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Zieva Dauber Konvisser Traumatology published online 7 March 2013 DOI: 10.1177/1534765613477500

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Themes of Resilience and Growth in Survivors of Politically Motivated Violence

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Abstract

The experiences of 19 Israeli civilian survivors of politically motivated violence (PMV) between 2001 and 2003 were examined using in-depth interviews to elicit resonating narratives. The narratives were informed by demographic data and the Posttraumatic Growth Inventory (PTGI) and Posttraumatic Stress Disorder Symptom Scale (PSS) self-report surveys. Four meaningful groupings or patterns of change emerged, reflecting various ways to experience the trauma of PMV: little or no growth, living the attack, resilience, and posttraumatic growth. Twelve descriptive themes of resilience and growth emerged from the data. The findings provide evidence that a positive psychological impact (PPI) can result from exposure to the trauma of PMV and provide deeper insights into posttraumatic growth, in particular: the primacy of the domains of new possibilities and personal strength; the focus on action growth; and the critical role of the integration of cognition and affect.

Keywords

positive psychological impact, posttraumatic growth, resilience, politically motivated violence (PMV), terror, Israel, trauma, posttraumatic stress, meaning

Introduction

Traumatic life events can shatter our fundamental assumptions about the benevolence of the world, the worthiness of the self, and the world as meaningful (Janoff-Bulman, 1992). In the case of politically motivated violence (PMV), violence or the threat of violence is used against civilians to obtain political aims (Ganor, 1998). This form of psychological warfare is essentially indiscriminate, instilling every individual with the feeling that he or she may be the target of the next attack (Ganor, 2004). As a result, the natural need of humans to see the world as predictable, orderly, and controllable is challenged (Hamblen, 2005). The sense of security and safety people usually feel may be eroded, creating varying degrees of anticipatory anxiety, fears of future harm to oneself or loved ones, and functional impairments (Desivilya, Gal, & Ayalon, 1996; Laor, Wolmer, & Cohen, 2001, as cited in Somer, Tamir, Maguen, & Litz, 2004; Serlin & Cannon, 2004; Knafo, 2004). In the aftermath of these extreme experiences, coping involves the arduous task of reconstructing one's fundamental assumptions to incorporate the trauma experience; and, over time, most trauma survivors manage to rebuild their inner world and can move on with their lives (Berger, 2004; Janoff-Bulman, 1992).

In response to PMV, individuals may experience both negative and positive outcomes. Direct exposure to PMV can lead to an extremely high incidence of posttraumatic stress symptoms (TSS). Nearly 40% of Israeli survivors directly exposed to PMV suffered from posttraumatic stress

disorder (PTSD; Schwartz et al., 2007; Shalev & Freedman, 2005, as cited in Shiri, Wexler, Alkalay, Meiner, & Kreitler, 2008). In addition to the negative outcomes of PMV, however, a positive psychological impact (PPI) can result from exposure to the trauma of PPV (Helgeson, Reynolds, & Tomich, 2006; Linley & Joseph, 2004; Pargament, Smith, Koenig, & Perez, 1998; Zoellner & Maercker, 2006, as cited in Shiri et al., 2008).

The PPI of trauma includes resilience and posttraumatic growth (PTG). Resilience is "the process of adapting well in the face of adversity, trauma, tragedy, threat or even significant sources of threat" (American Psychological Association, 2010). It can be characterized as the ability to return to preadversity levels of functioning (Carver, 1998). PTG describes the "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004). It is the experience of individuals whose development, at least in some areas, has surpassed what was present before the struggle with the crisis occurred (Carver, 1998; Tedeschi & Calhoun, 2004). Through the process of managing overwhelming emotions and intense rumination or cognitive processing of the difficult circumstances,

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individuals may develop new schemas and meanings for coping with life after the PMV event (Calhoun & Tedeschi, 2006, 2004; Tedeschi & Calhoun, 1995). Since "posttraumatic growth and posttraumatic stress are essentially separate dimensions, and growth experiences do not put an end to distress in trauma survivors" (Tedeschi & Calhoun, 2004), the individual's struggle with the aftermath of trauma can produce a mixture of negative and positive experiences (Calhoun & Tedeschi, 2004).

Predicting which individual is likely to develop resilience or PTG in response to a traumatic event is difficult. Southwick and Charney (2012) identified 10 coping mechanisms or "resilience factors" that proved to be effective for dealing with stress and trauma and contributing to stress hardiness. These include realistic optimism, facing fear, moral compass, religion and spirituality, social support, resilient role models, physical fitness, brain fitness, cognitive and emotional flexibility, and meaning and purpose. Tedeschi, Park, & Calhoun (1998) and Calhoun & Tedeschi (2006), identified enabling personality traits related to individuals' ways of processing information, such as optimism, hope, extroversion, openness to experience, creativity, self-efficacy, and self-esteem that were associated with the development of PTG. Furthermore, they identified specific domains associated with PTG, including warmer, more intimate relationships with others; recognition of new possibilities or paths for one's life; a greater sense of personal strength; spiritual and existential change; and a greater appreciation of life and changed sense of priorities (Tedeschi & Calhoun, 1995, 2004).

In a recent study in rescuers, nurses, and rehabilitation teams after secondary exposure to PMV, Shiri, Wexler, and Kreitler, (2010) presented evidence that cognitive orientation is predictive of PTG and that availability of options, optimism, the beneficial outcomes of suffering, and the challenge of hardship are thematic factors associated with PTG. Tedeschi and Calhoun also have found that the cognitive processing of trauma into growth appears to be aided in many people by self-disclosure to supportive others, including friends, family, other traumatized people, and professionals, as well as the broader society and culture. Such support enables the crafting of narratives about the changes that have occurred and offers perspectives that can be integrated into schema change (Neimeyer, 2001; Tedeschi & Calhoun, 1996, as cited in Tedeschi & Calhoun, 2004). Change in sense of identity may follow as people produce personal accounts of what happened to them (Calhoun & Tedeschi, 1998).

Although PTG following PMV has been quantitatively examined, little has been described about the qualitative experience associated with PTG, which according to Pals and McAdams (2004) constitutes a valid way of assessing PTG and complements the quantitative approach used by many researchers.

The purpose of this article is to portray, in a qualitative way, how those who have experienced PMV understand and

Table I. Population Sample

	Ν	Minimum	Maximum	Mean	SD	Median
Months since event	19	П	44	26.0	10.9	27.0
Age at interview	19	22	63	42.1	11.8	44.0
Years in Israel	19	2	60	29.5	16.7	27.0

	Frequency	Percent		Frequency	Percent
Shooting	6	31.6	Suicide bombing	13	68.4
Female	9	47.4	Male	10	52.6
Injured	15	78.9	Not injured	4	21.1
With no other family member	12	63.2	With 1-7 other family members	7	36.8
Israel born	9	47.4	US/Other born	10	52.6
College grad	14	73.7	High school	5	26.3
No prof support	7	36.8	Prof support	12	63.2
Non- orthodox*	11	57.9	Orthodox	7	36.8

Note: *Plus one Non-Jew 5.3%.

describe the changes that may occur as a result of the struggle with trauma; to characterize some of the emerging patterns or pathways of change inherent in the narratives of such experiences; and to identify themes that are descriptive, and might be predictive, of resilience and PTG and their distinguishing characteristics.

Method

Participants

The aim of this study was to elicit resonating narratives of individuals who were directly involved in an incident of PMV while living their routine lives or who were present at the scene of the attack. The focus was on those who grew and experienced positive outcomes. Survivors of PMV in Israel were recruited by word of mouth and via paper postings, newspaper ads, and trauma newsletters and websites. Excluded are survivors who were brain injured or lost other family members in the same attack, bereaved families of victims, soldiers attacked in the service of their country, and civilians living in fear of terrorism, exposed to terrorism only through media coverage, or unsure of what will happen next. Nineteen adult civilian Israeli survivors of suicide bombings or shootings of civilians between 2001 and 2003 during the Second Intifada were interviewed in 2004—11 to 44 months after experiencing PMV (Konvisser, 2006). The participants (Table 1) included 18 Jews and 1 non-Jew, 9 females and 10 males, ages 22 to 63, with a mean age of

Table 2. Key Narrative Questions

Please tell me about your personal experience of the event. Tell me what happened.

How were you before the event?

How were you during the event and immediately thereafter? What did you think, feel, and do?

How has the event impacted or influenced your life?

How did your actions or engagement with the world change?

Have your physical or psychological injuries had an effect?

How did you change? (positive, negative)

What helped you get over the outcome of the event? How do you think the incident will influence your life in the

What did you learn about yourself?

future?

42.1. The number of years lived in Israel ranged between 2 and 60, with a mean of 29.5 years. Fifteen participants were personally injured in the attack; three were with relatives who were injured; and three were with friends who were killed.

In 2007 these individuals were interviewed again to engage them in an ongoing and widening conversation, to probe for changes in levels of functioning—positive and negative— and factors facilitating sustained or continued positive growth, and to determine whether intervening events (e.g., the 2006 Israel-Hezbollah/Lebanon war) had an impact.

Data Collection

A *Preinterview Questionnaire* was administered to obtain key information about the event and to gain a better understanding of each candidate and his/her demographics, values, beliefs, ideologies, biases, and level of response to trauma. Participants completed the questionnaire before the start of the interview.

Qualitative data in the form of narratives or stories were collected using unstructured open-ended interview questions to obtain "the rich descriptive detail and deep understanding of the experiences of individuals who have faced major life crises" (Calhoun & Tedeschi, 2006). Interviews were conducted in English and/or Hebrew. An Israeli bilingual translator was present for some of the interviews and provided transcription and translation services.

An *Interview Protocol* (Table 2) was developed to answer the key research question "How do Israeli civilian survivors of suicide bombings and other attacks make sense of their lives, find positive meaning and new purpose in their experiences, and make choices that involve significant life changes?" Information was gathered about the change, transformation, or growth that has occurred in all of the areas of the individual's life: (a) the domains—personal, family, and community, life work, sociopolitical, cultural, religious/spiritual, philosophy of life (worldview), and situational/environmental; (b) the periods—before, during, and after the

traumatic event—pre-, peri-, and posttrauma; (c) the aspects—cognitive, emotional, and behavioral—what they think, feel, or do; and (d) the causal or enabling factors—internal (e.g., psychological traits) and external (situational, process, structural).

Although the sample size was small, survey data were collected to inform the narrative data and to help organize the responses into meaningful groupings.

The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1995) was administered at the end of the interview to assess and give deeper insights into the participants' perceptions of well-being and growth. The PTGI is a 21-item self-report scale that measures the individual's perception of positive changes following a traumatic life experience. The items are aligned with the five factors of new possibilities, relating to others, personal strength, appreciation of life, and spiritual change that are predictors of growth. Participants were asked to rate the extent to which their views changed as a result of the traumatic event, using a Likert-type scale of 0 to 5, where 0 = no changes experienced as a result of the traumatic event and 5 = experienced change to a very great degree. Responses to the items are summed to produce a total score as well as subtotals for each of the five factors (Table 3). The PTGI has acceptable construct validity, internal consistency (0.90), and test-retest reliability over a 2-month interval (0.71) (Tedeschi & Calhoun, 1996). The PTGI has been translated into Hebrew and previously used in two studies in Israel (Lev-Wiesel & Amir, 2003).

The Posttraumatic Stress Symptoms Self-Report Questionnaire (PSS-sr, Foa, Riggs, Dancu, & Rothbaum, 1993) was sent to all study participants after the final interviews as an indicator of symptoms of possible distress, including the occurrence and severity of the DSM-IV PTSD symptoms of reexperiencing, avoidance or numbing, and hyperarousal. The 19-item PSS-sr has been translated into Hebrew and used in other studies in Israel. Participants were asked to rate how often they had been bothered in the past month, having in mind the most stressful event they have experienced in connection with the traumatic event and using a scale of 0 to 3, where 0 = no symptoms experienced and $3 = almost \ always \ experiences \ symptoms$ in the past month connected with the attack. Responses to the items were summed to produce a total score (Table 3). Since the surveys were self-reports, the findings do not reflect clinical assessments, and PTSD and other disorders cannot be ruled out. In addition, since only 12 of the 19 participants responded to this survey, the findings were used only to inform narrative comments.

Data Analysis

The PTGI data was sequenced by highest to lowest Total PTGI scores and groupings of participants were identified based on these quantitative self-reports of growth. The SPSS software package and its *hierarchical cluster analysis* and

Table 3. PTGI by Factor Within Grouping, Total PTGI, and Total PSS

		Relating to others	New possibilities	Personal strength	Spiritual change	Appreciation of life	Total posttraumatic growth	Total posttraumatic stress symptoms
Posttraumatic growth	N	8	8	8	8	8	8	6
Posttraumatic growth	Min-Max	3.1-4.6	3.0-4.8	4.0-4.8	1.5-5.0	3.3-5.0	3.5-4.7	0.3-1.5
Posttraumatic growth	Std Dev	0.5	0.6	0.3	1.4	0.6	0.4	
Posttraumatic growth	Mean	4.0	4.1	4.4	3.3	4.2	4.0	1.0
Resilience	N	5	5	5	5	5	5	3
Resilience	Min-Max	2.7-4.2	1.4-3.0	3.0-4.3	2.5-4.5	3.7-4.0	3.1-3.7	0.7-1.2
Resilience	Std Dev	0.5	0.6	0.5	0.9	0.6	0.3	
Resilience	Mean	3.6	2.4	3.7	3.5	4.1	3.4	0.9
Living the attack	N	4	4	4	4	4	4	2
Living the attack	Min-Max	2.9-4.3	1.2-3.6	2.0-4.3	1.0-5.0	2.0-5.0	2.5-4.3	0.4-1.6
Living the attack	Std Dev	0.6	1.0	1.1	1.8	1.3	0.8	
Living the attack	Mean	3.5	2.2	3.4	2.9	3.4	3.1	1.0
Little or no growth	Ν	2	2	2	2	2	2	1
Little or no growth	Min-Max	0.1-1.1	1.0-1.4	0-1.5	0-0	2.3-4.0	0.6-1.6	0
Little or no growth	Std Dev	0.7	0.3	1.1	0	1.2	0.7	
Little or no growth	Mean	0.6	1.2	0.8	0	3.2	1.1	0
All	Std Dev	1.1	1.2	1.2	1.6	0.8	1.0	0.7
All	Mean	3.4	2.9	3.6	2.9	3.9	3.4	1.0

Note: PTGI: scale of 0 to 5, where 0 = no changes experienced as a result of the traumatic event and 5 = experienced change to a very great degree. PSS: scale of 0 to 3, where 0 = no symptoms experienced and 3 = almost always experiences symptoms in the past month connected with the attack.

principal components analysis tools were used as alternative methods to organize the responses to the 21 PTGI questions for the 19 cases into homogeneous groups of cases, where members of the groups share properties in common and which both minimize within-group variance and maximize between-group variation. Looking at these groups in conjunction with their demographic data and their narratives, a few of the participants were realigned based on the strength of the qualitative interview data.

Using the approach to narrative analysis described by Josselson and Lieblich (Josselson & Lieblich, 2003; Lieblich, Tuval-Mashiach, & Zilber, 1998; Riessman, 1993), the content and structure of the narratives were analyzed, beginning with a high level factor/theme analysis across all of the interviews, to identify common themes-internal factors and external factors—and the patterns or pathways of change or growth, reflecting various ways to experience the trauma of PMV. A brief case analysis of each participant's lived experience was written, retaining the richness and particularities of the stories, including the meanings and purposes inherent in the participants' voices, to try to understand how participants "make sense" of their lives. Rigor was achieved in the analysis of the narratives by following socially constructed criteria for qualitative and narrative research (Burr, 1995; Chen & Pearce, 1995; Josselson & Lieblich, 2003). Specifically this involved the consistent application of the research design; being transparent about and explicating the researcher's own biases, preconceptions, and lenses; reviewing the transcripts with the participants to ensure that it makes

sense to them; using a second reader to open up multiple perspectives and to question and validate interpretations; and crafting and presenting the material in a clear, logical, and compelling manner.

Longitudinal study data were analyzed using (a) qualitative narrative case analysis; (b) quantitative data analysis of PTGI survey scores and demographics, using SPSS and a repeated measures design; and (c) regression analysis of 2004 and 2007 PTGI scores to assess change over time.

Results

The characteristics and demographics of the 19 participants are summarized in Table 1.

Four meaningful groupings or patterns of change that were identified in the qualitative interviews in conjunction with the participants' self-reports of PTG: (a) little or no growth, (b) living the attack, (c) resilience, and (d) posttraumatic growth. Descriptive characterizations of each of the four groups emerged from the qualitative data and are presented below.

Acknowledging again the small sample size and the focus on participants who grew and experienced positive outcomes, the results of the data analysis for the 19 participants are displayed in Table 3, which summarizes the PTGI by factors within groupings, as well as Total Posttraumatic Growth and Total Posttraumatic Stress Symptoms. While almost all participants reported positive growth on the quantitative survey, there are varying degrees or gradations to

Table 4. PTGI Aggregated Data

	Ν	Minimum	Maximum	Mean	SD
Relating to others Avg	19	0.1	4.6	3.4	1.1
New possibilities Avg	19	1.0	4.8	2.9	1.2
Personal strength Avg	19	0.0	4.8	3.6	1.2
Spiritual change Avg	19	0.0	5.0	2.9	1.6
Appreciation of life Avg	19	2.3	5.0	3.9	8.0
PTGI total	19	0.6	4.7	3.4	1.0

Note: PTGI: scale of 0 to 5, where 0 = no changes experienced as a result of the traumatic event and 5 = experienced change to a very great degree.

which they report having experienced growth, ranging from a small degree of change (0.6) to a very great degree of change (4.7) (mean = 3.4). Likewise, looking across all four groupings at Total PSS for the 12 individuals who returned the survey, almost all reported some concomitant distress as well, ranging from half the time (1.6) to none (0.0) (mean = once a week or 1.0). Although the responses are limited, in conjunction with narrative comments, these results are an indicator of the coexistence of distress even while positive changes are reported.

Table 4 summarizes the PTGI self-report data at an aggregate level for each of the five factors of growth identified by Tedeschi & Calhoun (1995, 2004). Comparing the five PTG factors, the greatest growth is reported in the domain of appreciation of life and changed sense of priorities, followed by personal strength, relating to others, new possibilities or paths for one's life, and spiritual or existential change. These five factors also are reflected to different degrees in all of the narratives.

A qualitative analysis of these participants' narratives from 2007 compared to 2004 showed a continuation of the same patterns, with some moderation at the extremes over time. This finding was corroborated by a regression analysis, which demonstrated a strong correlation of scores over time. As illustrated by the regression analysis of 2004 and 2007 Total PTGI for the 16 participants who responded to both surveys (Figure 1), individuals who reported the smallest degrees of positive change in 2004, tended to report somewhat greater degrees of positive change in 2007; those who reported the greatest degree of change in 2004, tended to report somewhat smaller degrees of change in 2007; and individuals with intermediate 2004 values tended to change the least.

Patterns of Change

The quantitative data analysis organized and structured the data into four meaningful clusters or groups, using the participants' self-reports of posttraumatic growth in conjunction with the qualitative interview data. The resulting four patterns of change can be characterized as follows based on their narratives:

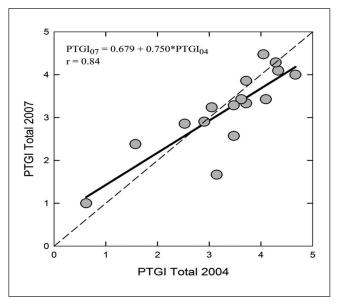


Figure 1. Regression analysis of PTGI scores for 2004 and 2007.

Narratives of little or no growth: Two participants reported little or no growth, continuing to perform and function at the same high levels as before the attack. They may be demonstrating stress resistance or may be in denial. While they are aware of being traumatized, they do not admit the impact of the trauma and attempt to normalize life's changes, believing in God's plan, appreciating life, taking on responsibility, and moving to action and good deeds.

Narratives of living the attack: Four participants were still living the attack and struggling with the traumatic event. While there are varying degrees of self-reports of changes in some domains of growth, as well as of intellectual and emotional awareness, their lives have taken a downturn that they blame on the attack. Their lives are defined by the attack and in some cases by their victimization. They use defense responses, for example, humor and drama, to protect their selves from the reality of the situation and are struggling with the vicissitudes of life—physical, psychological, and/or financial issues, yet rationalize some small changes for the better.

Narratives of resilience: The narratives of five participants characterized as demonstrating resilience described a return to the preadversity level of functioning. These individuals are continuing or "moving on" with their lives, self-reporting growth overall, but less so in the domain of new possibilities and somewhat in the domain of personal strength. They have cognitively processed the attack and are moving on with their lives each in their own way and with their own logical reasons for how they are living their lives. They may be protecting themselves by denying, repressing, or rechanneling their feelings and emotions about what happened.

Narratives of posttraumatic growth: Eight participants were identified as experiencing posttraumatic growth. Three characteristics distinguish them from those who are characterized as resilient. They self-report higher degrees of new possibilities and personal strength. In their narratives, they talk about the future and "moving forward" beyond their pretrauma level of functioning, not just moving on with life as normal. Their narratives also reflect an integration of affect and cognition, as demonstrated by intellectual awareness—talking about the event and their experience—and emotional awareness—talking about feeling states and living with them.

Themes of Resilience and Growth

The following 12 themes emerged from the individual narrative voices of those who are characterized by resilience or PTG. The resulting composite vivid description of the qualities that helped this sample of survivors survive and thrive illustrates common qualities that may be cultivated to master any crisis.

The individuals in this study all have struggled personally with highly challenging life circumstances—the traumatic experiences of PMV. For some, these events are of seismic proportions—"my private holocaust"—a term not used lightly by those who are often related to survivors and victims of the Shoah (the Holocaust). The manner in which each individual experiences the event, the meaning that each ascribes to the event, and the actions each takes result from his or her personal characteristics, past experiences, present context, and physiological state (see, for example, Butler, Morland, & Leskin, 2006).

They struggle, confront, and ultimately integrate painful thoughts and emotions: As they struggle with highly challenging life circumstances, they confront their trauma-related thoughts, feelings, and images, seeing all aspects of the trauma—negative and positive. While they do not forget their traumatic experiences nor minimize their suffering, they are able to integrate and own the painful emotions of their situation, make them part of their story, and live with them in a productive way. They have learned how to live next to and move forward with their feelings of grief, pain, and helplessness.

They adjust their future expectations to fit their new reality and focus on the important things in life: Although they may experience severe distress, including physical limitations, stress symptoms, and anxiety, at the same time they move forward in their lives. They have visions for the future, identify new possibilities, and actively seek solutions for dealing with challenges, rather than waiting passively for something to happen. In struggling to make sense of the event, they realize a greater appreciation of their existence in the world, along with a sense of reordered priorities. They manifest growth as warmer, more intimate relationships with others or with God; recognition of new possibilities for life; a greater sense of personal strength; spiritual and existential change; and a greater appreciation of what is really important and meaningful and what is trivial.

They call on their inner strength, core beliefs, and values: They recognize the power or strength from within, as well as in the context of their external world. They take the time to reflect and go deeply into their selves and discover who they are and what is important and share these thoughts and feelings with others. They develop their own coping strategies to reconstruct their shattered assumptions and establish a comfortable, integrated world that incorporates the traumatic experience. While who they are does not change, they deepen and clarify their core values and beliefs. They are helped to move forward by their future visions and goals. By discovering their strengths, their self-perception improves, as well as their self-respect.

They stay in control and do not fall apart: Many demonstrate self-reliance. Staying in control during and immediately after an attack often contributed to saving their lives and the lives of others, even though they may have experienced serious injuries.

They are helped to move forward with strength gained from their past experiences and prior adversity: Although life crises, loss, and trauma are undesirable and nobody should have to experience such life events, successful past adaptation may have a steeling effect or provide psychological preparedness, which increases the likelihood of meeting future challenges. While some attribute their changes to having experienced a trauma, others think these changes might be due, at least in part, to the natural process of maturation.

They are helped by spirituality or grappling with fundamental existential questions: Some may experience deeper faith; for others, their religious or spiritual beliefs and practices have become more meaningful. Often individuals who face trauma are more likely to grapple with fundamental existential questions about death and the purpose of life; as a result, they may experience life at a deeper level of awareness. They may ask themselves, Why me, Why did I survive while others died, or Am I immune now that I have been in one attack? Some conclude that It was destiny or that God had a plan and was testing me, while others find no answers.

They stay healthy and focus on their body image: Living well—a good diet and regular physical activity—provides crucial buffers against stress. Some focus on their body image as an attempt to control what they can and normalize their lives, helping them organize their thoughts about their experiences and cope with stress. As a result, they develop a stable sense of self-worth and enhanced self-esteem, which are related to well-being and better stress resistance.

They are creative, find the silver lining and give back, moving forward with action: Many survivors find meaning by their deeds, experiences, and the attitudes they take towards unavoidable suffering, acknowledging the human potential to grow. They may find meaning by creating a work or by doing a deed. Some construct meaning through self-transcendence or altruism. They see negative events as an opportunity to help others, contributing to society and turning tragedy into action or activism.²

They stay connected and seek outside resources to help them survive rough times: Recovery can be enhanced by the availability of psychosocial, social, and material resources to the individual both during and after the event—sometimes not accessed until many years later. Often, most helpful are other people who have been there and just understand it, legitimating painful experiences and feelings.

They tell their stories and make sense of their lives: Storytelling helps everyone gain perspective on their lives and redefine their identity; while their narratives help them rebuild coherence. Over time, their narratives become more consistent and coherent, reflecting a great degree of processing of both their thoughts and feelings. Recovery is supported by disclosing their personal narratives to interested and supportive listeners—including family, friends, other traumatized people, professionals, and general audiences. Expressing feelings and concerns and receiving supportive suggestions facilitate coping.

They are hopeful, optimistic, and celebrate life: The tone of their narratives goes beyond acceptance and appreciation of life; hope and optimism replace despair. People who have a sunny outlook do better at managing crises. They frequently use expressions like positive, I can do it, I will do it, and a glass half full and feel their survival is fortunate, good luck, or a miracle. They understand the healing power of laughter and a smile. They celebrate life and the important events in their lives, especially the anniversary of the attacks. Remarkably, many report feeling little or no resentment or hatred toward their attackers.

They discover who they are: In the process, they come to understand and change their self-identity; they identify themselves as survivors and are not defined by victimization or by survivor's guilt. In the face of overwhelming disaster, these otherwise ordinary people call forth courage they never knew they possessed, find meaning from their deeds, experiences, and attitudes, and turn tragedy into triumph, allowing growth and wellness to thrive. They become survivors! And they discover for themselves that the meaning is not in the disaster, but in the way they respond to the disaster!

Discussion

This examination of the experiences of survivors of PMV in Israel provides an opportunity to examine the boundaries of human experience in the domain of trauma in a manner that may bring about greater understanding of important elements of human experience in coping with trauma. It also explores what is in the stories of some individuals that allow them to move from some of the darkest experiences possible into a path of life that may be called extraordinary by human standards.

Although we cannot draw definitive conclusions from this relatively small sample, the analysis of the stories of this diverse group of survivors provides a composite portrait of what it is like to live with and beyond PMV in Israel. Such a portrait helps to personalize and contextualize historical events, humanize the people who have survived or perished, establish real faces in an overwhelming sea of facts and statistics, and provide us with historic memory and connection. The stories also are important so that we can understand and strengthen the factors that help people better cope with trauma. Understanding these patterns of change and the themes and factors that enhance resilience and growth could provide valuable insights for the design and implementation of prevention and treatment protocols by educators, counselors, therapists, and other helpers, as well as for the questioning, reasoning laity to help themselves.

This study describes the experiences of civilian survivors of PMV and how they may find meaning and growth in the aftermath of suffering. It is illuminated by the literature on PTG and resilience, which provides the theoretical frame through which to examine the data. The findings confirm the theories in the literature and provide evidence and ample illustrations that a PPI can result from exposure to the trauma of PMV alongside the negative stressful outcomes (Calhoun & Tedeschi, 2004).

The findings align with the literature on PTG (Calhoun & Tedeschi, 2006; Tedeschi & Calhoun, 1995, 1998, 2004), in that the traumatic event sets in motion a process of rumination for the survivors—focusing on and thinking about who and what they want to be, addressing emotional issues, selfdisclosing in supportive social environments, and changing their senses of identity. Furthermore, the findings provide many rich examples of narratives of the different degrees of change reported in each of the five domains of growth (Tedeschi & Calhoun, 1995). Participants' comments support that they better understand what is important and beautiful in life and what is trivial and are helped to move forward by the strength gained from their past experiences, prior adversity, and personal resources; by their love for their children, family, and friends; by their future visions and goals; and, to a lesser extent overall, by their religious and spiritual beliefs. Many examples are given of personal qualities that have been shown to enhance stress resilience and growth, such as acceptance, self-reliance, self-worth, self-esteem, optimism, hope, and humor.

The 12 themes of resilience and growth discussed in the results section vividly describe the personal qualities shared by those who have survived and thrived. Table 5 presents a comparison of these themes to the similar coping mechanisms or "resilience factors" described by Southwick and Charney (2012) that have been shown to be effective for dealing with stress and trauma.

Also, as was done in the literature (Crossley, 2000; Peri, 2003; Tuval-Mashiach et al., 2003), telling their stories was therapeutic and healing for these participants. Many have told their stories before in interviews and as speakers. Narratives that have been told repeatedly are coherent, organized, and significant. Stories and meanings are cognitively processed by thinking about and disclosing them to an interested and supportive listener in a safe environment. Through their stories they come to discover themselves—their

Table 5. Comparison of Resilience and Growth Factors and Themes

Resilience factors (Southwick & Charney, 2012)	Themes of resilience and growth in survivors of PMV
Cognitive and emotional flexibility	Struggling, confronting, and ultimately integrating painful thoughts and emotions
Cognitive and emotional flexibility	Adjusting future expectations to fit the new reality and focusing on the important things in life
Cognitive and emotional flexibility; moral compass	Calling on inner strength, core beliefs, and values
Facing fear	Staying in control and not falling apart
Facing fear	Moving forward with strength gained from past experiences and prior adversity
Religion and spirituality	Grappling with fundamental existential questions through religion and spirituality
Physical fitness; brain fitness	Staying healthy and focusing on body image
Moral compass; meaning and purpose	Finding the silver lining and creatively giving back—moving forward with action
Social support	Staying connected and seeking outside resources to help survive rough times
Social support; resilient role models; brain fitness	Telling their stories and making sense of their lives
Realistic optimism	Being hopeful, optimistic, and celebrating life
Meaning and purpose	Discovering who they are

identity and self-image—and are able to reveal themselves to others and think of themselves as survivors not victims. As Pals and McAdams (2004) assert, "Posttraumatic growth may be best understood as a process of constructing a narrative understanding of how the self has been positively transformed by the traumatic event and then integrating this transformed sense of self into the identity-defining life story."

Four clear patterns of change or ways to experience the trauma of PMV emerged from the data: (a) those reporting little or no growth because "they already were there," (b) those who are still struggling with and "living the attack," (c) those who are moving on (resilience), and (d) those who are moving forward (posttraumatic growth). The findings also provided deeper insights into the distinction between post-traumatic growth and resilience. Participants who are identified in this study as demonstrating PTG and those who are identified as demonstrating resilience manifest and report both on the surveys and in their narratives some degree of change in all five domains. As illustrated in their narratives and as shown in Table 3, a heightened sense of *new possibilities* and a high degree of *personal strength* are key distinguishers between those demonstrating PTG (*new possibilities*,

mean = 4.1; personal strength, mean = 4.4) and those demonstrating resilience (new possibilities, mean = 2.4; personal strength, mean = 3.7). Similarly, preliminary findings in a study by Zoellner and Maercker (2006) indicate that PTG is not a homogeneous construct and that, so far, the domains of "new possibilities" and "personal strength" seem to be consistently associated with adaptive processes and that gains in these domains seem to signify coping successes.

Furthermore, as Hobfoll et al. (2007) have conceptualized, "true posttraumatic growth [is] not simply a[] cognitive process, or intellectual exercise in reframing, but salutogenesis through *action growth* whereby an individual actuali[z] es their benefit-finding cognitions—or reifies their illusions through action." Likewise, these narratives of resilience reflect survivors' attitudes of moving on with their lives "as normal;" while those demonstrating PTG tell of visions for the future and focus on moving forward with action and finding meaning through self-transcendence or altruism.

While Tedeschi and Calhoun's model is "largely a cognitive framework" (Calhoun & Tedeschi, 2006), the element of managing emotional distress is inherent in that model. The findings in this study support a more integrated approach to emotions as evidenced by the greater degree to which participants demonstrating PTG addressed their emotional issues. Their narratives are told with vividness, openness, unapologetic feelings, and confidence. They recognize the importance of addressing all the aspects of their lives. While they do not forget their traumatic experiences, they are able to integrate and own the painful affect of their situation, make it part of their story, make sense of it, and live with it in a productive way. These survivors make the crisis manageable and comprehensible by deciding what is possible and integrating the new experiences into their revised schemas and find that life continues to be meaningful. Perhaps even more clearly, those who remained at an intellectual level demonstrated resilience at best, but did not demonstrate growth. There is a downplaying or minimizing of emotional content embedded in their narratives. They may be protecting themselves by denying, repressing, or rechanneling their feelings and emotions about what happened.

Limitations of the Study and Recommendations for Further Research

The design of the study and the interview protocol were approached with the purpose of identifying factors, patterns, pathways, and guideposts facilitating posttraumatic growth. The interview questions initially were created to address Tedeschi and Calhoun's five factors leading to posttraumatic growth as described in the PTGI and their frame of reference through which an individual perceives his or her world, that is, changes in self-perception, changes in interpersonal relationships, and a changed philosophy of life. The paradigm borrowed from the literature was that posttraumatic growth

revolves around a central theme of cognitive engagement and growth, with brief acknowledgment that growth results from new information that is both intellectually and affectively grasped. As presented in this article, what actually emerged from the data was a heavy emphasis on the critical role played by the integration of cognition and affect.

Thus, the first recommendation for future research as a direct outgrowth of this study is that the interviews might be more psychodynamically informed to better elicit data on these two domains of cognition and affect. In addition, other quantitative surveys designed to elicit this type of information might be sought and/or developed.

Since a heightened sense of *new possibilities* and a high degree of *personal strength* appear to be associated with greater growth, a more focused quantitative and/or qualitative study on these factors and their relationship to growth would also be enlightening.

Although, the PTGI is intended to solicit self-reports of change or growth and not of performance or functioning, this may not be self-evident to the study participant. Similarly, there is always the possibility of self-report bias among respondents. The use of the quantitative survey in conjunction with a qualitative interview helps elicit and clarify any disconnects and such a dual methodology is suggested for future research projects.

The use of a survey tool to assess level of functioning preand posttrauma might also be considered. Additional focus might be incorporated on participants' pretrauma states to identify and better understand the role of characteristics predictive of integration and growth. Posttrauma, follow-up interviews and surveys with the study sample showed moderation of growth at the extremes over time. Furthermore examination of the longitudinal data would be useful to understand the responses to living with the chronic threat of PMV and the factors predictive of positive and negative outcomes.

In addition, the solicitation of participants in this study targeted survivors of PMV who grow and experience positive outcomes. The use of PTG as a theoretical frame for observing the experience and the PTGI as a measure of such growth is not designed to provide information about participants who might respond in a negative direction. Although themes of distress were identified in the survivors' narratives and the limited PSS data showed some concomitant stress symptoms, it would be informative to interview and elicit the experiences of those survivors who have been clinically assessed as suffering from PTSD or other disorders. What might be the impact of interviewing this segment of the population with a frame of positive outcomes and positive being?

Furthermore, since this study was limited to 19 adult Jewish-Israeli civilians who personally experienced PMV, it would be informative to replicate the same research interview protocol and methodology with other traumatized populations in Israel.³

Finally, comparing the themes of resilience and growth identified in this study with those reported by other researchers

would be instructive, as described in the above comparison with the resilience factors of Southwick and Charney (2012). It also might be valuable for other researchers to examine these same and other similar narratives through their theoretical frameworks and approaches. Of particular interest might be such emerging models of resilience as (a) the seven possible trajectories of posttraumatic adjustment (Layne et al., 2009); (b) Conservation of Resources (COR) theory, emphasizing the centrality of both resource loss and resource gain cycles (Hobfoll, Horsey, & Lamoureux, 2009; Hobfoll, 2011), conceptualizing engagement as a product of vigor, dedication, and absorption (Hobfoll, 2011), and distinguishing between resistance and resilience (Hobfoll et al., 2009); and (c) the resilience model of well-being in which resilience is an adaptive response to adversity through the three processes of recovery, sustainability, and growth (Zautra, Hall, & Murray, 2010; Zautra & Reich, 2011; and Murray & Zautra, 2012).

Acknowledgments

The author wishes to thank all of the participants for sharing their stories, the Israel trauma community—clinicians, researchers, helping organizations—who welcomed me, recognized the importance of my work, and supported me in numerous ways, and Drs. Isaiah D. Wexler and Shimon Shiri of Hadassah University Hospital, Mount Scopus, Jerusalem, Israel for their comments and insights on this manuscript.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported in part by a research grant from Fielding Graduate University.

Notes

- 1. For a more detailed description of the theory and practice, see Konvisser, 2006, pp. 107-122.
- 2. In the wake of grief, many bereaved family members also create meaning through altruism; others create memorials to meaningfully recognize and honor their loved ones. Out of their disappointment in others who do not know how to react to their bereavement, they create opportunities to educate and raise awareness. Through these acts of healing others, they heal their own hearts and souls, and leave a legacy for future generations.
- 3. As a start, between 2004 and 2007, the author interviewed 29 additional Jewish-Israelis, including brain-injured survivors, bereaved family members (some of whom also personally experienced attacks), family members, and military personnel injured in PMV, as well as 15 Arab-Israelis—Christian, Muslim, and Druze—who also directly experienced the effects of PMV. Similar themes of resilience and growth were found in these narratives.

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