

The correct reference for this paper is: Anne Speckhard, "Acute Stress Disorder in Diplomats, Military and Civilian Americans Living Abroad Following the September 11th Terrorist Attacks on America", *Professional Psychology: Research & Practice* Vol 34(2), Apr 2003, 151-158. (The published version may differ slightly from this copy).

Running Head: Acute Stress Disorder in Diplomats Living Abroad Following Sept. 11th

Acute Stress Disorder in Diplomats, Military and Civilian Americans  
Living Abroad Following the September 11th Terrorist Attacks on America

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The author would like to acknowledge the assistance of Dr. Sergei Sivuha of European Humanities University, Belarus, for his assistance on the statistical analysis of the data.

Running Head: Acute Stress Disorder in Diplomats Living Abroad Following Sept. 11th

Acute Stress Disorder in Diplomats, Military and Expatriate Americans  
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Abstract

Can an expatriate witnessing attack of his country from afar develop acute and posttraumatic stress reactions? In Brussels fifty expatriate Americans were surveyed in the ten weeks following September 11<sup>th</sup> . Ten percent (n=5) of the sample showed acute stress disorder in the first week and four percent (n=2) persisted with traumatic stress indications in weeks following. All participants showed symptoms of distress: derealization, reexperience, avoidance, heightened arousal, trouble working and assault on world assumptions. For most, symptoms diminished over time. Increased psychological readiness in terms of assessment, prevention and treatment methods is called for in response to mass terrorism.

Acute Stress Disorder in Diplomats, Military and Expatriate Americans Living Abroad  
Following the September 11<sup>th</sup> Terrorist Attacks on America

The events of September 11<sup>th</sup>, 2001 struck terror into the hearts of all Americans, even those living far from home. Expatriate Americans witnessed the horrific attacks by television, either in nearly live time or in the repeated television coverage. Of those working for the military, State Department or for New York City based businesses the attacks were taken quite personally, especially among those familiar with the offices in the Pentagon or New York city, who had colleagues there, or who likely would have been victims had they been posted stateside at that time. Even those participants with no work or personal ties to either site took the attacks quite personally due to the extensive human-interest coverage in the media and the symbolic nature of the attacks on their nation.

In addition to the attacks themselves, their aftermath created new fears for Americans living abroad with heightened awareness of the possibility of being included as future terrorist targets. Suddenly personnel found their sense of security and worldviews assaulted. Security was abruptly heightened around the world, particularly at U.S. embassies, military and other installations. Overnight, many Americans found that they were suddenly confronted with armed guards, barbwire and truck-bomb barriers surrounding their work places. For months after the attacks they received security circulars on how to increase their own personal and familial security and how to detect and deal with mail bombs and anthrax filled letters and other forms of bio-terrorism.<sup>2</sup>

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<sup>2</sup> The author held stress debriefings for 250 military, civilian and foreign service workers and their spouses at their work and gathering places in the two months following September 11<sup>th</sup> and thus was well aware of the heightened fears and changed work environments that many

The bombing and collapse of the Twin Trade towers, and partial collapse of the Pentagon with the resulting three thousand plus deaths, could easily be expected to cause acute and posttraumatic stress disorder in those close to ground zero. Indeed, traditional theories of posttraumatic stress disorder view proximity to disaster as a risk factor for development of either disorder, a finding that has also been born out in numerous studies (Hanson, et al, 1995; Pynoos et al, 1995; Hodgins et al, 2001; Schwarzwald, 1993; Fehon, Grilo & Lipschitz, 2001; Shalev, 2001). But what about those who witnessed the events from afar as did American personnel living abroad? What level of exposure, through television, media and personal contact, would be expected and how should psychologists expect this population to fare? According to the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed (DSM-IV-R) (APA, 1994), an event capable of engendering acute or posttraumatic stress disorder is one in which the person experiences, witnesses, or is confronted with an event or events that involves actual or threatened death or serious injury, or a threat to the physical integrity of self or others and that the person's response involves intense fear, helplessness, or horror. Certainly, the events of September 11<sup>th</sup> fit the criteria for those proximate to the disaster. It was of interest to the author to learn if an attack perceived at a distance by Americans abroad could also cause symptoms of either disorder.

This paper reports on how a voluntary sample of American expatriates posted in Brussels, Belgium (or its nearby vicinity) responded within the two months following the terrorist attack of their country: inquiring if they would have heightened anxieties,

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expatriates experienced following the terrorist attacks. She also had access to all of the security notices circulated both within the embassy tri-mission community and within NATO headquarters.

increased concerns and even posttraumatic symptoms along the lines of acute and posttraumatic stress disorder (PTSD).

#### Disaster Stress Self Assessment Survey

In Brussels, Belgium approximately one thousand six hundred American diplomatic, civilian and military personnel are posted within the tri-mission community (i.e. to the U.S. Embassy to Belgium, to the U.S. mission to the European Union, and to the U.S. Mission at NATO). Hundreds more American military staff are posted by the Department of Defense to Supreme Headquarters Allied Powers Europe (SHAPE; which is within forty minutes of Brussels) and to NATO (within Brussels) and there are also hundreds of Americans working as civilians for NATO and as expatriates posted to various international and American businesses. In Belgium, NATO headquarters was named, immediately after the September 11<sup>th</sup> attacks, as an imminent target for additional terrorist attacks. The U.S. embassy in Paris was also discovered to be the target of a foiled bombing, with the conspirators found to be living in Brussels. Americans posted in Brussels were suddenly confronted with the fact of the multi-cultural nature of their city: that twenty percent of the population is of Arabic descent and Muslim and that terrorist cells had been discovered living there. Likewise, anxieties over threats that might materialize were heightened when “anthrax” letters were received at NATO headquarters – reaching well beyond the mail- room security into the Secretary General’s private office – and at Embassy Brussels. These powder-filled letters were later discovered to be only hoaxes, but they still had the intended effect of creating feelings of terror and vulnerability, especially since at the same time the U.S. media was reporting anthrax deaths in the United States. Thus, even though the actual attacks occurred at great distance, Americans living in Belgium suddenly found their workplace and home

security threatened, and many were thrust into a state of heightened arousal. Hence, it was decided that this group would make a good sample to test the question of how American personnel overseas fare while witnessing the large-scale terrorist attack of their own country and its aftermath.

The sample for this research was nonrandom<sup>3</sup> consisting of fifty Americans living abroad during the September 11<sup>th</sup> terrorist attacks on the U.S. who were recruited to anonymously take a two- page survey entitled “Disaster Stress Self Assessment”. The participants were recruited at their work places in U.S. facilities in and near Brussels including: the U.S. Embassy to Belgium, the U.S. Mission to the European Union, the U.S. Mission to NATO, Supreme Headquarters for Allied Partners Europe, and NATO Support Activity and hence represented diplomats serving in the foreign and commercial services, armed forces, and civilian government workers and their spouses.

To diagnose for acute stress disorder the DSM- IV-R (APA, 1994) requires the presence of symptoms of dissociation, re-experience, avoidance, and arousal causing clinically significant distress, all of which occur for a minimum of two days and a maximum of four weeks, within a *four week time period* of the traumatic event. It was decided that the terrorist attacks did not have a clear end point since additional threats were anticipated as well as retaliatory actions. Thus the time beginning immediately after the attacks ensuing through a ten-week period of heightened threat (i.e. beginning with the terrorist bombings and including the anthrax scares) was considered a suitable time

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<sup>3</sup> The researcher requested permission to officially contact employees for participation in the survey in order to be able to draw a random sample. However, given the unexpected nature and suddenness of the attacks, each of the bureaucracies was overwhelmed with increased demands for security and could not possibly respond quickly to such a request. It was thus impossible to get past bureaucratic procedures to draw a random sample within the time frame of the questionnaire. Hence the value of collecting the information in a timely manner and within the frame when acute stress responses could still be measured dictated the decision to use a nonrandom sample.

frame for sampling for this disorder. The research began on September 20<sup>th</sup> and surveys were collected in weeks two to ten following the attacks up to November 19, 2001.

All participants who wished to discuss their reactions with the researcher were invited to do so, and many did so at some length (nearly all doing so after they filled out the survey). This anecdotal information was anonymously recorded as well. In addition to the surveys, the author ran six stress debriefings<sup>4</sup> during this time frame for the above named organizations and for the American Women's Club of Brussels. In these debriefings a short presentation regarding typical responses to disasters, acute stress disorder and normalizing of responses was given followed by an opportunity for the participants to discuss feelings and concerns. In this manner additional impressions were also collected that add perspective and validity to the paper and pencil measures. One third of the subjects were recruited at these stress debriefings organized at the work place (nearly all filled the survey out before the debriefing), the remainder were recruited in public areas at the workplace such as the community liaison office, the cafeteria, through other subjects, etc. Many filled it out in the presence of the researcher who was nearby but not interacting with the participant, others took the survey at work or at home and returned it by inter-office mail or over the Internet, some including letters with additional comments about their symptoms of stress.

The research instrument entitled "Disaster Stress Self Assessment" included thirty closed-ended items designed to reflect the diagnostic criteria for Acute Stress Disorder (APA, 1994). These items covered the following five fields:

1. Dissociative symptoms

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<sup>4</sup> These debriefings were basically discussion groups involving psycho-education, discussion of common responses to traumatic events, and involved only spontaneous and completely voluntary processing of emotional responses to the terrorist attacks. They were one hundred percent voluntary and had no relationship to the structure or methods of critical incident stress debriefings, which have in recent years been the subject of controversy.

2. Reexperience,
3. Avoidance
4. Increased arousal,
5. Symptoms impairing psychological, social and occupational functioning, including questions regarding coping or failure to cope, issues of conflict with significant others, and desire for professional help.
6. In addition, a sixth field was added concerning assault on world assumptions.

Questions concerning depersonalization were not included due to concerns raised by participants who pre-tested the instrument. They stated that such questions seemed to apply to “crazy” people and answering them made them feel so uneasy that they would decline participation in the survey. Hence it was decided that derealization was likely an extreme response and alienating the subjects was not worth the benefit of including such items.

Answers of never, rarely, sometimes, and often were possible choices for the thirty items, and participants differentiated between their initial responses for the first week after the attacks and the time period at which they filled out the survey. These were followed by open-ended queries about their chief worries, stress responses, coping mechanisms, family concerns and what support they felt was missing. Likewise, they were asked to give non-revealing demographic information: age, sex, marital status, type of government or civilian service, and rank.

The survey was designed to give a score on each of the five individual factors making up acute stress disorder as well as a total stress score to be compared with a cut-off for acute stress disorder when the criteria were met in each category.

The results of the survey were tabulated using two time frames: subjects recall of their responses the first week after the attacks and the time of the survey, which was during weeks two to ten after the attacks. This second time period represented a period of decreasing alert as compared to the actual attacks, although even during it there were still many scares. For instance October first was rumored as the date of an attack on NATO, and the month of October included the time period of heightened anthrax scares and deaths in the states, receipt of anthrax letters at the embassy and NATO and the beginning of the war in Afghanistan which caused perceived threat levels following Sept 11<sup>th</sup> to fluctuate from week to week. Because it was not a smooth decrease in threat level, but instead an inconsistent lowering and then re-heightening of threat (although never re-heightening to Sept 11<sup>th</sup> levels) it was concluded that given the small sample size the most logical thing was to collapse this time period as one group in comparison to reactions in the first week.

While all of the participants completed the disaster stress portion of the survey fully, some failed to give complete demographic information. This was likely due to concerns about anonymity. In particular in regard to age only sixty percent of the sample gave information: with the ages ranging from nineteen to sixty-one, with the average of forty-two. The sample was fifty-two percent female and forty-two percent male, with six percent undisclosed. Sixty-two percent of the participants were government or military employees, two percent civilian non-government, twenty-eight percent were spouses and eight percent failed to identify themselves. Of the government employees: sixty-one percent were diplomats or civilian government workers, thirty-nine percent were military. Military ranks ranged from sergeant to major, Foreign Service from FS-1 to FS-MC, and GS ranks were from GS-12 to the Senior Executive Service.

Means for the acute stress disorder variables are reported in Table One for the two time periods – recall to the time of the disaster and time at which the survey was taken. The general and most important findings are that ten percent (n=5) of the sample showed acute stress disorder in the first week and four percent (n=2) persisted with indications of traumatic stress in the weeks following. All participants showed symptoms of distress ranging from derealization, reexperience, avoidance, heightened arousal, trouble working and assault on world assumptions at the time of the disaster, but for nearly all categories, symptoms diminished over time. The only symptom that did not decrease over time was avoiding talking about the event, which increased at the time of the survey.

Linear regression was applied to the total intensity scores for each category of responses (dissociative, re-experience, avoidance, arousal, assault on world assumptions and dysfunction) with military status (military/civilian); gender (male/female); marital status (married/unmarried); age, and time since the attacks as independent variables. Only gender and military status were significant with women and civilians having higher stress responses to the September 11<sup>th</sup> attacks as shown on Table Two. T-tests of these variables showed the following:

- 1) Females showed higher levels of dissociative effects ( $t(48) = 2.793, p = 0.007$ ); re-experiencing effects ( $t(48) = 2.853, p = 0.006$ ); avoidance effects ( $t(48) = 2.013, p = .050$ ); arousal effects ( $t(48) = 4.137, p = 0.000$ ); assault on world assumptions ( $t(48) = 2.356, p = 0.023$ ); dysfunction ( $t(47) = 2.423, p = 0.019$ ) and total scores ( $t(48) = 3.702, p = .001$ ).
- 2) Military personnel showed lower levels than civilians for dissociative effects ( $t(46) = -3.289, p = 0.002$ ); re-experiencing effects ( $t(46) = -2.411, p = 0.020$ ); avoidance effects ( $t(46) = -2.187, p = .034$ ); arousal effects ( $t(46) = -5.089, p =$

0.000); assault on world assumptions ( $t(46) = -2.441, p = 0.019$ ); dysfunction ( $t(45) = -2.535, p=0.015$ ) and total scores ( $t(46) = -4.733, p = .000$ ). This effect appears to demonstrate that military are more tolerant to exposure to this type of event as they showed less symptoms than their civilian counterparts.

3) Marital status and time since the event had no significant effect.

4) Age as converted to a dummy variable (dividing the group into age forty or less and forty-one and above) was significant as follows (with younger age being better - older age being more affected) by dissociative effects ( $t(48) = -2.961, p=0.005$ ); arousal effects ( $t(48) = -2.202, p = 0.032$ ) and total scores ( $t(48) = -2.337, p = .024$ ).

### Acute Stress Responses in the Wake of Terrorist Attacks

#### *Assessment Issues for Acute Stress Responses following Disaster and Terrorist Acts*

The relatively recent introduction of acute stress disorder (ASD) as a diagnostic category occurred as a means of facilitating identification of those individuals most at risk for developing longer-term PTSD following exposure to a traumatic stressor (Koopman, Classen & Spiegel, 1994). ASD describes posttraumatic stress reactions that occur between two days and four weeks following exposure to a traumatic event and thus differs from PTSD in terms of timing and in its heavier emphasis on the development of dissociative symptoms. The predictive power of this diagnosis is impressive.

Researchers report for example that seventy-eight percent of trauma survivors who meet criteria for ASD suffer PTSD six months following the trauma, and sixty percent of those who display acute posttraumatic stress symptoms (subclinical ASD) but no dissociation develop PTSD (Bryant & Harvey, 1998; Harvey & Bryant, 1998) and these rates persist

even two years after the trauma (Harvey & Bryant, 1999). Hence the importance of importance of assessing for ASD following a mass disaster or terrorist act cannot be overlooked especially when one considers how far reaching some terrorist event can be. As in this case, the effects of terrorist attacks in New York City and Washington, D.C. reached across the Atlantic Ocean affecting Americans living abroad.

At the time of the September 11<sup>th</sup> terrorist attacks there were few scales available to measure ASD and each had their drawbacks. For example many researchers use measures developed for PTSD to measure aspects of ASD such as the Impact of Event scale (IES; Horowitz, Wilner, & Alvarez, 1979) to index acute intrusions and avoidance or the PTSD Symptom Scale (Foa, Riggs, Cancu, & Rothman, 1993) to assess the range of intrusive, avoidance and arousal symptoms in the acute phase. These however do not encompass dissociative symptoms and additional measures such as the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) or the Peritraumatic Dissociation Experiences Questionnaire (Marmar et al., 1994) must also be used to assess dissociative responses. Two measures that have been proposed to measure acute stress responses are the Stanford Acute Stress Reaction Questionnaire (SASRQ; Cardena, Classen, & Spiegel, 1991) which has been modified from a seventy-three item questionnaire to a thirty-item inventory that indexes ASD symptoms (see Stam, 1996). But neither has been validated to date. The Acute Stress Disorder Interview (ASDI; Bryant, et al, 1998) is a validated 19-item, dichotomously scored interview schedule that is based on criteria from the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; American Psychiatric Association, 1994). However it is an interview that requires professional administration versus a paper and pencil test.

*Readiness in the Psychological Profession for Large Scale Response to Trauma*

The terror attacks of September 11<sup>th</sup> caught the whole world off guard. The psychological profession was not immune. This researcher for example found that there is currently a lack of standardized measures that can be “taken off the shelf” to quickly and accurately assess for ASD and that quick research and treatment responses for terrorized populations are hardly “at the ready”. In this study the availability of psych info and other data bases made it possible to quickly construct a paper and pencil measure that was based both upon the DSM –IV criteria and the work of others, but it could not be validated or standardized prior to its application. A recent gathering of the world’s top experts on psychological responses to terrorism at a NATO sponsored Advanced Research Workshop underlined this concern. Psychologists, clinicians and researchers, are unprepared to professionally respond to massive terror attacks of a biological, chemical or nuclear nature and even to simple terrorist attacks involving huge numbers of citizens (NATO Advanced Research Workshop, 2002). Given the current concerns voiced by officials in the United States and abroad regarding the likelihood of increased terrorist threats it would be very useful to clinicians to be able to turn to established data banks of measures to help assess large groups of individuals not only for purposes of research but also for triage and prevention. The availability of such paper and pencil measures might make a huge difference if large groups of individuals were exposed to an act of terrorism enabling clinicians and researchers to learn who is having adverse reactions and who is most at risk for developing long term PTSD. The implications for prevention and treatment are very important given the current world atmosphere of increased tension and expectation of increased terrorism.

There are of course some significant measurement issues that researchers must keep in mind when developing such measures. For example ASD as a diagnostic

category is often not a stable diagnosis but rather fluctuating in its course. Hence the diagnostic rate can be variable depending upon when one is assessed. According to the DSM-IV the dissociative symptoms may occur either during the trauma or at any time during the month after the trauma. In this study symptoms of ASD decreased over time in general but not in every case. Likewise in this study as in every case when a terrorist act is the traumatic stressor there are problems in defining when the event is over if there exists after the attack an increased perception of threat following the initial attack. This was seen in this study where the onslaught of anthrax letters and rumored “next” attack sites created increased arousal states for weeks following the initial stressor event.

*Psychological Readiness for Treatment Responses to a Mass Terrorist Event*

It is important to note that this study revealed significant acute stress reactions to terrorism even in those far removed from the actual site of the attacks which raises the issue of the potentially huge numbers of individuals who might be adversely affected by mass terrorist attacks and increased threat levels the world over. For psychologists this introduces the need to think creatively about what can be done to ameliorate stress responses and about how to prevent the development of PTSD in large populations following acts of mass terrorism. Certainly when huge groups have been exposed to trauma individual assessment and treatment might not be feasible and group approaches may be useful.

Group approaches are likewise not straightforward nor agreed upon. Over fifty years ago stress debriefing was introduced as a means of caring for traumatized WWII soldiers (Shalev & Ursano, 1990) and since then many brief psychological crisis intervention services have been developed for use in the immediate wake of trauma and disasters. Some of these are models developed primarily for emergency service

personnel and are described by Mitchell, 1983 and Dyregov, 1989. Some have since been expanded for wider use. Psychological debriefing – the current trend – has been described by Bisson, McFarlane and Rose (2000) as "a single-session semistructured crisis intervention designed to reduce and prevent unwanted psychological sequelae following traumatic events by promoting emotional processing through the ventilation and normalization of reactions and preparation for future experiences" (p. 555).

Likewise Foy, (2001) writes: "Debriefing is usually an early (e.g. 1-3 days posttrauma) group intervention, facilitated by mental health professionals or trained peers. Usually, PD includes some or all of the following: (a) an introduction to the rationale and methods of PD to group members; (b) explanation of confidentiality; (c) time to describe traumatic events and discuss initial reactions; (d) time for describing emotional responses to the experience; (e) discussion of the recognition, normalization, and management of symptoms; (f) discussion of implementing knowledge and coping strategies; and (g) identification of internal and external sources of support. The aforementioned draws attention to a critical issue in evaluating the effectiveness of PD—that is, the lack of clarity regarding what actually constitutes PD."

While psychological debriefing remains imprecisely defined its proponents argue for its efficacy in reducing acute traumatic reactions while opponents argue that it is useless and can even cause harm. The reality is that in review of practice there is a lack of standardization across interventions, differences in timing, duration, trauma type, recipients and facilitators. Likewise the studies of psychological debriefing generally lack baseline data, usually have self -selected participants and lack appropriate and randomized control groups so it is difficult to know whether they help or harm. (Foy, 2001; Neria & Solomon, 2000; Bisson, McFarland, and Rose, 2000).

Hence it is clear that if mass terrorist attacks were to occur on a more devastating and widespread scale, psychologists might be terribly unprepared in terms of mass assessment, prevention and treatment plans. There is therefore a need for each government and their nongovernmental units, including the profession of psychology, to develop appropriate psychological service responses (in terms of assessment, treatment and prevention) to massive terrorist attacks. Clearly more research, treatment approaches and models must be developed to create a state of readiness for such events.

### Implications and Discussion

The research question of this study, examining if there would be evidence of acute and posttraumatic stress disorder symptoms in a sample of Americans posted abroad as a result of witnessing the September 11<sup>th</sup> attacks on America is answered affirmatively. Witnessing one's country being attacked, even from afar can be cause for posttraumatic responses – especially in this day of live television coverage and endless replay. However it is also clear from the statements made by respondents that it was not only the September 11<sup>th</sup> attacks that contributed to their acute stress disorder symptoms but also the possibility of further attacks and the heightened sense of arousal caused by this increased threat status.

It is a significant finding of this research that ten percent (n=5) of the sample showed immediate signs of acute stress disorder in the first week after the September 11<sup>th</sup> attacks and four percent of the sample (n=2) persisted in such a state. Likewise, the average respondent felt a sense of derealization over the trauma, reexperienced it in intrusive thoughts and flashbacks and felt increased arousal particularly in terms of increased threat.

Peritraumatic dissociation has been linked in some studies to the possibility of later developing posttraumatic stress disorder (Birmes, et al, 2001a; Birmes, et al, 2001b; Fullerton, et al, 2001). It is significant to note in this sample that twenty percent of the respondents experienced all four areas of dissociative symptoms (derealization, numbing, dazed and partial amnesia) (on the sometimes to always level) and ten percent persisted with these symptoms beyond the first week. While it seems unlikely that anyone in this sample would develop long-term PTSD, five of the respondents did briefly suffer acute stress disorder and two of these persisted in their symptoms. Acute stress disorder has also been implicated as a potential pathway for later development of PTSD (Harvey, et al, 1999; Hodgins, Creamer & Bell, 2001; Bryant, et al, 2000).

Traumatization, the use of dissociation as a defense and the long-term development of PTSD all revolve around the inability of the traumatized individual to incorporate an emotionally overwhelming, terrifying and inescapable experience into existing schemas. Instead of finding a way to process the trauma, the victim's mind sequesters the terrible reality as an unprocessed experience, reminders of which are to be avoided. Unfortunately until it is resolved, the traumatic memory keeps intruding into consciousness causing havoc with healthy functioning. In this sample dissociative defenses were used to keep the traumatic reality at bay, with derealization (i.e. not accepting the reality of the attacks) being the most prevalent symptom at the time of the disaster, while emotional numbing, reduction in awareness and traumatic amnesia were also utilized at the time of the disaster. Reexperience and avoidance were also indicated, (with intrusive thoughts and nightmares being common) and but over time it appeared that most of the sample participants were working through, versus avoiding their

traumatic responses to the attacks and the general trend was toward a decrease in posttraumatic symptoms. Hyperarousal was also present but also diminished over time.

The majority of the sample stated that they had experienced an assault on previously held world assumptions: that they had a new recognition for how fragile life is, and that they felt a new sense of uncertainty about the future. They were struggling for ways to incorporate their new post September 11<sup>th</sup> reality of increased workplace threat and heightened security measures – meant to protect - but often in reality increasing their sense of threat. Workers struggled with newly organized procedures such as bomb drills and new mail handling procedures. Circulars warning of how to respond in a biological or chemical threat situation created a feeling that the world had changed overnight. Were they to now order gas masks and keep them nearby? Was it better to forgo receiving mail at all for a time? One woman told of her husband calling frantically from work to tell her to remove the “Economist” magazine from their home due to an embassy e-mail (later discovered to be a hoax) warning that some copies had been laced with anthrax. “You should have seen me with my plastic gloves and tweezers trying to take it out of our home.” She recounts. “He was so afraid. He didn’t want the kids to be infected.”

Having a work force experiencing difficulty concentrating, increased arousal states, flashbacks and even resorting to substances to cope is troublesome. Certainly in this sample, anxieties were increased by the September 11<sup>th</sup> attacks and their aftermath, and help for dealing with the increased sense of threat would have been welcomed by respondents. Fifty-five percent of the sample stated the desire for group discussions and twenty percent would have accepted confidential individual counseling in the first week. Given the receptivity to help it is important to consider how to best offer assistance.

It remains an essential research question to understand how persons under threat develop new schemas and if preventive measures can be developed to inoculate those facing increased threat against psychological disorder. Given that news pundits have labeled “the world as forever altered following September 11<sup>th</sup>”, for personnel serving abroad it raises the question of how to best help them deal with the increased threat levels and perhaps even how to raise resilience to this type of occurrence. It is significant to note that military men in the sample had the lowest stress scores in general indicating perhaps that military training and combat readiness skills may be a factor in creating increased resilience to this type of stress. This is not to say that the military respondents did not also show symptoms of distress, but that their responses were on the whole lower than the mean scores.

Groups in which respondents can discuss and work through some of their responses to the disaster, educational groups, easy access to confidential counseling, sensitively written materials all appear as common-sense responses to situations of this type. Indeed in response to the attacks, and expressions of need, the author volunteered to hold simple stress debriefings in which common psychological responses to disasters were discussed, risks of threat were put into perspective (death by anthrax compared to current TB rates for instance, death by terrorist attack compared to the risks of driving, etc.) and participants were given a chance to discuss their emotional responses. Unlike some psychological debriefing approaches these sessions were entirely voluntary and did not require anyone in the group to do any “emotional processing”. Instead helpful information was given, including common responses to disaster, which generally sparked quite animated discussions among the participants where they expressed emotions to the levels they chose. Feedback to the author regarding the six stress debriefings that were

held was overwhelmingly positive (Speckhard, 2002). Participants especially appreciated discussion of potential self-care and anxiety reduction methods that they might use to stabilize their emotional and familial distress in response to the attacks.

However, objectively judging the sessions, the researcher observed that there were both positives and negatives to such groups. For instance when gathered together individuals had the opportunity to discuss fears and found relief in doing so, however they also exchanged fears and potentially called attention for other group members to threats that they hadn't considered. Thus the groups gave the opportunity for both relief and emotional contagion. The same was true for security debriefings and security flyers circulated at the workplace. Intended to reassure, they often heightened fears. One worker stated, "After I read what to do in a biological attack, I felt sickened. I don't read those papers anymore." Another worker stated, "After the bomb drill at NATO I became more convinced that our security system is not adequate to protect us."

Clinicians who work with expatriates or those preparing to serve the country or their corporations abroad can equip them to deal with the new stresses of terrorism threats in a number of ways in groups or in individual formats. First it is helpful to discuss the fears engendered by heightened security measures and to discuss the new threats and what they mean for the person. A common problem with those facing new threats can be the tendency to over focus on it, especially if the media supports an obsessive new interest. In this case it is helpful to point out and contrast the new threat to other threats that the person takes for granted – such as getting in a car and driving in dangerous traffic each day, despite the odds of dying. In this way the new threats can be put into perspective and lose some of their ability to intrude on conscious attention. At the same time it can be useful to teach or review strategies of self-awareness, vigilance, and safety

measures against terrorism for those who may be in fact be facing increased danger (e.g. such as monitoring ones surrounds while driving, locking cars, examining and taking precautions before opening mail, etc.) and in doing so help the client by monitoring and addressing any anxieties raised by the need for increased self protective measures. When the awareness of new threats brings up fears of mortality these fears can also be used as therapeutic catalysts to discuss life choices in light of the potential fragility of life. Often spouses and family members have different tolerances for threat and it is also useful in therapeutic contacts to help family members to discuss their fears and desires regarding prevention. Teenagers for instance may chafe under restrictions to avoid roaming in ethnic areas that seem safe to them but potentially dangerous to parents. Spouses may differ on how much precaution the other needs to take, and issues of potential loss and abandonment can come up when they each contemplates that the other could be the object of terrorist attack. These fears can be used as opportunities to enhance family communication and to address existential issues as well as those unresolved from childhood. Likewise, the employee may have issues he needs help addressing in the work place, such as the need to address new security measures that seem harassing or lapses in security that create potential for danger. Again clarifying the issues, putting them in perspective, and support for communicating one's needs and objectives within the organization in an effective manner is useful.

This research found significant distress, posttraumatic and acute stress disorder responses in expatriate Americans to the September 11<sup>th</sup> attacks on America. It highlights the need for research and educational programs looking into how not only expatriates, but all persons living under increased terrorist threats can make adjustments to reduce anxiety, aid in creating new schemas and even inoculate resilience into the

workforce for the “new world” we live in post September 11th. Likewise there is a need for psychologists to work towards readiness in assessment, prevention and treatment of acute and posttraumatic responses both in response to the threat of continued terrorism and the possibility of a mass terrorist attack. We will continue sending our foreign, commercial, civilian, and military services to work overseas while the threat of worldwide terrorism seems unlikely to decrease anytime soon. In response we must equip our people at home and abroad and our profession, psychologically as best we can.

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**Table One – Mean Scores for Acute Stress Disorder Symptoms\***

Acute Stress Responses (n=50)	Time of the Disaster		Time of the Survey		S.D.	
	Mean	S.D.	Mean	S.D.		
<b>Dissociative Criteria</b>						
Derealization	1.98**	Sometimes	1.08	1.23**	Rarely	1.02
Psychic Numbing	1.16	Rarely	1.06	.52	Rarely	.74
Dazed	.96	Rarely	.99	.56	Rarely	.70
Amnesia	.62	Rarely	.90	.44	Never	.73
<b>Re-experience Criteria</b>						
Intrusive Thoughts	2.76	Often	.48	2.12	Sometimes	.77
Flashbacks	2.39*	Sometimes	.76	1.90*	Sometimes	.90
Nightmares	.72	Rarely	.90	.44	Never	.84
<b>Avoidance Criteria</b>						
Avoiding Thoughts	1.28	Rarely	1.03	1.10	Rarely	.93
Avoiding Conversation	.70	Rarely	.86	.96	Rarely	.90
Wanting to be Alone	.70	Rarely	.99	.54	Rarely	.84
Avoiding People & Places	.52	Rarely	.79	.46	Never	.84
<b>Arousal Criteria</b>						
Fear of the Trauma Repeating	2.10	Sometimes	.97	1.80	Sometimes	1.01
Safety	2.02	Sometimes	1.04	1.74	Sometimes	1.10
Increased Threat or Danger	1.98	Sometimes	.96	1.54	Sometimes	.93
Increased Agitation/Nervous	1.78	Sometimes	.97	1.31*	Rarely	.92
Difficulty Concentrating	1.80	Sometimes	1.14	1.06	Rarely	.87
Sleep Disturbance	1.46	Rarely	1.22	.90	Rarely	1.05
Cried Easily	1.20	Rarely	1.28	.72	Rarely	1.03
Jumpy/Easily Frightened	1.08	Rarely	1.07	.72	Rarely	.83
Increased Bodily Arousal	.68	Rarely	1.02	.38	Never	.73
<b>World Assumptions</b>						
Life is More Fragile	2.59*	Often	.67	2.47*	Sometimes	.74
Feel an Uncertain Future	2.02**	Sometimes	.91	1.67*	Sometimes	.94
<b>Dysfunction Criteria</b>						
Group Discussion Wanted	1.49*	Rarely	1.10	1.16*	Rarely	.96
Trouble Working	1.29*	Rarely	1.14	.63*	Rarely	.81
Counseling Wanted	.86*	Rarely	.84	.65*	Rarely	.78
Trouble with Partner	.51*	Rarely	.78	.34*	Never	.60
Substance Desired	.29*	Never	.61	.18*	Never	.44
Substance Used	.24*	Never	.60	.16*	Never	.43
* n=49, ** n= 48, *** n=47						

*Qualitative Score Key	
Often	2.51-3.00
Sometimes	1.51- 2.50
Rarely	0.51-1.50
Never	0.00-0.50

Table 2: Linear Regression of Total Responses to Sept. 11<sup>th</sup> at the time of the Survey

Model	Unstandardized Coefficients		Standardized Coeff. s
	B	Std. Error	Beta
1 (Constant)	25.029	8.507	
Female	9.639	3.858	.403*
Military	-12.067	4.474	-.462*
Married	5.469	4.584	.149
Age	-.223	.155	-.206
Time Since the Event	0.086	.77	.137

\*p<0.05