Dealing with Extreme Stressors

Obviously, not all people are affected by a disaster or catastrophe in the same way and to the same extent. Broadly speaking, three sets of factors interact to produce an individual's response to traumatic stress.

Factor	Explanation
The stressor	Effects are linked to the intensity of the event, the level of threat experienced and the amount of loss the person sustains. The higher the level of each, the greater the stress reaction.
The person	Effects are mediated by the person's cognitive appraisal of the stressor. Those with an external locus of control and low self-efficacy tend to react more strongly. Additionally, those with pre-existing psychological problems tend to suffer more.
The social environment	The effects of the stressor are inversely related to the amount of social support available. The greater the support available from family, friends, the community and healthcare professionals, the lesser the intensity of the stress reaction.

In general, then, the findings of research into individual differences amongst trauma survivors are consistent with research into more everyday stressors, with the proviso that, since the stressor itself is of an extreme nature, the victim's response may be similarly great.

Intervention Before and After Disasters

Given the degree of psychological suffering experienced by survivors of disasters it is not surprising that some researchers have investigated how such effects might be reduced through intervention before and after the event.

Before the Event

In general, a stressor has less of an impact if the person exposed to it has been warned. Although some disasters and catastrophes are entirely unexpected, a substantial proportion can be predicted, at least in principle. For example, some areas are known to be more prone to earthquakes or extreme weather (hurricanes, tornados) than others are. In many such areas, people are given information and training about what to do in an emergency. Schoolchildren in the part of the United States known as 'Tornado Alley' are regularly drilled in the procedures to follow during a tornado, much as British schoolchildren are given regular fire drills. In addition, information is available to householders on how to construct adequate storm shelters for the home. Clearly, this information is likely to be beneficial in helping people to avoid the immediate effects of such disasters.

However, it is also clear that such interventions will only be of use insofar as the target audience is prepared to attend to and follow the advice given. A range of factors could affect whether this is the case. First, the target audience must consider the threat to be a credible one. This is more likely to happen if they have been affected by similar disasters in the recent past. Therefore, in Tornado Alley, 'tornado drill' is generally taken seriously and the many householders able to take some precautionary measures do so. However, as with any threat, those at risk may protect themselves from anxiety by adopting the belief that, whatever the threat is, it will never really happen and therefore take no action (compare this with some of the reasons why people have been slow to adopt measures to halt environmental damage). During the Cold War years, the British Government made many attempts to educate the public about what to do in the event of a nuclear attack, most memorably through the 'Protect and Survive' film and leaflets, which gave advice on building a shelter, stockpiling food, basic medical care and so on. However, it appears that the majority of British people preferred not to dwell on the possibility of a nuclear attack and ignored the campaigns (although it is fair to surmise that when the threat was most salient, as during the Cuban missile crisis, public attention to such government information did increase).

In addition to the target audience's perception of the threat's credibility, there is also the question of whether the advice offered by the authorities is seen as similarly credible. To remain with the example of Protect and Survive, many people took the view that, in the event of a nuclear attack, they were unlikely to survive the immediate aftermath if the attack itself did not kill them. Hence, taking the precautions advised by the government would have been pointless. In some quarters, a certain amount of (albeit grim) amusement was derived from the suggestion in the Protect and Survive material that once the all clear had sounded, people could resume their normal activities.

Of course, the effectiveness of damage limitation advice depends not only on people's willingness to follow it but also on their material ability to do so. It remains the case that in many of the areas most likely to be affected by disasters the populace is poor and hence may materially be unable to comply with advice about strengthening buildings, constructing shelters and stockpiling food and medical supplies.

Behaviour Following Disaster Warnings

Some authorities have suggested in the past that warnings should not be given when a disaster is imminent. Although warning information could lessen the

Warning Myth	Reality
People panic when warned about an imminent disaster	Panic has never been recorded as a response to a disaster warning. However, panic can occur when there is a clear sign of threat, a narrow window of escape and it is clear that not everyone will escape the threat.
People get confused if they are given too much information	People under threat of disaster often feel 'information starved'. They want detailed information and will use alternative sources (e.g. television news channels) if they feel they are not getting enough information from the authorities.
If repeated warnings are given, people stop taking them seriously (the 'cry wolf' phenomenon)	People respond to warnings even if false alarms have occurred in the past. Those who do not respond are those who do not perceive themselves to be at risk in the first place. The exception to this is that sirens that go off frequently and for no apparent reason tend to be ignored.

psychological impact of a disaster and reduce loss of life, there is the possibility that people may panic, with predictably negative consequences. According to Sorensen, (2002) this is unlikely to happen. Sorensen suggests that 'keeping people in the dark' to stop them from panicking inevitably does more harm than good. It is a strategy based on a number of 'warning myths', some of which are outlined in Table 2.

Sorensen suggests that the effectiveness of disaster warnings can be enhanced by focusing on two features:

- **The message content:** this should include a description of the hazard and its impact, its predicted location, what action to take and when to take it. It should also include sources for further information.
- **The message style:** this should be clear to all audience members, be specific and accurate and delivered in an authoritative, confident way. Additionally, it should be consistent. If there is any change in the information being put out, then the basis for this change should be explained.

After the Event

For a number of years it has been common (where possible) for survivors of disasters and catastrophes to be offered some sort of counselling or therapy in the immediate aftermath. The assumptions on which such interventions are based are first, that those exposed to disasters are at an increased risk of mental health problems and second, that the earlier they are given help the fewer psychological problems they will experience. Although a number of different interventions have been used, one that has caused particular controversy is '**Critical Incident Stress Debriefing**' (CISD) or 'Psychological Debriefing'. CISD takes a range of different forms, but usually has the following features:

- **On-scene or near-scene debriefing**: the survivor discusses the disaster as near as possible to the scene and as soon as possible after the event. The counsellor observes them for signs of acute stress reaction.
- **Initial defusing**: within a few hours of the disaster, survivors are invited to discuss their feelings and reactions. The aim is to provide a supportive atmosphere and any insensitive or overly 'tough' comments are discouraged.
- **Formal CISD**: within 48 hours of the event, survivors engage in a structured debriefing session in which they describe what they did during the incident and how they felt about it as well as any stress symptoms they are experiencing.
- **Follow up**: weeks or months after the initial CISD, survivors are reassessed on a group or individual basis in order to provide additional support and counselling if necessary.

Because of the nature of their work, adoption of CISD-type interventions has been greatest amongst emergency services organisations. However, it has also been used in more general health-care settings, in commercial organisations and in education as a response to a variety of 'critical incidents' including accidents, suicides, workplace violence and terrorist attacks. In some organisations, belief in the effectiveness of CISD – coupled with a belief that non-intervention is actively damaging to the survivor – has led to it being introduced as a compulsory measure for workers exposed to a critical incident.

Although the rapid and widespread adoption of CISD might suggest an effective psychological intervention for disaster survivors, some commentators (e.g. Gist 2002) propose that its popularity has more to do with aggressive marketing and widespread coverage in the specialist media than clinically demonstrable effectiveness. A number of well-conducted studies have more recently suggested that, at best, CISD does not improve the prognosis for survivors of disasters and, at worst, may actually inhibit normal recovery for some people. A major review by Rose et al (2001) of a number of clinical trials concluded that CISD was not effective in preventing or reducing PTSD and that its compulsory use after critical incidents should stop. National Health Service guidelines on the treatment of trauma victims now classify CISD and similar interventions as contraindicated (i.e. specifically not to be used; Parry, 2001).

Gist (2002) draws several conclusions about why CISD can be counterproductive when used with disaster survivors. Amongst these are:

- Forcing people to relive traumatic events very soon after they have happened can overload their coping systems. It appears to be more useful for survivors to cognitively distance themselves from events, in order to be able to reframe them in a more positive way later on.
- Giving immediate and obvious help to survivors may undermine their feelings of self-efficacy, especially if they are able to cope effectively without assistance. However, feelings of self-efficacy appear to be very important in successful psychological adjustment following traumatic stress.

This does not mean that psychologists and counsellors have nothing to offer those affected by disasters. There will always be people affected to a sufficient degree, or sufficiently cut off from effective social support to benefit from formal psychological intervention. However, many researchers now agree that many of those so affected recover from the initial shock and trauma without psychological treatment, usually within a few weeks or months of the disaster (Salzer and Bickman, 1999). Recovery in these cases is assisted by informal 'therapeutic' processes such as support from peers and family. Gist (2002) makes the following recommendations concerning current practice in psychological interventions following critical incidents:

- Immediate intervention should emphasise support available to survivors through natural (i.e. non-clinical) relationships and social support.
- Assessment of survivors should be made at about 4 weeks after the incident, when initial reactions have stabilised and those potentially in need of additional support can be more easily identified.
- Different levels of assistance should be made to survivors according to their actual needs. 'One size fits all' treatments are an inefficient way of allocating resources, besides being unhelpful in many cases.

The fact that therapeutic intervention appears to be unhelpful for the majority of disaster survivors has led an increasing number of researchers to question the traditional emphasis of much disaster psychology on individual stress effects. A number of studies have made clear that the psychological distress suffered by the majority of disaster survivors can have more to do with the difficulties encountered during recovery and reconstruction than the impact of the disaster itself. For example, Parker (1977) found that whilst initial psychological problems amongst a group of cyclone survivors were linked to fear of injury and death, after 10 weeks psychopathology was better predicted by problems such as loss of residence and possessions and disruption of social support. Additional 'recovery stressors' could include dealing with relief agencies, loss of employment and loss of social status (Flynn, 1999). Reviewing a number of such studies, Hutton (2001) concludes that CISD and similar interventions are 'likely to lack relevance to the needs of the vast majority of disaster survivors' (p.2). Hutton continues, 'people may benefit most from very concrete, explicit and directive assistance which enables them to attain the tangible goods and services required to overcome the material losses of a disaster' (ibid.).