Acute Stress Responses: A Review and Synthesis of ASD, ASR, and CSR

Leanna Isserlin, MD
University of Western Ontario

Gadi Zerach, PhD, and Zahava Solomon, PhD
Tel Aviv University

Toward the development of a unifying diagnosis for acute stress responses this article attempts to find a place for combat stress reaction (CSR) within the spectrum of other defined acute stress responses. This article critically compares the diagnostic criteria of acute stress disorder (ASD), acute stress reaction (ASR), and CSR. Prospective studies concerning the predictive value of ASD, ASR, and CSR are reviewed. Questions, recommendations, and implications for clinical practice are raised concerning the completeness of the current acute stress response diagnoses, the heterogeneity of different stressors, the scope of expected outcomes, and the importance of decline in function as an indicator of future psychological, psychiatric, and somatic distress.

Keywords: acute stress disorder, acute stress reaction, combat stress reaction

Initial responses to trauma include emotional, cognitive, somatic, and behavioral symptoms (for extensive reviews, see Bryant, 2003; Shalev, 2002). Both theoretical perspectives and empirical findings have served to validate a unique set of diagnoses describing these responses (e.g., Bryant & Harvey, 2000). In the Diagnostic and Statistical Manual of Mental Disorders (4th ed., text revision [DSM–IV–TR]; American Psychiatric Association, 2000), these responses are classified under Acute Stress Disorder (ASD) and in the International Classification of Diseases (10th rev. [ICD–10]; World Health Organization, 1992) they are classified under Acute Stress Reaction (ASR). In the field of military psychiatry the definition of the acute stress response has been described using many terms such as war neuroses, battle fatigue, or shell shock, and more recently, combat stress reaction (CSR). Although seemingly different with regards to formulation these three diagnoses (i.e., ASD, ASR, and CSR) are all essentially attempts at describing the same clinical entity. Given the multiple sites of ongoing conflict and concerns of global terrorism it is of timely importance that we gather and integrate our knowledge with regards to trauma responses.

Regardless of the definition used or the trauma experienced, the effects and evolution of the responses is remarkably similar as illustrated by subjective descriptions shared by survivors of different traumatic events:

What we went through in Yom Kippur war wasn’t pleasant . . . I saw a lot of wounded and a lot of guys who died of their wounds because we couldn’t reach them. They cried out for help. The shelling was heavy, and you can’t get to them. And all the while they’re slaughtering, and the wounded are dying like flies.

I remembered the feeling of utter impotence. In just another minute, they’ll finish me off. I’ll die. And there’s no way out. I was waiting for a miracle. I asked myself, “Why the hell did you volunteer for the parachutists, of all things? Who needs it? What am I doing here?” I saw dying men, soldiers of mine, who’d been training for several months, call me to help them, I couldn’t have gone. I wanted to talk, but found myself crying. I was sweating. Crying and trembling, I was shaking, shaking like a leaf. A madness of fear . . . I was rooted in one spot. I was lying there and couldn’t get up.

—Soldier of 1982 Lebanon War (Solomon, 1993, pp. 41–42)

I remember that I went down the market to buy vegetables and other products. Then suddenly I heard this explosion. I don’t remember a lot from those moments, I just started to run in the other direction. It all looked like a movie to me. Like it is not real. It can’t be happening to me. Today I can’t go to the market. When I need to pass this area I will take the longer way. Just not to see it and remember. I also can’t handle the smell its bringing me the taste of mud and blood.

—Bystander at scene of suicide bomber in Israel (R. B., personal communication, October 26, 2005)

There’s always something to remind me, crawling into my mind, unbidden, for no obvious reason, in the shower, in line at the grocery store, I guess just because it is always there . . . I panicked at the rumble of freight elevators and low flying planes; I dreamed about running from my life. There was no way to escape . . . Every night I went home with the air smelled of smoke, the missing stared from fliers on every corner, and my wife never wanted to let me out of her sight again . . . I was trying to find some way to talk about what I saw, heard and tasted, someway to articulate the emptiness that crawled beneath my skin.

—Survivor of World Trade disaster (Lisberg, 2005, pp. 126–127)

Toward the development of a unified and comprehensive definition for the acute stress response this article reviews the knowledge currently available and attempts to integrate insights gained from CSR veteran studies into the realm of nonmilitary psychiatry. As an initial step our article aims to: (a) provide a critical comparison among ASD, ASR, and CSR definitions; (b) present findings from prospective studies of ASD, ASR, and CSR that will enable examination of the predictive value of the current acute stress response definitions; and (c) raise nosological considerations...
and challenges for further research concerning future diagnostic criteria of acute stress responses.

Comparison: ASD, ASR and CSR

The way in which a psychiatric condition is conceptualized and defined has a significant impact on both the clinical identification threshold and the further investigation of the nature and prevalence of the condition. Thus it is important to consider the potential strengths and weaknesses of each approach as well as the links among them. ASD, ASR, and CSR can be compared and contrasted with regard to multiple features including the tradition on which they are based; the setting in which they have been used and studied; the stressor criterion described, the time frame, and clinical picture; and the importance placed on functional decline (see Table 1).

The first important contrasting feature is the fact that ASD was developed for its prognostic value (Spiegel, Classen, Cardena & Classen, 1996) in which ASR and CSR are more descriptive in nature. It has been argued by some that because the prevalence of acute symptoms in the aftermath of trauma is initially quite high and diminishes spontaneously in many individuals, that the value of an acute stress response diagnosis lies solely in its ability to identify those at risk for long term sequelae (Bryant & Harvey, 2000). However, in the midst of a traumatic event, immediate symptoms and poor functioning have significant implications and thus identification of acute conditions may also hold intrinsic value beyond identifying those at risk for future consequences.

The second important difference among ASD, ASR, and CSR is the type of events and setting on which they were based (i.e., single and circumscribed vs. wide-spread and cumulative). The feasibility and precision of ASR, ASD, and CSR in circumstances other than those for which they were developed is an unanswered but important question. Furthermore, the accuracy of diagnosis may be compromised when clinicians themselves are experiencing various ongoing stressors.

The third area of difference among ASD, ASR, and CSR is the inclusion of a subjective criterion in the definition of the stressor required for ASD. The relative contribution of this subjective component remains debatable. On the one hand numerous reports have demonstrated the importance of the subjective response to the prediction of posttraumatic stress disorder (PTSD; e.g., Bryant & Harvey, 1996; Speed, Engdahl, Schwartz, & Eberley, 1989). On the other hand this requirement is problematic in the context of dissociation that could act to mask any emotional response (Bryant & Harvey, 2000).

A fourth area of difference to consider is the time frame and clinical picture of these definitions, with CSR being the most immediate and inclusive and ASD being more delayed and specific. These differences in symptom description do not necessarily suggest that ASD, ASR, and CSR are different clinical entities, but rather they may reflect the natural history of trauma responses. In the immediate aftermath of trauma symptom constellations are often amorphous (Yitzhaki, Solomon, & Kotler, 1991). Within a few days these symptoms of acute distress crystallize into a clinical picture that resembles PTSD and depression (Shalev et al., 1998). Thus by focusing on different time periods following the trauma the different definitions may be describing various phases of the same condition.

Finally, the role of functional decline in defining and identifying acute stress responses differs among ASD, ASR, and CSR. ASD does not include a functional requirement, whereas both CSR and ASD do to deferring degrees. The inclusion of a functional requirement is important as it acknowledges that many of the symptoms seen in these disorders may be adaptive in stressful situations, but they become pathological when they are so great that they impair functioning (Solomon, 1993).

Predictive Value of Acute Stress Responses

Multiple studies have been conducted examining the predictive value of the ASD, ASR, and CSR paradigms. Generally speaking, studies of ASD have been conducted on victims of acute, circumscribed traumas involving individual victims and the follow-up has been relatively short (see Table 2). Only a few studies of ASR have been conducted and their follow-up period was less than 1 month. Most studies have examined PTSD as the only outcome variable. In contrast, studies using the CSR diagnosis have included a longer follow-up period and examined multiple areas of psychosocial outcomes. We have reviewed the currently available prospective research on this topic and in this section we review the predictive value of ASD, ASR, and CSR based on this literature.

Table 1
Comparison of ASD, ASR, and CSR

<table>
<thead>
<tr>
<th></th>
<th>ASD</th>
<th>ASR</th>
<th>CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradition</td>
<td>Means of identifying individuals at risk of developing PTSD</td>
<td>Means of describing immediate response to trauma</td>
<td>Means of identifying those unable to function as combatants</td>
</tr>
<tr>
<td>Setting/events</td>
<td>Multiple—mostly single, circumscribed stressors</td>
<td>Multiple—mostly single, circumscribed stressors</td>
<td>Use in combat—stressors accumulative and wide-spread</td>
</tr>
<tr>
<td>Stressors criteria</td>
<td>Objective and subjective</td>
<td>Objective</td>
<td>Objective</td>
</tr>
<tr>
<td>Time frame</td>
<td>No onset specifiers; lasts 2 days to 1 month</td>
<td>Immediate onset, duration 48 hr</td>
<td>Immediate onset, no duration limit</td>
</tr>
<tr>
<td>Clinical picture</td>
<td>Specific and static</td>
<td>Polymorphic and labile</td>
<td>Polymorphic and labile</td>
</tr>
<tr>
<td>Functional criteria</td>
<td>Nonspecific—clinically significant distress or impairment</td>
<td>None</td>
<td>Specific—ceasing to function as a combatant</td>
</tr>
</tbody>
</table>

Note. ASD = acute stress disorder; ASR = acute stress reaction; CSR = combat stress reaction; PTSD = posttraumatic stress disorder.
ASD Studies

The value of ASD for predicting PTSD has been examined using various trauma paradigms. In studies of motor vehicle accidents (MVAs) the diagnosis of ASD in the month following the trauma correctly predicted the development of PTSD in 42% to 72% of participants (Movs et al., 2006; Harvey & Bryant, 1998, 1999; Holeva, Tarrier, & Wells, 2001). Taken together these findings indicate that the ASD diagnosis has value in identifying those who will develop PTSD; however, the same studies indicated that of those that developed PTSD only 29% to 73% had been classified as having ASD.

In populations of assault victims the specificity was slightly better with between 83% and 90% of those diagnosed with PTSD having been previously diagnosed with ASD (Brewin, Andrews, Rose, & Kirk, 1999; Elklit & Brink, 2004). In medical related traumatic events the sensitivity and specificity are less encouraging. Only 17% to 33% of samples that were originally diagnosed with ASD had PTSD between 7 months and 1 year later (Creamer, O’Donnell, & Pattison, 2004; Ginzburg et al., 2003; Kangas, Henry, & Bryant, 2005). Finally, with regards to terrorism, one prospective study found that 4 months after a terror attack, 44% of those initially diagnosed with ASD went on to be diagnosed of PTSD (Kutz & Dekel, 2006).

Recognizing that the full ASD diagnosis may be too restrictive some studies have also examined the potential of subclinical ASD to predict the development of PTSD. There have been two different definitions of subclinical ASD used; either a diminished threshold on the Acute Stress Disorder Scale (ASDS; Bryant, Moulds, & Guthrie, 2000) or meeting all the criteria for ASD other than having three dissociative symptoms. Results have shown that 12% of cancer patients, 46% of assault victims, and 72% of MVA casualties who met all the criteria for ASD other than the dissociative features later developed PTSD (Elklit & Brink, 2004; Hamanaka et al., 2006; Kangas et al., 2005). Using ASDS scores, Fuglsang, Moergeli, and Schnyder (2004) demonstrated that by using a less stringent score (> 55 total score) they could increase the identification of those who would later develop PTSD from 28% to 44%. Thus it appears that by excluding dissociation as a necessary criterion for ASD the predictive value may increase.

Data on outcomes other than PTSD related to acute, circumscribed trauma are minimal. However a few studies have indicated that depression, anxiety, and substance abuse disorders occur both as comorbid disorders and in isolation in the aftermath of trauma (Kangas et al., 2005; Kessler, Sonnega, Bromet & Hughes, 1995). Some studies have reported a higher probability of developing depression following ASD (Fullerton, Ursane, & Wang, 2004; Wang, Tsay, & Bond, 2005) as well as panic attacks (Nixon & Bryant, 2003). In sum, these results suggest that the diagnosis of ASD may have the potential to identify individuals at higher risk of developing a range of sequelae. Further long-term studies are needed to clarify the breadth and longitudinal course of these impairments following ASD.

---

Table 2

Summary of Prospective Studies of the Relationship Between (ASD and PTSD) Among Adults (1998 to 2006)

<table>
<thead>
<tr>
<th>Author and year</th>
<th>Event</th>
<th>N</th>
<th>Follow-up</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kutz &amp; Dekel (2006)</td>
<td>Terrorist attack</td>
<td>44</td>
<td>4 months</td>
<td>44% who had been initially diagnosed with ASD subsequently developed PTSD</td>
</tr>
<tr>
<td>Holeva et al. (2001)</td>
<td>MVA</td>
<td>265</td>
<td>4-6 months</td>
<td>72% who had been initially diagnosed with ASD subsequently developed PTSD; 69% who had been diagnosed with PTSD had diagnosis of ASD</td>
</tr>
<tr>
<td>Harvey &amp; Bryant (1998)</td>
<td>MVA</td>
<td>71</td>
<td>6 months</td>
<td>78% who had been initially diagnosed with ASD subsequently developed PTSD; 39% who had been diagnosed with PTSD had diagnosis of ASD</td>
</tr>
<tr>
<td>Brewin et al. (1999)</td>
<td>Assault</td>
<td>138</td>
<td>6 months</td>
<td>83% who had been initially diagnosed with ASD subsequently developed PTSD</td>
</tr>
<tr>
<td>Hamanaka et al. (2006)</td>
<td>MVA</td>
<td>100</td>
<td>6 months</td>
<td>42% who had been initially diagnosed with ASD subsequently developed PTSD; 72.2% who had been initially diagnosed with ASD or partial ASD subsequently developed partial or full PTSD</td>
</tr>
<tr>
<td>Elklit &amp; Brink (2004)</td>
<td>Assault</td>
<td>214</td>
<td>6 months</td>
<td>90% of the initial ASD cases had PTSD at 6 months, and 11% received a subclinical PTSD diagnosis; 51% of the subclinical ASD cases had PTSD at 6 months, and 46% received a subclinical PTSD diagnosis</td>
</tr>
<tr>
<td>Fuglsang et al. (2004)</td>
<td>Traffic accident</td>
<td>90</td>
<td>6-8 months</td>
<td>28% of the patients who scored above the ASDS cutoff had a PTSD diagnosis according to PDS; using the second cutoff score of 56 for ASDS total score, 44.4% reached the threshold for PTSD</td>
</tr>
<tr>
<td>Ginzburg et al. (2003)</td>
<td>Myocardial infarction</td>
<td>116</td>
<td>7 months</td>
<td>6% of the respondents had both ASD and PTSD, 10% did not have ASD but did have PTSD, and 12% had ASD but not PTSD</td>
</tr>
<tr>
<td>Creamer et al. (2004)</td>
<td>Severe injury</td>
<td>307</td>
<td>1 year</td>
<td>Only 1% of the sample met criteria for an ASD diagnosis, whereas the incidence of PTSD was 10% at 12 months</td>
</tr>
<tr>
<td>Kangas et al. (2005)</td>
<td>Cancer</td>
<td>82</td>
<td>1 year</td>
<td>17% who had been initially diagnosed with ASD subsequently developed PTSD; 12% who had been initially diagnosed with subsyndromal ASD subsequently developed PTSD</td>
</tr>
<tr>
<td>Harvey &amp; Bryant (1999)</td>
<td>MVA</td>
<td>56</td>
<td>2 years</td>
<td>63% who had been initially diagnosed with ASD subsequently developed PTSD; 29% who had been diagnosed with PTSD had diagnosis of ASD</td>
</tr>
</tbody>
</table>

Note: ASD = acute stress disorder; PTSD = posttraumatic stress disorder; MVA = motor vehicle accident.
ASR Studies

To the best of our knowledge there have been only a few short-term studies using the current ASR paradigm. These studies assessed ASR in earthquake victims. The first examined the incidence of ASR as well as the incidence of Protracted ASR, defined as ASR lasting greater than 48 hr. They found that 70% of victims met criteria for ASR in the first 48 hr, and that 60% continued to report symptoms after the initial 48 hr (Bergman, Pappas, Varsou, Paparrigopoulos, & Soldatos, 2003). The second study (Soldatos, Paparrigopoulos, Pappa, & Christodoulou, 2006) examined the association between ASR diagnosis and the development of early PTSD. Eighty-five percent of their research participants fulfilled the diagnostic criteria for ASR, and 43% developed PTSD. Of those who developed PTSD, 97% had experienced an episode of ASR.

Thus, the thought that ASR is primarily a transient condition that resolves within 2 days appears to be presumptuous. In fact, the diagnosis appears to identify almost all individuals who go on to develop PTSD. In this way ASR has the potential to identify an inclusive “at-risk” group of individuals who have experienced a traumatic event, unfortunately the specificity of this diagnosis is low. More research is needed to examine ASR across different types of traumatic events and long-term outcomes.

CSR Studies

The psychiatric consequences of exposure to combat related stressors have been observed following multiple wars and in many different cultures (Bar-On, Solomon, Noy, & Nardi, 1986), and investigators have examined the role of acute responses in predicting these long-term sequelae.

Archibald and Tuddenham (1965) examined American soldiers from World War II and the Korean War 20 years after they had been diagnosed with combat fatigue. They found that compared to a noncombat veteran mental health patient group and combat veteran control group, the soldiers who had suffered from combat fatigue reported more ongoing stress related symptoms. Three-quarters of the combat fatigue group felt that their symptoms were interfering with providing for their families and enjoying their hobbies. Half stated that they were unsatisfied with their sex lives and were unduly irritable with their children, and one-third were unemployed.

In contrast, Kettner (1972) did not find any significant differences between a small and highly selected group of 35 Swedish soldiers who served in the Congo and had suffered from combat exhaustion compared to matched controls who had not suffered from combat exhaustion. This finding was thought to be explained not only by the small sample size and the highly selected population, but particularly by the low combat stress exposure compared to veterans of World War II (Solomon, 1993).

The most extensive prospective studies of CSR have been conducted in Israel examining casualties of combat related trauma following both the 1973 Yom Kippur and 1982 Lebanon Wars.

Eighteen years after the Yom Kippur War, CSR veterans were found have lower PTSD recovery rates than comparable control veterans; 37% of the veterans with antecedent CSR reported to have suffered from PTSD, compared to 23% of the comparable veterans without a diagnosis of CSR (Solomon & Kleinhaus, 1996). Furthermore, these veterans with CSR also had higher rates of physical symptoms, adverse health practices (Neria, & Koenen, 2003) and general psychiatric symptoms (Neria et al., 2000).

Similar studies following the Lebanon War have traced the 20-year longitudinal course of combat-induced psychological, psychiatric, and somatic conditions in a representative sample of CSR casualties and matched controls that had participated in similar levels of combat but had not suffered a CSR episode. Assessments were conducted at 1, 2, 3, and 20 years after the 1982 war.

With respect to the trajectories of PTSD it was found that soldiers who suffered from CSR during combat were more likely to develop PTSD at all four study points (see Table 3). Moreover individuals in the CSR group showed significantly higher levels of symptoms across all years and a more persistent course of PTSD. The odds of CSR casualties endorsing PTSD symptoms unInterruptedly were 6.6 times higher than those of veterans without CSR. Thus CSR can be seen as a predictor of the later development severe persistent PTSD (Solomon & Mikulincer, 2006).

PTSD, however, was not the only deleterious outcome observed in the CSR group. Individuals in this group also endorsed significantly greater general psychiatric symptomatology and distress, more difficulties with social functioning (Solomon, Shklar, Singer & Mikulincer, 2006), and more health related problems than those in the non-CSR group (Benyamini & Solomon, 2005).

Very few studies have been conducted examining the effects of ongoing conflict in Iraq and Afghanistan and there are no studies monitoring the immediate responses to traumatic events in the theater of operations. The studies that have been published have reviewed the diagnoses given to soldiers evacuated for psychiatric reasons (Rundell, 2006; Turner et al., 2005). These studies show that 5.5 to 6.9% of psychiatrically evac-

### Table 3

<table>
<thead>
<tr>
<th>Diagnosis and year</th>
<th>% of veterans with CSR</th>
<th>% of veterans without CSR</th>
<th>Odds ratios</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD at Year 1</td>
<td>64.12</td>
<td>12.05</td>
<td>8.64</td>
<td>4.10–18.19</td>
</tr>
<tr>
<td>PTSD at Year 2</td>
<td>58.78</td>
<td>7.23</td>
<td>11.53</td>
<td>4.69–28.33</td>
</tr>
<tr>
<td>PTSD at Year 3</td>
<td>39.69</td>
<td>6.02</td>
<td>9.63</td>
<td>3.65–25.41</td>
</tr>
<tr>
<td>PTSD at Year 20</td>
<td>26.72</td>
<td>7.23</td>
<td>4.68</td>
<td>1.87–11.70</td>
</tr>
</tbody>
</table>

*Note.* PTSD = posttraumatic stress disorder; CSR = combat stress reaction; CI = confidence interval.
ated soldiers receive a diagnosis of ASD or ASR. Unfortunately these studies are retrospective in nature and have missed a potentially large proportion of soldiers who were not evacuated. Furthermore, there have been no studies published using the CSR paradigm. There is an important need for prospective research in this area to further understand the immediate and long-term implications of the war related traumatic experiences ongoing in many parts of the world.

Implications for Research and Relevance to Clinical Practice

It is clear from this review of the literature that several important questions remain concerning the relevance, applicability, and predictive value of the current definitions of the acute stress response.

**Do the Current Diagnoses Adequately Capture the Complex Nature of Acute Stress Responses?**

ASR and ASD as they are currently formulated are mutually exclusive and either diagnosis alone is too narrow to adequately describe the full range of acute stress responses. ASR includes a broad range of peritraumatic responses; however, the notion of rapidly resolving symptoms appears to be presumptuous. ASD acknowledges the sometimes prolonged nature of acute stress responses and their value as predictors of PTSD, but by delaying the diagnosis by at least 48 hr important information about the immediate response may be disregarded and a potentially important therapeutic window overlooked.

Toward the publication of the *DSM–V* it may be important to consider one acute stress response diagnosis that covers the full range and various degrees of severity of the acute responses in the first days after the event (as in ASR) as well as the later developing clusters of symptoms (as in ASD). This change could enhance current clinical practice by providing definitions for the full spectrum in time and symptom profile of acute stress responses, thus enabling the accurate diagnosis of these victims of trauma.

**Are All Types of Stressors Commensurate?**

Another important issue that needs to be given further consideration is the type of stressor required for the ASR and ASD diagnoses. The literature deals mainly with the qualification of Criteria A for PTSD (e.g., Breslau & Kessler, 2001) and little attention has been paid to the question of whether the cumulative, continuous, and changing stressors of combat, terror, and natural or man-made disasters could be considered together with those that occur in a single, discrete, and encapsulated trauma (e.g., a car accident).

The combination of stressors and the protracted nature of combat, terror, and disasters have the potential to affect many areas of victims’ lives even after the cessation of the traumatic event (Norris et al., 2002; Solomon et al., 2006). Theoretically it is likely that an acute incident in an otherwise well maintained social structure and natural environment would not have the same depth and breadth of effects.

In looking to compare among different types of traumatic events it might be wise to consider the type of event in question and to compare only those that induce similar levels and types of physical and social destruction. Further research is needed to determine the empirical validity of this approach, and given the recent concerns of increasing frequency of terrorism, disasters, and combat around the world, it is important to engage in such studies.

**Do Acute Stress Responses Have the Potential to Predict Outcomes Other Than PTSD?**

The vast majority of ASD and ASR studies have focused on PTSD as the only outcome variable of interest, however, emerging evidence on ASD alongside the insights from CSR research would suggest that PTSD is not the only important form of distress subsequent to traumatic events. CSR studies have clearly demonstrated that the experience of psychological breakdown during battle can have wide and enduring effects on the psychiatric, somatic, and interpersonal well-being of veterans (e.g., Solomon et al., 2006). Awareness of the full range of important outcomes is essential for the treatment of trauma victims, and future research might benefit from casting a broader net when looking at outcomes to determine the scope of the effects that can be expected from other types of stressors.

**What Role Does Functional Decline Play in Identifying Those at Risk?**

It has been demonstrated that early PTSD symptoms are common and show an overall decline during the first month (e.g., Foa, Stein & McFarlane, 2006). As such, these symptoms alone do not effectively predict PTSD (Shalev, Freedman, Peri, Brandes, & Sahar, 1997). The diagnosis of ASD addresses this problem with the inclusion of Criterion F, (i.e., clinically significant distress and interference with functioning), as an effort to differentiate between those with pathological reactions and those likely to recover spontaneously. Unfortunately this functional criterion as it is currently formulated is vague and perhaps under emphasized.

Prospective studies of CSR have shed light on the strong predictive power of the functional criteria alone, and the importance of functional decline as a risk factor for future PTSD and other somatic and psychiatric symptoms. Subsequently, it is suggested that the current significance of the function criteria in the diagnosis of ASD and ASR might benefit from being reconsidered and their value as a predictive factor of future psychopathology be reassessed.

**Summary**

This article critically compares the diagnostic criteria of ASD, ASR, and CSR to better understand how CSR might fit within the spectrum of other defined acute stress responses. The predictive value of these definitions is examined through a review of the currently available prospective follow-up studies. Suggestions and implications for clinical practice are made with respect to: (a) the development of a unified definition for acute stress responses; (b) comparing between types of stressors; (c) the expected outcomes of traumatic experiences; and (d) the importance of the decline in functioning as an indicator of future psychological, psychiatric, and somatic symptoms.

**References**


Received July 27, 2008
Revision received July 27, 2008
Accepted September 22, 2008