

Chapter 15 – MODELING PSYCHO-SOCIAL RESILIENCE TO TERRORISM

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15.1 INTRODUCTION

Terrorism is a psychological weapon waged upon society by non-state actors who attack civilian populations using various unconventional means in order to create the most horror, fear and panic possible in order to move the political process in the way the terror groups desires. In this type of psychological warfare, civilians are targeted for political purposes usually in a campaign of targeted attacks rather than one isolated attack, unless it is a horrific one, in order to continually create and reinforce in civilian perceptions an ongoing sense of threat and dread – that anyone and anyplace, at anytime can be a victim. By achieving this aim the terrorist can force concessions, withdrawals and win their way on their deadly battleground. In nearly every case the terrorists' main goal is to hit the largest possible target (symbolically or in the number of casualties) in the most horrifying manner and by doing so use the media to amplify its horror driven message which is some variant of “make your government give in to our concessions or suffer more threats to civilian security”. Terrorism is a tool and it is used to create states of fear, horror and dread not only in its immediate victims but in its wider witnessing audience.

Increasingly western populations and governments are finding themselves the targets of terrorist plots and need to take into account the best measures for protecting themselves. Defense against terrorism involves numerous measures: from hardening targets, strengthening police and intelligence functions, winning hearts and minds to fight against terrorists, diminishing popular support for terrorism, reducing the root causes as well as preparing civil populations to be resilient in the face of terrorist attacks. While counter-terrorism measures are important to fight terrorism, resilience to terrorism is also an important deterrent to terrorists. A population that is resilient in the face of terrorism and remains steadfast and cohesive in the face of attacks on the civilian population refusing to be moved by fear into political concessions is one of the most overlooked and perhaps best tools in the fight against terrorism.

This chapter examines the concept of psycho-social resilience to terrorism and is based upon the author's research on the topic with both military and civilian populations working in both combat and noncombat zones. It provides a model for defining and measuring the concept on both a societal and individual level.

In discussing this model of resilience to terrorism the author discusses challenges that governments and civil society faces in preparing their civilian population to be resilient in the face of terrorist attacks and the variables that are important to consider in enhancing resilience to terrorism. It discusses the challenges of reporting terrorism in the media, the psycho-social responses that are likely and how to deal with them. It examines the psychological dimensions of terrorist attacks on the civil population and how government responses and communications via mass media can greatly modulate stress responses and increase societal resilience to terrorism.

15.2 TERRORISM

Terrorism (defined as violent attacks carried out by non-state actors against civilians for the purpose of influencing the political process) has become a looming threat in the 21st century and appears for Western nations to be more of a security threat than modern warfare. Terrorism, by definition, is always intended to influence and intimidate a far larger group of people than the actual number of persons who

actually become victims. It is literally aimed at striking terror in the hearts and minds of a far wider witnessing audience who identify with the victims plight and become fearful that they too can become the next victims – if the terrorist is not either stopped or appeased. Terrorism is thus a pervasive type of psychological warfare and governments that wish to fight terrorism must understand the psychological responses to terrorism and how to enhance resilience in the face of terrorist attacks.

15.3 MASS MEDIA AND TERRORISM

Terrorists operating nowadays make full use of the mass media to either intentionally or unwittingly amplify its effects by broadcasting the terrorists' actions far beyond the immediate reaches of a terror attack. The psychological warfare carried out by terrorists is thus conducted largely through the mass media with terrorists plotting their actions in order to maximize media coverage with gory explosions, spectacular attacks, maximum civilian carnage and using suicide attacks in particular to strike terror into the civilian population. At times children in particular are targeted as in the Beslan school suicide/hostage-taking attack to gain full media coverage, or by using women suicide terrorists to maximize questioning about why a woman would willingly suicide for the cause. Media is essentially the stage upon which the terrorists conduct their actions. Nowhere was this phenomenon of terrorism played out on the “mass media stage” more clearly than in the Moscow Dubrovka theater in which forty terrorists overtook a Moscow audience of eight hundred theater goers, holding them hostage for three days while the world looked on in horror. By using twenty female terrorists to help carry out this act, all of them dressed in black with suicide belts strapped to their bodies, the terrorists effectively brought once again the media suppressed situation in Chechnya front and center for the world media.

By making use of media amplification terrorists manage to reach civilians far removed from the actual attack who are then psychologically victimized by it – suffering from anxiety and terror that they too can become victims. When considering the psychological repercussions of terrorism and to measure how successful terrorists are in their attempts to pressure public opinion through terrorism it is important to realize that terrorism nowadays is essentially a media experienced phenomena versus actual experience. Relatively few victims are killed but the spectacular manner in which they are killed terrorizes millions who fear they could be the next victims. Following the attacks of 9/11 the discussion of terrorism has dominated the international western media. Horrific images of the attacks in the US were broadcast repeatedly inside the United States and worldwide. Likewise horrific images from ensuing suicide terror attacks in Russia and later in the UK, terror attacks in Madrid, and the spate of suicide attacks that sprang up in Iraq and elsewhere following the US led invasion there have dominated the collective unconscious of the western media, so much so that for many westerners, particularly Americans, the myth of invulnerability has been torn apart. Americans much more than Europeans had to grapple post 9/11 with why terrorists and their supporters may hate them and with an increased perception of risk particularly when boarding airplanes and in public transportation.

Perception of the risk of being injured or dying from terrorist attack is largely media driven, a fact which places governments and civil society in the position of having to not only manage the actual threat and its psychological repercussions but the imagined threat created via the media by terrorists as well. This can only be done making clever use of the media in a manner that directly combats terrorists' impact upon the psychology of an entire nation. Likewise, media amplification may not be the only thing contributing to increasing perceptions of risk following a terror attack. Amplification can also originate with politicians as it occurred in the United States post 9/11 when politicians who stood to gain by repeatedly emphasizing the threat continually did so, thereby ratcheting up the perceived threat level and creating generalized anxiety throughout society where it had not existed beforehand. To promote resilience in society political leaders must not only understand how terrorists achieve their media borne goal but also use the media responsibly themselves to serve society.

15.4 MODELING RESILIENCE TO TERRORISM

In all models of resilience, the concept of resilience implies adaptability and a certain ability to “bounce back” in the face of a challenge or stressor. In this model resilience is likewise defined as dynamic variable, one that is influenced by many co-variables and that exists on a continuum of adaptability. To be resilient an individual or society must in the face of a challenge, retain flexibility, adaptability, functionality and empathy. To lose any of these is to lose resilience. Conversely for these traits to be present, or even to develop or to increase in the face of a stressor is to show positive resilience. Likewise, a loss of resilience is indicated by the appearance of pathological symptoms: of posttraumatic stress (including flashbacks, high arousal states, loss of concentration, irritability, etc.), dissociation (a separation of normal cognitive functions, emotional numbing, inability to think, etc.), anxiety, depression, and panic, all of which interfere with and create a loss of normal functioning.

According to this model the variables that affect resilience to terrorism on both a societal and individual level include ten main variables which both affect resilience to a stressor and may also be affected in turn by a traumatic stressor event. These ten variables are each discussed in turn below with implications for governments to consider steps for promoting and enhancing resilience rather than contributing to a reduction in resilience to terrorism.

- 1) **Posttraumatic Stress (PTSD)** – In the face of life threatening events individuals are at risk for developing posttraumatic stress, anxiety responses, depression, panic and dissociative responses. These responses all relate negatively to resilience in that they relate to a loss of functioning and a decrease in adaptability to a stressor. Acute stress reactions are also serious short-term posttraumatic effects. However, they often resolve on their own and do not negatively affect long-term resilience, whereas depression, posttraumatic stress, dissociative and anxiety responses can go on for months after a terrorist event and interfere with normal functioning. These more often require intervention. Governments are wise to train their first responders, help line operators, physicians and social workers to recognize and refer for appropriate treatment those they encounter after a terrorist attack and in the case of first responders, even themselves when they are experiencing traumatic flashbacks, dissociative responses, anxiety, avoidance, bodily arousal, depression, panic and loss of function that involves long-term losses in significant areas of life functioning. Often education about these issues is useful to help normalize acute and posttraumatic responses and reassure people that these normal responses will often pass on their own, but those in whom they don't may benefit from professional caring help [1].
- 2) **Social Buffering** – When facing a terrorist event social buffering can do a lot to increase resilience provided the communications are positive and comforting. The social network one has a great deal to do with positively or negatively influencing perceptions of a terrorist event. When one looks at social buffering the sub-variables are comforting, information sharing, attachment style and communication network:
 - a) **Attachment Style** – There is considerable research that shows that there are distinct attachment styles (secure, anxious, avoidant, and chaotic/disorganized) present in adults that relate to their previous life experiences and that may predict how well they will be able to cope and calm themselves when under stress. We know from the work of Bowlby [2],[3], Main and Ainsworth [4] and many other attachment researchers that strange, fearful and anxiety provoking situations generally provoke attachment behaviors which are characteristic to the individual. Of the main attachment styles so far identified by researchers it is clear that those with more secure attachment styles are most likely to be able to make use of others to help dampen their anxiety, to calm anxiety and arousal states, and to increase their ability to cope in the face of a traumatic stressor.
 - b) **Comforting** – The expectation is that when an individual has others to turn to for comfort in the face of a traumatic stressor that its negative effect is ameliorated to a certain extent.

In Schuster et al. [5] and Cantor et al. [6] talking to others and discussing your feelings about terrorist attacks (mostly as seen on television) proves to be a significant coping strategy, especially with those who experienced substantial stress reactions.

- c) **Information Sharing** – This variable relates to the ability of individuals to share information that is useful for coping in a positive way. In the negative sense we know from the study of psychological contagion that emotions and even psychogenic illnesses can be transmitted quickly across a cohesive population [7],[8],[9],[10] meaning that when individuals share rumors and anxiety producing information they can induce panic and even psychogenic illness in one another other. To promote resilience information should be shared in positive ways that influence a positive sense of coping rather than fear or panic.
 - d) **Communication Network** – This relates to the ability to communicate adequately with others in order to receive information that is calming and that is useful for coping. In many cases it is as simple as being able to reach loved ones on the phone or via the Internet and be reassured that they are okay. Receiving reassurances and being able to be in touch with loved ones relates positively to resilience.
- 3) **World Assumptions** – In the western world it is generally believed that most individuals function with three basic world assumptions: that the world is predictable, that personal safety exists, and in the goodness of the world [11]. While one could argue with this premise for those who have grown up with child abuse or other traumatic stressors, it may be applicable to most. A feature of traumatic stress is that it often shatters world assumptions leading to a sense of unpredictability, lack of safety and disbelief in the goodness of the world. When world assumptions remain intact an essential optimism remains. This is related to positive resilience. Shattered world assumptions on the other hand are more likely to relate to negative resilience, although if one works through shattered world assumptions there is often a new sense of resilience that emerges. If political leaders are aware of world assumptions they can speak directly to this aspect and reassure the public that predictability will be restored, as will safety, and that despite a terrorist attack the majority of society can still be deemed benevolent, in fact encouraging just these things to be restored in society and in the minds of those victimized directly and through the media by a terrorist attack.
- 4) **Mastery** – A sense of mastery is that which conveys to the individual and his society that the stressor event is something that can be adequately dealt with (i.e., mastered) and that neither the individual nor society will ultimately fail in the face of the stressor. In the case of terrorism this means that the terror event is not experienced as insurmountable and that he and the society can adapt not only to this event but to threats and actualities of further terrorism events. A large body of research makes clear that previous positive experiences of mastering stressful experiences as well as a positive attitude toward new situations fosters resilience. When it comes to terrorism, Israeli society is perhaps the best example of a society learning to habituate and carry on with daily life undaunted. This came as a result of government and civil society taking measures to prevent and defeat terrorism while at the same time weathering two successive waves of terrorism campaigns. Israelis have a deep belief that they can achieve mastery in the face of terrorism, knowing that they may never completely defeat terrorism and may continue to expect terrorist attacks at some baseline level. UK citizens have also shown a great deal of mastery in the face of the UK metro bombings. In the case of Israel part of the Israeli civilians' sense of mastery may have come from measures that the media voluntarily took after numerous suicide attacks. Israeli media made a conscious decision not to sensationalize attacks nor give them over much media attention, thereby decreasing the media amplification of horror and terror that usually accompanies suicide attacks. They in effect decided to curb media attention to terrorism and reduced the media effect of aiding the terror organization in spreading societal fear. Likewise, Israeli bars, dining establishments and shopping malls installed armed guards to search everyone entering the establishments preventing bombs from being exploded inside where many persons

had gathered. Israelis learned to adapt to these arrangements and many made their own adaptations as well such as carrying mobile phones and frequently checking in with family members and loved ones and avoiding crowded places. This is not to say that many of these citizens did not also suffer a loss of resilience in terms of posttraumatic stress responses and increased anxiety, but many did not suffer enough to cause them to lose their ability to function well. The point is thus that when one has a sense of control which can be instituted by taking useful protective and preventive measures distress is reduced and resilience enhanced. UK citizens likewise responded to the metro bombings without a lot of panic or fear. Most returned to full metro use within a week. This is likely due to previous mastery experiences in dealing with IRA terrorism in the preceding decades and confidence that the phenomena will eventually be defeated. Within the variable of mastery there are three components – previous mastery experiences, locus of control and religiosity/spirituality each of which can enhance the sense of mastery:

- a) **Previous Positive Experiences of Mastery** – These should lead to enhanced coping, positive expectations and be related to increased mastery and increased resilience.
 - b) **Locus of Control** – Individuals and societies that have a high sense of locus of control will generally believe they can do something to affect the situation and cope better with it. We can expect locus of control to relate positively to mastery and to resilience.
 - c) **Religiosity/Spirituality** – Often individuals do believe in some type of positive or loving higher power cope better with stressors because they do not feel alone in the face of it and they expect that the higher power will make some good come out of it. Thus this aspect Religiosity/Spirituality (of believing in a benevolent higher power) should be related to increased mastery and resilience.
- 5) **History** – Individual and societal history relate strongly to resilience. Israelis for example are often extremely sensitive about Holocaust imagery and language, whereas Arabs are about crusaders and crusades. On the positive side invoking images of the kibbutzim and the wars won by the Israeli Defense Force can restore a sense of confidence, as will invoking images of the caliphate and previous scientific achievements and glory of past Arab days to Arabs. On an individual level we judge history from three aspects: age, previous trauma exposure and major life stressors experienced:
- a) **Major Life Stressors** – Major life stressors can lead to stress pile up and the inability to remain resilient. Thus more life stressors are likely to lead to decreased resilience in the face of terrorism.
 - b) **Age** – Youth is likely to relate to many of the other variables, less sense of mastery, lowered locus of control, etc., and young are more likely to be less resilient although this variable may be curvilinear with advanced age also reflecting a loss of resilience.
 - c) **Previous Trauma Exposure** – Previous trauma exposure may indirectly relate to pre-existing PTSD symptoms and relate negatively to positive resilience.
- 6) **Social Capabilities** – This variable is made up of two aspects being a problem solver and self esteem:
- a) Those individuals with high self esteem generally can reach out to others for help more effectively and expect positive help and as a result often obtain the resources they need to cope effectively. Thus positive self esteem should relate positively to resilience.
 - b) **Problem Solving** – Similarly to master a problem solving attitude is likely to contribute to being able to cope with a stressor positively and it should relate to increase resilience.

- 7) **Perceived Risk and Fear** – This variable is broken into two sub-variables:
- a) **Perceived Risk for Local Attacks** – Terrorists win when they convince individuals that what they view on the media, the attack and harm to relatively few is likely to happen to them also. The more an individual begins to believe that he is at great risk, the more likely his significant life functions, psychology and relationships are to be negatively affected and his positive resilience reduced.
 - b) **Mental Distance** – Likewise feeling extreme empathy for the victims of an attack and overly identifying with them can create a short mental distance from the attacks increasing the probability of PTSD type symptoms, anxiety and lack of functioning, thereby relating negatively to resilience.
- 8) **Personal Preoccupation** – When it comes to terrorism individuals maybe become overly preoccupied with terrorist events and lose resilience as a result of focusing overmuch on preparedness and searching the media anxiously about terrorism. The two variables measuring this feature are:
- a) **Media Searching Behavior** – Spending a long time and a lot of effort trying to learn everything about a terror attack likely relates negatively to positive resilience as it is likely to increase anxiety, interfere with normal life functioning and increase PTSD type symptoms.
 - b) **Preoccupation Behavior/Preparation** – Those who spend a lot of time preoccupied with terrorism, preparing for a possible attack by stockpiling food, medicines, etc., often do a disservice to society by creating scarcities in needed items and are functioning in an anxious mode. This variable relates negatively to positive resilience.
- 9) **Attitude toward Government** – The public and an individual’s disposition toward his government can have a huge impact on how resilient he will be. On a societal level political leaders must understand that at times of traumatic stress they may become attachment figures functioning through the media. Citizens look to their political leaders for comfort and reassurance that the attacks will be stopped, safety will be restored and the victims cared for. When they feel connected to their government and that the government is acting effectively in their behalf this can reduce levels of anxiety and negative psychological effects. Political leaders that use the media effectively can thus function as strong attachment figures and tamp down the society wide anxiety. Perhaps one of the best positive examples of such a figure was Rudy Giuliani, mayor of New York City after the 9/11 attacks who continuously appeared on the television to reassure the citizens of New York that he was acting in their behalf. Governments communicate with their citizenry through the media, as do terrorists. The images that terrorists manage to put out on the media are experiential and create strong negative emotional associations (fear, anger, sadness). Politicians must be effectively equipped to communicate about these images that link to strong negative emotions in order to modulate them and to keep a population resilient. The variables regarding attitude toward government includes four aspects:
- a) **Perceived Preparedness** – The perception that government is adequately prepared leads to a sense of confidence and mastery that despite the terrorist attack government is prepared to respond well. This variable relates positively to resilience.
 - b) **Quality of Government Information** – The ability of government to produce high quality information and to use the mass media effectively so that citizens so that they can understand a terrorist attack(s) and know how to respond is a crucial aspect in predicting resilience. When citizens trust that the quality of government information is reliable and useful they are likely to be more resilient in the face of terrorist attacks.
 - c) **Quantity of Government Information** – The outputs of the government must be adequate and to the point. An overabundance of information will only cause anxiety and make it

impossible for citizens to understand as will a lack of information or silence cause anxiety. The perception that there is an adequate amount of government information provided about the terrorist attack and responses to it relates positively to resilience.

- d) **Need for Information** – Related to the above variable when citizens feel they need information and it is not being provided they become more anxious and less resilient. They may become preoccupied with the terrorist event(s) and spend inordinate resources and time searching the media and in preparation for an attack. This variable relates negatively to resilience.
- 10) **Xenophobia** – A fortunate after affect of a terrorist attack is in the first days there is often an increase in societal cohesion and in attachment and helping behaviors. This is common in disasters and after group experienced traumas. An unfortunate after affect of terrorist attack however can be a negative increase in group behavior resulting in negative expressions of nationalism, or in xenophobia. After the 9/11 attacks and following many other militant jihadi attacks in Europe, Muslims as a group became wrongly targeted as potential terrorists and hate crimes were directed to many. Likewise hate speech appeared targeting Islam and its believers. This is an unfortunate negative aspect and relates negatively to resilience to terrorism.

15.5 CONCLUSIONS

In summary psycho-social resilience to terrorism is presented in this model as a dynamic variable (influenced by many covariates) and resilience is defined along a continuum, along which an individual retains his or her flexibility, adaptability, functionality and empathy in the face of terrorism this equaling a resilient individual, or even makes gains in resilience. The loss of resilience is indicated by the appearance of posttraumatic, dissociative, anxiety, depressive and loss of functioning symptoms in direct response to the stressor as well as an increase in perceived risk and fear, personal preoccupation with terrorism and increased xenophobia. Figure 15-1 provides a schematic of how the variables discussed above relate to resilience. This model is useful for political leaders to think ahead and anticipate civilian responses to terrorism, to design prevention strategies and promote resilience through communication – in the media and through governmental and nongovernmental channels. In this way society can be prepared to defend against terrorism when and if it does strike.

MODELING PSYCHO-SOCIAL RESILIENCE TO TERRORISM

Resilience is defined as a dynamic variable (influenced by many covariates) which moves between an area in which an individual retains his or her flexibility, adaptability, functionality and empathy in the face of distress (including traumatic stress) this equating a resilient individual, with the loss of resilience being clearly indicated by the appearance of posttraumatic, dissociative, anxiety, depressive and loss of functioning symptoms in direct response to the stressor.

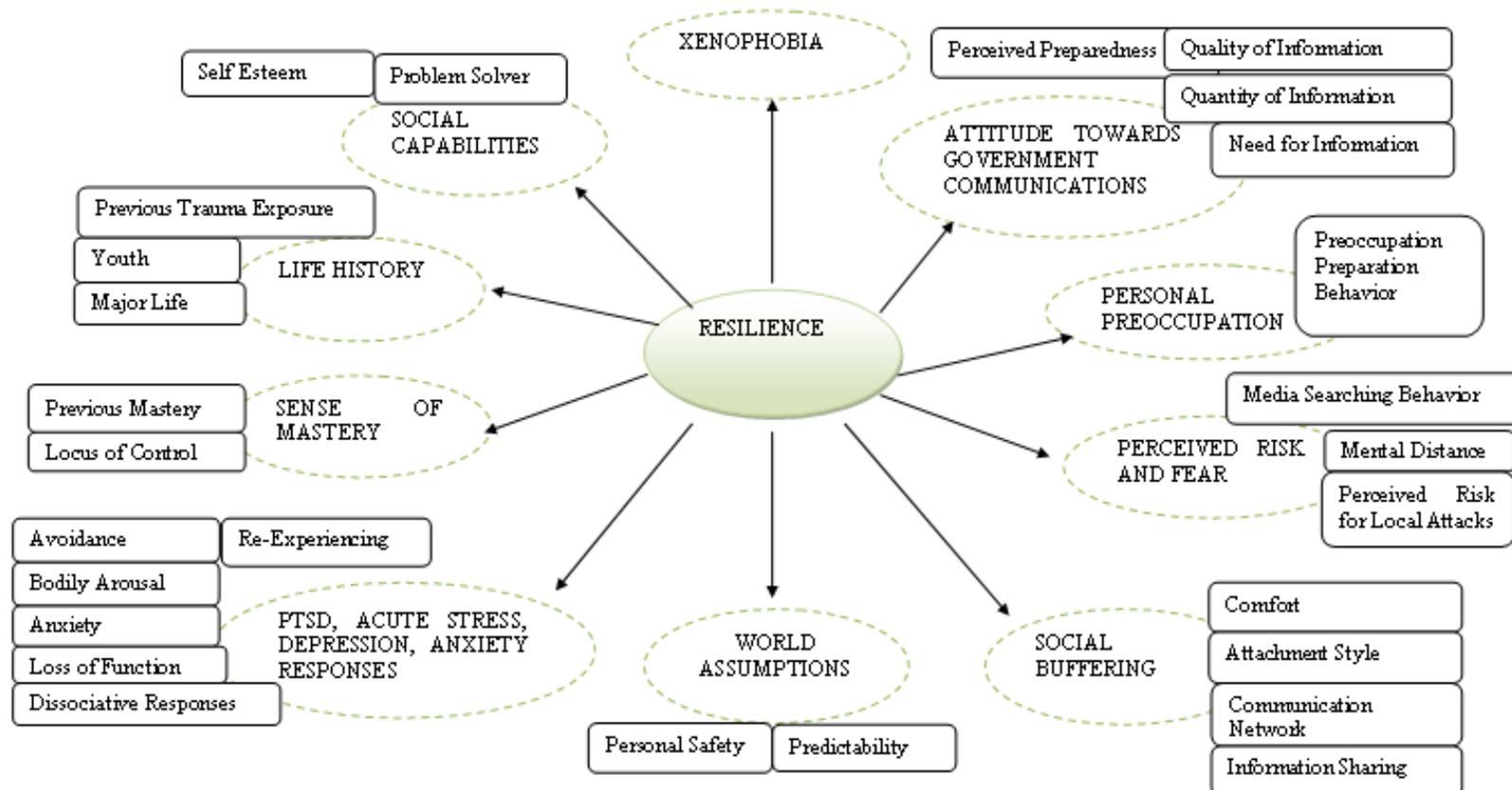


Figure 15-1: Model of Psycho-Social Resilience to Terrorism.

The model presented here was developed for the use of the NATO Research and Technology Group (140) Psycho-Social, Organizational and Cultural Aspects of Terrorism which was an international group tasked with studying terrorism over a three year period. A survey instrument was developed by the author to measure and test all of the variables for consistency and reliability. This survey instrument was used in a preliminary research study in four countries that faced terrorist attacks: Morocco, Chechnya, Jordan and Iraq. In the first three cases the sample consisted of civilian members exposed to one or more terrorist attack(s) in their city (i.e., the Casa Blanca bombings in Morocco, the Amman hotel attacks in Amman and repeated attacks by Chechen terrorists in Grozny). In the fourth case the sample was civilians and military members of the US forces serving in Iraq facing mortar and suicide attacks by local terrorist and insurgent groups. The results of these first attempts of members of the RTG-140 to test the Psycho-Social Resilience to Terrorism Model are presently under analysis and will be published in academic articles as well. It is the author's hope that the results of this research will develop the model and survey instrument further and make it useful for understanding and combating the largely media driven effects of terrorism as it relates to resilience on an individual and societal level.

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