

Mapping the Multidimensional Picture of Acute Responses to Traumatic Stress.

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A. Introduction

Recent years have seen a growing interest in the immediate responses evoked by traumatic stressors. This renewed interest has several sources, not the least of which is the desire to prevent the occurrence of prolonged stress disorders among survivors. Accordingly, the mapping of the early responses to traumatic events has recently focused on the challenge of identifying risk factors for developing prolonged stress disorders, and in particular post-traumatic stress disorder (PTSD; for review see Brewin et al. 2000). Early therapeutic interventions have equally been evaluated, and sanctioned, by their preventive long-term effects (Wessely et al. 2000).

Yet, the attempts to identify predictors of PTSD and to implement early preventive interventions has so far yielded limited results (see other chapters of this book). One reason for such shortcoming might be an inappropriate shift of the field of observation from examining the obvious (i.e., the inherent reasons for reacting one way or another) to exploring and manipulating elusive risk factors, such as symptoms that may be predictive of PTSD. At this point in time, therefore, there is a need and a reason to re-evaluate the early responses to traumatic events in their proper context.

Examining the early responses can be done at different levels. Aiming to instruct potential helpers, this chapter is both descriptive and explanatory. It assumes that given the heterogeneity of traumatic situations and post-traumatic responses, description is not enough and one must resort to generalizations and theory. The text is guided by several ideas. Firstly, it tries to avoid the confusion between symptoms (i.e., manifestations of diseases) and emitted behavior. Because most trauma survivors are not diseased it makes no sense to read their behavior as being 'symptomatic.'

Secondly, the chapter does not follow the current trend of preferring the reliability of observation and neglecting the validity of underlying mental processes. It posits that comprehending the psychological tasks related to surviving adversity is essential for organizing one's observation and hence for a proper practice of rescue and support.

Thirdly, the early responses to traumatic events are construed as primarily adaptive. Accordingly, all the early responses are, in essence, survival-driven. Survival, here, includes short-term (e.g., avoiding harm, recruiting support) and long term (e.g., learning) goals.

This is not to say that the early responses are always and invariably adaptive. Indeed they may either succeed or fail. A mismatch between situational demands, personal resources and survival mechanism

is one reason for failure (e.g., when withdrawal is used as survival mechanisms in situations from which one can escape or vice versa when scarce resources are wasted in fighting against uncontrollable dimensions of a stressor). Additionally, the effectiveness of the early responses, and ultimately their outcome depend on human interactions that are entered into at the time. Vignettes 1 and 2 illustrate a happy, yet totally fortuitous success in coping with severe trauma and a happy match between survivor and helper.

Vignette 1: This lady reacted to a bomb attack, in which she was slightly wounded, by immediately looking for a young relative, blown away by the blast of the explosion. She had to overcome pain and physical limitations, yet succeeded in finding her relative alive and pull him out of danger. In her mind, saving her relative revealed her strength of character and determination. Had she found him dead or disfigured, this 'success' might have turned into agony.

Vignette 2: Brought to a hospital, a wounded survivor of a mass casualty event was extremely distressed by the idea that the news of her being in an incident might reach her unprepared family. Being in a bed she could not easily reach a telephone, yet on her way to the X-ray Department an attentive aid brought her to a public phone, from which she could call home, still lying in bed. She describes this incident as 'the moment in which she took control' and following which she knew that things were going to be fine.

Finally, as assiduous observer of human reactions to traumata, the authors of this chapter are repeatedly humbled by the bravery and the sophistication with which survivors cope with their misfortune. This chapter, therefore, is a tribute to human resourcefulness and resilience. Not that it denies the painfulness of traumatic experiences. It simply avoids the pitfall of perceiving survivors as passive receivers of adversity, as often depicted by sensational dramatizations. The latter clearly betray and disrespect the human way of surviving adversity.

B. Limitations of current views

a. Symptoms are not enough

The morphology (i.e., the overt expression) of early responses to traumatic events has been repeatedly described (e.g., Solomon 1993). Yet there seems to be little agreement about the nature of these responses. For example, the early distressful responses to traumatic events have been construed as both 'pathogenic' and 'normal' in the sense of being (a) a risk factor for developing of PTSD and, at the same time (b) a necessary step towards recovery.

To make the problem worse, specific symptoms, such as dissociation, intrusive recall of the event and early depression have been conceived as 'pathogenic' (Marmar 1994, Shalev et al. 1998b, Freedman 1999). All the same, almost everyone is perturbed during the

aftermath of a trauma, and everyone experiences a degree of intrusive recall and sadness.

Alternatively, better understanding might be gained from looking at the adaptive role of behavior emitted at the aftermath of traumatic events. The following enclosure offers a short formulation of this approach, specifically addressing the adaptive value of early PTSD 'symptoms.'

In their progression towards recovery, trauma survivors express common responses that may enhance communication with others (e.g., by telling their story time and again); recruit support (e.g., by emitting a 'cry for help') and effectively initiate a process of learning and reappraisal (by going back to memories of the traumatic event and associating them with other experiences).

The same expressions may, in some cases, prevent communication (e.g., when telling the story is fearfully avoided), reduce the helping responses of others (who might be burdened themselves) and consolidate the link between traumatic memories and negative emotions.

Consequently, the effectiveness of expressed behavior at this stage is as important as its overt expression.

An important function of the early response is communication. Outcry is universally emitted in situations of pain, forced separation and distress. Recruiting support from co-species, signaling one's position upon forced separation and, in general, communicating distress to helping others are extremely useful survival-related behaviors. Yet, like most emitted signals, the ultimate outcome of such behavior depends on its ability to elicit appropriate responses from others and make use of such responses. Continuous expressions of distress may, therefore, reflect either a failure to elicit proper responses or a failure to use it appropriately. This is illustrated by Vignette 3.

Vignette 3: Upon admission to a hospital, following a road accident in which she incurred slight wounds, the survivor felt that she could not possibly trust the nursing staff. Her husband came to see her, but he was also 'remote' 'cruel' and 'cold.' She developed PTSD. An exploration of her life history revealed two previous instances of traumatization - sexual abuse by a 'friend of the family' and prolonged physical abuse by her mother (Shalev et al. 1992).

b. The multiple dimensions of a 'trauma'

Another problematic point is the erroneous assertion that traumatic stressors are distinguished by the presence of a threat, as exemplified by the current definition of a traumatic event by DSM IV (APA 2000) : "...event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others." This widely publicized injunction does not capture the essential nature of human traumatization. For example, studies of traumatic stress disorders among body handlers

(e.g., McCarroll et al. 1995) show that concrete threat is not a necessary condition for being traumatized. Extreme events often involve several traumatizing elements, some of which are depicted in **Table 1**.

Table 1. Traumatizing Elements of Extreme Events

Threat
Physiological strain (pain, starvation, dehydration)
Exhaustion
Surrender
Separation
Relocation
Loss
Isolation
Dehumanization
Uncertainty
Incongruent experience
Exposure to the grotesque

Few of these terms require detailed explanation, yet they significantly shape the early responses. *Loss* can be concrete or symbolic (beliefs and expectations). *Loss* may also involve social networks, community structures, financial and personal resources (Hobfoll 1989). *Relocation* is an assault on a deeply embedded territorial habit of humans. It uproots people from cherished land, familiar environment, dear objects and reassuring life routines. *Isolation* (e.g., during captivity) violates a profound need of humans to share the company of others. Importantly, mental isolation may occur even when others are present. Feeling disconnected, detached and unable to resonate with others is a salient description of many traumatized survivors (e.g., Dasberg 1976, Shalev and Munitz 1989). *Dehumanization and degradation* (e.g., as prisoner or war, during sexual assault or group rape) leave severe psychological scars beyond those engendered by threat. This is particularly true when surrender and obedience are enforced. *Uncertainty* during traumatic events (e.g., as to the duration or the source of adversity) is often depicted as extremely distressful.

Finally, *incongruence*, that is, the absolute novelty of an experience and its salient contrast with what had been believed in, known, expected or experienced beforehand is probably the most difficult part of the trauma for many survivors. Examples of the above include the responses of trained rescue workers to being exposed to body parts of young children; of a survivor of sadistic rape who reported having been faced with evil; of a wounded soldier who, during air - evacuation was exposed to the agonizing screams of a friend and ultimately to his death. Holocaust survivors coined the name 'the other planet' to describe Auschwitz. Scholars of the Vietnam War spoke of a psychological 'trauma membrane' separating what had been experienced 'there' from the rest of their lives (Lindy 1985). These terms epitomize the idea of incongruent experiences and properly place them at the core of mental traumatization.

c. Responses are 'polymorphous and labile'

Given the variety of traumatic experiences it is clear that, according to circumstances, survivors' responses may involve apprehension, anger, bewilderment, grief, regret, yearning, attempts to retrieve and repair, efforts to control emotions, attempt to forget, and attempts to re-appraise and make sense of what has just happened. Empirical studies of the early responses reveal these to be "polymorphous and labile," that is, changing rapidly and including a mixture of anxiety, depression, agitation, stupor, numbing and irritability (Itzhaki et al. 1991). Grinker and Spiegel (1945) describe the early 'neurotic' response as consisting of "a passing parade of every type of psychological and psychosomatic symptom."

Whilst the 'heterogeneity' or 'polymorphism' can baffle researchers the experience of those who rescue trauma survivors is very different. Rather than being erratic and incomprehensible to the intimate observer, early responses are eminently and intuitively understandable. They are also very communicative, and readily evoke intense emotional responses and enduring impressions in helpers. Indeed, they rapidly create intense and mutual bonding between rescuer and survivors (Shalev et al. 1993).

In their proper context, therefore, the early responses are clearly understandable, especially when one is ready to read human faces and respond to human emotion. Emotional reading, a deeply embedded function of the human brain offers one of the best approaches to 'mapping the multidimensional picture' of the acute response to traumatic events.

Along the same line, the 'lability' of the early responses is also understandable. Intuitively we know that the response to traumatic should change with time, from an initial 'outcry' to subsequent phases of mourning and elaboration. Yet, the proper time unit here is 'psychological time,' and the latter may differ from one individual to another. Moreover, the sequence of responses may be different in different individuals, with some being initially shut down and unexpressive, and opening up later, and others reacting in very expressive ways - to be soothed with time. When one evaluates groups of survivors, the differences in personal timing, inner experiences, personal and cultural style almost invariably yields a 'labile and polymorphous' picture. Much better understanding may be gained from following individual paths. Indeed, a single observation can hardly inform us about the quality and complexities of an individual's response.

Finally, the period that follows a traumatic event is not uneventful. Secondary stressors (e.g., relocation; disclosing rape experience, enduring surgical operations) tend to follow the primary ones. These new stressors evoke new responses and, as will be argued below, send the survivor, who may already be in a phase of learning and re-appraisal, back to fighting for survival.

d. Can one generalize?

The question, therefore, is can one make any generalizations without being too schematic?. Can one reduce the variety of observable responses while leaving enough room for the specifics of each event, individual and group?. We offer the following as a 'productive reduction.' Firstly, we describe a temporal sequence of the responses to traumatic events, dividing them to four phases: impact phase, rescue, recovery, and return to life. Secondly we outline the psychological tasks related to each phase and the typical expressions of distress. Finally, we use Pearlin and Schooler's (1978) coping model to organize clinical observations by focussing on the effectiveness of emitted behavior rather than on its morphology. A failure to cope may occur at each stage of the response to traumatic events, and such failures are likely to generate similar and easily identifiable behavior patterns. We recommend, therefore, that observers firstly identify the stage (or overlapping stages) in which they find the survivor. Then they should evaluate external and internal stressors. Finally they can identify behavior patterns related to either successful or unsuccessful coping with these stressors. Manifestations of distress will consequently be examined within their proper context, and this in turn may make more sense and lead to more adaptive responses.

C. Succession of responses

Table 2 summarizes a succession of stages of and responses to traumatic events. The table addresses the above-mentioned four different stages, specifying for each the principal stressor, concrete goals of behavior, salient responses and concurrent roles of helpers. The table is meant to be read vertically first to give a summary of the stages and outline their inherent complexity. When read horizontally the table illustrates the extent to which survivors may have different experiences and needs at different stages. Importantly, the table is not meant to suggest a strict temporal progression from one stage to the other. Most often these schematic stages will overlap in reality. For example, a survivor (e.g., of a car accident) may already be adapting to a new reality (e.g., of being injured and hospitalized) when another threat presents itself (e.g., a medical complication), sending him or her back to fighting for survival. Indeed, many survivors will be found simultaneously in more than one stage and therefore have overlapping needs. Finally, because the phase of 'return to life' is not part of the 'immediate responses,' it will not be elaborated in this chapter.

	Impact phase	Rescue	Recovery	Return to life
Principal Stressor	Threat, separation, exposure, incongruence etc...	New external and internal realities	Learning about the consequences of the event	Incongruence between inner experience or resources and external demands
Concrete goals of behavior	Survival	Adjustment to new realities	Appraisal and planning	Re-integration
Psychological tasks	Primary stress-responses:	Accommodation	Assimilation	Practicing and implementing change
Salient behavior pattern	Fight/flight, freezing; surrender etc...	Resilience versus Exhaustion	Grief, re-appraisal, intrusive memories, narrative formation	Adjustment versus phobias, avoidance, depression and PTSD.
Role of all helpers	Rescue and protection	Orientation, provision for needs.	Presence, responsiveness and sensitive interaction	Continuity of concrete and symbolic assistance
Role of professional helpers	Organizer	Holder	Interlocutor	Diagnostician and Therapist

The impact phase

The impact phase of a traumatic event is characterized by actual presence of adversity. Despite the use of the word ‘impact’ this period can be of various duration. The various types of traumatic adversities which have been described in Table 1 are present and often co-occur (e.g., threat, separation, isolation etc...). The survivor’s very concrete tasks during this phase are survival and reduction of harm to self and significant others. Yet other goals are also present, such as preserving one’s dignity, remaining in contact with others and helping others. Issues of altruism and risk-taking by survivors and rescuers are beyond the scope of this chapter. Suffice it to say that these are frequently observed, reminding us of Fredrick Manning’s (1930) intuitive reference to an “inalienable sympathy of one man to another” as a motivating force of soldiers during the carnage of World War One. Simply assuming human sympathy, however, seems quite odd at the present time. For skeptics, therefore, let it be said that rescuing others has evolutionary advantage.

Importantly, primary stress responses are seen at this stage (e.g., fear, surrender, fight etc...), and these responses are often very powerful, unexpected and take control of a person’s behavior. Survivors, therefore, often find themselves acting in ways that they did not expect and had no previous experience of. For example, threatened by likely death a rape victim may surrender her body. A young father may escape from a burning house, leaving a child behind. A soldier may find himself paralyzed by fear while others launch an attack. To the extent that these acts are ‘out of character’ or ‘out of one’s repertoire’ these very early responses will be revisited later during the phase of re-appraisal when self criticism may be harsh and condemning. See vignette 4.

Vignette 4. A policeman who had specialized in diffusing explosives, developed severe PTSD following an incident in which he found himself paralyzed for what seemed like a long time, but was in fact only seconds whilst he tried to detonate a bomb in one of Jerusalem’s public places. Firstly, he did not believe that the object that he examined could be a bomb. Then he realized that it was, and also that he did not have the equipment at hand needed for this job and that it was too late to make use of a bomb-detonating robot. He had to go back to safety, fetch his tools, and then, knowing that the object was a bomb, return to the explosive and dismantle it. He froze at about one meter from the bomb with thoughts running through his head about his life and that of others around him. He proceeded to dismantle the bomb, yet could never recover from the instants of ‘freezing,’ the thoughts of which undermined his sense of competence and self-worth.

During the impact phase survivors primarily require protection from adversity. This, however, may not always be possible because the adverse effect of some events continue (e.g., when one’s child is missing following a disaster). Even during prolonged adversities to is possible for, adequate help to reduce the randomness of the situation as well as the survivor’s helplessness and loneliness. The main role of helpers at this stage can be equated with that of a ‘primary organizer,’ that is, a person who, by his or her stable presence reduces the randomness of both external and internal realities.

The immediate post-impact phase (Rescue phase)

At this point in time, survivors have typically been rescued from the primary stressor and may have been moved to a place of relative safety. However they now

subject since priority should be given to smoothing a natural healing path. However, excessive anxiety, episodes of dissociation, intolerable insomnia, daily agitation and uncontrollable pain must be treated.

D. The construct of coping

‘Coping’ is the psychological and behavioral correlate of the bodily efforts to maintain its inner milieu within viable (or homeostatic) boundaries despite excessive demands. By analogy, coping with stress is an effort to maintain psychological balance and functioning despite excessive demands. Coping theorists describe a broad range of mechanisms designed to ‘increase the gap between stress and distress.’ Such ‘coping strategies’ are generally divided into ‘problem-focused,’ ‘emotional-focused’ and ‘appraisal-related’ (e.g., Haan, 1969; Lazarus and Folkman 1984). Individuals are said to have specific ‘coping styles’. That is they engage in a typical mixture of tactics when faced with stress. Some individuals tend to prefer action to reflection; others are preferentially help-seekers, yet others tend to be emotional and expressive.

Studies of trauma survivors have mainly addressed the effectiveness of particular coping strategies. Among combat veterans, Solomon et al (1991), for example, found the use of emotion-focused and blunting coping strategies to be associated with higher levels of psychiatric symptoms whereas problem-focussed strategies lead to a decrease in symptoms. In body handlers, in contrast, McCaroll et al., (1993)

found an advantage to accrue from avoidance, denial and receiving group support. Spurrell and McFarlane (1993) found no clear advantage of any coping strategy.

These conflicting results should not surprise us, because it might be true that achieving effective coping is more important than any particular strategy. In order to succeed one’s coping must match the circumstances of the event and the survivor’s resources. These in turn differ between events, within events (e.g., at different stages) and between individuals. Surrender, stoic acceptance and cognitive re-framing may be more appropriate to situations in which the stressor is uncontrollable (e.g., captivity) whereas action to reduce the stressor, or help seeking are more appropriate in other circumstances.

The idea of evaluating coping efficacy has distinct advantages for understanding the early responses to traumatic events. Regardless of the type of trauma, the stage of the response sequence a person is in or the task to be accomplished successful coping will affect the survivor in a very typical way. Pearlin and Schooler (1978) suggested four observable consequences of effective coping: (a) relief of distress, (b) sense of personal worth, (c) ability to enjoy rewarding interpersonal contacts, and (d) sustained task performance. Ineffective coping will lead to impaired task performance, uncontrollable emotions, self-blame (or worthlessness) and inability to enjoy the presence of others (Table 4).

Table 4: Signs of Effective Coping

Effective coping	Failure to cope
Sustained task performance	Impaired task performance
Reduction of distress	Distress, uncontrollable emotions
Sustained ability for rewarding human contacts	Inability to make use of the presence of others.
Ability to maintain a sense of personal worth	Self-blame, worthlessness

Early responses to traumatic events can also be evaluated using these four areas. A survivor is coping better when he or she experiences relatively controllable emotions, can continue the task at hand (e.g., seeking shelter, reviewing his or her nightmares), keeps a sense of self-worth and, most importantly, engages in rewarding communication. Traumatic events certainly disrupt a person’s sense of coping and therefore lead to temporary periods in which individuals may be flooded by distress, feelings of worthlessness and may be unable to make use of help offered. This is not by any means true for all survivors nor for all stages of the response. For some survivors the impact phase may involve paralyzing fear, disrupted behavior and a sense of total chaos. For others, however, the rescue period can be extremely difficult despite having coped well during the impact phase (e.g., when bad news is brought). Finally, and most importantly, the long-term effect of traumatic events is significantly affected by the way in which

survivors cope with the particular tasks of the reappraisal and recovery phases. At each of the phases listed in Table 4 the ‘signs and symptoms’ of ineffective coping are likely to be very similar.

Importantly, effective coping should not and does not lead to a ‘victory’. Nor is it always directed towards the most important stressor. Instead, coping may involve contingent (yet more controllable) stressors as well as one’s own responses. In a study of survivors of a terrorist attack, Shalev et al (1993) described various coping efforts used during the impact phase. These included actively rescuing other survivors, sharing important information with the rescuers, preserving one’s dignity by covering one’s body or controlling the disclosure of information about the event to one’s relatives. Successfully achieving such individual goals increased the survivors’ sense of control and reduced their distress.

face a new reality. For instance, evacuees find themselves in a shelter; injured survivors in hospital; released hostages may be on their way home. Importantly the new reality is also psychological. Having survived a sadistic assault a person's internal reality is very different – but not yet shaped in any specific way.

Typically, at this stage one has to face the new reality without having changed internally. Hence, it is the old self which struggles with a new reality; often with a great amount of confusion and bewilderment. This process is referred to as 'accommodation,' in the sense that existing resources are used and extended to cope with novelty. The prevalent feeling is that the world is not the same. Yet the intensity and the pervasiveness of the experience differ between survivors. Importantly, this feeling of alienation and of major (and negative) change may remain with the survivor and become part of his or her prolonged response to the trauma. The role of helpers at this stage is to mitigate the novelty of the situation such that survivors are not totally estranged and alienated. In other words, the presence and the warmth of helpers, as well as their somewhat better capacity to endure emotions, provide the necessary 'holding' for distraught survivors. Indeed this is the stage where people are often observed to hug one another. It is also important to acknowledge that helpers can function as effective 'holders' to the extent that they are assisted and supported themselves for instance by being part of a team (e.g., Shalev 1993).

The early recovery phase

Overlapping with the previous phase, recovery includes two contrasting mental efforts: to distance oneself from the traumatic event and to re-evaluate the traumatic experience. Few survivors do well with just distancing themselves from what has happened. Most will repeatedly, vividly and involuntarily recall the traumatic event through intrusive thoughts and images, nightmares and flashbacks. Many will share these experiences with others for instance by repeating their story again and again. Others may think that they are going mad because of the unusualness of the intrusive and vivid images and memories. Negative appraisal of one's early symptoms increases the likelihood of subsequent PTSD (Ehlers et al., 1995, 1998).

At this phase survivors are psychologically assimilating their recent experiences, try to understand its meaning and examine key learning points relevant taking account of previous life experiences and future expectations. This is properly the 'post-traumatic' period, during which the concrete event becomes a mental event. Optimally, the new experience can be assimilated and this is likely to be reflected in subtle yet consistent changes in the survivor's appraisal the circumstances of the event and of his or her feelings and actions. Dreams become more detailed with elements from one's past appearing alongside representations of the traumatic event. The telling of

the story becomes a conversation. Other pieces of information, (e.g., observations made by others, references to options and choices, links with past experiences) can be brought in and accepted. The traumatic event can thereby become a formative event. There is a sense of being changed, but not of being torn apart.

Survivors differ in the extent to which they tolerate the necessary phase of intrusive recall. For some, nightmares are a dreadful experience and recall is fearfully avoided. The story is never told, may be truncated, reduced or even schematized and repeated without change. Importantly, nothing changes with time. The event is not compared with previous experiences. Conversations about the traumatic event is avoided because 'no one can understand', including oneself. Memories remain fragmented, iconic, poorly verbalized. Negative perception of self and others generalize and extend to other events and people. A sense of radical unwelcome transformations prevails. The traumatic event becomes destructive life experience.

It is during this period that a stable narrative of the traumatic events and of one's own responses to it are formed and consolidated (Shalev et al., 1998). Holloway and Ursano (1984) suggested that both the past as well as the present and a person's view of the future mold the emergent narrative and conscious recall of what has happened. The narrative, however, is never purely an individual creation, but rather includes elements of what has been said by others and of the larger social appraisal of the event (e.g., a heroic act, a shameful blunder etc...). The resulting mixture of personal experience and adopted facts may consolidate into a set of memories that will later be remembered as 'authentic' and 'accurate' (e.g., Loftus, 1979).

The roles of helpers differ from that of 'holders' seen in the previous phase. Helpers, at this phase must be available for conversations and talking about what has happened and its aftermath so far. They should also be able to foresee and tolerate the repetitiveness and vividness of intrusive experiences and also share their knowledge with survivors and with other helpers. They must also be able to respond emotionally without themselves being flooded or frustrated. Finally they should be able to recognize, on the basis of repeated observations, when things are going badly, (i.e., when isolation, poorly modulated states of mind and aversive emotions increase with time). A sign of particular importance during this period is the degree to which the survivor is constantly distressed; in contrast to his or her fluctuating back and forth from well modulated to poorly modulated states of affect. The latter is generally a more reassuring presentation. This is a time in which verbalization is the key element, hence the role of professional helpers as interlocutors. Specifically, they should help putting experiences into words and encourage the sharing of these narratives. It might be unwise to 'intervene' or otherwise 'treat' the

Comment

Practically, what one sees during the aftermath of traumatic events is a combination of primary and secondary stressors, a mixture of overlapping stages of response to what has happened and various degrees of coping with each. This chapter does not discuss the various ways in which a failure to cope may induce permanent negative changes such as a permanent reduction in one's ability to tolerate anxiety, or a permanent shift in the central nervous system's response to stimuli (Shalev et al., 2000). These *allostatic* changes, and their leading causes are not well understood at this point. Indeed some of the causes for permanent changes may precede the traumatic event (e.g., prior traumata, prior mental disorders, adverse rearing environment; Brewin et al., 2000). It is important to recognise that to clearly discern the expression of such factors is beyond the capacity of those involved in attending to survivors' needs during the early aftermath of traumatic events.

The model proposed here posits, therefore, that, in general, human traumatization engages powerful adaptive mechanisms, of which all helpers should be aware. The survivor therefore is not a passive 'receiver' of a 'package' of care, but is more usefully viewed as the helper's active guide. Identifying and managing obstacles to self-regulation and recovery becomes the 'therapeutic' endeavor. The same active attributes extend to families and communities whenever this is reasonable as they persist in their endeavors to regain equilibrium.

Hence, rather than bursting on to the dynamic scene of a recent trauma with pre-fabricated ideas and techniques the professional helper will do well to follow the advice of Marshall(1944) to "conduct himself as a student, rather than as a teacher." He or she is riding a horse, rather than driving a car. Natural forces operate at all stages and he or she should be able to recognize these as they occur and assist in their successful resolution. Ignorance of such adaptive forces and failure to engage them might have been the worse systematic error of early interventions programs devised so far. As argued in this chapter the main a-priori wisdom of helpers is to be found in their knowledge of generic processes and their progression. Helpers' skills should firstly be expressed as a capacity to identify the specific motion, the typical rhythm and the salient trend of survivors' progression, as well as the underlying contingencies. Secondly, and most importantly, helpers should be able to join forces with survivors and in turn help each of optimize his or her early responses.

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