

IDENTIFYING TRAUMA AXIOMS APPLIED TO ISRAELI'S LIVED
EXPERIENCES: INTERNATIONAL DEVELOPMENT IMPLICATIONS

AN ABSTRACT

SUBMITTED ON THE 28th DAY OF MARCH 2016

TO THE PAYSON CENTER FOR INTERNATIONAL DEVELOPMENT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

OF THE SCHOOL OF LAW

OF TULANE UNIVERSITY

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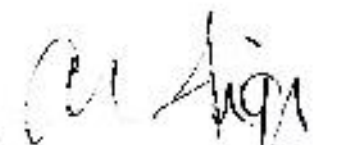
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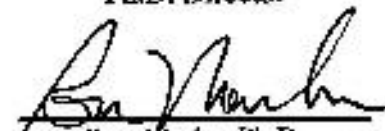
DOCTOR OF PHILOSOPHY

BY


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Abstract

This dissertation research has two purposes: (1) to broaden our knowledge on trauma resilience, and (2) to propose and test a methodology to help a development worker develop a program to address trauma resilience while taking into account the local context. To do this a group of Israeli experts on trauma resilience was recruited, for the purpose of developing a set of axioms about trauma resilience and how these axioms have been or should be applied in Israel. Israel has had to face ongoing terror and war through its history, which has led to a very experienced professional class of academics and practitioners in trauma resilience. The first part of the paper discusses the purpose of the research and the concept behind the research; the use of an expert panel, the Variable Generating Activity (VGA), and the Delphi Technique. The literature review on trauma resilience concentrates on research done in Israel dealing with trauma and trauma resilience and helps develop the framework to categorize the trauma resilience axioms around different societal contexts of analysis: individual, family, community, and national. There were 83 axioms identified. These axioms served as the basis for two follow-up surveys of the Expert Panel. The first survey asked the Panel to rate the 83 axioms identified from the interviews using a 5-point Likert scale (strongly disagree – strongly agree), and the second survey was to allow the expert panel to provide examples of how the top consensus axioms have been or should be applied in Israel. The methodology was able to successfully broaden our understanding of trauma resilience with the identification of 83 trauma resilience axioms. The axioms spanned all four

contexts of analysis, but the majority of trauma resilience axioms, 59%, focused on the individual context. The top consensus axioms emphasized the importance of connections and support within and between contexts, also resilience characteristics within individuals and communities were identified. The methodology also was able to identify strategies to address the axioms. These ideas could help a development worker to develop a plan to address trauma resilience and to take local perspectives and ideas into account.

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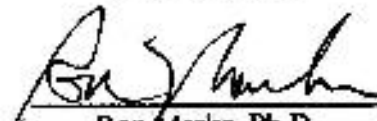
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Chapter 1: Introduction

Problem Statement

Development workers can find themselves in new communities and cultures that have or may experience a disaster, either natural or manmade such as terrorism, in which they do not fully understand the nature of or the local issues involved with trauma resilience, or other topics, therefore in order to be efficient, they need to quickly understand trauma resilience and how it fits within a given culture and develop methods to address the problems or deficiencies that are encountered. A methodology is required that can be duplicated and is flexible enough to produce results in a variety of situations and cultures and that are comparable between cultures and over time.

Trauma resilience is complex and has many aspects; for example, the trauma itself, the person directly affected, the family, the caregiver, the community, etc. Many development workers have limited experience dealing with trauma and would benefit from an understanding of where there is local consensus on trauma resilience.

Variable Generating Activity and the Delphi Technique: Methodological Conceptual Framework

Since the purpose of a conceptual framework is to capture something real and that is easy to both remember and apply regularly, this section describes an approach to a methodology that guides this dissertation research. The Variable Generating Activity (C.R. Figley & Morris, 2013; Morris, 2013; C.R. Figley, Cabrera, Chapman, & Pitts, 2011) (VGA) is an approach that emerged from studies of communities that had not been

carefully studied until then and the Delphi technique that is a methodology for using experts to provide guidance.

The VGA is a methodology for determining axioms about a phenomenon. In this study the question is: What do Israeli experts believe is commonly known about trauma resilience based on their lived experience in Israel and their learned knowledge and study? The VGA methodology has been tested previously. Figley & Cabrera (2011) addressed the question: What do combat medics believe are commonly known about dealing with trauma (trauma resilience) in and out of combat for self and soldier and civilian patients? (C.R. Figley et al., 2013) IRB approval, 2010, to address the following question: What do people outside the Parish (Terrebonne) need to know about the people and cultures down here, with the rising waters? Morris (Morris, 2013) addressed the question: What do musicians who returned to New Orleans after evacuating from Katrina think being resilient means? In each case spokespersons were selected by the community to speak for the community in a video interview.

These spokespersons would then receive a video of their interview to keep as an expression of appreciation and also as a tool in the verification process for the research. The position on the video where the axiom could be found would be marked and communicated to the spokesperson. The spokesperson would then be able to verify what the research team had determined were axioms. All axiom nominations would be listed randomly after duplicates were omitted.

The final phase is returning to the community that nominated the spokespersons who generated the axioms to have them complete a survey composed of all of the nominated axioms. Each person then rates each of the axioms on a Likert scale (Strongly

Disagree to Strongly Agree). Thus, the VGA approach provides a powerful tool for quickly determining the axioms of a particular community. This is especially important of a little known community that is experiencing a crisis and there is uncertainty about the wishes or needs of that community.

Among the goals of this dissertation is to test the VGA approach toward a proof in concept; that a video-assisted set of interviews about a particular community can be useful in a survey that quickly determines the sentiment, culture, values, and preferences that best represent that community.

Expert panels are an excellent way to learn about communities and seek consensus but they have various problems; such as geographic, logistics, time, and economics. It is difficult and costly to bring together experts together in one place. In addition to the cost issue there are challenges in bringing the panel together because of conflicting time schedules and distances. Similar to the VGA approach, the Delphi Technique is a method to overcome these obstacles and reach a consensus (Keeney, Hasson, & McKenna, 2006). The Delphi technique is a structured process to obtain the opinions of experts. The opinions can be gathered in interviews and questionnaires this is then provided back to the entire expert panel usually in the form of a questionnaire format. This process of refining and returning to the panel can happen numerous times, there is no set number of rounds for the process occur.

This conceptual framework is an analytical tool that is variable and can be applied to in different contexts. It can be used to make conceptual distinctions, organize ideas, and capture something real and do this in a way that is easy to remember and apply. The conceptual framework provides a method to develop and reach consensus on trauma

resilience axioms; the VGA methodology paired with the reiterative process of the Delphi technique. Therefore, step one is to identify the community and seek representatives to serve as spokesman; an expert panel that includes both trauma resilience practitioners and academics is needed; academics are mainly involved in research and study while practitioners are mainly involved in treatment, there may be some overlap but they may provide different perspectives on trauma resilience. The experts need to have extensive experience both lived and professional with trauma resilience. In applying this to Israel, and the secondary data used for this proposal, the inclusion criteria for members of the expert panel were (1) lived their entire life in Israel; (2) published on resilience in ways that both are both practical and science-based. In order to identify these experts they were nominated by Zahava Solomon, the most universally respected scholar/practitioner in Israel in the area of trauma, PTSD, resilience, and trauma resilience in particular. Thus, a panel of experts was selected and asked to nominate 6 among them to serve as spokespersons and that were video interviewed. Those who were interviewed constituted the nominating body for the axioms that the Expert Panel considered to determine the top axioms of trauma resilience. The Panel represented the fields of psychology, psychiatry, epidemiology, and military mental health. This lived experience of the Expert Panel inform them of what resilience is and what it is not, at least in Israel.

To begin to understand what trauma resilience is in Israel, it is important to have some common understanding of the concepts of trauma resilience.

Trauma Definition

Trauma is a state of disruption caused by stressors severe enough to threaten life or make one believe that one is about to die. Trauma can split and fragment the mind in various biopsychosocial survival patterns, including various weightings of awareness and unawareness. Disruptions may radiate to any or all levels of human functions, ranging from anatomical and physiological to existential and spiritual. It can envelop individuals and range across groups and time including across generations. Trauma always leaves an imprint, and even if covered by extra defenses, a degree of compromised functioning, sensitivity, and vulnerability remain. (Figley, 2012, p. 678).

Resilience Definition

Resilience can be perceived in many ways; for example, individual versus community resilience. Therefore it is important to understand what is meant by “resilience”. Hobfoll, et al (Hobfoll, Stevens, & Zalta, 2015) investigated resilience from the perspective of materials science which he believes can also be applied to resilience. Hobfoll adapts materials science terminology:

Resilience: The ability of individuals or human systems to absorb stressors and return to their original state when that stressor is lifted without creating permanent damage or harm (Hobfoll, Stevens, & Zalta, 2015).

He takes this *materials science* perspective further to broaden the definition.

Stress is the externally applied force. Strain is the negative impact placed on the individual or system. Toughness refers to the ability of the human or system to remain functional while under stress. Resistance to Breakdown is the ability of an individual or system to not breakdown under stress. Plasticity is the ability of individuals or systems to undergo change in form without breakdown.

The Hobfoll, et al (2015) perspective illustrates that resilience can be viewed from various perspectives. Hobfoll stresses that resilience is for both the individual and human

systems. Trauma not only affects individuals but human systems. Human systems are systems that people develop and form to organize and protect themselves such as the family which is a basic human system, these systems are also found in different contexts such as communities and local organizations and also at the national context such as the national government. Therefore in Israel as well, resilience is more than just about the individual it is also about the human systems people form.

The terminology used by Hobfoll, et al (2015) also illustrates that resilience is dependent on more than just one factor. Stress (type, intensity, and duration) can influence resilience. Toughness of the individual or system to withstand the stress and keep functioning; not all are the same and some have qualities which better enable them to survive the stress and be more resilient. The ability to not breakdown also points to qualities which support an individual or system to not breakdown. Plasticity points to the ability to change and adapt to the stress. These point to different qualities and times in the stress process; pre, during, and post stress.

The definition points to the ability to return to the original state after the stress is relieved. However, Israel is a country which has experienced continuous and on-going stress. Israel provides a unique opportunity to better understand stress as the community has had to learn to return to an original state without the stress being relieved; there is a change in the gradation of stress, but not an elimination. Therefore academics and practitioners have extensive experience looking at the Israeli people and their systems' reaction to this ongoing stress.

The Context - Israel: Risk and Protective Factors of Trauma Resilience

Israel and its people have experienced periodic and on-going trauma – terrorist attacks, threats across all the borders, wars that can break out at any time, and universal expectations to serve in the military and defend the homeland.

Since Israeli's War for Independence starting in 1947 to 1949, there has been a long list of conflicts afflicting the country; the Six Day War (1967); fighting with Egypt (1967-1970); the Yom Kippur War (1973); invasions of Lebanon (1978, and 1981-1982); the first Palestinian Intifada (1987-1993); The second Palestinian Intifada (2000-2005); fighting in Lebanon and Gaza (2006); fighting with Hamas (2008-2009); fighting with Hamas (2012). The country has a unique and sustained history of war and conflict and therefore has had to learn to deal with the trauma that that history brings.

This constant exposure in Israel has been shown to lead to worsening emotional distress as opposed to habituation (Pat-Horenczyk et al., 2013). People do not simply become accustomed to an ongoing threat. The length of exposure has also been shown to have a greater impact on minority populations who have experienced dramatic increases in PTSD while also experiencing large drops in resilience due to continued exposure. (M. Gelkopf, Solomon, Berger, & Bleich, 2008)

The Israeli's have had a high exposure to terrorism and the trauma it causes. This exposure has provided an opportunity and a necessity to confront this trauma and to understand the resilience which can help not only the individual, but the country. This in turn has led to a professional class of practitioners and academics who have had to confront the trauma caused by this exposure and address the issue of trauma resilience (Figley, 2002). This professional class has obtained a unique and broad experience base;

they have both lived and worked through traumatic events. Their consensus on issues dealing with trauma resilience can indicate areas that would be important for development workers, practitioners and academics that have less experience dealing with on-going exposure to trauma and indicate areas for further research.

Axioms of Trauma Resilience

This study develops axioms from these Israeli trauma resilience experts.

According to the Oxford English Dictionary, an axiom is - “A proposition that commends itself to general acceptance; a well-established or universally-conceded principle; a maxim, rule, law.” In other words, axioms are widely held beliefs that help us understand and frame the world around us. Axioms can be a useful vehicle to aid in understanding and clarifying new concepts or situations. These axioms in addition to providing a framework for greater understanding, are also comparable across countries and cultures and can be the focus of research to either support or negate the axiom.

Axioms have been used to help frame and understand cultural differences. Leung and team (Leung et al., 2002) used social axioms to provide a basis to analyze differences between cultures. He noted that beliefs can vary by the actors, the setting, and the timeframe. Beliefs can be specific or general in nature; for example a specific belief that a certain food is best prepared raw, or a more general belief or abstract belief that is more applicable to a variety of actors, settings and timeframes.

Leung agrees with Katz (Leung et al., 2002) (Katz, 1960) that these social axioms serves the same purpose as attitudes: (instrumental) aid in goal attainment, (ego-defensive) protect self-worth, (value-expressive) illustrate value, (knowledge) aid in understanding. Axioms provide an important method to organize our belief systems.

While Leung uses his social axioms to broadly address what a culture values, trauma resilience axioms can also have a similar role in illustrating a culture's attitude to trauma, how it is treated, what effects it has on the individual and the society, the importance to the society, and provides a way to organize our knowledge and pass this understanding on to others.

Leung (Leung et al., 2011) further expanded his study of social axioms looking at how they compared across countries; looking at the axioms across 11 countries. This was further expanded by Stankov and Saucier (Stankov & Saucier, 2015) that showed that social axioms were useful in the cross-cultural comparisons of 33 countries.

Different professions and fields of study have their axioms, ideas and concepts which they believe are self-evident and do not require further thought. However many times this belief in the axiom turns out to be misplaced. Proving or disproving axioms can provide greater understanding and serves as the basis for research in many fields. Banton (Banton, 2003) takes on a long held axiom in ethnic and racial studies and discards a long held axiom. Cohen and team (A. Cohen, Patel, Thara, & Gureje, 2007) reviewed the axiom that developing countries have a better outcome in treating schizophrenia. This axiom was developed on some previous studies, but Cohen's research suggests that this axiom needs to be re-evaluated. Axioms help organize our understanding and can serve as the basis for further analysis, however before they can serve this role these axioms must be known and understood.

The Expert Panel provides a select population with considerable experience in the trauma field that has the experience to define these axioms. Their widely held beliefs, or axioms, are informed by years of experience and insights. Their knowledge and opinions

can help create a better understanding of trauma resiliency. This can help to persuade, teach, and counsel those with less experience in trauma resilience.

Research Questions

The aim of this study is to both test the proof in concept of the VGA and Delphi approach by generating a set of trauma resilience axioms for review by a panel of experts and to survey the panel of experts about their ratings trueness of the nominated trauma resilience axioms.

To reach these aims, the study seeks to answer three research questions:

1. What do Israeli trauma resilience experts endorse as a trauma resilience axiom?
2. What do Israeli trauma resilience experts reject as a trauma resilience axiom?
3. Which trauma resilience axiom contexts (individual, family community, or country) have greater consensus?
4. Is there agreement between practitioners and academics?
5. Given the endorsed axioms, what has or should be done?

Significance of the Research Aims and Research Questions

The research will aid development workers by providing them a methodology to explore and clarify trauma resilience in a given culture. Development workers work in many communities that have been traumatized or are vulnerable, yet the development worker may lack an understanding of how that trauma has affected or could affect the communities and individuals in the culture in which they are working. To effectively work in these communities and to build resilience into their programs, development workers need to understand trauma resilience. This methodology provides a way for the

development worker to make contact with local trauma resilience experts in order to facilitate this learning and sharing of information. The video interviews is a method to see deeper meaning in what the interviewee is saying and the review methodology begins to synthesize the knowledge and wisdom of each expert. The surveying allows for the further refinement of the data. Then finally allowing them to suggest how these axioms have been or should be addressed, allows the development worker to not only begin to understand but to begin to formulate a plan. Axioms about resiliency can help identify the level of resiliency, identify the need for intervention, and provide guidance on creating and fostering resiliency.

In addition, these axioms can also influence future research. Future research can either validate or invalidate these axioms. They can also serve as the basis for comparisons between countries and cultures and over time.

Chapter 2: Review of the Literature

“That resilience is many things to many people is not surprising, nor a problem.”
(Hobfoll et al., 2015)

Hobfoll, Stevens, and Zalta (Hobfoll et al., 2015) recognize the complexity and varied aspects of trauma resilience and therefore believes it is important to classify them correctly. This literature review will illustrate this complexity, with special attention to Israel and Israelis, and that when we attempt to develop axioms over trauma resilience they can cover many aspects and these need to be organized. The Expert Panel reflects academics and practitioners with different backgrounds and interests, their proposed axioms should also reflect this diversity of background and interests. Given the complexity and the need to classify, a structure is needed for the classification.

Therefore, the literature review will also serve an additional purpose of not only illustrating the complexity of trauma resilience axioms, specifically in Israel, but also proposing a method to classify these trauma resilience axioms. A structure is needed that is able to organize a broad range of axioms that cover different aspects of trauma resilience. The structure for this research is one used by NATAL, Israel Trauma Center for Victims of Terror and War, an organization dedicated to increasing public awareness of national trauma caused by the Israeli-Arab conflict (“To Discover,” n.d.). and supported by one of its members and also a member of the Expert Panel, Rony Berger (Berger, 2005).

Resilience

Bonanno and team (G. Bonanno, Brewin, Kaniasty, & Greca, 2010) argues that individual trauma only causes problems in a small minority of exposed individuals. These individuals can show psychological problems including; post-traumatic stress disorder, grief, depression, anxiety, stress-related health costs, substance abuse, and suicidal ideation. The team proposes that in studies this is seldom above 30% and in most studies considerably lower. This is supported by Greene and Greene (Greene & Greene, 2009) who estimate that approximately 15% experience psychological problems after exposure. They state that not everyone is a victim, and that individuals respond differently and should be treated differently.

Resilience can be viewed from multiple perspectives. One way is to look at the path that research has taken over its history. Resilience research, mainly centered on the individual, has followed three waves according to Richardson (Richardson, 2002). The first wave looked at what characteristics makes an individual resilient or protective factors. The second wave of research looked at how to obtain these characteristics. The third wave looks at belief systems and practices that can provide the energy to form a resilient individual. The third wave being more holistic approach and looks at resiliency through a multi-disciplinary approach. This leads to Richardson asserting that an individual's ecosystem helps empower one's resilience.

Following on with the ecosystem, researchers such as Greene and Greene have looked at the environments that individual's find themselves. These environments provide contexts (Greene & Greene, 2009) at both the micro and macro to analyze resilience. The micro being the individual, families, and communities and the macro

being the economic, cultural and political systems. They argue that to address resilience a more complete view is needed and many aspects need to be included; such as personal care, services and infrastructure, legal codes, and political conditions. There is a need for an ecological multi-systemic perspective to address resilience that ties internal, personal processes and external, environmental factors; individual resilience is entrenched in greater social systems.

In order, to address resilience on a broader perspective Walsh (Walsh, 2007) argues that to help families and communities cope with traumatic loss attention needs to be paid to belief systems, organizational patterns, and communication processes. Walsh calls for multi-systemic approaches that involve local participants, national organization, and possibly international. This collaboration can assist families and communities to cope and grow.

Providing Structure

Hobfoll and team (Hobfoll et al., 2015) begin to classify trauma resilience with a clarification that the terminology can be relevant for both individuals and human systems. Hobfoll and team agrees with Bonanno (Hobfoll et al., 2015; G. Bonanno, Romero, & Klein, 2015) that the focus of resilience needs to go beyond just the individual and needs to include the family and the community. This perspective of going beyond just the individual is also advocated in Israel by Berger, Expert Panelist and NATAL member, who argues for this perspective of looking at the overall system in which an individual operates including the family, the community, and the country and viewing trauma as a bio-psycho-social phenomena, it is not just about the individual but the individual also

operates within different contexts and they impact and influence each other (Berger, 2005).

NATAL's methodology is to include the following contexts in its interventions; individuals, families, communities, and country (Berger, 2005). This approach highlights the individual in relation to changing environments (Bronfenbrenner, 1977) and the many contexts involved in traumatization developed by Jay Belsky's framework to view child maltreatment (Belsky, 1980) in which he breaks down the contexts into the same categories. This perspective of multi-levels forms the framework to not only look at the literature but the axioms in this research project. The first is the Ontogenic Development Level which looks at the individual and individual qualities such as biology, personality, and history. The second is the Micro-Systemic Level which focuses on the family and its functioning. The third is the Exo-Systemic Level this looks at the community and the interplay between different groups and leadership. The fourth is the Macro-Systemic Level which is the country's response to a given traumatic event. The rest of the literature review will use these categories to help organize the research.

Individual Context of Analysis

An individual who faces a traumatic event brings certain internal qualities that aid or hinder trauma resilience, using Hobfoll, et al (Hobfoll et al., 2015) terminology a toughness and resistance to breakdown. These individuals have different personalities and histories and studies have shown that there different factors can affect these individuals and their trauma resilience; factors such as high exposure, purpose in life, mastery, gender, religion/spirituality, optimism, and supportive relationships.

In Israel, Shalev and Freedman (2014) showed that an individual's susceptibility to PTSD was affected by higher exposure to terrorist attacks increases the incidence of post-traumatic stress disorder PTSD(POW) captivity over a 35 year period. POWs were assessed three times and had a higher incidence of PTSD than control groups. There were four identified paths for PTSD; chronic PTSD, delayed PTSD, recovery, and resilience. POWs were more vulnerable to PTSD, even after 35 years, than combat veterans. A powerful predictor for the resilient POWs was that the better their work functioning the lower the rate of PTSD. The strongest factor which distinguished resilience was the subjective experience of captivity. The subjective appraisal is of personal resources, goals, and past experiences. Reappraisals which worsen the experience later in life can exacerbate PTSD symptoms. Some other factors affecting resilience are participation in previous wars, and negative events during childhood. Previous wars remind sufferers of previous similar events. Childhood experiences can weaken a sense of safety and the establishment of effective coping strategies (Solomon, Horesh, Ein-Dor, & Ohry, 2012).

Post-traumatic stress symptoms can happen long after the event occurred. Israel has a traumatic present and has had a traumatic past. Children survivors of the Holocaust witnessed and experienced horrendous treatment. The studies show that long-term some have been resilient and have been able to lead resilient lives while others have not. Again there are some protective factors involved. There are three identified attachment styles; secure (positive), anxious-ambivalent (negative), and avoidant (negative). The attachment style 'avoidant' led to a greater frequency of posttraumatic symptoms. Background variables were also shown to have an impact; such as the higher the level of education

seemed to be a protective factor. There is disagreement on whether the attachment style changes after being formed in infancy (E. Cohen, Dekel, & Solomon, 2002).

The individual brings their own histories and biology and group affiliations, these can all affect resilience. The individual can possess certain protective factors or qualities that can help protect or mitigate the effects of trauma resilience.

Family Context of Analysis

The importance of family and family ties can influence an individual's reaction to trauma and has a role distinct from the individual. Victims in Israel (Bayer-Topilsky, Itzhaky, Dekel, & Marmor, 2013) that have been exposed to terror through family were positively correlated with both posttraumatic stress and posttraumatic growth; this was not the case with those directly exposed, and those exposed through friends. The speculated reason is that the terror causes hypervigilance and the individual worries about family members. Higher exposure to posttraumatic stress also leads to higher rates of posttraumatic growth which is Hobfoll's plasticity.

While this study is focusing on Israel, the importance of understanding the society and the local context is illustrated by the Arabs in Israel. The Arabs while very close geographically to Israeli communities, were found to be experiencing post-traumatic stress symptoms at a greater rate than their Israeli counterparts, in part, due to family relations. It was speculated that Arabs may have been reluctant to go outside the family ('familism') but they had exceeded the family's ability to help (M. Gelkopf et al., 2008). To understand the uniqueness of this society and people it would require an additional future study to focus on them, using an expert panel familiar with them.

Dekel and Monson (2010) discuss trauma and its effects on family and intimate relations. She looks at secondary/vicarious trauma, ambiguous loss, caregiver burden, couple adaption, and a cognitive-behavioral interpersonal model. Also, treatment is discussed for couples, and parent child.

Community Context of Analysis

Societies and communities also have to come back from trauma. They attempt to build systems that can aid in prevention, mitigation, and rebuilding. The Israelis have attempted to understand resilience in their communities and systems.

There are tools out there to assess community resilience, two examples of this are the Conjoint Community Resiliency Assessment Measure (CCRAM) (Leykin, Lahad, Cohen, Goldberg, & Aharonson-Daniel, 2013) and a model that looks at for areas (economic development, social capital, information and communication, and community competence) (Sherrieb, Norris, & Galea, 2010). The CCRAM model evaluates five areas; leadership, collective efficacy, preparedness, place attachment, and social trust. The CCRAM was found to be an effective tool in Israel for measuring community resiliency (Sherrieb, Norris, & Galea, 2010).

The other tool mentioned above was evaluated in Mississippi where indicators of economic development and social capital were validated using county data compared to an existing index of social vulnerability and survey data. These two areas were chosen from four identified focus areas; economic development, social capital, information and communication, and community competence. The areas were chosen for evaluation due to the availability of secondary data. The two variables were validated and seemed appropriate for measuring community resiliency (Sherrieb, Norris, & Galea, 2010).

Different communities, like individuals, may have different protective factors; for example, the difference between urban and rural communities. An Israeli urban community highly exposed to rocket fire showed a significant increase in PTSD symptoms over an equally exposed rural community. A lack of resources was associated with this increase and protective factors for the rural community; such as; increased community solidarity, sense of belonging, and greater confidence in authorities (Marc Gelkopf, Berger, Bleich, & Silver, 2012).

A community has various opportunities to influence resiliency in the community. To facilitate resiliency it has been shown that intervention provided through the schools can aid children in the face of terrorism. Male middle school students who had been subjected to prolonged terrorist attacks experienced an easing of stress symptoms after an intervention. The program combined psycho-educational material, skills training, and resiliency strategies which led to significant drop in posttraumatic stress symptoms (Marc Gelkopf & Berger, 2009).

Two different communities in Israel, Palestinians and Israelis, are both subject to ongoing terror, but they experience it in different ways. The pattern of exposure has an influence. The Israelis (Pat-Horenczyk et al., 2009) experience more of a sporadic terrorism while Palestinians experience more of a regular exposure. This leads to higher posttraumatic stress in Palestinians than in Israelis.

Country Context of Analysis

Nations have governments, policies and cultures which can affect resilience. Israel has governments and NGOs that attempt to meet the need of continuing trauma services (CTS). These services provide an additional safety net and help build community

resilience. The scope of the traumatic event is important and can impact direct victims, relatives (close friends), and others who receive no benefits such as first responders, second responders, eyewitnesses, near misses, and the community. CTS (Levanon, Flamm-Oren, & Kahn-Hoffmann, 2005).provides training, primary prevention, post-event intervention, screening, clinical interventions, and support for families.

Involvement of many organizations with their own expertise allows for the coordination of limited resources.

Nations or societies can also have different protective factors or experience the trauma in different ways. The Israeli and the Arabs are both involved in the conflict and are victims to trauma. However, the Israeli majority and the Arab minority were studied at two different time periods (19 months and 44 months) after continuous terror attacks starting in September of 2000. The two groups were compared on compared on measures of exposure to terrorism, posttraumatic stress symptomatology, feeling depressed, coping, sense of safety, future orientation, and previous traumatic experiences. After 19 months, the groups were similar. After 44 months, the Arabs were much worse. Arabs increased three times in posttraumatic symptom disorder, increased two times in posttraumatic symptomatology, and resiliency almost disappeared. In general some of the measures improved, some stayed the same, and some worsened. Resiliency may have worsened due to dual allegiance, perceptions of political and social oppression, and pressure to support terror activities. In addition, Arabs were also experiencing secondary trauma from the 'related', affected Palestinian community (Gelkopf et al., 2008).

Mooli Lahad (2005), a member of the Panel and interviewed for the study, advocates that there is a need to raise public awareness of the impact of terrorism

psychologically and behaviorally on the public. There is a need for a national system to address psychosocial aspects, at the local level systems needed to be expanded, cultural sensitivity is important, and the family is central as a source for preparedness.

Conclusion

The literature review indicates that Israel is a laboratory for the study of resilience. The nation has experienced on-going terror which has allowed researchers to look at trauma from many different contexts; there is the individual, family, community, and country. Trauma resilience touches on many different aspects. The literature review illustrates the complexity of a vulnerable population. The Israelis face trauma at different contexts, they bring a history marked by events such as the Holocaust, wars, and terror. They have two unique communities within its borders, the Arabs and the Jews. Protective factors may not stay the same in all circumstances or communities. This complexity can only be understood by getting with those who understand these unique circumstances and begin to make the complex understandable. The Expert Panel axioms fall into many areas and the literature review has provided a structure of what those areas are (individual, family, community, and national) and some of the issues in each.

The literature review also highlights the problems a development worker may face and provides a framework for overcoming this. A development worker needs to take action that is focused and relevant for the given circumstances; for example by focusing on advocacy at the national context or the creation of new organizations at the community context. A development worker needs some structure in order to realize what is relevant or achievable. A development worker attempting to understand this complexity needs some guidance from experts who have knowledge and experience

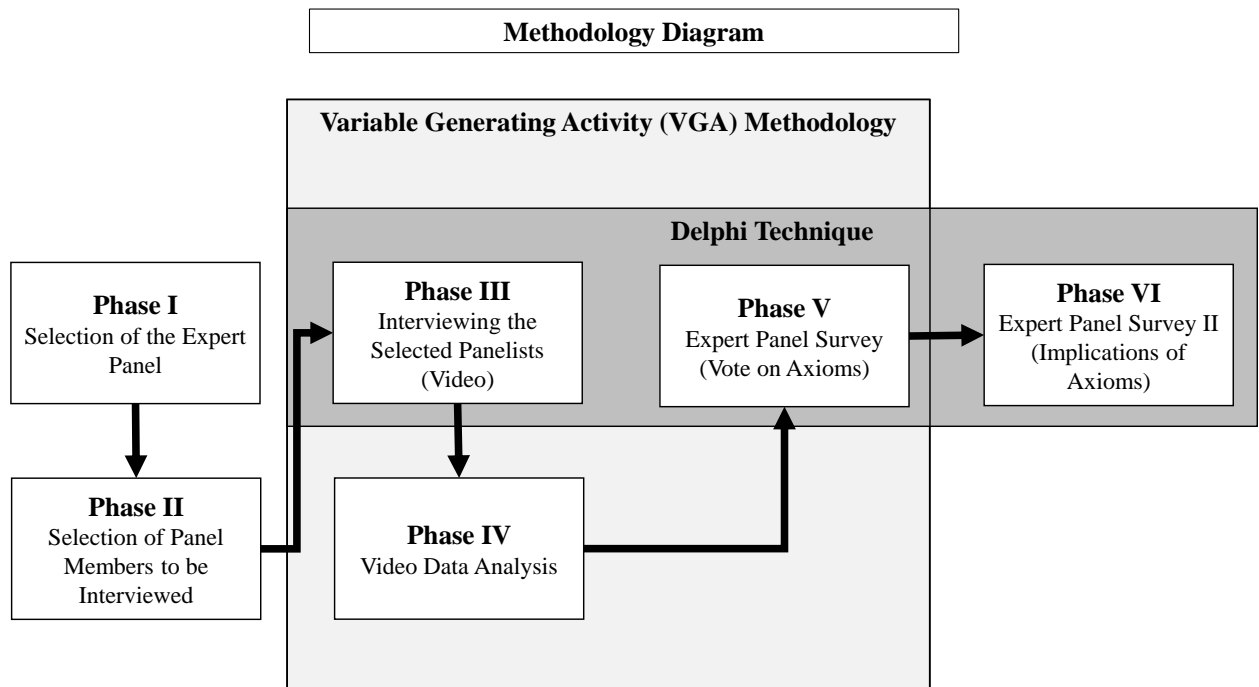
specific to their environment. This guidance needs to be easily understood and communicated. The guidance needs to lead to relevant and achievable action.

The Expert Panel provides the expertise to inform the less experienced and provide guidance. Axioms that reach expert panel consensus provide easily understood and communicated concepts. Taking these axioms to the next step of application can allow the inexperienced to focus and plan activities that are relevant. The following methodology gives a structured method for the development worker to follow to access this specific knowledge and experience

Chapter 3: Methodology

This chapter includes a description of the process by which the Panel was formed, their vote to determine who would be interviewed, the interview procedure, how the observations made in the videotaped interviews were transformed into a list of statements describing the axioms about trauma resilience in Israel, and the consensus of the Panel regarding ranking the axioms and their application to Israel. The chapter then explains how the data was analyzed. The research follows a six-phase process utilizing the VGA Protocol (C.R. Figley et al., 2011); C.R. Figley et al., 2013) and the Delphi Technique (Keeney et al., 2006).

Figure 1. Methodology Diagram. The figure illustrates the different phases of the methodology.



Phase I: Selection of the Expert Panel

Due to the ongoing Arab-Israeli conflict, an Israeli Expert Panel was brought together with vast experience in dealing with trauma resilience. Experts who have faced continuous terrorism and war since their nation was founded. These experts have a unique perspective and a vast amount of experience; this experience spans their professional and personal lives.

Most often, some type of expert panel is used when specialized input and opinion are required to debate and discuss various courses of action and make recommendations for treatment, policy, interventions, etc. Expert panels most often meet together for an extended period of time to reach consensus on a specific set of questions. This process, however, poses logistical challenges since expert panelists are rarely available to meet at the same time and place.

Zahava Solomon, a distinguished professor at Tel Aviv University and recipient of the prestigious Israel Prize for research in social work, helped to form a Panel of Israeli experts. She provided a list of names and emails; consisting of sixteen social and health scientists and practitioners, who were born and have lived in Israel all their lives, and that have made significant and sustained contributions to our knowledge of trauma resilience. Within one month from identification, Dr. Figley and Dr. Marks interviewed seven from the Expert Panel including the chair, Dr. Solomon in Israel.

Professor Solomon was asked by the research team to identify at least a dozen trauma resilience experts with the following two inclusion criteria: (1) they were native Israelis who were exposed to continuous traumatic adversities, and; (2) they have made

substantial and sustained contributions to our understanding of trauma and especially trauma resilience. Solomon identified the following Israeli scholars that accepted the invitation to be members of the expert panel based on these criteria:

- Avi Bleich is the director of Lev-Hasharon Psychiatric Hospital, a Professor of Psychiatry in the School of Medicine at Tel Aviv University, and Chairman of NATAL's, Israel Trauma Center for Victims of Terror and War, professional steering committee.
- Rony Berger is a faculty member of Emergency Medicine at Ben Gurion University and the Stress, Crisis and Trauma program at Tel Aviv University, and also the Director of Disaster Relief and Rehabilitation Unit at Brit Olam, an International Relief organization.
- Itamar Barnea is NATAL's, Israel Trauma Center for Victims of Terror and War, Chief Psychologist. He previously served as the head of the Psychology & Psychiatry for the Israeli Air Force, and as head of the Casualties Department for the Israel Defense Forces.
- Talia Levanon is the Director of the Israel Trauma Coalition. She has also worked in private practice and in a Unit of the Jerusalem Branch of the Israeli National Insurance Institute for Treatment and Rehabilitation of Trauma Widows and Widowers.
- Sam Tyano is a member of the Faculty of Medicine, Tel Aviv University.
- Karni Ginzburg is a lecturer at the School of Social Work, Tel Aviv University.
- David Senesh is a lecturer at Levinsky College of Education in Tel Aviv, a member of Restorative Justice in Israel, and the PsychoActive group of mental

health practitioners against the violation of human rights, and the Public Committee Against Torture in Israel.

- Mooli Lahad is the Professor of Drama Therapy and Psychology at Tel Hai College, Israel and Roehampton University, United Kingdom, the president of the Community Stress Prevention Center (CSPC), an NGO he founded 30 years ago.
- Rachel Dekel is the Head of the School of Social Work, Bar-Ilan University, Israel.
- Orit Nuttman Shwartz founded and heads the Department of Social Work, Sapir College, Israel, a member of the Sapir College Research Authority and a Lecturer in the Department of Social Work, Ben-Gurion University of the Negev.
- Dan Sharon is a Senior Lecturer at the School of Social Work, Tel Aviv University, Israel.
- Arie Shalev is a Professor in the Department of Psychiatry at New York University Langone Medical Center, the former Chair of the Department of Psychiatry at Hadassah, Director and founder of the Center for Traumatic Stress at Hadassah, Jerusalem, the Chair of the Israel Society for Biological Psychiatry, and the Editor and Founder of the Israel Journal of Psychotherapy.
- Ofir Levi is a member of the faculty at the School of Social Work, Tel Aviv University, Israel.
- Zahava Solomon is a Professor at the School of Social Work, Tel Aviv University. She has received the Laufer Award for Outstanding Scientific Achievement given by the International Society of Traumatic Stress Studies and the Israel Prize for research in social work.

Phase II: Selection of Panel Members to be Interviewed

The research team contacted the colleagues identified by Solomon and invited them to be part of the Trauma Resilience Expert Panel. They were then asked to identify individuals from the panel who should be interviewed, spokespersons for the community of trauma resilience experts. In addition to the Panel chair, Zahava Solomon, six panel members were identified and invited to be interviewed in Tel Aviv in December 2012, the panelists selected to be interviewed were: Avi Bleich, Rony Berger, Itamar Barnea, David Senesh, Mooli Lahad, and Rachel Dekel.

Phase III: Interviewing the Selected Panelists

Video Interviews

The use of video provides advantages that are not available with only written or audio records. Videos provide researchers a record of non-verbal clues that would not be available if you were not present for the event. In addition, even if you were present, the video allows the researcher to watch the video over and over again (Hopper & Quiñones, 2012). A researcher does not have to rely on memory or the notes taken during the interview. The written and photos are static, videos provide a non-static view of the event. Researchers are able to have a record of the environment and the interviewee's interaction with it, see nonverbal cues, and have a permanent record of the interview (Wang & Lien, 2013).

Charles Figley and Ron Marks interviewed the chair of the Panel, Zahava Solomon, and six members of the Panel with the highest recommendation rating by the Expert Panel. Everyone agreed and was able to make the interview as scheduled. The interviews were professionally videotaped with High Definition (HD) videos for each of

the seven interviews that were conducted over a four-day period. This was critical in assuring that the best video quality was utilized to study the interviewee panelist's answers.

The living room area of a shore-front hotel in Tel Aviv was transformed into a professional studio. Ronald Marks served as the interviewer for six of the interviews and Charles Figley served as video production director for the interviews as well as the interviewer for one.

The interviews were guided by the following agenda: (1) description of the project and purpose of the interview; (2) questions about the Expert Panelist's life in Israel growing up with a special interest in their lived experiences with trauma and resilience; (3) questions about their research as trauma scholars and their views about trauma resilience, and; (4) follow-up questions that would illuminate the complexity of trauma resilience. The interviews lasted between 45 and 90 minutes.

The purpose of conducting the interviews was to generate a comprehensive list of trauma resilience axioms and generate examples of resilience from the Israeli lived experiences of the interviewees. To increase the understanding of resilience in Israel and learning to overcome adversity in ways that work for the individual, family, community, or country.

Phase IV: Video Data Analysis

The video production company transformed each interview into data files that could be assembled and analyzed by the research team in New Orleans. The author was responsible for coordinating the analysis that generated the axioms identified in the videotaped interviews. The Variable Generating Activity (VGA) procedure (Figley et al.,

2011; Figley et al., 2013), a systematic methodology for identifying informants' observations, was used. This procedure enabled the research team to quickly review the video interview data and identify the relevant axioms. The VGA protocol was developed to have the content of the interviews, specifically the direct words of the interviewees, shape the axioms; interpretation from the research team does not alter the experts' views. Furthermore, retaining statements in their original quoted form enhances validity of the axioms; it is not being interpreted. The investigators were trained to conduct the VGA protocol. This VGA protocol includes a system of checking the work of others thereby establishing a system of reliability.

Three researchers reviewed the video recording before developing the written transcript. Transcribing can be more complex than many think. The reviewer needs to decide the context of detail, data interpretation, and data representation (Bailey, 2008). The researcher interprets what is attempting to be communicated, during this interpretation it is easy for errors to appear (Hammersley, 2010).. The addition of video allows for other researchers to verify the transcript and limit the deficiencies in transcription.

The video allows for investigators to take into account tone, facial expressions, and gestures. This has advantages over the use of transcripts because transcripts alone do not capture much of this valuable context. Without the video, researchers need to be present, or to rely on the memory of the interviewer, or need to return to the interviewee to provide context. In addition, the VGA Protocol requires researchers to return to the video to check and verify each other's work and interpretations.

Each video had three reviewers, these were chosen from five current or former Tulane students that had participated as reviewers in another study using the VGA methodology and conducted by Dr. Charles Figley, the developer of the methodology, in Terrebonne Parish Louisiana. The reviewers had the following responsibilities:

- Primary reviewer is responsible for viewing the video all the way through and generating a list of at least five points made by the interviewee and identifying where each point could be found on the tape by providing a timestamp. The primary reviewer also reviews the initial draft of axioms that were later prepared by the tertiary reviewer.
- Secondary reviewer is responsible for viewing the video all the way through and verifying the major points and the timestamps of the primary reviewer.
- Tertiary reviewer is responsible for viewing the video all the way through, settling any disputes between the primary and secondary reviewers, and developing the initial draft of axioms.

The initial draft of axioms was then sent back to the interviewee for review. In addition the interviewee was given a transcript, a copy of the video, and where each point could be found on the video. The interviewee then provided feedback on the axioms; the interviewee could approve, disapprove, change or add to the list of axioms. The axioms were then changed based on interviewee feedback.

Phase V: Expert Panel Survey

The interviewee responses were combined into an online (Qualtrics) trauma resilience survey. An attempt was made to remove duplicates and keep the wording of

the approved axioms unchanged; however, some minor rewording did occur to make certain items clearer.

Members of the Israeli expert panel voted on their level of agreement with each of the axioms using a Likert Scale (Strongly Disagree = 1 to Strongly Agree = 5). The average for each axiom was calculated.

Phase VI: Expert Panel Survey II

The panelists were then sent an email asking them to participate in a second online survey and comment on the top consensus axioms (based on the average) agreed upon trauma resilience axioms. The panel received a Qualtrics survey with an open-ended question to provide them the maximum flexibility in responding and a list of the top consensus axioms at the top of the page. The idea was to provide the respondents with the top 10 consensus axioms, due to ties with the average of some of the axioms this number was increased to 13. The breakout of the axioms falls within all four contexts; Individual 8, Family 1, Community 2, and National 2. The survey question was the following:

Please review the top consensus trauma resilience axioms (above) from the expert panel survey. Choose one or more of the top consensus axioms and provide three examples (in the spaces provided below) of how the axiom has been or should be addressed in Israel. Possible examples could be of, but not limited to: treatment, training, policy, or organizations.

The respondents were able to concentrate on one axiom or choose up to three and they were also able to choose between the four contexts. This allowed them to choose, and left some axioms or contexts with no examples. However, this allowed them to

comment on the axioms they felt most comfortable or knowledgeable about and did not force them to comment on an axiom in which they have no interest. The respondents were also asked one demographic question to determine if they identify more as an academic or a practitioner.

Data Analysis

The Axioms Survey

The Likert scale allows respondents to express their opinion on a given topic. The Likert scale used in the Trauma Resilience Axiom Survey allowed respondents to express their agreement with each axiom. The answers were coded:

Strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5

There is some controversy on how responses to a Likert scale should be analyzed. The response is a rank order; an ordinal level of measurement and the use of parametric measures are not appropriate (Jamieson, 2004). The difference between the ranks cannot be assumed to be equal. However, many researchers assume them to be equal and the use of parametric measures is common. Some researchers argue that the use of parametric measures is appropriate of measurement (Norman, 2010). Whether the results are viewed as ordinal or interval has a bearing on what statistics to use.

To begin the analysis of the results, descriptive statistics were used. If the data is ordinal then it is not appropriate to use the mean, or standard deviation, instead the mode and the median should be used. The mean require arithmetical manipulation, but it is not a number but a rank order. The mode and the median are specific numbers and require no arithmetical manipulation. The frequency and percentage of responses can be reported.

As noted previously many use ordinal data as interval. This research paper assumed the data is interval and the mean was used.

As the Delphi Technique (Keeney et al., 2006) is a reiterative process with no set number of rounds, a third round of surveying the expert panel gathered additional information. Additional demographic information was gathered on gender and professional role (academic, practitioner). However due to the low sample sizes, it was determined that there were no conclusions to be found analyzing the data from the gender or the professional role. There was an analysis of each context (individual, family, community, and country) to evaluate the amount of consensus in each context. In addition, additional qualitative data will be gathered from the panel. The panel members were surveyed on how or what Israel is doing or has done to address the highest ranked axioms from the initial survey and what should they be doing.

The Axiom Implication Survey

The second round of surveying in which the expert panelists had an open ended question in order to provide examples of how the consensus axiom have been or could be applied in Israel. These were reviewed to see if there is any common consensus between the experts and begin to categorize the responses using the same framework as was used for the axioms: individual, family, community, and country.

Conclusion

The VGA approach provides an efficient methodology (Figley et al., 2011; Figley et al., 2013) to quickly identify the axioms of a community through video interviews and community survey. Various reviewers are able to review the actual interviews, not just transcripts, and verify each other's work and the interviews are available for future

review. The reiterative process of the Delphi technique (Keeney et al., 2006) allows researchers to bring together the collective expertise of local experts to begin to develop a picture of what is true or not true of a given community, culture, or country and to apply this to the given situation. In addition, the axioms can be compared to other cultures and countries and across time. Therefore the axioms can begin to tell a more comprehensive story of trauma resilience and how it can change across communities, countries, and time.

By asking the experts for examples of the implication of the axioms, the real world consequences of the axioms can begin to be developed. A development worker can duplicate this methodology and quickly gain insights into trauma resilience in their environment. They can start to formulate development and disaster plans for vulnerable populations in their communities. Each environment brings unique characteristics in addressing trauma resilience. The first step, is beginning to gain insights into these characteristics.

Chapter 4: Results

This Chapter will look at the results from the two surveys; Survey 1 whose purpose was to develop consensus trauma resilience axiom, and Survey 2 whose purpose was to document how the top consensus axioms have been or should be applied locally, in Israel. The axioms relate to different aspects of trauma sometimes quite distinct from each other and need some method to focus the analysis; for example: there are axioms relating to characteristics that aid trauma resilience in an individual context and there are axioms related to the role of media in spreading trauma in the national context. Therefore, the results will be categorized and presented according to the four contexts of analysis identified in the literature review: individual, family, community, and national. This categorization will allow the analysis to focus and identify the contexts that have more or less consensus and provide a greater illustration of trauma resilience in that context. All axioms were assigned to a context, based on researcher judgment. Certain axioms were related to two different axioms and so were assigned to two different contexts.

The results from the first survey allowed the expert panel members to rate each axiom on a 5-point Likert scale (strongly disagree to strongly agree). This provided an average for each axiom. The higher the average the greater the agreement consensus of the expert panel on the axiom; some of the axioms received the same average. The averages were then ranked from 1 to 83; the higher the ranking the greater the consensus. In order to focus in on where there was agreement, the top 20% ($83 \times .20 = 17$) or those axioms with a ranking of 1 to 17 were identified, and those axioms in the top 20% were presented for each context. All the axioms were assigned to a 20% range (1-17, 18-34.

35-51, 51-68, and 69-85) in order to illustrate if the axioms in that context were high or lower consensus axioms.

The overall results will be presented breaking all the axioms down by context (individual, family, community, and national), then the top 20% range of consensus axioms will be broken down by context. The results will then be presented focusing on each context. The context results will first provide a breakdown of the axioms in that context by range to illustrate the consensus of the expert panel on that context. All the axioms will be presented which are in the top 20% of consensus axioms (see full results for Survey 1 in Appendix A) for that context. Next, the examples of how certain axioms have been or should be applied in Israel will be supplied. The expert panel was asked to provide three examples of the top 10 consensus axioms; however due to ties in ratings this resulted in a list of 13 consensus axioms; any axiom with a rating of 10 or above. Respondents were able to choose which axioms to comment on, and therefore, not all axioms have examples.

The response rate for Survey 1 (consensus axioms) was 81% (13 of the 16 expert panel members responded to the survey). The response rate for Survey 2 (axiom applications in Israel), was 38% (6 of the 16 responded to the survey); however of the six responses, two did not complete the survey which resulted in four completed surveys. One responded that he did not feel he had anything to contribute as he viewed himself as only a clinician and another indicated that he was too busy due to the ongoing terror in Israel:

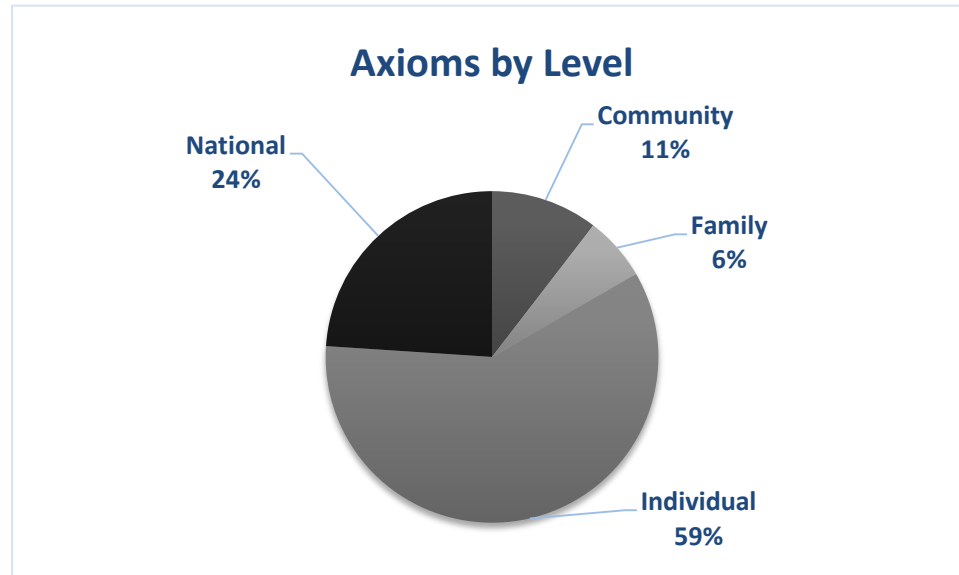
I am sure you are aware of the fact that every day someone is killed by Palestinian terrorist. It's directly have an impact on my clinical work. – Dan Sharon

The reason for not participating in the survey, while disappointing, illustrates the unique and ongoing trauma faced by Israelis and the unique experience of the expert panel.

Overall:

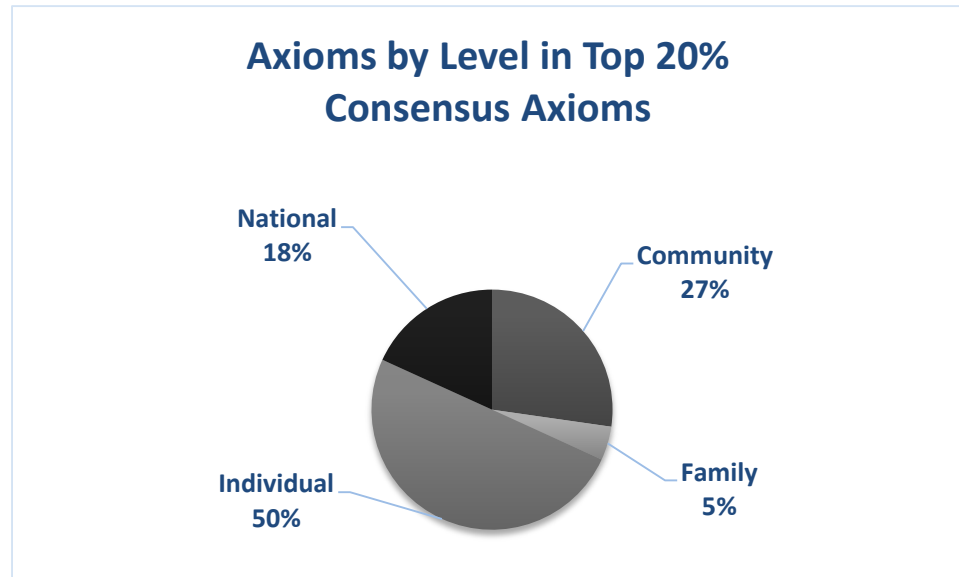
The axioms were categorized by context of analysis; individual, family, community and national. There were a total of 83 trauma resilience axioms, however, 13 of these axioms could be applied to two different contexts (for a total of 96 axioms). The breakdown in axioms per context was: Individual - 57 axioms or 59% of the total, Family - 6 axioms or 6% of the total, Community - 10 axioms or 11% of the total, and National - 23 axioms or 24% of the total (See Illustration 1). By far, the trauma resilience axioms developed from the video interviews dealt primarily with the individual context, with almost 60% of the total. This was followed by a quarter dealing with the national context. The family and community contexts combined did not account for a quarter of the total axioms. The expert panel focused primarily on individual and national context trauma resilience.

Illustration 1. Axioms by context. This graph illustrates the percentage of all axioms in each context.



The averages of each axiom were calculated and then ranked, from most consensus = 1 to least consensus = 83. There were many axioms that were tied with the same average of ratings from the expert panel. These axioms were further divided into 20% ranges ($83 \times .20 = 17$); this resulted in 5 ranges of 1-17, 18-34, 35-51, 52-68, and 69-85. The top 20% of axioms, 1-17, were the highest consensus axioms. The following is how the highest consensus axioms were divided among the different contexts: Individual - 50% down from 59% of the total, Family – 5% down slightly from 6% of the total, Community – 27% up from 11% of the total, and National – 18% down from 24% of the total (see Illustration 2). The individual context has the most consensus axioms, however the community context was up dramatically to account for a greater proportion of consensus axioms. The community context was the only context to have a greater percentage of the top 20% consensus axioms than its percentage of the total.

Illustration 2. Axioms by context in top 20%. This graph illustrates the percentage of all axioms in the top 20% of consensus axioms in each context.



Individual:

The individual context shows that only 11 of 57, 19%, of total individual axioms fell within the top consensus axioms, 1-17 (see Illustration 3). There are 81% that are not top consensus axioms, indicating some disagreement about the individual context.

Illustration 3. Individual axioms by class. This graph illustrates the distribution of individual context axioms in each 20% class of consensus axioms.

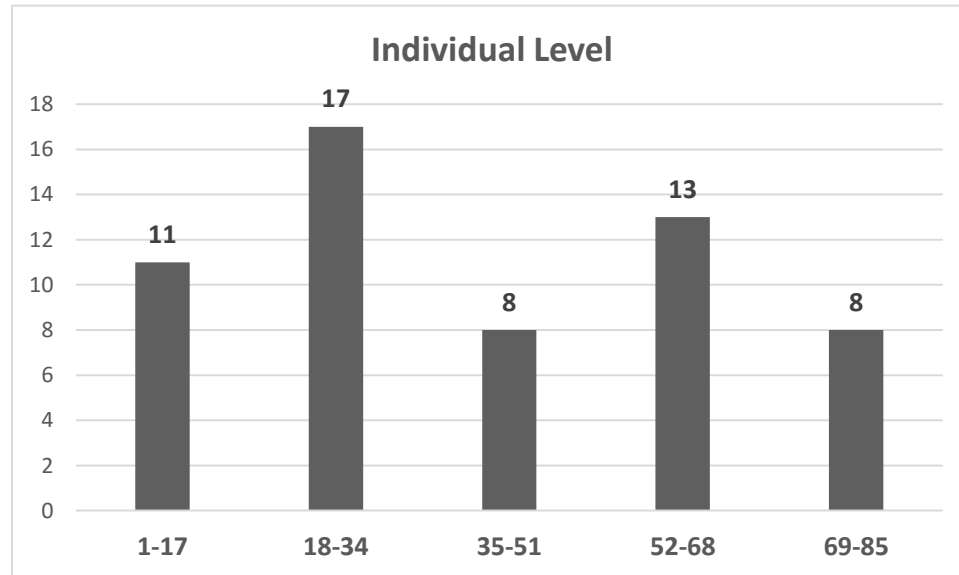


Table 1. Individual axioms within top 20%. The following table is a list of the individual context axioms within the top 20% of axioms.

<u>Axiom #</u>	<u>Axiom</u>	<u>Average Rank</u>
22	In a stressful and traumatic situation, it is very important to feel connected to other people.	1
23	Strong sense of purpose can have a positive impact on resilience.	1
38	Trauma resulting in a loss of trust in oneself and others is a psychological barrier to peace.	5
40	The negative effects of trauma are not limited to clinical psychopathology. Trauma can also produce negative personal and social circumstances.	5
57	Feeling a sense of belonging to the community gives you a sense of power and resilience.	5
26	It is important to have a sense of mission, a sense of history and purpose.	9
59	Family support increases an individual's resiliency.	9
60	Social support increases an individual's resiliency.	9
41	Expressions of inner strength, coping skills, hope, and social support are the four major factors in building resiliency according to current research.	14
50	Being creative, courageous, and resourceful can allow people to find solutions for things that they once thought were impossible.	14
77	Vicarious experience of trauma can occur through working with traumatized individuals.	14

Axioms #22, 59, 60, and 41 describe connections and support from other contexts such as the family and community. Axioms #23, 38, 57, 26, 41, and 50 talk about inner qualities or perceptions that help make an individual resilient; sense of purpose, trust in oneself, trust in others, sense of belonging, sense of history, sense of purpose, inner

strength, coping skills, hope, creative, courageous, and resourceful. Axioms #40 and 77 are related to the scope of the negative consequences of trauma and it is just not clinical but can have personal and social effects and can also affect those treating the traumatized, vicariously.

Survey 2 – The individual context received 40% (4/10) of the examples. The following are the examples to how the axiom has been or should be applied in Israel:

Axiom #22 - In a stressful and traumatic situation, it is very important to feel connected to other people.

In 2002 and 2004 (the second Intifada) we examined various aspects of traumatization, coping and resilience on representative samples of Israeli society. Among the various findings we found a correlation between risk factors such as: less years of education, low sense of personal security, low sense of social support and more post traumatic psychopathology and decreased measures of resilience. We also found that among Israelis' common coping mechanisms for dealing with ongoing traumatic stress, is a need to immediately check up on dear ones (usually with cellular phone calls); and the use of social support. - Avi Bleich - Practitioner

Axiom #23 - Strong sense of purpose can have a positive impact on resilience.

The elderly people in Gaza area prefer to stay at the area and not be evacuated as the young because they felt sense of belonging to the land, to the place that they built by their own and to feel that they are strong enough to stay and to protect their home. After the war they declared that those role help them to feel competent and enable them to support the young population although at the beginning they thought that they are vulnerable. - Orit Nuttman-Shwartz - Academic

Axiom #40 - The negative effects of trauma are not limited to clinical psychopathology. Trauma can also produce negative personal and social circumstances.

“The essential difficulty underlying trauma research lies in the conceptual limitations. The focus of many studies is on post-traumatic stress disorder and

therefore focuses on signs of depression, emotional distress, / sleep problems, anxiety and violence. However the PTSD checklist does not adequately cover the effects of trauma as seen in Israel. Sderot and the Gaza Envelope have (1) been exposed to a series of threatening events over an extended period of time. (2) residents do not have close personal contact with the aggressor and (3) residents have an ongoing situation where they live in the same community but their daily routine, family life and community activity is threatened and frequently disturbed. In light of all this, the negative effects of trauma in the Gaza Envelope have produced negative personal and social circumstances including issues of loneliness, eating disorders, lack of support, decrease in quality of life and work achievements and somatization (hypertension, diabetes, miscarriages). An example would be young parents who grew up in this area and are post traumatic – the quality of marriage and parenting, is affected by years of long term exposure to anxiety and fear. They are very busy with themselves, less available or responsive to expressions of anxiety or stress in their children. Resulting in second-generation exposure. The question arises whether the responses of residents of southern Israel are unique regarding clinical psychopathology and an even more fundamental question is how to adapt the response to this unique situation. - Talia Levanon - Practitioner

Emphasize the role of families, interpersonal connections. / Developing interventions for couples” - Rachel Dekel - Academic

Family Context:

The family context shows that only 1 of 6, 17%, of total family axioms fell within the top consensus axioms, 1-17 (see Illustration 4). There are 83 % that are not top consensus axioms, indicating some disagreement about the family context.

Illustration 4. Family axioms by class. This graph illustrates the distribution of family context axioms in each 20% class of consensus axioms.

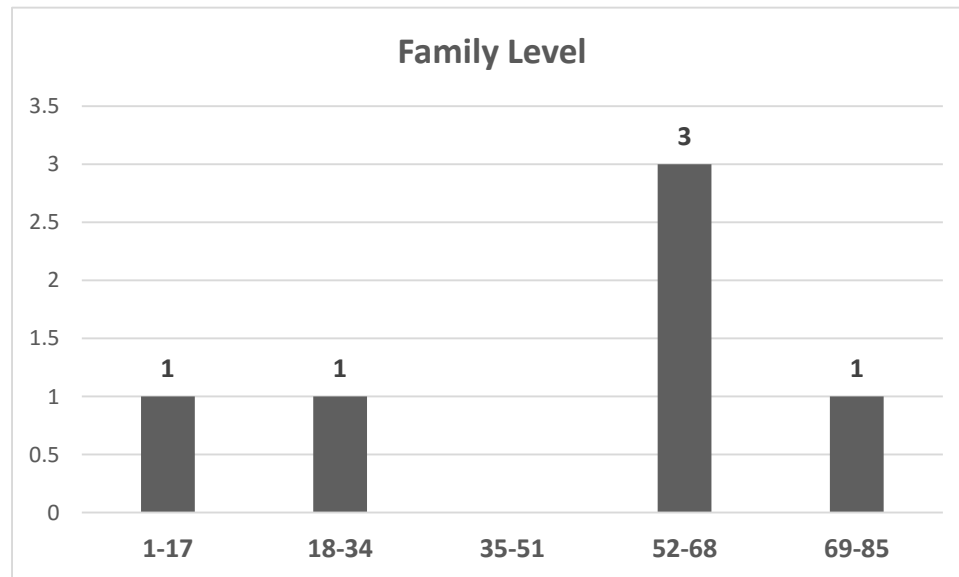


Table 2. . Family axioms within top 20%. The following table is a list of the family context axioms within the top 20% of axioms.

<u>Axiom #</u>	<u>Axiom</u>	<u>Average Rank</u>
59	Family support increases an individual's resiliency.	9

There is only one axiom that is within the top 20%. This was also listed with the Individual axioms. Axiom #59 stresses the importance of connections and support from the family. There is less consensus on the axioms that deal with the perspective and actions of spouses and families.

Survey 2 – The family context received 0% (0/10) of the examples; there was only one axiom with a ranking of 10 or above available for comment.

Community:

The community context shows that 6 of 10, 60%, of total community axioms fell within the top consensus axioms, 1-17 (see Illustration 5). There are 40% that are not top consensus axioms, indicating that in relation to other contexts there is greater consensus about the community context.

Illustration 5. Community axioms by class. This graph illustrates the distribution of community context axioms in each 20% class of consensus axioms.

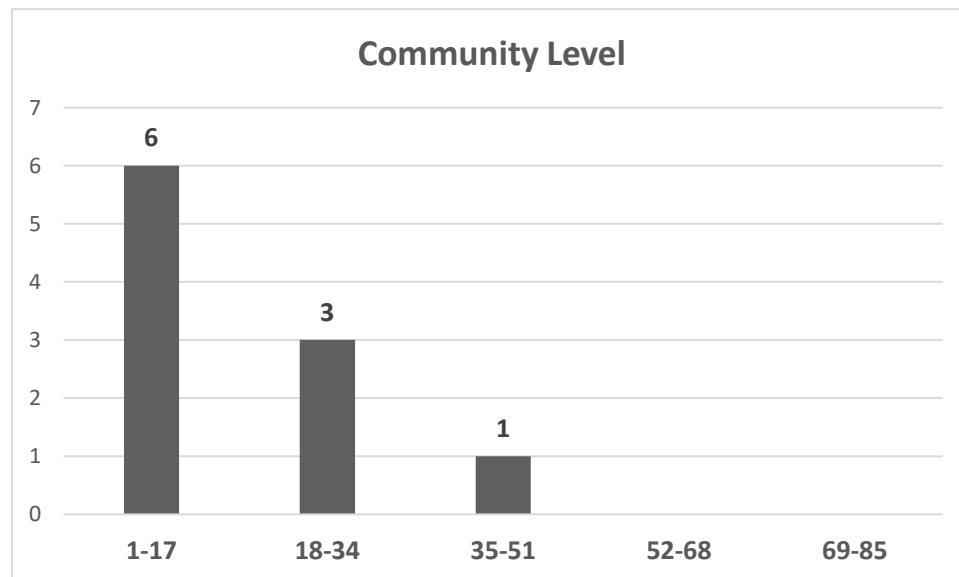


Table 3. Community axioms within top 20%. The following table is a list of the community context axioms within the top 20% of axioms.

<u>Axiom #</u>	<u>Axiom</u>	<u>Average Rank</u>
2	Strong social ties promote resilience in a community facing ongoing traumatic threats.	3
57	Feeling a sense of belonging to the community gives you a sense of power and resilience.	5
68	Communities that are resilient tend to have a strong sense of belonging, solidarity and trust in their leadership.	9
4	Repeated traumatization can have negative psychological consequences for the communities that experience them.	14
5	Resiliency is the capacity of a community to deal with a major crisis by adapting and growing while minimizing casualties and preserving a fair quality of life for all its citizens and maintaining its core values and identity.	14
77	Vicarious experience of trauma can occur through working with traumatized individuals.	14

Axioms #2, 57, and 68 stress the importance of connections, social ties, and a sense of belonging to a community for resilience. Axiom #68 also talks about the importance of community leadership. Axiom #4 talks about a time element of trauma and that repeated trauma can have negative consequences on communities. Axiom #5 talks about the qualities that make for a resilient community; minimize casualties, preserve quality of life, and maintain core values and identity. Axiom #77 talks about the scope of the trauma and that it can have negative effects, vicariously, on those treating the traumatized in the community.

Survey 2 – The community context received 40% (4/10) of the examples. The following are the examples to how the axiom has been or should be applied in Israel:

Axiom #68 - Communities that are resilient tend to have a strong sense of belonging, solidarity and trust in their leadership.

In Israel, from 2001, at the onset of the terror attacks and the challenge of the security situation, it was clear that the focus is shifting from individuals to include entire communities. Whilst personal trauma is about individuals in terror attacks and natural disasters it is communities that are affected, therefore communities should be the focus of the response. Local services, working in a fragmented way, were not adequate to deal with the new situation and the growing and changing demands. A multi- disciplinary and multi- sector approach of collaboration had to be created to provide and build a concept of a shared language and culture of preparedness and response. Thus the concept of a Resilience Center was created. The goal was to “provide psycho-social assistance to the residents of the area” by creating a “one stop shop” providing a wide spectrum of services from the individual to the community level. Having all these services under one umbrella allows for implementation of integrated, long term and multi – level intervention plans and minimizes the need for managing interfaces between multiple intervention organizations. These Resilience Centers empower local communities to become self-sufficient in the realm of preparedness, response, empowerment and resilience. - Talia Levanon - Practitioner

In 2008, after about seven years of continuous threats on the Jewish settlements bordering the Gaza Strip, and cumulative shelling of 5,000 missiles and rockets that left 15 dead and 450 wounded and considerable damage to homes and property we examined risk factors and protective factors for ongoing traumatic stress, on the community level. We compared two communities with similarly high exposure (about 95%): Sderot, a development town with 19,000 inhabitants and rural settlements in the Gaza Strip vicinity (kibbutzim and moshavim) with about 25,000 inhabitants. Post-traumatic stress (PTS), global distress, functional impairment and need for health services were significantly higher among the residents of Sderot. Predictors of PTS included: female gender, history of trauma, financial loss, lack of social support. Lack of resources was found to be related to vulnerability among Sderot residents. In the rural settlements, sense of belonging, community solidarity and trust in the authorities served as protective and resilience factors. - Avi Bleich - Practitioner

The leader of the community is in between the government and the community and need to see a large picture, to integrate between the national, military and civilians needs. Specifically the local leader to supply information, help people to make decision. In our area his main task during the last army operation was to contain the people anxiety, to encourage families with children to be evacuated and prepare a suitable place for them etc. in a case that the leader was ready to do so the day after the war the community better succeed to return to the routine. - Orit Nuttman-Shwartz - Academic

Axiom #57 - Feeling a sense of belonging to the community gives you a sense of power and resilience.

Creating communities. / Strengthening the ties of and in communities during routine times-meeting/ Activities for communities - Rachel Dekel - Academic

National:

The national context shows that only 4 of 23, 17%, of total national axioms fell within the top consensus axioms, 1-17. There are 83% that are not top consensus axioms, indicating some disagreement about the national context.

Illustration 6. National axioms by class. This graph illustrates the distribution of national context axioms in each 20% class of consensus axioms.

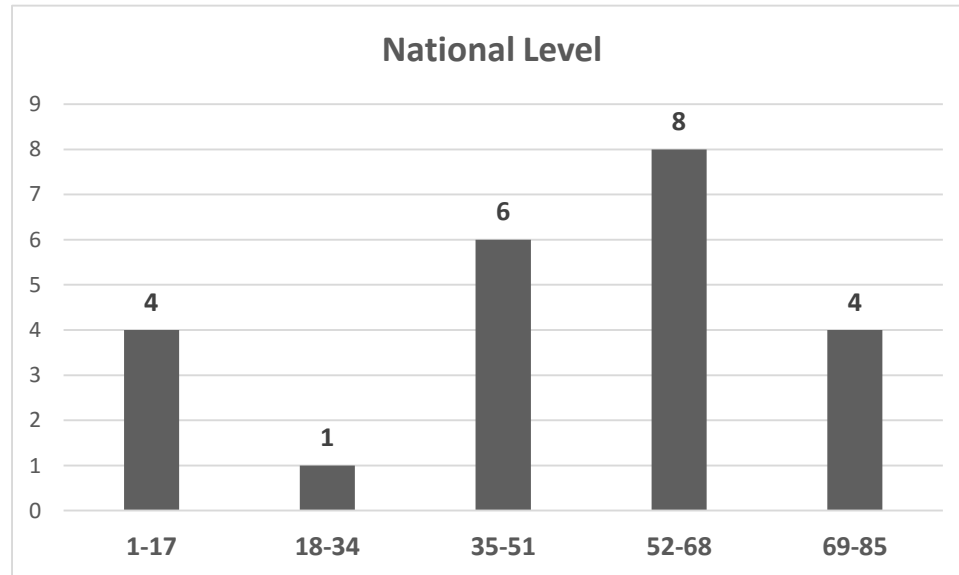


Table 4. National axioms within top 20%. The following table is a list of the national context axioms within the top 20% of axioms.

<u>Axiom #</u>	<u>Axiom</u>	<u>Average Rank</u>
3	3. A large portion of society is exposed to terror-related stress and trauma, but some sections of population are more at risk than others for developing mental health problems.	3
82	82. To teach resilience across cultures, one should be modest and learn strategies from the cultures of the affected.	5
75	75. Group cohesion increases resiliency within military units.	9
21	21. It is the central government's responsibility to assist those who have unequal access to resources in the wake of disaster.	14

Axiom #3 stresses that all populations are not equal and some are more vulnerable than others. Axiom #82 stresses the importance teaching resilience using the local culture. Axiom #75 talks about the connections within military units and its importance for resilience. Axiom #21 stresses the responsibility of the government to aid those with insufficient resources.

Survey 2 – The national context received 20% (2/10) of the examples. The following are the examples to how the axiom has been or should be applied in Israel:

Axiom #82 - To teach resilience across cultures, one should be modest and learn strategies from the cultures of the affected.

One of the central tenants' of the work of preparedness should be the development of tailor-made programs. An example is the Bedouins in the Negev who are a traditional, pastoral, nomadic Arab tribe, constituting approximately 31% of the total population in the south. In addition to the exposure to missile attacks, the Bedouin communities also experience exaggerated levels of trauma in their everyday lives, including food insecurity, high unemployment rates and intra-familial and intra-community violence. ITC began working with the Bedouin community and its leaders three years ago by performing needs analysis, mapping, recommendations and training with the goal of not only helping the greater population cope with trauma, but forming the foundation of recognizing, managing and building resilience. Work is provided in a “bottom up”, holistic manner – the ITC trains women, service providers, and community heads in turn. Recognizing the importance of Imams in the Bedouin community, ITC also works closely with these spiritual leaders developing strategies for security and self-care. Future plans include the establishment of a Regional Training and Resilience Centre catering to the Bedouin population. The Centre will not only serve the local population, it will be serviced by the local population and staffed by local service providers, ultimately establishing a system in which Bedouin community becomes self-reliant. - Talia Levanon - Practitioner

Axiom #75 - Group cohesion increases resiliency within military units.

Unit cohesion and trust in the commander were, repeatedly, found to be important factors which influence resilience of the soldiers on one hand and vulnerability to post traumatic disorders on the other. - Avi Bleich - Practitioner

Conclusion:

The methodology employed by this study successfully helped to identify trauma resilience consensus axioms and provide examples of their applications in Israel. The VGA methodology successfully identified the axioms and the Delphi technique led to how these axioms are applied or could be applied in Israel. For example, from a community context consensus axiom:

Axiom: Communities that are resilient tend to have a strong sense of belonging, solidarity and trust in their leadership.

Application which could benefit a development worker was supplied:

Community Resilience Centers...The goal was to “provide psycho-social assistance to the residents of the area” by creating a “one stop shop” providing a wide spectrum of services from the individual to the community level.

Another example, from a national consensus axiom:

Axiom: To teach resilience across cultures, one should be modest and learn strategies from the cultures of the affected.

Application which could benefit a development worker was supplied:

Working in the Bedouin community calls for a “holistic manner – the ITC trains women, service providers, and community heads in turn. Recognizing the importance of Imams in the Bedouin community, ITC also works closely with these spiritual leaders developing strategies for security and self-care. Future plans include the establishment of a Regional Training and Resilience Centre catering to the Bedouin population.”

These examples, illustrate the success of the methodology in not only identifying consensus axioms, but also in understanding their applications.

The expert panel members provided guidance that would be helpful to a development worker. The importance of these consensus axioms and the contexts was commented on by one of members of the expert panel:

The top trauma axioms mentioned above serve to highlight the need for a method that combines both an individual and community approach. It is a methodology that has a bottom up and top down approach to psycho-trauma care and resilience. By empowering local councils, we create an infrastructure that provides a range of responses before, after and during an emergency event and assist the community and the formal leadership in the rehabilitation process. When people have a defined role that they have been trained for, when they can be helpful, take care of themselves and others, give answers and provide solutions-they are resilient. A community with trained teams that together with the municipality can provide a seamless provision of services, with all its bases covered is a strong community- a resilient community. The strength is rooted in the partnerships and the collaborations that are at the core of this approach. The resources of key government ministries, Home Front Command, local councils and NGO's should be harnessed and brought together- a truly multidisciplinary approach that is engaged in a process that is transformative- revolutionizing trauma care. - Talia Levanon - Practitioner

The richness of the experience of an expert panel would benefit greatly and guide a development worker attempting to build resilience in a community and its members.

Chapter 5: Discussion

This final chapter is organized into four sections. Section one provides an overview of the findings. Following this overview section there is a discussion of the methodology and the use of the VGA methodology and the Delphi technique. This is followed by a section that reviews the limitations and contributions of the study. Finally there is a section that addresses the research's implications for international development research and practice.

Overview

The methodology, consistent with the research questions, enabled a successful consensus axiom identification and application process that resulted in a total of 83 trauma resilience axioms to be identified and 10 responses on application were also obtained. Due to the experience of the expert panel in operating in Israel, a country with continuous on-going terror, these axioms and their applications have deepened of our understanding of highly relevant aspects of trauma resilience. Further research is needed to corroborate and extend this research to other cultures and populations. A development worker could use these findings to take actions to enhance resilience in the face of trauma. This research process also led to lessons learned that could benefit future research.

Methodology

The Delphi technique, which requires ongoing communication and data gathering, can be time consuming for expert panel members, especially when dealing with busy professionals it can be a problem. As one of the members of the Israeli expert panel mentioned, (“*every day someone is killed by Palestinian terrorist*”) he is dealing with a population afflicted with continuous terror which takes priority over the research. The time constraint needs to be explicitly explained at the beginning of the process, how many surveys or data gathering activities will take place, and consent obtained from the expert panel members. The response rate for the first survey was much better than for the second survey. Expert panel members were made aware of the first survey at the beginning of the process, the second survey occurred significantly after the first survey and came as a surprise, or extra survey, to expert panel members. However, despite the lower response rate, thoughtful responses were obtained for the second survey.

In analyzing the data and the axioms it is important to keep in mind that Israel has its own culture and environment. The reason to interview and survey experts from Israel was to engage with local experts and learn from their expertise because of their great understanding of the local population. These axioms and their applications in Israel may not necessarily be generalizable to other populations or locales. A similar methodology could be applied with other populations to engage their experts and learn from their expertise. To get a true understanding of a local population there are cultural, social, historical, and religious nuances that require a local perspective; caution needs to be applied to generalizing the findings.

However, people are people and regardless of different cultures they may share many similarities in their response to trauma and building trauma resilience. There may be many things from the axioms and their applications which could provide valuable insights to other cultures that do not have a history so tightly bound with trauma on an ongoing basis. The number one consensus axioms would seem to be universal:

In a stressful and traumatic situation, it is very important to feel connected to other people.

Strong sense of purpose can have a positive impact on resilience.

Also on the topic local perspective, one needs to understand what that means and its caveats. For example, one of the expert panel talked about Bedouins that are also within Israel and dealing with trauma. They are within the same geographical area, but under very different circumstances and cultures. Also the literature review showed differences between Israeli cities that are urban and rural and facing different levels of terror intensity; the local population needs to be clearly identified which will aid in the identification of the local expert panel.

Expert Panel

Therefore, depending on the population you are dealing with, an expert panel needs to be built which understands deeply the studied population. The expert panel built for this study greatly understood the Jewish population in Israel and trauma resilience

axioms that were developed and their applications illustrated this understanding. As far as the size of the expert panel and the number of video interviews that need to be conducted, that seems to be dependent on the population being studied. First, how many experts are there; if the population is very small, for example experts on trauma resilience in the Bedouin community in Israel, this may limit how many you can recruit and their level of expertise.

The video interviews in the VGA methodology, is to have the axioms come from the experts in their own words. It is not possible to know how many axioms or consensus axioms there are before starting. In addition, it is not possible to know how many axioms will come from each interview before starting. However, using the expert panel to help make that determination seems to be the best option. As part of the methodology, the expert panel nominates members to be interviewed; they know and understand better than a non-local who those members are that may be the best to interview. In addition, there is a time element and logistics involved in the interviews which does not allow for unlimited interviews.

The methodology for choosing the panel could be problematic when dealing with expert panel bias. If only one person is responsible for choosing panel members, she or he may choose only experts that they like or are in agreement with, excluding people with a contrary opinion. However, as populations of experts are small, and contacting and recruiting could be difficult, this snowball method of expert panel development is probably the most realistic.

Context of Analysis

The purpose of this research was to develop Israeli trauma resilience axioms, that were later divided into contexts; individual, family, community, and national. At the time of the interviews the contexts had not been identified, and were not identified until after the first survey (consensus axioms). There was no specific context being researched and questions did not attempt focus in on different contexts. To help broaden and focus the axioms, depending on the context or contexts being researched, interviewers should ask specific questions focusing in on the studied contexts. For example if a development worker was looking to improve trauma resilience in the community context, she or he would ask specifically about that context.

Limitations of the Study

The following are some limitations to the study, these limitations are also addressed under contributions as the methodology attempted to compensate for these limitations. These are areas in which any researchers should be made aware but do not limit the value of the overall methodology.

Generalizability - Israel is a country with different populations and areas, the study results are addressed to Israel in general, the axioms and applications may not be applicable to every part of Israel or to every population outside Israel. The literature review showed that two different communities in Israel, Palestinians and Israelis, are both subject to ongoing terror, but they experience it in different ways (Pat-Horenczyk et al., 2009) which leads to higher Post-Traumatic Stress Disorders (PTSD) diagnoses among Palestinians than Israelis. Therefore, when interpreting the results one needs to

understand this is from a Jewish perspective and is addressing trauma resilience in general in Israel, not the entire population or a specific population. Also the example of applications are examples for the top axioms and may not function or be feasible given specific circumstances of the population.

In additions, the paper does not address the differences or similarities between the time element of ongoing, sporadic, and one time trauma. Individuals, families, communities, and nations may respond differently to ongoing terror versus a traumatic earthquake. Accounting for the time element may change axioms and their applications.

Comprehensiveness - The size of the expert panel was small and each member of the expert panel had his or her particular interest, some were more interested in the individual than in the community context or vice versa. This means that the axioms developed for each context may not be a comprehensive list of all the axioms for that context that could be produced in Israel; if panelists do not have an interest they may not generate many axioms for a given context. There was no guarantee that each expert panel member had a good understanding of all four contexts. For example if an expert panel member were a practitioner working with individual trauma resilience and is living and working in an individual context, such a panel member may be more likely to put forth and endorse axioms in the context in which they are well versed, in this case the individual context. A low consensus axiom, may simply indicate a smaller number of panel members working in that context and having less working knowledge in that specific context.

The axioms are from an expert panel, highly experienced in Israel, but this may not reflect the opinion of all academics and practitioners working in the area of trauma

resilience. In addition, the study does not take into account the general population who may have a different perception, as the expert panel works professionally in this sector and has more experience in the area than the average Israeli. It is not possible to say these axioms are definitively the axioms that reflect the entire population. The sample size is small, with only 13 out of the 16 experts accepting the invitation to become panel members. Also panel members were not picked randomly or from a complete list of academics and practitioners in trauma resilience. Panel members were chosen based on perceived experience and contributions based mainly on the recommendation of one person, Dr. Zahava Solomon. Therefore, the results may not represent all or most of academics and practitioners in Israel.

Human Element - The development of the axioms depends on a team of people and a process to be followed, the VGA methodology. Therefore, errors can occur along this process that can miss or distort data. During the interview process, if appropriate questions and follow-ups are not asked, valuable data may be lost by forgetting to ask a question. During the review process, a reviewer may miss an axiom or misunderstand the interviewee's intent. Axioms could never be verbalized or lost during the review process, which could limit the comprehensiveness of the list of axioms.

Contributions of the Study, Despite the Limitations

Despite the limitations, the results demonstrates a proof in concept; that the VGA approach can successfully develop axioms and provide examples of their application. Study's purpose was limited: to gain an understanding of trauma resilience from the perspective of a panel of experts on trauma resilience who happened to have lived their

life in Israel, a place known in part for its continual endurance of traumatic events. A secondary purpose of the study was to test the concept of the VGA methodology that might be useful to and international development workers seeking to understand a particular population after a particular traumatic event, as quickly as possible for little funding. The VGA methodology also provides mechanisms to overcome the limitations noted above.

Generalizability - The study's purpose was not to review every population and sub-group and extensively catalogue trauma resilience axioms for each group and sub-group in every context. Israel is an ideal choice to learn about trauma resilience because it has learned to endure and thrive despite the many traumatic events and memories of them. The VGA approach could be easily applied to another country and culture, in a specific area, and a specific societal context.

Comprehensiveness - The expert panel members while maybe not reflecting the whole of the population of academics and practitioners in the field of trauma resilience in Israel, reflect a pool of highly qualified professional in trauma resilience and have something very important to say on the subject which should be known and adds to our understanding of trauma resilience. The first steps of the VGA methodology are to identify a community that is knowledgeable about the subject being studied and then recruit a community leader that is the most knowledgeable about that subject and ask her or him to form a Panel of Experts; this is to compensate for the researchers lack of understanding of the identity of local experts. The VGA approach requires working with a leader of the community. The community that is the focus in this study is Israel and the subject matter is trauma resilience. In this case, the leader chosen is Zahava Solomon, a

renowned scholar and expert on trauma and trauma resilience with a very wide network of Israeli colleagues, among them trauma resilience experts.

Human Element - While there are weaknesses that could occur during the interview process, the VGA methodology provides a video component which allows for the interview to be reviewed multiple times, and review for lost questions or poor interviewing techniques, which a transcript may not provide. In addition, the VGA methodology has a review process that allows for omission errors or misinterpretations to be caught as each interview is reviewed by three reviewers and the interviewee. This study has shown that the VGA provides a methodology that attempts to obtain the interviewees words without interpretation, and provides checks along the process to make sure this happens.

Prospects for International Develop Research and Practice

International development workers live and work in local communities interacting with individuals and families, their work may be focused at the community or national context depending on their organization and position. They may have little or no experience working with trauma resilience and not understand local perspectives or attitudes about trauma resilience. They need to understand the local perspective and to not waste time and resources pursuing inefficient or unaccepted methods of addressing trauma in their communities.

The knowledge gained from the axioms and their application, would allow for greater understanding of the communities in which they work. They would also be addressing an area that needs to be addressed as many communities and nations face

traumatic events, and if not properly addressed can sap the resources and the people of the communities, Ideas on how to address the trauma can be suggested from the application of the axioms.

The VGA methodology and Delphic technique provides these workers a method to focus their efforts to gain this local context. The development worker can use this methodology to focus in on trauma resilience in any of the contexts of the individual, family, community, or national. The methodology is easy and the interview process would also help establish ties with the trauma resilience community, which could prove beneficial on an ongoing basis, after the study has ended; a dialog has begun.

Appendix A – Results of Survey 1 (All Axioms)

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
1 - Community level programs are useful in managing the effects of trauma.	4.00	4.00	4.08	32	2	Communit y	
2 - Strong social ties promote resilience in a community facing ongoing traumatic threats.	5.00	5.00	4.54	3	1	Communit y	
3 - A large portion of society is exposed to terror-related stress and trauma, but some sections of population are more at risk than others for developing mental health problems.	5.00	5.00	4.54	3	1	National	
4 - Repeated traumatization can have negative psychological consequences for the communities that experience them.	4.00	4.00	4.31	14	1	Communit y	
5 - Resiliency is the capacity of a community to deal with a major crisis by adapting and growing while minimizing casualties and preserving a fair quality of life for all its citizens and maintaining its	4.00	5.00	4.31	14	1	Communit y	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
core values and identity.							
6 - Israeli society exhibits some negative reactions to repeated exposure to threats.	4.00	4.00	4.00	38	3	National	
7 - Re-traumatization through war or threat of violence can trigger a population's collective traumatic history.	4.00	4.00	4.00	38	3	National	
8 - Having a long history of survival can shape a group's self-perception as survivors.	4.00	4.00	3.85	49	3	Communit y	National
9 - Cultural awareness of stress-related reactions as normal can increase a population's resiliency.	4.00	4.00	3.62	68	4	National	
10 - Effective coping strategies are influenced by cultural influences.	4.00	4.00	4.15	23	2	Individual	National
11 - Resiliency is a socio-cultural construct that is	3.00	3.00	3.23	79	5	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
not employed by all cultures in order to deal with trauma.							
12 - If stress and trauma are ongoing in a society and the end of a traumatic period is unknown, people do not feel the safety and security that is necessary to begin the healing process.	4.00	4.00	3.69	62	4	Individual	National
13 - A population under constant threat can create co-existing dual extremes of understanding the fragility of life and the victory of life.	4.00	4.00	3.62	68	4	National	
14 - Having a family system that verbalizes past and recent trauma can build resiliency.	4.00	4.00	3.77	53	4	Individual	Family
15 - Family members of veterans suffering from secondary PTSD are often not empowered and given a voice.	4.00	4.00	3.46	73	5	Family	
16 - Choosing to be with your partner, who is suffering from PTSD because you	4.00	4.00	3.69	62	4	Family	

Trauma Resilience Axioms	Median	Mode	Average	Average Rank	20% Ranges	Type 1	Type 2
want to, not because you have to, gives you the power and motivation to make meaning of the traumatic event.							
17 - Having time for oneself helps cope with a partner's PTSD.	4.00	4.00	3.77	53	4	Individual	Family
18 - Family system pressures can sometimes exacerbate combat stress reactions in married war veterans.	4.00	4.00	4.08	32	2	Individual	Family
19 - Children of holocaust survivors who succumb to combat stress reaction casualties are less resilient than those not having exposure to that experience.	3.00	4.00	3.31	78	5	Individual	
20 - Second generation holocaust survivors seek to undo past humiliations and/or restore past damages.	3.00	3.00	3.50	72	5	Individual	
21 - It is the central government's responsibility to assist those who	4.00	5.00	4.31	14	1	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
have unequal access to resources in the wake of disaster.							
22 - In a stressful and traumatic situation, it is very important to feel connected to other people.	5.00	5.00	4.62	1	1	Individual	
23 - Strong sense of purpose can have a positive impact on resilience.	5.00	5.00	4.62	1	1	Individual	
24 - It is difficult, but important, to talk about traumatic events in order to heal.	4.00	4.00	3.77	53	4	Individual	
25 - Recognizing that there will be ups and downs in the process of trauma recovery is helpful to make meaning of the traumatic event.	4.00	4.00	4.15	23	2	Individual	
26 - It is important to have a sense of mission, a sense of history and purpose.	4.00	4.00	4.38	9	1	Individual	
27 - People's varied coping styles can be ascertained through analyzing the way they express their stories about traumatic experiences.	4.00	4.00	4.08	32	2	Individual	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
28 - The process of learning coping strategies begins at birth.	4.00	4.00	4.08	30	2	Individual	
29 - Being in a constant survival mode can have negative consequences on psychological well-being.	4.00	4.00	4.15	23	2	Individual	
30 - New coping skills can be taught to provide individuals alternatives to deal with traumatic situations.	4.00	4.00	4.23	20	2	Individual	
31 - The coping strategy of acceptance (i.e., learning to live with the situation) often requires isolation and numbing.	3.00	2.00	2.69	83	5	Individual	
32 - Strategic use of certain skills, such as a balance between self-empowerment and allowing administration to take responsibility, can make one more resilient.	4.00	4.00	3.75	60	4	Individual	
33 - Imagination can be a protective mechanism in traumatic situations.	4.00	4.00	4.00	38	3	Individual	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
34 - Following traumatic situations, dreams can bring an individual back to feeling the effects of the trauma and can also provide direction towards working through and healing.	4.00	4.00	3.92	46	3	Individual	
35 - Some individuals do not exhibit trauma symptoms until they are older.	4.00	4.00	4.00	38	3	Individual	
36 - Openly discussing trauma helps the individual to normalize the process.	4.00	4.00	3.92	46	3	Individual	
37 - Not every negative reaction or symptom necessarily stems from a traumatic event.	4.00	4.00	4.23	20	2	Individual	
38 - Trauma resulting in a loss of trust in oneself and others is a psychological barrier to peace.	5.00	5.00	4.46	5	1	Individual	
39 - Resilience is a social construction coming out of the West and refers mostly to bouncing back from trauma, (i.e., not	4.00	3.00	3.62	68	4	National	

Trauma Resilience Axioms	Median	Mode	Average	Average Rank	20% Range	Type 1	Type 2
developing psychopathology following a traumatic event) rather than the integration of the difficult experience into one's life.							
40 - The negative effects of trauma are not limited to clinical psychopathology. Trauma can also produce negative personal and social circumstances.	4.00	4.00	4.46	5	1	Individual	
41 - Expressions of inner strength, coping skills, hope, and social support are the four major factors in building resiliency according to current research.	4.00	4.00	4.31	14	1	Individual	
42 - People who have a sense of self-competency, that is those who can identify their strengths, are more likely to recover.	4.00	4.00	4.08	32	2	Individual	
43 - People who are resilient tend to exhibit pro-social, culturally relevant behavior.	4.00	3.00	3.77	53	4	Individual	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
44 - Trauma, specifically PTSD, is not just a health issue but also a social issue, those who are less well off (i.e. poverty, less education, oppressed) or lack resources are less likely to recover.	4.00	4.00	4.08	32	2	Individual	
45 - Resilience, like trauma or PTSD, is a socially constructed concept imbued with social, political and moral aspects that are often latent and can be concealed.	4.00	4.00	4.00	38	3	National	
46 - The very definition of resilience and its individualistic and psychopathologic al focus separates the impact of exposure from the cultural and political contexts. In other words, this construct de-contextualizes the cultural and political aspects from the phenomenologica l aspects	3.50	3.00	3.67	67	4	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
47 - In order to survive you have to employ all of the resources you have and be able to adapt to your current situation.	4.00	4.00	3.77	53	4	Individual	
48 - During an interrogation, remaining mindful and feeling internally in charge of your own thought processes, has a positive impact on self-organization and self-regulation.	4.00	4.00	3.85	49	3	Individual	
49 - It is important to take autonomy and control over the thing that you can control and recognize what you cannot control; especially cognitive control and even an illusory sense of control.	4.00	4.00	4.00	38	3	Individual	
50 - Being creative, courageous, and resourceful can allow people to find solutions for things that they once thought were impossible.	4.00	5.00	4.31	14	1	Individual	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
51 - If you are physically disconnected from people due to circumstance, you can rely on the images of them you carry inside of you for comfort and support.	4.00	4.00	3.77	53	4	Individual	
52 - Forgiveness and acceptance allows one to heal.	4.00	4.00	4.15	23	2	Individual	
53 - It is important to have positive expectations of others.	4.00	4.00	3.69	62	4	Individual	
54 - It is important to have a post hoc sense of meaning, "emerging meaning" in hindsight.	4.00	4.00	4.00	38	3	Individual	
55 - One should take full responsibility of the little control one has in the traumatic situation.	4.00	4.00	3.69	62	4	Individual	
56 - We can make meaning of the traumatic events that we face.	4.00	4.00	3.92	46	3	Individual	
57 - Feeling a sense of belonging to the community gives you a sense of	5.00	5.00	4.46	5	1	Individual	Communit y

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
power and resilience.							
58 - A sense of working for a greater good can have a positive impact on resilience.	4.00	4.00	4.15	23	2	Individual	
59 - Family support increases an individual's resiliency.	5.00	5.00	4.38	9	1	Individual	Family
60 - Social support increases an individual's resiliency.	4.00	4.00	4.38	9	1	Individual	
61 - Individuals that are high sensation seekers are more likely to be better equipped to cope with traumatic events.	3.00	3.00	2.92	82	5	Individual	
62 - Secure attachment increases resiliency.	4.00	4.00	4.23	20	2	Individual	
63 - Positive coping mechanisms during traumatic events (e.g. – dissociation, self-regulation, etc.) can become pathological if used to excess after the traumatic event has ended.	4.00	4.00	3.83	52	4	Individual	

Trauma Resilience Axioms	Media n	Mode	Average	Average Rank	20% Range s	Type 1	Type 2
64 - PTSD has a greater effect on attachment than attachment's effect on PTSD	3.00	3.00	3.00	81	5	Individual	
65 - The ability to maintain agency (e.g. to remain active, both physically and mentally) has a positive impact on trauma resiliency.	4.00	4.00	4.15	23	2	Individual	
66 - Trauma can be exhibited by varied and coexisting symptoms (e.g. – short temper, loss of energy, loss of interest, and others).	4.00	4.00	4.08	30	2	Individual	
67 - A leadership figure is a significant factor for enhancing resilience.	4.00	4.00	4.08	32	2	Individual	Community
68 - Communities that are resilient tend to have a strong sense of belonging, solidarity and trust in their leadership.	4.00	4.00	4.38	9	1	Community	
69 - The media's constant coverage of traumatic events can provoke stress reactions in the Israeli people.	4.00	4.00	4.00	38	3	National	

Trauma Resilience Axioms	Median	Mode	Average	Average Rank	20% Range	Type 1	Type 2
70 - Symptom criteria of PTSD can result from indirect exposure to major traumatic scenes through the media (mainly visual) together with the actual sense of threat on the self or dear ones.	4.00	4.00	3.46	73	5	Individual	
71 - Avoiding media may allow an individual to regulate the sense of threat and thus may be a good coping mechanism.	3.00	3.00	3.23	79	5	Individual	
72 - Media allows an individual to gather information and resume a sense of self control, and thus may help him/her cope.	4.00	4.00	3.38	76	5	Individual	National
73 - Friction and adversity between soldiers and civilians living in combat zones is affected by the soldier's lack of knowledge of how to interact with civilians in the context of armed conflicts.	4.00	4.00	3.69	62	4	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
74 - Open dialogues between mental health professionals working with the military and mental health professionals working with civilians is important during combat.	4.00	4.00	3.85	49	3	National	
75 - Group cohesion increases resiliency within military units.	4.00	4.00	4.38	9	1	National	
76 - The inter-connectivity technology brings can serve as a powerful facilitator to resiliency.	4.00	4.00	3.75	60	4	Individual	National
77 - Vicarious experience of trauma can occur through working with traumatized individuals.	4.00	4.00	4.31	14	1	Individual	Communit y
78 - Psychopathologic al labels have a negative impact on trauma outcomes.	4.00	4.00	3.77	53	4	Individual	
79 - Implementation of research findings and changing of practical policies in medicine takes	4.00	4.00	3.46	73	5	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
time. This is especially true in controversial issues such as treatment of combat stress reaction.							
80 - Stress casualties should not be evacuated to the ER in general hospitals but rather should be treated in designated stress units/centers, either within the hospital or preferably in the community. This is in accord with the military therapeutic model for combat stress reactions, and in order to reserve the resources of the ER for the physically wounded.	4.00	4.00	3.62	68	4	National	
81 - Personal experiences with trauma can greatly influence the way a mental health professional approaches their work.	4.00	4.00	4.15	23	2	Individual	Communit y
82 - To teach resilience across cultures, one should be modest	5.00	5.00	4.46	5	1	National	

Trauma Resilience Axioms	Media n	Mod e	Averag e	Averag e Rank	20% Range s	Type 1	Type 2
and learn strategies from the cultures of the affected.							
83 - Conducting trauma research gives the illusion that one has control over trauma.	3.00	4.00	3.38	76	5	National	

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Biography

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