of husband and death of their children, and found commonly positive interpretations of hardships. An interviewed woman said, for example: "I never thought I had such a strength in me. I have learned the more the occupiers put me down, the stronger I get". Exposure to danger and life-threat may cause people to share experiences and disclose feelings, and a loss of a beloved person may increase appreciation of existing relationships (Tedeschi & Calhoun, 1996). Survival may result in awareness of the preciousness of life, conscious enjoyment of it and religious affiliation (Garbarino, 2001; Punamäki, 1986). However, no systematic empirical research is available on posttraumatic growth of tortured political prisoners.

Consequently, in the present study, healing process and recovering trauma was operationalized not only through the absence of negative consequences such as PTSD symptoms and somatic complaints, but also through the presence of posttraumatic growth (articles I, II, and IV).

Role of personality in posttraumatic adjustment

In order to find the most efficient ways to help traumatized political prisoners, we need to uncover what is the psychological mechanism defining how a particular individual responses and adjusts to experience of imprisonment and torture? Intuitively the overwhelming, pervasive and horrible nature of events like imprisonment and torture are thought to neutralize the significance of individual personality. Perhaps for that reason, the research on the role of personality in posttraumatic processes in the context of imprisonment and torture is scarce. Vast majority of studies have been focusing on the characteristics the traumatic event itself and the following symptomatology. However, as trauma theories suggest,

traumatic events involve the very basic structures of personality and thus should be studied also in this context.

According to Janoff-Bulman (1992) there are three fundamental assumptions that underlie psychic well-being: first, the world and other people are benevolent, second, the world and events are meaningful, and third, the self is worthy and competent. Traumatic experiences may seriously shatter these fundamental assumptions, as the world in fact is no longer as safe and predictable place, other people as benevolent, and oneself as capable and worthy as they used to be. These shattered and disintegrated representations may, in turn, result in PTSD symptomatology.

It is suggested that in order to psychologically recover from trauma, one needs to re-organize and adjust internal models according the new information. (Horowitz, 1997; Janoff-Bulman, 1992). This process may even have beneficial consequences, as is proposed by research on posttraumatic growth (Janoff-Bulman, 2006; Tedeschi, 1999), as the reconstruction of basic assumptions may in fact create a possibility for the new, adjusted representations illuminate the posttraumatic reality in more positive way. Hence, representations are suggested to be involved in posttraumatic adjustment in two ways: firstly, shattered and disintegrated representations result in PTSD symptomatology, secondly, successful reconstruction of representations may lead to beneficial after effects in terms of posttraumatic growth.

Representations of self and significant others

The suggestions of Janoff-Bulman and Horowitz are based on clinical observations and theoretical notions, and do not offer operational measurements for assessing the representations in more detail. As the theoretical background in their models derive from generally accepted assumptions on inner working models and representations, it is possible to utilize measurement tools from other than trauma representation research.

Three main theoretical frameworks – object relations, social cognition and attachment – propose processes through which the earliest relationships are internalized and transmuted into intrapsychic structures, that is, representations of self and significant others. These representations guide individual's behaviour and perceptions and are especially activated

and relevant after traumatic event. Object relations theory states that internalized object relations are motivational structures that guide perception and affect the organization of past experiences and expectations (e.g. Blatt, Auerbach, & Levy, 1997; Kohut, 1971). Similarly, social cognitive studies have examined development of relational schemas that are relevant in the processing of social information (e.g., Baldwin, 1992; Selman, 1980). Finally, Bowlby (1969, 1973, 1980) proposed the concept of internal working models of attachment that are assumed to include the subject's memories, perceptions, and expectations in relation to significant others as helpful and effective in diminishing stress. In spite of the different theoretical contexts, object relations, social cognitive and attachment and theories alike assume a link between internal representations and adaptive functioning. In the present study, we utilized constructs and measures from all these three perspectives.

Object relations and social cognitive theories

The role of internal object representations in relation to mental health has been highlighted, especially in the work of Sidney Blatt and his colleagues (Blatt et al., 1997; Blatt, Wiseman, Prince-Gibson, & Gatt, 1991). They have proposed a developmental model where representations are considered as multidimensional and complex structures comprising a model of self and other relationships. Representations are hierarchically organized, and some of them are conscious and reflect reality fairly well, while others are unconscious and often related to basic needs and fantasies. These internalized images of self and others are not rigid and static, but rather prototypical models, which may alter in times of significant life events. (Blatt, Stayner, Auerbach, & Behrends, 1996; Blatt, et al., 1997).

Blatt and his colleagues have developed a scoring system with which self and other representations can be assessed by elaborating their content and structure (Blatt, Chevron, Quinlan, Schaffer, & Wein, 1992). The content of representations consist of thematic, qualitative aspects of the persons or relationships (e.g. "Compassion. When I was set free from prison, my mother caught me between her arms and I felt warm inside me in a way I never had felt before.", "My father did not take much care of me, except that I had to be good in my work. He never advised me or was never interested in my social life").

The structure of representations illustrates firstly, how differentiated and secondly, how conceptually mature the representations are. The level of differentiation illustrates how narrow or broad the representation is, e.g., how many attributes and associations an individual uses in describing significant persons or relationships. The conceptual maturity reflects the phase of cognitive and conceptual development. In the lowest developmental level the representational figures are described just in terms of gratification or frustration they provide. (e.g. "Jealousy. In spite of the fact that I have deep faith in my wife, I feel very jealous about her"). In the next developmental levels representations include more detail, involving persons' concrete attributes and activities (e.g. "Religious. I am a religious person, I know Allah and Mohammed, I pray for the two, and I also pray in the mosque"). Higher developmental levels incorporate persons' feelings, thoughts and values, and finally, integrate opposite and contradicting attributes into coherent synthesis (e.g. "Sociable. I am sociable to a great extent. This is because my stepmother's sons always treated me in a very bad ways. That forced me to look for friendship and understand people outside the house. This created my sociability to admit that I need people and can compensate the stepbrothers action"). Along with the developmental tasks, environmental demands and new interactional relationships, the representations gradually develop towards multidimensionality and abstract conceptual level.

Here, Blatt's conceptualization on the differentiation and maturity of self and other representations comes close to *social-cognitive* viewpoint presented in Selman's (1980) model of self-awareness. In this model young child's ability to perceive different aspects of self and others develop gradually from egocentric perspective taking to societal-symbolic understanding of relationships.

Empirical studies have already linked representations to mental health, both in terms of the content and structure. Indeed, Blatt and his colleagues have identified specific disturbances in representations in different forms of psychopathology (Blatt et al., 1991; Blatt et al., 1997). More specifically, in severe psychopathology, such as schizophrenia, content of representations have been characterized as inappropriately articulated, barren or having a benign theme. Depressed patients' representations of others were characterized as negative, people having malignant intentions and being undependable and frightening. Among narcissistic

borderline patients, in turn, there is a gradual deterioration of object representations. In summary, Blatt has suggested that the content and structure of representations are meaningfully related to psychopathology in that more narrow, negative or even irrational representations with a low developmental level are linked to severe forms of psychopathology.

With regard to trauma Blatt and colleagues (1996, p.83) have noted, "When life's demands are severe or developmentally inappropriate, however, they can overwhelm the child's capacities for accommodation and compromise the development of adaptive interpersonal schemas." Thus, Blatt is here in line with the general idea of Janoff-Bulman that traumatic events are likely to disintegrate individual's core representations, which, as a consequence, need reworking. However, despite the theoretical significance, self and other representations, as conceptualized by Blatt and his colleagues, have not been empirically examined in relation to trauma. Further, not only the current representations but also recollections of childhood representations may be of importance here. Therefore, we utilized a social-cognitive framework and added a developmental perspective into examining the representations as suggested in Selman's (1980) model.

Thus, the first aim of the present study was to examine what kind of content and structure may be identified in the self and other representations of political prisoners. Further, I studied whether and how the qualities of their representations are related to their posttraumatic adjustment (Article I).

Adult attachment theory

Similarly to object relations theory, attachment theory suggests the importance of internal working models in individual's general well being. In line with object relations theory, attachment theory assumes that representations are constructed on the basis of early relationships with the primary caregiver (Ainsworth, 1979; Bowlby, 1969). Initially, these models are organized as action schemata of attachment-related events, specifically, in terms of the caregiving behaviour in response to the needs of the infant (Cassidy, 1999). When compared to object relations theory, however, attachment theories ethological roots become more evident (Fonagy, 2001): attachment theory states explicitly that the working models of attachment relationships are specifically activated in

times of fearful stress and function as guiding behaviour and thought towards comfort (Bowlby, 1973). Thus, similar to the core representations suggested by object relations theory, the role of the working models of attachment in relation to traumatic events seems evident.

However, as compared to object relations theory, which is more interested in the idiosyncronatic content and structural aspects of self and other representations (e.g. Kernberg, 1976; Kohut, 1971), current attachment theory assumes that there are systematic and universally classifiable differences in these models (see e.g. Fonagy, 2001). These differences are thought to develop as a result of differences in the caregiving system. Hence, a child develops a behavioural strategy for getting comfort on the basis of emotional cues and comfort provided by the parent. These early childhood behavioural strategies for proximity seeking are activated when fear system is aroused.

Childhood behavioural strategies have their mental counterparts in adult internal working models (Main & Goldwyn, 1998). There are three main attachment styles: Secure, insecure-avoidant, and insecurepreoccupied. Secure attachment in adulthood refers to interpersonal stance of relying that other people are responsive and predictable and they themselves worthy and beloved. Insecure-avoidant adults have resolved the early disappointments by denying the importance of attachment relationships, mistrusting others and relying excessively on themselves. They have often repressed negative emotions from consciousness and have a tendency towards idealization of the self and others. Insecure-preoccupied persons have felt rejected and they continue to cling to attachment relationships and feel easily disappointed and angry. Preoccupied individuals dwell on negative emotions and their working models of self and others are characterized by a sense of mistrust: other people cannot be relied on and should be treated with suspicion (Collins, 1996; Crittenden, 1997; Main, 1996).

In adulthood, attachment models are thought to be activated especially under dangerous and threatening situations and guide the individual reactions accordingly (Bowlby, 1973; Crittenden, 1997; Mikulincer, Florian & Weller, 1993). Indeed, there is empirical evidence that secure persons resist better PTSD and other psychopathology, while insecure are more vulnerable (Kanninen, Punamäki & Qouta, 2003; Mikulincer & Florian, 1998; Mikulincer et al., 1993; O'Connor & Elklit, 2008). Securely

attached victims may be protected due to their coherent, optimistic and trusting representations, and comprehensive working models that enable them to integrate both emotional and cognitive processing of trauma (Bartholomew & Horowitz, 1991; Shaver & Hazan, 1993; Mikulincer, Horesh, Eilati, & Kotler, 1999). Indeed, secure trauma survivors have been found to apply more effective coping strategies and mature defences (Punamäki, Kanninen & Qouta, 2002) and their perception of threat and estimation of the availability of help are more adequate. In this line, secure individuals also coped better with exposure to physical torture (Kanninen et al., 2003). However, the nature of trauma seems to matter as well. Exposure to psychological torture and ill-treatment was associated with an increased level of somatic symptoms among secure but not insecure individuals (Kanninen et al., 2003). This result may be understood from a representational perspective in that for a securely attached individual the malevolence of other people may especially contradict with their positive view of the self and others, which actually causes more symptoms (see Crittenden, 1997).

With regard to insecure- avoidant and insecure-preoccupied attachment styles, they have both been suggested to pose an individual at a psychological risk in life-dangering conditions. Indeed, Mikulincer and colleagues (Mikulincer et al., 1993; Mikulincer, 1998) have shown that insecure-avoidant trauma victims suffered high rates of somatization while insecure-preoccupied reported most distress. Furthermore, in relation to physical ill-treatment both avoidant and preoccupied individuals showed more symptoms, while in contrast to secure individuals, when exposed to psychological ill-treatment they did not (Kanninen et al., 2003). This result has been interpreted to reflect the internal representations of insecure attachment styles because they hold negative expectations of human relationships and of the world which picture is actually verified by the traumatic event itself.

Considering the potential beneficial effects of trauma (Tedeschi, 1999), there may also be significant individual differences according to the attachment styles. It has been suggested that individuals differing in attachment organization may also differ in their general ability to organize one's own thinking, i.e., being able to reflect one's experiences, it's validity, nature and source (Main, 1991). Thus, the internal world of secure individuals may then be distinguished from those of insecure

individuals not only in their content but also in terms of their flexibility, positive valence and readiness for re-examining one's experiences (see Main, 1991). These qualities of thinking, i.e., being able to reflect on even the most negative experiences and find positive meanings for the self, are central aspects of posttraumatic growth (Janoff-Bulman, 2006). However, attachment styles and posttraumatic growth has not yet been empirically studied.

Thus, the second aim of the present study was to assess whether association between exposure to trauma, and posttraumatic growth and negative emotional experience is dependent on the type of adult attachment (Article II).

Trauma management and recovery

Coping styles and strategies

Effective coping strategies are crucial for survival in prison conditions. The basic function of coping is to manage specific demands that are appraised as taxing or exceeding the resources of the person (Lazarus and Folkman, 1984, p 141), thus protecting persons' mental health and psychological integrity from the negative impact of traumatic experiences. Moreover, as noted before, imprisonment and torture are likely to shatter the fundamental aspects of individual's mental health: the beliefs that the world is benevolent, and the self worthy and capable of actively cope with stressful events (Janoff-Bulman, 1992, 2006). Therefore, it is important to study how tortured political prisoners maintain adequate coping mechanisms.

Traditionally, coping strategies have been divided in two categories: in *emotion-focused coping* people attempt to manipulate their feelings, perceptions and attributes to be less threatening and more controllable, and in *problem-focused coping* they attempt to change distressing reality and remove the cause of stress and trauma (Folkman & Lazarus, 1985, Skinner, Edge, Altman, & Sherwood, 2003). Research shows that political prisoners employ both emotion- and problem-focused coping (Emmelkamp et al., 2002; Kanninen, Punamäki, & Qouta, 2002). Political prisoners have

provided examples of how harsh external conditions are shaping coping strategies towards inner modes of mental activity, e.g. imagination, daydreaming, and praying (Levi, 1949/1995; Qouta, Punamäki, & El Sarraj, 1997; Senesh, 2004). However, political prisoners also usually have active coping orientations, due to their political commitment (Becker, 1997; Emmelkamp et al., 2002; Punamäki, 1988). This may lead to variety of active, problem-focused coping strategies. Empirical evidence on effectiveness of coping strategies in the context of military conflicts suggest that passive, avoidant and distracting coping strategies are ineffective (Emmelkamp et al., 2002; Fairbank, Hansen, & Fitterling, 1991; Stein et al., 2005), whereas active and problem-focused coping is related to good posttraumatic adjustment (Mikulincer & Solomon, 1989). A possible explanation for inferior effectiveness of avoidant and distractive coping is that they prevent the cognitive-emotional reworking process of the disintegrated representations (Benotsch et al., 2000).

Imprisonment in political context poses conflicting requirements for coping strategies. Commitment to a national struggle demands entirely different coping responses than those that are allowed inside the prison. Employing active and political problem solving strategies in prison, e.g., organizing hunger strikes, would inevitably lead to escalated punishments and threat to life. In order to better understand how political prisoners solve these discrepant demands, I studied their coping responses as dispositional traits and situational strategies.

Dispositional coping is a result of people developing habitual ways of dealing with stressors and trauma, and these styles become stable personality traits that influence coping in different stressful situations (Carver & Scheier, 1994). Alternatively, coping responses can change from moment to moment depending on the nature and personal appraisal of a stressful transaction, indicating situational coping (Folkman & Lazarus, 1985). Dispositional coping style is a function of personality, while situational coping strategies depend on the nature, appraisal and meaning of stressful situation (Bouchard, Guillemetter, & Landry-Lèger, 2004; Suls, David, & Harvey, 1996). Research shows that problem-focused and active coping strategies are effective in controllable environment, while passive and emotion-focused coping responses are protective when the stress situation is incontrollable (Lazarus, 1993; 2000). As for individual's mental health, it is important how well individual's dispositional coping

style and situational coping strategies match together. The compatibility or 'goodness of fit' between individual's coping responses and environmental demands entail low psychological cost, thus predicting better posttraumatic adjustment. Concerning political prisoners, therefore, one could expect that their dispositional coping style may contradict the situational coping needs, thus resulting in mental health problems.

Therefore, the third aim of this study was to examine, firstly, how political ex-prisoners utilized dispositional and situational coping strategies, and secondly, how coping strategies and their compatibility were able to protect prisoner's mental health (Article III).

Treatment of trauma

Clinically it is of vital importance to understand what kind of treatment is effective for whom. As there is individual variation in regard to posttraumatic adjustment and recovery rate, also treatment should be approached taking individual differences into account. Hence, this study aims to examine the possible differences on individual versus group treatment efficacy as well as whether representations of self and others are related to treatment outcome, that is, to decrease of symptoms and increase of positive growth.

There is a general agreement that psychotherapeutic treatment is helpful for trauma victims. Bradley, Greene, Russ, Dutra, and Westen (2005) found in their meta-analysis of randomized study designs that most of the PTSD patients treated with psychotherapy recovered or improved. Current consensus exists that most effective treatment methods focus on the traumatic event itself. Recent reviews and meta-analytical studies have showed that individual trauma focused cognitive-behavioural therapy (TFCBT), eye movement desensitisation and reprocessing (EMDR), stress management and group TFCBT are the most effective treatment types for PTSD patients in general (Bisson & Andrews, 2008; Bisson et al., 2007; Seidler & Wagner, 2006).

As conclusive the current results on PTSD treatment efficacy in general population are, the research on treatment of torture victims is, however, scarce (review Campbell, 2007). Many of the current treatment methods are applications from more general trauma treatment techniques, such as cognitive-behavioural treatment (CBT).

Group therapy has been suggested to be especially adequate among war and torture survivors, who feel unsafe in intimate social encounter and easily feel that only those with similar experiences can understand them (Fischman & Ross, 1990). In comparison to individual approaches, group procedures provide them sense of communality and cohesion, opportunities for sharing and validating painful memories, learning to trust, diminishing the feelings of shame and helplessness and preventing social isolation (Fischman & Ross, 1990; Foy et al., 2000; Harvey, Bryant, Tarrierc, 2003; Turner, McFarlane, & van der Kolk, 1996). There is some evidence that group therapy can be effective for torture survivors (Sehwail & Rasras, 2001), but no comparative research is available on the effectiveness of group versus individual therapy among torture victims.

Therefore, the fourth aim of this study was to examine the differences in efficacy of individual and group treatment approaches, both in diminishing PTSD symptoms and somatic symptoms and in enhancing positive growth. (Article IV).

Role of representations in the treatment process

Research on trauma treatment has mainly focused the effectiveness and ignored the role of individual differences in the recovery process. As representations of self and others have been proposed to be central psychological constructs in symptom formation, they should be studied also in the context of treatment process.

In general, patient's quality of object relations, i.e. representations of self and significant others are considered important for therapy efficacy. Empirical findings suggest that patients' mature and differentiated object relations predict successful therapy outcome (Ogrodniczuk, Piper, Joyce, & McCallum, 2001; Piper, McCallum, Joyce, Azim, & Ogrodniczuk, 1999; Hull, Clarkin, & Kakuma, 1993). In their studies on inpatients with severe psychopathology, Blatt and colleagues found that good outcome in long-term treatment was related to changes in the descriptions of self and significant others. Clinical improvement was associated with increased positive content and differentiation and articulation of significant figures, and increased capacity for representing reciprocal interpersonal relatedness (Blatt et al., 1997; Blatt et al., 1996; Gruen & Blatt, 1990).

Little research is available on the role of object relationships or representations among trauma survivors. Ford, Fisher, and Larson (1997)

examined the role of object relations as a predictor of outcome in chronic PTSD inpatient treatment and found that patients with moderate structural maturation level of representations showed decrease on PTSD symptoms, anxiety, and global distress, whereas patients with low structural maturity of representations did not show consistent change. Low level structural quality of representations also predicted premature termination of the therapy. No research exists on the relation of representation qualities and treatment efficacy in survivors of torture and ill-treatment.

Thus, the fifth aim of this study was to examine the role of self and other representations in the treatment of torture survivors. (Article IV).

Research questions and hypotheses

Only the main research questions and hypotheses of the study are presented here. More detailed questions and hypotheses are presented in the original articles.

Personality structures underlying posttraumatic distress

- Q1: What kinds of patterns of self and significant other representations may be identified among former political prisoners? (article I)
- **Q2:** How representation patterns associate with political prisoner's mental health? (I)

Hypotheses: Questions 1 and 2 are explorative.

Q3: How adult attachment styles associate with former political prisoner's mental health? (II)

Hypothesis: Secure attachment is associated with high level of posttraumatic growth and low level of negative emotional experience, whereas both insecure-avoidant and insecure-preoccupied attachments are associated with a low level of posttraumatic growth and a high level of negative emotional experience.

Dealing with trauma: coping and recovery

Q4: How former political prisoners differ from non-prisoners in dispositional and situational coping strategies? (III)

Hypotheses: 1. Dispositional coping:

The political ex-prisoners and non-prisoners do not differ in their dispositional coping styles because trauma in adulthood, even if extremely threatening, may not impact stable personality characteristics.

2. Situational coping:

Alternative hypotheses are available:

According to the helplessness model, political prisoners use high levels of passive, avoidant, and emotion-focused coping, as well as low levels of active and constructive coping strategies due to their harsh incarceration experiences.

According to the resourcefulness hypothesis, political ex-prisoners show high levels of active, constructive, and political coping strategies, and low levels of passive and emotion-focused strategies due to their choice of activity and ideological commitment.

- **Q5:** How dispositional and situational coping strategies associate with posttraumatic distress? (III)
- **Q6:** How compatibility between dispositional and situational coping is associated to mental health?

Hypothesis: Compatibility between dispositional coping styles and situational coping strategies predict low levels of psychological distress due to low psychological costs

Q7: How effective individual and group treatments are in decreasing posttraumatic distress, and increasing posttraumatic growth? (IV)

Hypotheses: The question is explorative.

Q8: How self and other representations associate with changes in mental health during individual and group treatments? (IV)

Hypothesis: Persons whose representations are characterized by positive contents (benevolent, ambitious, and nonpunitive) and mature structure (high level of differentiation and conceptual maturity) show decrease in PTSD and somatic symptoms and increase in posttraumatic growth across one year of treatment.

The question about whether the content and structure of representations play a different role in individual and group treatments is explorative.

Methods

A summarized description of the participants, procedures and measures is given in this section. Detailed information is provided in each of the original articles. An overview of the study design and measured concepts are presented in the figure 1.

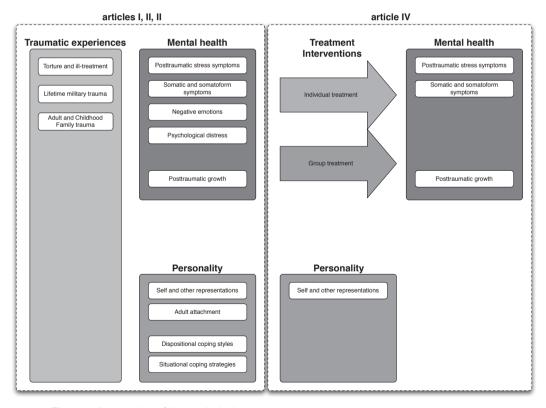


Figure 1. An overview of the study design.

Participants

The participants in the four studies were drawn from three separate samples. The samples and their use in each studies are as follows.

First sample consisted of 117 Palestinian men, who were political ex-prisoners from the Gaza Strip. All of them had been imprisoned during the First Intifada, the national uprising for independence in 1987, and were freed according to the Oslo peace agreement that was signed between Israel and the Palestinian Liberation Organization (PLO) in Washington in September 1993. The list of 1500 names was received from a non-governmental organization providing ex- prisoners social services and vocational training. Every tenth name was chosen. The participation was fully voluntary and no reward was possible to receive.

For the study described in Article I, the target sample were 153 ex-prisoners, of whom 36 were left out because of incomplete accounts of the representation data. In Article IV the same sample was used to yield data for 19 men, who participated in individual and 20 men, who participated in group therapy at local mental-health clinics in Gaza. The individual therapy sample consisted of voluntary consecutive referrals in clinics and the group therapy sample of volunteers seeking counseling and preferring this type of intervention in the Gaza Community Mental Health Programme. Furthermore, 76 men served as a control group, and were drawn from a separate community sample of political ex-prisoners.

Second sample consisted of 275 Palestinian men, who were political ex-prisoners from the Gaza Strip. All the men had been imprisoned during the First Intifada. Of these men, 225 were randomly sampled from a list of 1000 political ex-prisoners in a local human rights organization, every fourth name was selected. An additional 50 men from local rehabilitation programs participated. Data collection was conducted on two occasions in 1997 and 1999. This data of 275 men was used in the study presented in Article II.

Third sample consisted of 184 men, 92 of them were political ex-prisoners and 92 their matched controls. Participants were derived from a Palestinian community sample (n=585), which was randomly selected and covered three refugee camps, two resettled areas and three cities in the Gaza Strip. The matching criteria of participants were age (< 20–29; 30–39; 40–50, > 50), education (no schooling, primary, secondary, and

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university), and place of residency (refugee camp, town and resettled area). 33.6% of men in the epidemiological sample had been imprisoned during the First Intifada, which corresponds with statistics showing that about third of Palestinian men have been imprisoned by Israeli military forces during the Intifada I (B'Tselem, 1995; 1999). The data from this sample was used in the study described in Article III.

Data collection

The fieldwork was conducted in cooperation with the Palestinian ex-detainees' rehabilitation programs and local mental health clinics (the Gaza Community Mental Health Program GCMHP). The participation of the former political prisoners was voluntary and they did not receive any rewards for it.

The data was collected by male field workers, who were trained by the researchers. Field workers approached the participants personally in their homes and explained the study aims to them. The interview lasted about 1.5 hours. None of the former political prisoners refused to participate, apparently because the interviews took place in their homes and the interviewers were familiar and respected members in the community. GCMHP clinical team provided consultation and help for mental health issues if participants so wished. In the clinical context, the case managers in the clinics distributed the questionnaires.

Treatment procedures

The duration of both individual and group therapies was around twelve months, and the clients were seen and groups met once a week. Seven male therapists had clients in individual therapy (one therapist had six patients, two had five patients each, three had two patients and one had three patients). The therapists were trained as MA social workers or psychologist in Arabic universities and were specialized in trauma treatment at the Copenhagen Rehabilitation Centre for Torture victims. The therapies involved specified techniques for torture victims such as systematic desensitization, stress inoculation and coping skills training,

and emotion regulation, combined with a wider approach including victim, family, and social problems. Five counselors (four men and one woman), educated at BA level in local universities, led the group therapy sessions with five participants in each. The approach was to provide with mutual support groups that concentrate on sharing and validating the individuals' personal traumatic experiences, prevent social isolation and solve socio-economic problems.

Measures

Traumatic experiences

Torture and ill-treatment

Torture and ill-treatment was evaluated (in studies I, II, and IV) with a list consisting of 30 interrogation methods including physical (e.g., beating hands and legs) and psychological (e.g., harassing family members) ill-treatment, sexual harassment (e.g., attempted rape), sensory deprivation (e.g., solitary confinement) and overexposure (e.g., standing in the sun). These items were derived from an Amnesty International report (1984), earlier studies (Allodi, 1985) and testimonies of other Palestinian prisoners (Al-Haq, 1988). The interviewees were asked whether they had been exposed to such methods during the interrogation: (1) never, (2) sometimes or (3) very often. A sumscore was formed to indicate level of self-reported torture and ill-treatment experiences.

Lifetime military trauma

Lifetime military trauma was assessed (in study III) using a combined variable covering adulthood and childhood experiences of losses, destruction and military violence. Adulthood military trauma involve 18 traumatic events derived from the Harvard Trauma Questionnaire, section I (HTQ-I by Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1993). They cover traumatic events that people face in political and military conflicts (e.g. witnessing and being the target of shooting, violent deaths, combat experience, being wounded, air raids and house demolition). The participants were asked whether they had been exposed

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to each event (0=no; 1=yes). Childhood military trauma -scale includes the same traumatic experiences and the participants were asked to indicate whether they had been exposed to these events (0=no; 1=yes) before the age of 12.

Adult and Childhood Family trauma

Adulthood family trauma was measured (in study III) by a 13-item scale describing domains of death and separation in the family, family conflicts and domestic adversities, such as aggression and humiliation. The participants were asked whether they had been exposed to each event (0=no; 1=yes) in the adult lives. Childhood family trauma -scale includes the same traumatic experiences and the participants were asked to indicate whether they had been exposed to these events (0=no; 1=yes) before the age of 12.

Posttraumatic distress

Posttraumatic stress symptoms

We used two ways of measure PTSD-symptoms: Self-reported questionnaire of Harvard Trauma questionnaire (HTQ) in studies I, III and IV, and CIDI-2.1 in study III.

HTQ by Mollica & Caspi-Yavin (1991) consists of 30 symptoms, the intensity of which participants rate from 1 (not at all) to 4 (very much). Sixteen of the items are derived from DSM-III-R criteria for PTSD (e.g. I have recurrent nightmares), and 14 items from clinical experience (e.g. I feel guilty for having survived). HTQ provides three sumscores of traumatic symptoms: intrusive re-experiencing, avoidance, and hyperarousal. Detailed information of the HTQ is provided in the article I.

CIDI-2.1 diagnostic interview scale for PTSD-symptoms consists of 21 indicators of DSM-IV criteria for posttraumatic stress disorder. The total score refers to the number of PTSD symptoms reported as a part of the DSM-IV lifetime diagnose. The Cronbach's α of the sumscore was 94.

Somatic and somatoform symptoms

Somatic symptoms were assessed using a questionnaire developed by Allodi (1985) (in studies I and IV). The participants were asked to indicate to what extent they suffered from each of the 31 symptoms. The list is composed of items referring to physical symptoms and pain often associated with torture (hearing problems, blood in the urine, aches and pain in the teeth, high blood pressure), and symptoms often associated with depression and anxiety (lack of appetite, loss of weight, feeling like vomiting, feeling hot or cold, trembling, recurrent unlocated pains). The scale was a 3-point Likert scale: (1) not at all; (2) sometimes; (3) frequently. The sumscores were formed based on symptom contents: Diversified aches and pains included items such as blood in the urine, and pain in the teeth. General symptoms included items such as stomach and heart problems, and high blood pressure. Psychosomatic symptoms consisted of lack of appetite and losing weight, for example.

Somatoform symptoms were assessed (in study III) using the CIDI-2.1 diagnostic interview scale consisting of 30 indicators of the DSM-IV somatization, conversion, hypochondrias, and pain disorder symptoms. Cronbach's α for the sumscore was.88.

Negative emotions

Negative emotional experience was indicated (in study II) by 14 negative emotions derived from Fridja, Kuipers, & ter Schure (1989) and Smith (1991), who conceptualize the emotional experience as a multilevel construct involving appraisals, feeling states and action tendencies. The participants were instructed to think about their prison experiences. Then they were given a scale consisting of seven negative appraisals of the experience and seven negative feeling states. Participants rated the intensity of each appraisal and feeling state on the ten-point scale (0 = nothing at all, 10 = extremely strong).

Psychological distress

Psychological distress was evaluated two-ways: using the SCL-90-R self-report instrument and the CIDI-2.1 diagnostic interview (both in study III). The SCL-90-R is a 90-item self-report instrument revealing generalized feelings of malfunctioning and psychological distress

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(Derogatis & Cleary, 1977). Participants answered on five-point scale (0 = never, 1= rarely, 2 = sometimes, 3=often, 4= always) how often they suffered from each problem. The SCL-90-R was translated and validated for use with Arabic-speaking populations, and studies among Palestinian male (Abu Thahina, 1999) and female (Khamis, 1998) trauma victims, and primary health care patients (Afana, Dalgard, Bjertness, & Grunfeld, 2002) showed good internal reliability. In this study, all nine dimensions each including 10 symptoms were used: somatization (Cronbach's α =.82), obsessive-compulsive symptoms (α =.80), interpersonal sensitivity (α =.81), depressive symptoms (α =.87), psychoticism (α =.81), phobic anxiety (α =.83), paranoid ideation (α =.81), anxiety (α =.83), and hostility (α =.82).

CIDI-2.1 diagnostic interview scale for depressive symptoms consists of 21 indicators of the DSM-IV major depression and dysthymia disorder symptoms (study III). The Cronbach's α for the sumscore was.97.

Posttraumatic growth

Experiences of posttraumatic growth were measured (in studies I, II, and IV) using the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996). It is a 20-item scale that measures the degree of reported positive aspects and changes after a traumatic experience, such as gaining better understanding of the self, spirituality and social cohesion. The intensity of each aspect is rated on a 4-point Likert scale: (1) not at all; (2) to a small degree; (3) to a moderate degree; (4) to a very great degree. The total sumscore was applied in this study.

Personality structures

Self and other representations

Self and other representations were assessed (in studies I and IV) by using a modified version of a procedure developed by Blatt and collagues (Blatt, Chevron, Quinlan, Schaffer, & Wein, 1992; Quinlan, Blatt, Chevron, & Wein, 1992), which evaluates the content and structure of spontaneous descriptions of the self and significant others. The participants were asked to describe their spouses, themselves and their childhood relationships with their mothers and fathers by using five adjectives, and then to

illustrate these adjectives with a short story. We chose to include the descriptions of the mothers and fathers as representations of childhood rather than current relationships (as Blatt et al. originally did), because in this way we would have an indication of the person's current experience of the onset of representations (see e.g. Main, Kaplan, & Cassidy, 1985).

Content. The content of the descriptions was assessed using three sumscores of 12 qualitative-thematic 7-point scales, which evaluate the presence and intensity of qualities that could be attributed to the person being described (Blatt et al., 1992). The scales were Affection, Ambition, Malevolence-Benevolence, Cold-Warmth, Degree of Constructive Involvement, Intellect, Judgement, Negative-Positive Ideal, Nurture, Punitiveness, Success, and Weakness-Strength. Three sumscores were formed from the scales: Benevolence, Ambition and Punitiveness. The sumscores were derived from previous factor analyses made by the authors of the article I (available from the authors).

Structure. The structure of the spouse and self descriptions were scored using a 9-point scale evaluating the conceptual level, i.e. the cognitive development of representations (Blatt et al., 1992). The scale for the conceptual level goes through the following levels, Sensomotoris-Preoperational (score 1), Concrete-Perceptual (3), External-Iconic (5), Internal-Iconic (7) and Conceptual (9). In order to evaluate the descriptions of childhood relationships with the mother and father, we developed a 9-point scale based on Selman's theory of the development of social cognition (Selman, 1980). The need for the new scale arose from the modification of the instruction to describe the childhood relationship with the mother and the father, rather than the mother and the father themselves. This scale goes through the levels of Egocentric Perspective Taking (score 1), Subjective Perspective Taking (3), Reciprocal Perspective Taking (5), Mutual Perspective Taking (7) and Societal-Symbolic Perspective Taking (9). Furthermore, the differentiation level of the representation is indicated by the number of qualitative attributes that were scorable in the description (0 to 12). Finally, the degree of ambivalence expressed in the descriptions is assessed on a 5-point scale from 1 (no ambivalence) to 5 (extreme ambivalence). More details are available in the article I, tables 1 and 2.

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Interrater reliability. The written descriptions were scored by two independent judges, one of them an experienced clinician and the other the first author of the study. Before scoring, the judges went through a 16-hour training procedure. The scoring order of the descriptions was randomized and the judges were blind to all other information of the participants. The interrater reliability for all of the scorings were based on a separate sample of 15 Palestinian men, whose responses provided the total of 60 descriptions (of their mothers and fathers, spouses and themselves). The interrater reliability varied from reasonable to excellent. More detailed description of the interrater reliability is provided in the article I.

Adult attachment

Adult attachment was measured (in study II) by The Attachment Style Questionnaire by Feeney, Noller, & Hanharan (1994), which is a 40-item self-report questionnaire. Participants rate on a Likert scale from 1 to 6 (1 = strongly disagree, 6 = strongly agree) feelings and behaviour in close relationships. Averaged sum scores were formed following Feeney et al. (1994), and depicted secure, insecure-avoidant and insecure-preoccupied dimensions of attachment. The secure scale includes 10 items (e.g., "I find it easy to trust others"). The insecure-avoidant scale includes 14 items (e.g., "I worry about people getting too close"). The insecure-preoccupied scale includes 12 items (e.g., "Other people often disappoint me").

Dispositional coping styles

Dispositional coping styles were assessed (in study III) in relationship to two imaginary but manageable stressful situations: a damaging gossip and loss of property in theft. The participants estimated by a nine-item checklist (Stone & Neale, 1984) how they would cope in each hypothetical situation. The instruction allowed the respondents to choose more than one coping alternative, but the majority of participants marked only one. Coping alternatives were scored as 0=no and 1=yes. Four sum variables were constructed based on the 18 coping responses, i.e., nine alternatives in two stress situations: (a) Active and constructive (5 items, e.g., show that the gossiping is false and try to get the property back, Cronbach's α .56), (b) Avoidance and denial (5 items, e.g., ignore the gossiping and

avoid thinking the loss, Cronbach's α .53), (c) Social affiliation (5 items, e.g. discuss the problem and try to find a person to help, Cronbach's α .83); and (d) Emotion-focused coping (5 items, e.g., e.g., get angry and accuse somebody, Cronbach's α .50).

Situational coping strategies

Situational coping strategies were assessed (in study III) in relation to the life-event interview by asking participants to indicate how they coped with each of the traumatic events that they reported. The life-event interview for adulthood involved eighteen items, such as lack of food and water, loss of home, witnessing killing, serious injury or escaping death. The participants answered by a six-item coping checklist by Mattlin, Wethington, & Kester (1990) whether they had coped with each situation by, for instance, active efforts, passive withdrawal, or by any other ways. Political activity as a coping strategy was added based on responses to the last alternative. Six averaged sum variables were formed by counting responses (1=yes) across coping with reported traumatic experiences, indicating the following situational coping strategies: (a) Active and constructive, (b) Avoidant and passive (c) Social affiliation, (d) Emotion-focused coping, (f) Religious affiliation, and (g) Political activity. Because the value of each coping strategy was dependent on the exposure to traumatic life-events, the coping scores were divided by the number of the reported traumatic events. The accounting procedure did not allow us to measure the internal consistency of the situational coping strategies (i.e., uneven number of items and dividing of scores).

Translation of measures

Instruments were translated focusing on content, criterion, technical, conceptual and semantic equivalence as recommended by Flaherty et al. (1988). A team of four Palestinian social scientists and doctors checked the cultural adequateness for Palestinians in Gaza. The measures of posttraumatic growth, adult attachment, emotional experience, and representations were translated from English into Arabic by a bilingual psychologist and independently back-translated by a bilingual social worker. The Harvard Trauma Questionnaire was translated from English

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into Arabic and back-translated into English by members of a research group at the Rehabilitation Center for Torture Victims in Copenhagen. The torture and ill-treatment scale was translated into Arabic for earlier epidemiological studies (El Sarraj et al., 1996).

Results

A short overview of the main results is given in this section. Detailed information with statistical parameters is provided in the original articles.

Personality structures related to posttraumatic adjustment

What kinds of patterns of self and significant other representations may be identified among political prisoners? (I)

Cluster analysis identified three representation patterns based on participants' descriptions of their spouse and themselves, and of childhood relationships with their mother and father. Representation patterns differed in negative vs. positive content and in the levels of differentiation and conceptual maturity. The Malevolent Others and Defeated Self representation pattern was characterized by very negative content, and poor differentiation and conceptual maturity in all descriptions. The Moderate Parents and Negative Spouse pattern was characterized by an average level of content negativity/positivity and reasonable levels of differentiation and conceptual maturity. Finally, the Benevolent Spouse and Ambitious Self pattern showed the most positive content and the highest levels of differentiation and conceptual maturity in spouse and self descriptions. The three representation profiles are illustrated in article I.

How representation patterns associate with mental health? (I)

The results revealed that self and other representations were associated with both the posttraumatic stress symptoms and the positive growth, but not with the somatic symptoms. The men with the Malevolent Others and Defeated Self representation pattern reported significantly higher levels of posttraumatic stress symptoms (intrusion, avoidance, and hyperarousal symptoms) and lower levels of posttraumatic growth (personal growth, spirituality, and social affiliation) than men with other representation patterns.

How adult attachment styles associate with former political prisoner's mental health? (II)

The results substantiated the hypothesis that secure attachment plays a protective role in posttraumatic adjustment, while insecure attachment forms a risk for posttraumatic symptomatology. Analyses revealed that in comparison to insecure men, the men with secure attachment reported more personal strength, positive affiliation to others and positive spiritual change. Further, both insecure-preoccupied men and insecure-avoidant men reported high level of negative emotional experience. In addition insecure-avoidant men showed low level of personal strength and affiliation to others.

Considering the moderating role of attachment between the relation of the level of ill-treatment and the level of positive growth, the results revealed that men with secure attachment reported relatively more positive affiliation to others when they were exposed to a high level of torture and ill-treatment than when exposed to a low level. Insecure-avoidant men, in turn, reported relatively more negative emotional experience when exposed to a high level of torture and ill-treatment than when exposed to a low level.

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How former political prisoners differ from non-prisoners in dispositional and situational coping strategies? (III)

Concerning the use of dispositional coping styles the results validated the hypothesis that former political prisoners do not differ form non-prisoners. Results concerning the use of situational coping strategies substantiated the resourcefulness hypothesis in that the ex-prisoners employed less avoidant and denying, and emotion-focused coping strategies than non-prisoners.

How dispositional and situational coping strategies associate with posttraumatic distress? (III)

The results showed that in regard to dispositional coping styles, high levels of active and constructive coping, and low levels of emotion-focused coping were related to low levels of somatoform symptoms, psychological distress, PTSD symptoms and depressiveness.

Concerning situational coping strategies, seemingly opposite coping responses, that is, high levels of avoidance and denial on the one hand, and political activity on the other, were associated with low levels of PTSD and depressive symptoms. In addition, high levels of avoidance and denial were associated with low levels of somatoform symptoms. Social and religious affiliations were ineffective coping strategies as high levels in using them associated with high level of psychological distress.

How compatibility between dispositional and situational coping is associated to mental health?

The results substantiated the hypothesis that the compatibility between dispositional coping style and situational coping strategy predicts low level of psychological distress. The analyses formed four groups, two indicating a match between strategy and style (either high – high or

low-low constellation), and two indicating a mismatch between strategy and style (either high-low or low- high constellation).

The results revealed that incompatibility indicating high dispositional activity and low situational activity was related to high level of hostility symptoms. Further, incompatibility characterized by high dispositional and low situational avoidance and denial was associated with high level of medical complaints. Incompatibility involving low dispositional and high situational activity was not a risk for high level of medical complaints.

How effective individual and group treatments are in decreasing posttraumatic distress, and increasing posttraumatic growth? (IV)

The results showed that avoidant and hyperarousal symptoms decreased and posttraumatic growth increased significantly in individual treatment but not in group treatment. Intrusive symptoms decreased in both individual and group treatment conditions, but not among controls. In addition, analyses indicated significant decrease in somatic symptoms in both treatment groups and control group.

How self and other representations associate with changes in posttraumatic distress during individual and group treatments? (IV)

The results revealed that benevolent, ambitious and non-punitive content in self and other representations predicted decrease in PTSD symptoms and increase in posttraumatic growth. Avoidant symptoms decreased especially among men with non-punitive representations, and posttraumatic growth increased only among men with benevolent and ambitious representations.

Further, the change in posttraumatic distress differed according to the treatment type. Among men participating the group treatment or in control group, PTSD symptoms decreased and posttraumatic growth increased, only among the men whose representations were positive in content and structurally mature. In contrast, characteristics of representations made no difference in efficacy of the individual treatment.

The aim of the present study was to examine why other political trauma victims survive from their traumatic experience quite well while others continue to suffer extensively. For this task, the present work begun by examining the role of personality in relation to posttraumatic adjustment (articles I, II, III) and ended to studying how personality contributes to the successfulness of therapy (article IV).

Main findings suggest that not only in terms of less amount of distress but also in terms of more positive growth after traumatic experience, the underlying core personality structures are of importance. Two approaches to personality were utilized here, namely more idiosyncratic clustering of self and other representations as suggested by object-relations theory, and a typological model of adult attachment working models as delineated by attachment theory. The results from both these perspectives suggested similarly that internal models might act either as protective as well as vulnerating factors in recovery from trauma. In addition to these "core" personality structures, the more active and contextual personality aspects, namely, coping skills and strategies were studied. The results show that former political prisoners utilize unique constellations of coping strategies in order to survive their experiences. Also, the results indicated that individual representation patterns of self and others were highly relevant in predicting what kind of treatment proved to be most beneficial.

Together the results of the present study underscore the person-centered perspective in understanding recovery process from political trauma. They contribute to existing literature especially in highlighting the dualistic role of personality. Thus, not all individuals are shattered internally by even a very severe traumatization and they were also those who has less symptoms and who has most experiences of positive growth.

However, also the reverse was true. Among those men, whose internal representations were, indeed, characterized by negativeness and mistrust in self and others continued to suffer more, experienced less positive growth and, importantly, needed more intensive treatment. These findings are relevant from both clinical as well as societal viewpoints. They underscore the need to assess the trauma victim's personality, i.e., internal representations, in order to understand the meaning of torture and ill-treatment to the particular individual as well as plan suitable and cost-effective treatment.

In the core: Personality structures underlying posttraumatic adjustment

Representation patterns and recovery

The findings of this study identified three representation patterns which differed from each other in terms of the content and structure: first, Malevolent Others and Defeated Self, second, Moderate Parent and Negative Spouse, and third, Benevolent Spouse and Ambitious Self. These representation patterns have a multidimensional nature consisting of (1) multiple interrelated representations, including both childhood and current significant relations, (2) negative versus positive content, and (3) structural qualities in terms of differentiation and conceptual maturity. The differences in representation patterns emphasize the interrelatedness and complexity of representations, which has not been empirically showed in previous research. However, theoretically, these representation patterns fit well into the general models explaining the role of representations and mental health.

The overall negative content and poor structural definition of significant others and the self in Malevolent Others and Defeated Self representation pattern could be interpreted along the lines of schema theories by Janoff-Bulman (1992) and Horowitz (1997). Malevolent Others and Defeated Self representation pattern is perfect rendering of a person whose fundamental assumptions have been shattered by the traumatic experience. The person sees his significant relations to

be malevolent, non-helpful, and non-comforting. His self-image is diminished to unworthy and incapable, and he lacks future directions and ambitions. Furthermore, consistently with schema theories, the men with Malevolent Others and Defeated Self representation pattern suffered most from PTS symptoms and had least amount of beneficial growth experiences. As Janoff-Bulman (1992) suggests in her theory, the dramatic disintegration of previous assumptions and posttraumatic reality leads to typical PTSD symptoms. Also, experiences of posttraumatic growth are not possible until the fundamental cognitive-emotional assumptions are reconstructed (Janoff-Bulman, 2006).

The results concerning representation patterns are also in line with findings of Blatt and his colleagues: the narrow and conceptually immature representations are related to psychopathology (Blatt et al., 1997). It may also be of significance to note, that in their studies Blatt and his colleagues found that especially malevolence attributed to significant others was related to more severe forms of psychopathology and they suggest that this has straightforward implications for clinical treatment plans (Blatt et al., 1996). Interestingly, our results seem to confirm this idea. Malevolence was linked to need for more intensive, individual treatment as well.

The emergence of the Moderate Parents and Negative Spouse, and the Benevolent Spouse and Ambitious self representation patterns among political trauma victims is interesting. In contrast to Janoff-Bulman's ideas, they show that not all individuals suffer from extreme shattering of internal view of self and others. Especially the profile of the Benevolent Spouse and Ambitious Self may be interpreted from a developmental rather than trauma perspective. Thus, it may be that for some individuals the core perception of other people is so strong that not even a severe traumatization alters them. This viewpoint is strengthened by the findings that these groups experienced, indeed, less symptoms than the men with the Malevolent Others Defeated Self pattern.

However, as the representation qualities were only assessed after the traumatic event, it is merely speculative whether or not the traumatic experience has changed them. Rather interesting finding approaching this question was that there were no connection between the characteristics of the traumatic event itself and the representation patterns. That is, the men with different representation patterns did not differ in terms of

severity of ill-treatment, number of detentions or length of imprisonment. According to the shattered schema -theory, one could expect that the men with Malevolent Others and Defeated Self representation pattern would have experienced more severe ill-treatment than the other men. This was not, however, the case in this study. Perhaps this finding indicates that the linkage between trauma – representations – mental health is more complicated. The results concerning the role of attachment styles may shed some light on this issue.

Attachment and recovery

The results revealed that secure attachment style played a protective role in enhancing posttraumatic growth, while men with insecure-avoidant attachment were vulnerable to negative emotional experience in the face of trauma. Among secure men, exposure to torture and ill-treatment was associated with increased shared emotions and trust in their fellow-men. Moreover, those secure men who were exposed to severe ill-treatment, reported even more positive growth than men with less severe torture experiences. Thus, cruel experiences did not shatter their core beliefs in human virtue, but rather strengthened them. Secure men were apparently capable of integrating their dangerous experiences and fears into an overall positive adaptive strategy, and this made it possible for them to mature and have beneficial transformation. In addition, secure men had less negative emotions than insecure men. In sum, the findings in this work suggest that secure attachment style is able to emphasize the psychic resources the individual has, both in diminishing distress and strengthening the beneficial after effects of trauma. This finding is in accordance with other studies showing that secure attachment serve as a protective factor in relation to PTSD (Kanninen, et al., 2003; O'Connor & Elklit, 2008)

Another hypothesis of the role of attachment in posttraumatic adjustment is that the traumatic experience may either match or not match victims' pre-existing working models and core beliefs of themselves, other people and the world (Crittenden, 1997; Dunmore, Clark & Ehlers, 2001, Kanninen et al., 2003). Insecure persons expect others to be malevolent and cruel experiences may confirm their core beliefs. Our result concerning insecure-preoccupied men substantiated the hypothesis

that the match between the attachment-specific working models and current experience can neutralize trauma impact. Insecure-preoccupied men generally reported a high level of negative emotions, which accords with their characteristic way of ruminating and being easily overwhelmed by negative emotions (Main, 1996; Shaver & Hazan, 1993). Torture experiences did not, however, further escalate their negative emotions, possibly because they matched their inner working models and memory schemas.

Match-mismatch -hypothesis was not, however, substantiated concerning secure men, who would have been expected to be profoundly shocked by the malevolence of their perpetrators. A probable explanation for this would be that these secure men are so called earned secure, rather than naïve secure (Crittenden, 1997). That means, that they have previously undergone stressful situations in which they have managed to survive with help of their significant other relationships. Therefore, their secure attachment is stronger, and they do not experience a particular mismatch between their attachment expectations and traumatic experience. In contrast, their attachment representations give them reliance that they will be able to go on with their lives – as they have before.

Men with insecure-avoidant attachment, in turn, responded with highly negative emotions when exposed to severe trauma. Avoidant persons typically minimize and belittle their painful experiences, as well as deny and numb the emotions evoked (Collins, 1996; Mikulincer & Orbach, 1995). This seemed also to be generally true in our sample (no direct main association was found between insecure- avoidant attachment and negative emotions), but especially, once exposed to a high level of torture and ill-treatment, the insecure-avoidant attachment formed a risk for intense negative emotions.

To summarize the findings about the role of attachment in posttraumatic adjustment, the results showed that the working models of secure individuals involved benign perceptions and a sense of inner strength that facilitated effective coping with traumatic stress, whereas insecure-preoccupied individuals exaggerated the significance of the threat and negative perceptions, and felt personally inadequate and helpless in dealing with the stress. These results are in accordance with the findings of O'Connor and Elklit (2008) who propose in the light of their data

the following: "attachment may be an intermediate factor in relation to psychological trauma in the direction that a high degree of secure attachment could be a protective factor, whereas preoccupied exhibits a neutral middle ground, while fearful and dismissive attachment are risk factors in relation to specific types of abuse and psychological distress."

Active interaction: Coping strategies

This work suggests that successful coping in imprisonment demands interplay between personality characteristics and contextual flexibility. Concerning the level of personality characteristics, as hypothesized, imprisonment was not associated with dispositional coping styles. Dispositional coping styles are typically formed early in development and reflect personality or temperamental characteristics such as activity or passivity, and need or tolerance for excitement (Ayers, Sandler, West, Roosa, 1996; Horowitz, 1979). Further, as the findings showed that active and constructive dispositional coping styles are related to better mental health, we could argue that the personality acts as a protective factor in torture experiences also in the form of personal coping style.

In regard to flexibility in situational coping strategies, the results showed that political prisoners are able to use active resources in their coping efforts. They employed less avoidance and denying as well as less emotion-focused situational coping strategies than non-prisoners. That is, they did not sink into helpless, desperate and passive state as would have been expected by the classical helplessness model. Ideological commitment may serve as a situational resource for active coping; through their ideological worldview the prisoners are able to interpret and attribute the causes and consequences of trauma in meaningful and consoling ways (Basoglu et al., 1996; Becker, 1997). Active coping strategies in turn enable the re-organisation and integration of representational content and structures of the fundamental assumptions about the world and self, which then protects prisoner's mental health. Avoidant and passive coping strategies would not allow the representational integration process to happen.

Effectiveness of situational coping was a combination of seemingly opposite strategies: both avoidance and denial, and political activity were

effective, i.e., they were related to low PTSD and depressiveness. The result accords with observations that flexibility and repertoire of various kinds of coping strategies is effective in dealing with multiple stressful demands (Lazarus, 2000). The particular conditions and situations in prison may pose different demands for successful coping. On some situations it might be better to avoid provocative behavior and perhaps even deny the seriousness of the event. On other situations then, it might be important and valuable to express one's thought and viewpoints. That strengthens person's identity and basic beliefs.

Compatibility between dispositional coping styles and situational coping strategies is important in protecting torture survivors' psychic integrity and mental health. The findings indicated that discrepancy characterized by high dispositional activity and low situational political activity formed a risk for psychological distress, especially for hostile symptoms. The result illustrates a situation in which an actively coping person is unable to realize and express his natural tendencies, which results in distress. This phenomenon may be a risk factor especially for political activists, who have been used to express themselves actively and cope with difficult situations in active manner. In prison conditions, however, they are forced to suppress their natural way of coping (Foley, 2006; Senesh, 2004).

In addition, incompatibility characterized by high dispositional and low situational avoidance and denial was associated with high level of medical complaints. In other words, when a person's natural tendency would be to avoid an unpleasant situation, and when avoidance is not possible in prison conditions, s/he reacts with bodily complaints.

Posttraumatic adjustment: efficacy of individual and group treatment

The results showed that individual treatment was overall quite successful. All PTSD symptoms (intrusive, avoidant, and hyperarousal) diminished, and posttraumatic growth experiences enhanced over the one-year treatment period. Group treatment, in turn, was not that self-evidently efficient. Only intrusive symptoms decreased in group treatment.

Interestingly, posttraumatic growth increased only in individual therapy. Further, only men possessing positive and mature representational qualities benefited from group treatment.

Somatic symptoms decreased among all participants, whether being in individual or group treatment, or in control group. This may be due to the cultural context. In the male Middle Eastern culture it may generally be more convenient to express distress as bodily sensations rather than as mental health problems, which may signify weakness and defeat. Thus, somatic complaints may be more easily diminished as well.

The group therapy techniques in our study involved psychoeducational, behavioral, attribution, social and normalizing issues. This approach was not enough either in healing survivors' posttraumatic symptoms, except for intrusive symptoms, or promoting their posttraumatic growth. Individual interventions, in turn, were combined and tailored with trauma-related techniques, such as emotion regulation, desensitization and training of effective coping strategies, all aiming at both symptom reduction and enhancing positive growth. Individual therapy made it possible to deal with unique personality, family and social issues, thus enabling re-structuring of representations of significant others.

Considering the role of representations in the treatment process, the results confirmed that the good quality of representational content is associated with successful recovery among trauma survivors. This is in line with other studies, which have found similar results in other populations (Blatt et al., 1996; Ogrodniczuk et al., 2001). Interestingly, the beneficial role of good quality self and other representations was especially salient in the context of group treatment, in which positive and mature representations were a prerequisite for recovery. In other words, group treatment was effective *only* among those trauma survivors whose representations were benevolent and well-structured, and were lacking punitive and ambivalent characteristics.

Apparently, reworking and restructuring traumatic experiences and integrating past and present and personal and trauma-related painful memories were successful in individual treatment, which resulted in neutralization of the detrimental impact of poor representation quality. Group treatment, in turn, seems to have activated harmful effects of negative and poorly constructed representations, but did not succeed in reprocessing and integrating of past and present painful experiences.

Our results caution the use of group therapy, at least in the context of Palestinian male former political prisoners. Individual treatment was more effective in contributing comprehensively positive impact among Palestinian ex-prisoners. These findings suggest that different and unique ways of processing traumatic experiences are strongly influenced by self and significant other representations. Understanding their dynamics enables selecting and tailoring the most appropriate treatment method for each individual. Evaluation of the survivor's self and other representation qualities gives guidelines for choosing the intervention type: If a person has benevolent and well-structured representations he/she would be able to benefit from group treatment and peer support. If a person's representations are negative in content and structurally immature, then more intensive, individual therapy would be needed. This type of evaluation could be done by a rather simple screening tool, which could be developed from Blatt's (Blatt et al., 1992) assessment method. The careful elaboration of individual needs is utmost important, as torture survivors cannot undo their painful past, but right type of intervention provides them possibilities to gain new insights and meanings, feeling of control, and even positive perspectives of their experiences.

Limitations and future directions

There are some methodological limitations which should be considered when interpreting the results of this study. Limitations of the measures, samples and study design are presented in detail in the original articles, thus only the main areas of criticism and directions for future research are reflected here.

Considering the investigation of treatment efficacy, the study design and group characteristics were not ideal. The participants were not randomly assigned to treatment groups, and as clinical practices did not allow us to use waiting list procedure, the only alternative for seeking controls was a community sample of former political prisoners according to the criterion of not having sought mental health services. The compared groups were not matched according to significant qualities, i.e., symptoms and representations of self and significant others. At the beginning of treatments the PTSD symptoms were higher and representations qualities

poorer among both individual and group therapy seeking men than among controls. Although initial symptom level was used as a covariant in this study, it would be important that the findings could be replicated in a randomized controlled trial or at least match the groups in baseline for both their representational qualities and symptom levels. This design would reveal the magnitude of the effect of representation qualities for treatment efficacy. Livanou and colleagues (2002) have presented a promising study towards this direction, but more elaboration is needed.

Considering the results for the dispositional and situational coping it is noteworthy to remember that the methods used in this study do not specifically measure the actual coping behaviour during the imprisonment, but rather the more general personal coping tendencies. Thus, in future studies it could be interesting to use a measure which directly assess the coping strategies associated to the particular imprisonment experience.

Further, cultural issues should be considered. The studied Palestinian political ex-prisoners belong to the Arab-Islamic culture and sought mental health consultation in their society and not as refugees. Palestinian understanding of trauma and its implications on human life follow ancient Middle Eastern tradition, in which hardships and challenges are inherent part of life, and humans can gain wisdom and strengths only through struggling. We cannot generalize the result to trauma victims or torture survivors in different kinds of political and cultural setting, for instance, to African and Asian asylum seekers or refugees from the Balkan war. Therefore, the replication of present results in other populations would be interesting. For instance, as many torture survivors live as refugees, it would be important to examine how they see themselves and significant others, and how these representations help or hinder their psychological adjustment. One could speculate that the quality of representations play even more important role for refugees, as they need to adapt their worldview according to their traumatic experience and to the new country and culture.

Moreover, the cultural effects may be decisive in creating of self and other representations. In an Arab Middle Eastern culture the concept of personal identity (representation of the self) is greatly related to the family and to close social and ideological relationships (Stæhr et al., 1993). The role of cultural factors in the construction of self and other representations would be an important area for future studies.

Finally, in this work each concept of personality was studied separately. In other words, first, how representational qualities, second, how attachment styles, and third, how coping strategies relate to posttraumatic distress and recovery. In future studies it would be rather interesting to study how these concepts might be interrelated. For instance, how representational qualities relate to attachment styles, and how these are connected to the coping strategies employed, and how different constellations associate with recovery and healing.

Summary

In the group of highly traumatized victims of human right violence our data showed that there does indeed exist some protective mechanisms. In the light of this study, the inner representations of self, others, and the world are in the core of this mechanism. Even the most incomprehensible torture did not cause every victim's representations to shatter. We found a group of men who even after their horrible experiences saw both their significant other people and themselves as worthy, capable and good. That is, earlier theoretical suggestions that trauma inevitably shatters fundamental assumptions is not correct in this data. The men who had positive representation pattern did not suffer as much and had also positive growth experiences. That means that their positive internal image somehow protected their mental health. Similar finding was that men with secure attachment style had better mental health. Thus, again, positive mental representation about significant social relationships was helpful in terms of mental health. Moreover, the protective importance of representations was reversely true in that the men with shattered representations needed most intensive, individual treatment in order to recover and heal. More dramatically, men with negative mental representations did not recover at all when they participated less intensive group treatment. Thus, the findings of this study strongly suggest that representations should be assessed and measured when helping highly traumatized victims. The ones with positive and benevolent mental representations are stronger and need different help compared to the ones with shattered, overall negatively colored representations. They will need more intensive, tailored care.

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