Coping with Trauma: Narrative and Cognitive Perspectives

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The immediate period following a traumatic event is a crucial time in the survivors' process of recovery. During this time, a narrative of the trauma is generated and constructed, alongside a process of cognitive processing of the traumatic events. In the first part of the article we present the outlines of the narrative and cognitive attitudes to trauma; the second part will illustrate the developmental process through which the trauma narrative is shaped, in the stories of five survivors of a terror attack. We suggest that by analyzing three main components of the trauma narrative (coherence, finding meaning and self-evaluation), together with the equivalent cognitive attitudes, it is possible to evaluate the process of recovery, identify foci of difficulties in this process and pinpoint possible therapeutic interventions in the early stages after the trauma.

INTRODUCTION

A traumatic event, by definition, confronts people with extremely unusual stress, and requires coping with a new, unexpected, and unfamiliar situation (DSM-IV-TR 2000). The different processes through which survivors might go after being exposed to a traumatic event constitute one of the most important questions regarding trauma. Trauma literature is in agreement that the immediate period after trauma is crucial, and most coping happens within the first weeks and months following the traumatic event (Brewin, Andrews, Rose, and Kirk 1999; Shalev 2002). Coping involves a multi-level process, including emotional, biological (e.g., hormonal), social, and cognitive levels (Pearlin and Schooler 1978; Shalev 1994).

However, the specific nature of these processes is still mostly unknown. Why do most people recover from traumatic events? Who is at a higher risk for developing Post-Traumatic Stress Disorder (PTSD)? Can we predict who is going to recover based on coping in the first phase after trauma? All these questions are of great significance both for researchers and clinicians, not only for a better understanding of the development of PTSD, but also for therapeutic interventions in the early stages.

In this article, we refer to two coping mechanisms which we believe play a crucial and interactive part in the early phase following trauma—narrative and cognitive mechanisms—and we conceptualize them as functioning in an interactive way, and with many parallels. The first section of this article will outline a theoretical understanding of the

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narrative and cognitive attitudes to trauma and coping with stress, and the second will describe in detail the narrative and cognitive processes of five trauma survivors who were exposed to a terrorist attack.

NARRATIVE MECHANISMS

People infuse meaning into their lives, into the events they have experienced, and into the choices they have made, through the stories they tell about themselves. As such, the life-story is not only a format for telling oneself (and others) about one's life but is also the means by which one's identity takes shape (Bruner 1990; Giddens 1991; MacAdams 1988; Polkinghorne 1988; Rosenwald and Ochberg 1992). On the one hand, the story expresses the identity of the narrator, on the other it shapes and influences the transformations of that identity. This is because it is through their stories that individuals come to know themselves or to reveal themselves to others (Lieblich, Tuval-Mashiach, and Zilber 1998).

The healthy individual is capable of holding a coherent, meaningful, and dynamic narrative of himself. According to this perspective, a person whose story is unavailable, flawed, or partial is prone to psychological and emotional difficulties. Howard (1991, p. 191) claims that "the development of identity is an issue of life-story construction; psychopathology can be seen as instances of life stories gone awry; and psychotherapy as exercises in story repair."

Narrative therapy focuses on the client's life-story as the main tool for a therapeutic change. Through locating those parts in the story that hinder continuity and coherence, and jointly creating an alternative story, a richer construction of one's life and identity is promoted (Omer and Alon 1997; Schafer 1981; White and Epston 1990).

Trauma, by its nature, breaks the continuity and smooth flow of daily life. This break is expressed in the stories trauma survivors tell about themselves and about their lives. Wigren (1994) suggests that trauma disrupts narrative processing in two levels: At a specific level, there is disruption of the narrative of the traumatic event; in addition, there is disruption on a more general level of the whole life-story of the individual.

One hundred years ago, Janet (cited by van der Kolk, and van der Hart, and Bugridge 1995) claimed, based on his observations of his patients, that traumatic memories lack the logical and sensible form usually found in non-patients' narratives.

Following this line of theoretical thought, several studies have shown that the ability to write a coherent story after experiencing traumatic events is positively correlated with better recovery and coping, for example, Pennebaker and Susman (1988), Pennebaker and Seagal (1999), and Gidron et al. (2002). Amir, Strafford, Freshman and Foa (1998) found that level of articulation of trauma narratives told shortly after exposure, was negatively correlated with severity of anxiety symptoms shortly after the trauma and with severity of later PTSD symptoms. Degree of articulation in this study was operationalized as the reading level of the narratives, as determined by a computer program. Gray and Lombardo (2001), in an extension and replication of the above study, found that when controlling for cognitive and writing abilities, these correlations cease to exist.

From a different direction, several studies (e.g., Foa, Molnar, and Cashman 1995; van Minnen, Wessel, Dijkstra, and Roelofs 2002) have shown that narrative changes during and following treatment may be correlated with a decrease in PTSD symptomatology.

While all the above studies referred to narratives following a trauma, most reflect one point in time, and no study has followed the natural and spontaneous development of the narrative from immediately after the trauma. Moreover, most studies were retrospective and examined trauma narratives many months or years after the event (e.g. Gidron et al., 2002; van Minnen et al., 2002, Zoellner, Alvarez-Conrad, and Foa 2002).

Most studies have analyzed narratives structurally, that is, by referring to their form and shape rather than their contents. Such an

analysis stems from the concept of the relationship between fragmented and disorganized recollections, and memory coding and organization. In this article, we wish to take a different look at trauma narratives, one that is based on the narrative literature, and present the sequential development of written trauma narratives, from shortly after the trauma, until four months later.

It is important to note that the construction of stories is mediated by different factors—psychological (e.g., personality), cultural (norms and values), and situational (to whom is the story told). Three factors are crucial for effective coping, all of which are created and maintained through the dynamic creation of the story. These factors are:

- Continuity and coherence—The ability to maintain a sense of continuity (at both the level of the general life-trajectory and the specific, concrete trauma), is considered a prognostic sign of better recovery (Omer and Alon 1994; Wigren 1994). This ability should reflect itself in the narratives told by the survivor about the trauma.
- Creation of meaning—The coping process includes an active search for meaning to the events, on the side of the survivor. Questions like, "why me?" "why now?" "What can I learn from the event?" are examples of such a search meaning for (Crossley 2000; Davis, Nolen-Hoeksema and Larson 1998; Frankl 1984; Taylor 1983).
- Self evaluation—Different aspects of self-evaluation related to the traumatic event have been shown to correlate to efficacy of coping: degree of control (Foa, Zinbarg, and Olasov Rothbaum 1992; Steptoe 2000); feeling guilty or responsible; and being active or passive.

Most of the time, when the coping process proceeds adaptively, these factors emerge spontaneously, as some of the examples in the findings section show.

COGNITIVE MECHANISMS

Recent research has shown that the way in which a person perceives both a traumatic event and her reactions to it can be predictive of recovery (Ehlers and Steil 1995). This view, consistent with cognitive behavioral models of other anxiety disorders, suggests that therapy focusing on these perceptions, or cognitions, is beneficial (Ehlers and Clark 2000; Ehlers, Mayou, and Bryant 1998). Other research that has focused on cognitions of people who have experienced potentially traumatic events has shown that this group has a less positive view regarding the world (Janoff-Bulman 1992).

Specifically, Janoff-Bulman's work demonstrated that students who had experienced trauma perceived their world to be less safe, valued their self-worth as lower, and saw less meaning in the world. She argues that people who have not experienced trauma tend to perceive themselves as good (high-self worth), the world as meaningful (things happen for a reason), and the world as safe (it won't happen to me). Experiencing a trauma challenges these assumptions to such an extent that they can become "shattered," and the worldview changes.

CURRENT STUDY

Narratives from five men who were exposed to a life- threatening terror attack, in which some of them were injured, were collected at different phases following the trauma. Such documentation enabled two important perspectives, about which there is scarce information, regarding the development of narratives and perceptions.

The first perspective is comparative. Comparing the narratives of the five men immediately after the event allowed differences between their initial perceptions of the event, the various mechanisms of coping, and their constructions of the event to be analyzed. The

second perspective is developmental. A close look at the stories reveals the development of the trauma story during the critical period following the trauma, from the first description to the fully crystallized narrative.

METHOD

Background

The five participants whose stories are presented here were part of a large longitudinal study conducted at the Hadassah University Hospital in Jerusalem between 1998 and 2001.[1] The study followed people who were admitted to the emergency room (ER) following a traumatic event. The participants were seen by the research team at the ER and followed up one week, one month and four months, post trauma. As described in Shalev, Freedman, Peri, Brandes, and Sahar (1997), subjects were assessed using a variety of clinician administered and self-report instruments. This study concentrates on three of these.

Instruments

Participants were assessed by clinicians (RTM, SF, NBG, RB) experienced in the diagnosis and assessment of Post Traumatic Stress Disorder (PTSD), using the following instruments:

The Clinician Administered PTSD Scale (CAPS) (Blake et al. 1995) . A structured clinical interview for assessing PTSD according to DSM-IV criteria. The CAPS quantifies symptom frequency and severity for each PTSD diagnostic criterion, yielding both a continuous measure of symptom severity and a dichotomous classification into PTSD status. Post Traumatic Stress Disorder status at one- and four months was defined according to the CAPS in the following way: A symptom was scored as positive if its frequency was greater than one and its intensity greater than two. Participants with one symptom of re-experiencing were considered to have fulfilled DSM-IV criterion B, three symptoms of avoidance/numbing qualified for criterion C, and two symptoms of arousal for criterion D. A continuous score was calculated by summing the frequency and intensity of all 17 CAPS items.

World Assumption Scale (WAS) (Janoff-Bulman 1985). A 32-item self-report questionnaire that assesses subjects' beliefs about themselves, the world, and the future. It has been used with trauma populations.

Narrative Questionnaire. Each subject also completed a semi-structured narrative questionnaire, in which he was asked to describe the event, himself, his functioning, and how he evaluates it. The narrative questionnaire (Table 1) is composed of 9 questions, on which participants were asked to answer freely in writing, in the space provided. The questions addressed the three themes presented earlier: coherence and continuity, meaning, and self-evaluation.

The scores for every narrative for the three measures were assessed based on three scales: Coherence was scaled from 1 (very low or absent) to 5 (very high). Self-evaluation was scaled from 1 (very negative) to 5 (very positive). Meaning was scaled from 1 (absent) to 2 (conflictive) to 3 (present), and also marked as being either general or personal and specific. Two independent, trained clinical psychologists rated all narratives while being unaware the names, identification, and symptoms of the participants. The inter-rater correlation was very high (above 0.80), and in cases of disagreement, we discussed the differences and arrived at an agreement regarding a score.

The Event

On the night of the Jewish holiday, "Purim," in 2001, a group of 8 ultra-orthodox Jewish young men between the ages 17 and 23 were on their way to visit an army base

1. All five signed a separate informed consent for this paper, after reading and commenting on it. The manuscript has been changed based on their comments. All mentioned names are fictitious.

Table **1.**
Narrative Questionnaire

Coherence and Continuity	• What is the first thing that comes to your mind when you think of the event? • If you were asked to describe the event to a good friend and what really happened, what would you tell?
Meaning	• What is the most important thing for you to tell about the event? • How do you understand, retrospectively, what happened? • Is there any lesson, or "bottom line," you take from the event? • How, if at all, will the event affect your life in the future?
Self–Evaluation	• When you think of yourself at the time of the event (functioning, feelings, thoughts), what do you remember most? • Did you react in a way that surprised you, during the event or right after? If yes, in what way? • What did you think of your functioning during the event or right after? What were you proud of or what did you regret?

in the West Bank to celebrate the holiday with the soldiers. The young men belonged to a Hassidic group, "Chabad," in which such activities are part of the daily routine and norm. The men in the minibus barely knew each other or the driver, and for most of them, it was the first time they had been on such a trip.

On the way, near Kiriat Arba, they were ambushed and shot. One of them, a 17-year-old boy, was badly wounded and started to bleed profusely. His brother was also wounded, and the others were injured, but less seriously.

In the first minutes, it was unclear what had happened. Some of them thought they had been attacked by stone throwers. There was panic. The driver, who was not hurt, continued to drive several miles to the closest soldiers' camp. The wounded received immediate care and were then evacuated to hospital. The others decided to keep to their original plan, and drove to the base to celebrate the holiday.

Five of the men who arrived at the ER that night were recruited into the study. The severely wounded patient was not recruited, due to the extent of his injuries.

Findings: Post Traumatic Stress Disorder Status

At the one-month assessment, none of the subjects had Post Traumatic Stress Disorder, although subjects 2 and 4 met two out of three critera. At four months, subject 2 had developed full Post Traumatic Stress Disorder, while subject 4 had recovered. The three others were free of Post Traumatic Stress Disorder.

NARRATIVE AND COGNITIVE COPING

I. The Comparative Perspective

The process through which a person perceives what has happened and constructs a narrative about it is not uniform for all survivor. Major differences between survivors surface at a very early stage of the process, as early as the immediate perception of the event. Differences occur both at the structural level (length, details, repetitions, breaks) and the content level (the description of the event).

The following citations from the survivors' descriptions demonstrate the narrative constructions they carried out, which do not necessarily represent the "historical truth" of the event (Spence 1982). We would like to claim that such differences in the perception and interpretation of the happenings relate directly to different coping styles, different narratives and cognitions, and to subsequent patterns of recovery.

All of the following citations were taken directly from the five survivors one week after the event. These were their replies to the first question:

Had you been asked to describe the event to a good friend and what really happened, what would you tell?

> No. 4: "I would say that we went to celebrate with the soldiers, and make them happy, and the atmosphere was good, and before we arrived there was shooting, and we simply had many miracles. The most important thing to say is that it was a great miracle that the bullets passed by some people, and didn't hurt them."
>
> *No. 3*: "We went for a 'task,' and we are on the way and suddenly we hear the noise of stones hitting the car, and afterwards we shouted: Shooting! but the greatest miracle is that bullets passed above my ears."
>
> *No. 1*: "10 bullets were shot at us, and magically only two penetrated the car, and one wounded my best friend, and the other passed just behind me and didn't hurt me because I bent at the same moment. And right after, the wounded were evacuated, and we tried to keep business as usual.
>
> *No. 2*: "We went in the Rabbi's mission to make people happy, and celebrate with the soldiers, and suddenly we were shot from behind, and we heard explosions, and then I felt a heat in my back, and I felt the bullet in the throat, I turned and I saw my wounded brother bleeding all over, like water, G-d forbid. I screamed, 'help him.'
>
> *No. 5*: "I would start from the ride on the road, and 200-300 meters ahead we heard a noise, like stones hitting the car, and then I got a blunt hit in my jaw, and I thought it's a stone, and then I heard Jack shouting, "I got hurt," and immediately I understood it's shooting. I saw him throwing up, and I thought it's nothing, but then I saw he is all bleeding. I tried to stop his blood with my hand, while at the same time bending him so he won't get hurt (by other bullets)."

The differences between the stories are ample. By carefully analyzing these early and short accounts, it is possible to differentiate between two facets of the texts: content and form. Analysis of the explicit content shows that for some, the whole event was not experienced as terrifying (nos. 3, and 4), while for others (nos. 2 and 5), the event was very traumatic. On the formal level, however, the structure of the texts may teach us something else. No. 3's narrative, for example, which seems plain and neutral on the content level, is a good example of a broken, non-coherent story on the formal dimension: It is very short, it switches from past to present and then back to past again, and it has no clear end. Therefore, we have to analyze both dimensions in order to better evaluate the narrative quality.

Differences in the perception and interpretation of traumatic events may arise from various reasons, among which are personality traits, situational factors (for example, did one see the events or not), physical injury, and background variables (past trauma). A thorough review of all of these factors is beyond the scope of this paper. (For a detailed review see Brewin, Andrews, and Valentine 2000). However, at this point, it is sufficient to note that whatever the causes of those differences, not only do they result in different narratives of the event, but they affect the later coping and recovery, as reflected in the stories throughout the follow-up period.

The differences in narrative are also reflected in the subjects' scores on cognition measures. Looking at the World Assumption Scale scores (WAS) (see Table 2), subject 2 believes in the meaningfulness of the world, but not in its benevolence or his own self-worth. Subject 4's scores, on the other hand, reflect belief in all three areas.

II. The Developmental Perspective

In this part, we look at the stories as they developed over time since the trauma.

Emergency Room (ER). The first time we heard the survivors' narratives was at the ER. In this early stage, the survivors have just begun to process the event, and to create their account of it. What was most salient in this immediate stage was a fragmented, partial

Table 2.
World Assumption Scale

	One Week			One Month			Four Months		
Subject	Benevolence	Meaningfulness	Self-Worth	Benevolence	Meaningfulness	Self-Worth	Benevolence	Meaningfulness	Self-Worth
1	48	40	51	42	32	57	43	48	71
2	35	47	57	32	47	36	33	54	41
3	43	44	47	33	45	52	39	57	53
4	31	28	33	34	39	31	32	35	34
5	45	45	51	46	47	54	46	50	65

and intensive account, which could barely be called a story:

> *No. 2*: We went to the celebration. To the soldiers. We were shot. I heard explosions. I saw like a light, like a fire. Suddenly—I felt a stab in my back. Suddenly a terrible pain. I got a bullet in my throat. I felt wetness. Blood. I looked back. I saw my brother. It was terrible. I jumped out and I yelled: help for my brother."

This description is composed of short, fast sentences, and is very intensive. Although there is a chronological frame to the account, it is not a coherent one—it switches from past to present, using short sentences without verbs. The story stops in the middle of the event, when he made it out of the car, without leading to its final end.

The accounts of the others were also only partial, and were mainly concrete accounts of the events. Common at this stage was an ambiguity regarding what had really happened (stones, shooting, who was hurt). However, even in this early stage, it is possible to identify those narratives which are better constructed and more coherent. The differences between the narratives, and their possible implications, will be discussed in more detail below.

It is interesting to note that the same event was constructed differently by another survivor (no. 4), one who was not hurt (but who also replied several hours after the event).

> *No. 4*: "We drove. A car blinded us from behind, and then there was gun firing. We all lay down, and a few moments later we arrived at the soldiers, and then went out of the car."

This is a totally different story. No hint about the wounded, about the blood and horror. The experience of time is also very different: What seemed like an eternity to one survivor seems like few moments to another.

A Week Later. The cognitive and narrative coping of the survivors continues to develop actively, at times unnoticed. In most cases, at this stage we could see a better construction of the events, and a more coherent and stable self-evaluation (although not always a positive one), regarding one's functioning during or after the event. The beginning of meaning-making and first insights of the event already began to emerge.

Looking again at the narratives (some of which were described in the previous section), we see a clearer and better-organized description, compared to the ones in the ER.[2] For example:

2. This is the case with the recovering survivor, who undergoes the natural trajectory following exposure. Not all survivors were characterized by this improvement.

No. 5: "I would start from the ride towards the block, and 200-300 meters ahead we heard a noise, like stones hitting the car, and then I got a blunt hit in my jaw, and I thought it's a stone, and then I heard Jack shouting: I got hurt, and immediately I understood it's shooting. I saw him throwing up, and I thought it's nothing, but then I saw he is all bleeding. I tried to stop his blood leakage with my hand, while at the same time bending him so he won't get hurt (by other bullets)."

This short description is a more coherent and crystallized construction of the event than those elicited in the ER, although not an unequivocal one—there are some facts that this man still questions: Stones or fire? Vomiting, or blood thrown up? This individual uses conjunctions in a way that logically arranges the chronological development of the event. It is evident that his self-evaluation is very high; he describes himself as very active, potent and taking initiative. Furthermore, he sees himself as involved in saving his friend's life. This is an example of a very positive self-image that was not present in any of the other participants' narratives. However, all participants reflected on this subject spontaneously, expressing a better or worse self-evaluation. Our basic assumption is that self-evaluation affects the recovery phase, so the more positive the self-evaluation, the better the coping and recovery.

Interestingly, this subject's scores on the World Assumption Scale show little change between one week and one month.

"Mainly, I remember Sam throwing up a lot of blood, and I can't do anything. At first I turned back to see what happened, and then I bent down. I couldn't do anything to help."

What matters is the subjective meaning one attaches to the event. It is not "what really happened out there" that is important, but the subjective construction of reality, the attributions the survivor refers to himself. These attributions stem from one's interpretations, and the interpretation can exist independently from the "objective reality," or more interestingly, can change through time and be subjected to the input of others input. (Loftus 1993).

An example of a change in construction that leads to a different narrative is found in the narrative of participant no. 2. This survivor described himself in the first week as hysterical, and said he screamed loudly at the horrible sights. At the interview one week post trauma, he blamed himself for terrifying the other survivors and frightening everybody. But as time passed, he attributed a different interpretation to his screams, and, at four months, he spontaneously said that maybe his screams actually saved everybody, because they were heard by the soldiers who hurried to help.

Is this the "truth?" What really happened there? Apparently, it doesn't matter as long as his understanding serves his self-image better, and enables him to at least partially regain control over this uncontrollable attack. This change in his self-worth evaluation is not reflected, however, in the World Assumption Scale scores—he is more negative at four months than he was at one week.

The meaning-making process, absent from the accounts in the first days, becomes more significant as time passes. The men start to refer to questions like: Why did it happen? Why was it me? How was I saved?

No. 5: When asked how he understands retrospectively what happened, No. 5 replied: "I see it as an observant Jew, who knows that someone who does a good deed will not be hurt: That is my explanation to the miracles we had. Why it happened? Because the terrorists feel more free to do what they want. Why did it happen to us? I have no explanation."

Meaning-making takes place at several levels. The most personal and difficult question—why did it happen to me—is still unanswered at this early stage. However, already as early as a week after the event, there is a clear expression of a positive meaning: What

happened is both terrible, yet at the same time a miracle, showing G-d's care.

The term "miracle" was used many times in all the stories, even at a very early stage following the event. For a clear picture of the coping mechanisms of the men in this group, it is important to understand the cultural and religious context in which they live. All of them are Hassidic Jews, who share the belief that every act and event is an embodiment of miracles and revelation, and that their rabbi is watching over them and protecting them. This terminology is culture-specific, and probably would not serve a secular, non-observant survivor. The creation of meaning is therefore always a culture-specific, culture-anchored process and does not exist in a vacuum.

In this sample, this phenomenon was especially vivid because of the homogenous nature of the meaning attachment: All, without exception, used the word miracle to explain the event, even in the immediate aftermath, when one man was severely wounded and battling for his life. At this early stage, it sounded more like a mantra than a real belief.

> *No. 1*: "We were going through a great miracle, and I don't want to think how it could end otherwise."

> *No. 4*: When asked (after a week) what is the most important thing for him to tell about the event, No. 4 says: " The most important thing is to say that it was simply pure miracles that the bullets passed near some heads and didn't injure."

Attachment of meaning is not crystallized at the early stages, and so it was not unusual to find conflictive or contradictory reference to the question of meaning. For example:

> *No. 2*: " I would say that this is a great miracle, of the redemption and we all got our life as gifts from God. (How do you understand what happened?) As a stage towards redemption, but this is something I totally don't understand: What happened, how and why it happened?"

Examining the World Assumptions Scale scores, we see an interesting pattern: All subjects become more positive over time in terms of meaningfulness of the world. This possibly reflects the contradictions described above.

Four Months Later. The narrative process keeps developing, even when distance from the event is increasing. A few months following the event, the survivor usually has a coherent and well- organized story of the happenings. His self- evaluation regarding the event is also becoming clearer, but may become more complicated and include different aspects of his personal functioning. The attachment of meaning becomes more personal and clear. We demonstrate it by showing how the same term, "miracle," which was used un-differentially by all and sounded like a mantra, shifts to become of a more personal and specific quality.

> *No. 4*: " Let's say, one miracle is that Jack turned and so the bullet missed the head and only hurt the throat. I had a miracle—because a bullet came across me and stopped right there. Another miracle—that the driver wasn't hurt, there is an end to each bullet, there is a leader to the world that is taking care of all."

Another survivor sees the miracle in his quick recovery. Still another sees his miracle in not being hurt at all. The meanings are now more personal and unique than at the first stages, although all of the survivor continue to use the term miracles.

Other aspects of meanings arose after four months. For example, the publicity they received, helped them become more widely known for their daily work, and within their community, they received a great deal of social support and celebrity status. Those who were able to feel their agency and mastery, during the event and afterwards, coped better and processed the events in a more productive way. Again, this is reflected in the World As-

sumptions Scale scores. All of the survivors become more assured of their self-worth over time, except Subject 2 (who becomes more negative and who develops Post Traumatic Stress Disorder).

After four months, in those who recovered from the event and did not develop Post Traumatic Stress Disorder, we saw, as expected, shorter, more coherent, well-constructed narratives, less occupied with questions of meaning and explanations.

The next citation is a demonstration of a good story[3] several months after the trauma. It is taken from subject no. 1, who at this stage was free of symptoms.

> *No. 1*: "(I would say that) we went to make the soldiers celebrate, and suddenly we were shot from behind 13 bullets. Three friends were wounded, and until we went off the car, we didn't really know what happened. We thought it was stoning, and eventually it became clear that it was shooting and there are people who were injured . . . I remember I then felt a great responsibility for my friends, since I brought them to this activity, but today I can say that my functioning there was excellent. I'm proud that we kept on and did what we planned to do with the soldiers. I feel that life now has a much more valued meaning, and believe that what happened will have a positive impact on my life from now on."

In looking at No. 2's narrative at this point, on the other hand, it is clear that his perception of himself, the event, and its meaning are different. At four months after the trauma, No. 2 was diagnosed as suffering from full Post Traumatic Stress Disorder.

> *No. 2*: " We went to give holiday treats to the IDF soldiers near Hebron. Before we even got at the army base, we were shot with a hail of bullets. We heard explosions, then we heard the window smashed, and I heard my brother throwing up blood, bleeding all over . . . indeed I can't understand why and what has happened there. [Evaluation of his functioning:] What should I have done differently? Is there something else I could do? My brother, when he heard my screams there, he was frightened because he heard me screaming while he was in a terrible condition. On the other hand, he understood that it helped because it brought the soldiers. What happened should in principle help me use every minute better, but now, since then, I don't sleep well, my day is a waste, and it affects other things like my mood, my ability to concentrate."

Figure 1 the narrative components in the five survivors' narratives, throughout the follow-up period.[4] As can be seen from the graph in Figure 1, the profiles of participants 2, 3, 4, are less positive than those of No. 1 and No. 5, especially in relation to the first week. The graphs of no. 3 and no. 4 changed in the direction of better coherence and self-evaluation scores, while No. 2 changed in the opposite direction. Changes can be seen also in the graphs of no. 1 and no. 5, but their general level of the measures is high. It is relevant to note that No. 2 and No. 4 were the two survivors who suffered the most Post Traumatic Stress Disorder (PTSD) symptoms. No. 2 suffering from PTSD four months after the event, and No. 4 suffered from PTSD after one month, but spontaneously recovered before the four-month follow-up.

3. For purposes of convenience, the citations here are a composite of all three aspects of the narrative construction, and each new paragraph is marked with the.elipses (. . .) It is important to note, however, that these sentences were written separately in reply to the different questions.

4. Presenting the component of "meaning" graphically was not possible since its complex coding system, which involved quantitative and verbal coding. Therefore, the graph shows two of the three components analyzed in the paper.

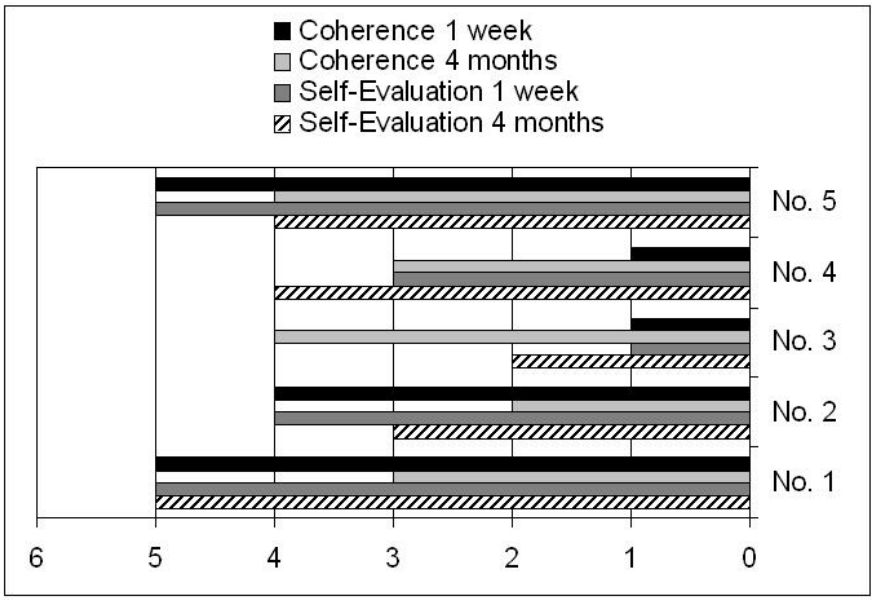

Figure 1.
Narrative Components in the Stories over Time

DISCUSSION

In this paper, we have presented narrative and cognitive measures of the coping of five young men, during the time immediately following their traumatic event. The narrative measures were presented from two points of view: first, a comparative perspective, comparing different people at the same time point—showing that immediate perceptions of the same traumatic event were very different—and second, a developmental perspective, that showed the changes in narrative over time.

The results show a preliminary relationship between narrative, cognitive measures, and symptoms of Post Traumatic Stress Disorder, such that when the narrative was well built, with a coherent story, significance, and a positive self-image, levels of Post Traumatic Stress Disorder symptoms were lower. Conversely, in this sample, a less coherent narrative was related to greater symptoms.

It would seem that the period immediately following a traumatic event is when the most intensive processing of that event takes place, at a narrative and a cognitive level. At this time, there is not yet a coherent organized story with significance—this takes place in the weeks following the event. During this time, the story changes and grows, and various factors influence this process, including new information, circumstances surrounding the event, perception of the trauma and subsequent symptoms, and the cultural context in which the survivor lives.

The effect of culture is particularly significant, and in circumstances such as those described in this article, where a community or religion sees a particular meaning in the event, this greatly influences the narrative.

As we have seen, the significance of the event changes over time, as does self-image and the individual's perception of his behavior. When this process happens naturally and spontaneously, and thus a coherent story develops,

there is greater significance and logic for the survivor. This is a natural process of recovery, which takes place in most individuals and is accompanied by a reduction in Post Traumatic Stress Disorder symptoms. This is an individual process. In line with previous research (Amir et al 1998; Pennebaker & Susman 1988, 1992), it seems that some individuals have difficulty producing a coherent and significant story. They are not successful at integrating the traumatic event into their life story, and they remain with only a partial story of the trauma or are unable to give it significance. These are the people who are most likely to develop Post Traumatic Stress Disorder.

The implications of this study are limited due to its sample size and the specificity of the sample. The sample was homogenous in terms of subjects' age, religious lifestyle, and cultural background. Also, no information was available regarding the subjects' background and past disorders. In addition, it may be that other kinds of trauma will result in different sequels of narrative creation and development. Therefore, generalization to other events and populations should be done with caution.

The cases presented here are a preliminary examination in the study of the importance of narrative in Post Traumatic Stress Disorder. This examination should be explored further, both in the narratives of the other 180 subjects included in the parent study and in future research.

Still, it is our belief that a thorough follow-up and analysis of the narratives as presented in the present study has value for therapists and trauma researchers. The essence of qualitative research is a detailed documentation of a certain phenomena, even at the expense of generalization.

Choosing qualitative methodology as the main tool for analysis calls for a comment about the validity and reliability of analysis. Reliability was achieved in this study by using two independent raters for each narrative, by using more than one narrative from each participant, and by the comparison with quantitative measures. In addition, the use of a semi-structured questionnaire enabled a systematic and consistent analysis on the one hand, while at the same time left room for spontaneous expressions and references of the participants.

The use of a narrative as a method for following coping in the critical period after a trauma is special for a number of reasons. First, the individual is trying to understand the event, and this understanding is carried out through the natural process of story construction. In this sense, the narrative follow-up reflects the individual coping, and can show success or lack of it. In addition, the narrative itself is a method of coping, and could therefore be used as an intervention tool. Creating a trauma story through information, reconstruction, or cognitive processing helps the individual to charge the event with personal meaning and to place it as part of the rest of his life, as opposed to being its focus.

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