

Terrorism, 9/11 and psychology

HOW much do psychologists really know about terrorism? It has been around for a long time, but it was not until the end of the 1960s that terrorism began to attract any degree of meaningful research interest within the social sciences. A recent review of academic research found that roughly 5 per cent of the published literature on terrorism was the work of psychologists or psychiatrists. In the 20 years prior to 9/11, there were probably fewer than 20 research-active psychologists in the area (Silke, 2003). Most papers are written by people who are not specialists and who will not write more than one or two articles on the subject over the course of their research careers (Silke, 2001). The result is that much research is very poorly aware of previous work and quite out of touch with established knowledge. So has 9/11 changed anything?

Early findings

The problems caused by patchy research in the area remain, demonstrated by repeated claims that terrorists may suffer from psychological disorders or illness, and that this is a useful way to explain their behaviour. Such claims have emerged consistently over the past three decades, and Pomerantz (2001), deMause (2002) and Meloy (2004) have offered the same arguments in the aftermath of September 11. Yet those who propose such views seem entirely unaware of the series of reputable studies concluded in the 1970s and 1980s in Germany, Canada, Northern



ANDREW SILKE looks at the responses, obstacles and ways forward.

Ireland, Italy and elsewhere. This research established that a psychopathological explanation of terrorism is simply not supported by clinical studies involving actual terrorists (Crenshaw, 2000). Likewise, arguments that al-Qaeda represents a new and different breed of terrorist appear unaware of the research of those such as Hassan (2002) and Sageman (2003), who have failed to find support for a psychopathological answer even in the extreme world of Islamist suicide bombers.

While confusion remains over the terrorists, 9/11 has certainly acted as a powerful catalyst to improve our understanding of the *impact* of terrorism, and already the findings of several studies on this subject are being published. Galea *et al.* (2002) conducted a random telephone survey of residents of Manhattan in the months after the destruction of the World Trade Center. They found that 7.5 per cent of the respondents reported symptoms consistent with post-traumatic stress disorder (PTSD) and 9.7 per cent reported symptoms consistent with depression. The closer one lived to the Twin Towers was found to be a major factor, with 20 per cent of those living in the vicinity of the World Trade Center showing symptoms of PTSD. The findings also emphasised the vicarious impact of the attacks: most of those displaying negative symptoms of PTSD and depression had not actually been at the Center when the attack occurred, they had not been in immediate danger and they were not related to direct victims. Galea *et al.* (2002) highlighted that these people turned to television, radio and the internet to learn about what had happened, and for some the media had then become an extremely significant vector of fear.

Schuster *et al.* (2001) also used a random-digit dial telephone survey of a US nationally representative sample to examine the immediate reactions of 560 adults to the September 11 attacks. Over 40 per cent of the sample reported at least one of five 'substantial stress symptoms', and 90 per cent reported at least low levels of stress symptoms. Physical proximity was again an important factor, with respondents who were closer to New York having the highest rates. Worryingly, a positive correlation between television exposure and stress was again established (Schuster *et al.*, 2001).

Silver *et al.* (2002), in a study involving 2729 respondents, found that 17 per cent of the US population outside New York reported symptoms related to post-traumatic stress in the first two months after the attacks, with 5.8 per cent still reporting such symptoms six months later. Higher levels of symptoms were significantly associated with female respondents, marital separation, those who had pre-existing psychological or physical health problems, the severity of exposure to the attacks, and early disengagement from active coping efforts (e.g. the respondents stopped seeking support from others, or used denial or self-distraction strategies).

In a separate study of 1142 respondents Jhll and Brant (2002) also found that women reported feeling more stress after the attacks, though women were also found to use more coping strategies than men and reported better psychological outcomes. Proximity to the attacks affected how people tried to cope, with New York City residents turning more to social support and using more active problem-solving

WEBLINKS

Psychology Applied to Peace, Conflict and Reconciliation (PAPCAR):

groups.yahoo.com/group/papcar

ESRC research programme on terrorism:

www.esrc.ac.uk/esrccontent/news/features2.asp

US National Center on Disaster Psychology and Terrorism: www.ncdpt.org

UK Home Office terrorism pages:

www.homeoffice.gov.uk/terrorism/index.html

strategies than those elsewhere. Coping strategies used by respondents was also found to be especially important factors associated with distress by Spiegel *et al.* (2002). Those with smaller social networks, poorer quality social support, and those who resorted to maladaptive coping styles (such as self-blame, substance use and emotional suppression) reported much higher levels of distress after the terrorist attacks.

The impact on vulnerable groups has also been considered. Schuster *et al.* (2001) examined children's reactions to the attacks by interviewing parents. Over one third of the parents reported that their children had at least one of five stress reactions, and almost half reported that their children had worried about their own safety or the safety

of loved ones. As with many of the other studies, there was a link between media exposure and reported stress symptoms, with the parents of children who viewed more television coverage of the attacks reporting an increase in observed stress symptoms. Though many parents discussed the attacks with their children, Schuster *et al.* (2001) did not find any relationship between the amount of discussion and the degree of stress symptoms.

Was 9/11 psychologically special?

How do these results relate to previous research on the impact of terrorism? The findings relating to the factors associated with post-traumatic symptoms are generally in agreement with previous work, highlighting the importance of variables

such as gender, proximity, past mental and physical health, and the coping strategies used. The concern about the negative psychological impact of media coverage was a finding that first came to light in the wake of the Oklahoma City bombing in 1995. While media coverage can have positive benefits, the growing evidence here of a link between exposure and traumatic stress symptoms remains a cause of serious concern (Pfefferbaum, 2003).

Other findings on the desire for vengeance after the attacks also match past research, with the fact that males expressed a greater need for vengeance than women (Johll & Brant, 2002), matching previous findings that males hold much more supportive attitudes to vengeance (Cota-McKinley *et al.*, 2001). It was interesting to note, however, that Johll and Brant (2002) also found that New York City residents actually reported a lower need for vengeance than other Americans. As one firefighter in their study put it: 'I wouldn't wish what happened to us on anyone.'

One early area of difference however is that the psychological impact of 9/11 appears to have been more malignant than that uncovered by past research. For example, after reviewing the research literature on the psychological impact of the Northern Irish troubles, Curran (1988) concluded that 'the campaign of terrorist violence does not seem to have resulted in any obvious increase in psychiatric morbidity'. Curran ascribed the general lack of harm to what he termed cohesion, noting that potential psychological ill-effects could be 'buffered by a state of rebound psychological well-being in the rest of the community'. Likewise, some research has suggested that often those with pre-existing psychological problems can actually report an improvement in the aftermath of a terrorist attack (e.g. Sharkey, 1997). But this does not seem to have happened in the US, where there are mixed findings on this issue with regard to 9/11.

A survey of over 2000 adult New York residents conducted five months after the attacks found that 2.7 per cent reported making more mental health visits than before the attacks and 2.8 per cent were using more psychiatric medication (Boscarino *et al.*, 2004). However, some positive changes were also noted: 3.9 per cent of the respondents reported making less use of mental health professionals than before the attacks, and 1.8 per cent reported less use of medications.

Reviewing data on England and Wales, Salib (2003) found that 9/11 was followed by a significant short-term reduction in the national suicide rate. The number of suicides reported in September 2001 was significantly lower than for any other month in 2001 and was lower than for any September in the previous 22 years.

Next steps?

Beyond the US it is fair to say that in most countries the response from the social sciences to September 11 has been relatively muted and largely uncoordinated. Even in the UK, which boasts (by international standards) a large, high-quality and productive behavioural science community, there has been no comprehensive campaign to harness the existing knowledge and skills.

Funding bodies have shown some response – for example the ESRC allocated some £600,000 in 2002 for a multi-university project on terrorism. The ESRC is also considering more bids on terrorism-related issues in its recent rounds, but so far very little has been awarded to psychologists. Though tackling terrorism is clearly a very high priority for the UK government, this has not been accompanied by a significant increase in research activity.

Can one build good policy without a foundation provided by good research? Perhaps. But evidence-led policy has been a cornerstone of UK government in recent years, and we do not currently try to tackle drug trafficking, street crime and juvenile delinquency without an adequate evidence base. Attempting to do otherwise in the context of terrorism then looks risky.

Overall, there has been no comprehensive national effort that could strongly link the knowledge and insight residing in the science communities with government agencies and activities. Individual university departments and professional organisations have tried to do their bit. The BPS for its part sponsored a short series of conferences hosted by Royal Holloway and the University of Ulster. These helped provide a useful focal point for the interested, but the series has now finished and it is far from clear how efforts will be taken forward. If government and industry are not willing to invest, it seems likely that endeavours must inevitably retreat to the isolated and sporadic research of previous decades.

In comparison, the US has been

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Evidence-led policy should be a cornerstone of UK government approaches to terrorism

ambitious in its efforts to fully harness what behavioural science has to offer. In 2000 the US government spent some \$727 million on terrorism-related research (primarily in the biological and medical areas). Post-9/11, the government has substantially increased on this figure, with at least an additional \$2.4 billion being thrust towards relevant research and development programmes. These sums exclude the considerable additional funding now coming from scientific organisations, charities and private industry.

Apart from the obvious motivating factor of the terrorist attacks on their own soil, the response of the social science community in the US has been aided by a number of other factors. One certainly is the massive size of that community, but the effort is also clearly benefiting from the presence of a number of multidisciplinary bridging organisations, and a clear government willingness to listen to and assist with efforts.

The Office of Science and Technology Policy – which directly advises the White House – organised a major review of relevant research and researchers in an effort to develop and coordinate counterterrorism efforts, as well as to produce more effective strategies to deal with the aftermath of terrorist attacks. The US National Academies involved the American Psychological Association in a large survey of the social and behavioural science community to bring together

accounts of relevant and potentially useful research. Formal meetings between social science experts and members of government departments and law enforcement agencies were organised and are continuing to be held in order to exchange ideas, information and to identify needs and knowledge gaps.

Further, the US Department of Homeland Security (DHS) is now funding the creation of several Centers of Excellence within the university sector to specialise in research on different aspects of terrorism. DHS has also separately awarded some 100 fellowships for graduate and postgraduate students to carry out dissertations on terrorism, with many further fellowships planned.

So what are the key knowledge gaps that could perhaps be explored productively and from a research perspective? As indicated earlier, our understanding of extremists such as al-Qaeda is very limited. Developing a better understanding of the life patterns and motivations of members of such groups and their sympathisers is a critically important issue. It is important to move beyond explanations based on personality defects and deviance, and instead explore the process by which such people become, and remain, involved in extremism. Perhaps even more important is research which can throw light on the factors that may play a part in explaining why communities can support or tolerate such

It is clear, even now, that the intense study of the aftermath of the attacks, generated in the US in particular, will give us a much deeper understanding of the psychological impact of terrorism. Lessons being learned will help to improve responses to future attacks, to ameliorate and alleviate the suffering of victims (both those directly caught up in violence and those who are victimised more vicariously).

Beyond those areas, however, it is very unclear what lasting impact will be observed. Many crucial areas appear to be going largely ignored (especially those concerned with attitudes to extremism among ethnic communities) and when the next mass casualty terrorist atrocity occurs, we may find ourselves asking the same questions and still having no better responses.

But there is some cause for hope. The 9/11 events have provided the impetus for creating a number of specialist organisations dedicated to improving knowledge on many aspects of the problem. For example, in 2002 the US established a National Center on Disaster

Psychology and Terrorism, in Palo Alto, California. This small but growing institute is focused on conducting new research, on developing and evaluating new interventions for victims and rescue workers, and on providing training to practitioners. The potential for such a centre to have a positive and long-running impact seems very good indeed.

There are also promising developments closer to home. Most notably, the creation of Psychology Applied to Peace, Conflict and Reconciliation (PAPCAR), a new working group affiliated with the BPS. PAPCAR aims to assist and focus the efforts and interests of psychologists here (both researchers and practitioners) who are concerned with all aspects of conflict, its origins, its prevention and the amelioration of the suffering of its victims (see weblinks). It is a worthy effort and one which will hopefully receive the support it needs and deserves.

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extremism. For example, a research team based primarily at the Royal Holloway has carried a small pilot study on attitudes among practising Muslims in the UK, which did reveal differences in attitudes and sympathies towards extremism (Ansari *et al.*, 2002). Similar work is badly needed.

Research issues being prioritised in the US include efforts to examine the social and behavioural characteristics of modern terrorists and the implications this may have in terms of deterring and preventing terrorism. The role of cultural and religious values has been highlighted as an area of critical interest, along with the influence of individual and group dynamics. Research energy is also being focused on response, with psychological studies exploring how to frame government responses to terrorist threats and ways in which to improve critical incident management.

At this stage, it is not possible to clearly assess what has been achieved by this work or in what particular areas efforts are making substantial progress. What is clear is that the US is making a serious and detailed effort to make thorough use of its social science resources to see how these can assist in the war against terrorism. It is difficult to imagine that the benefits from such an extensive endeavour will prove limited and few.

Concluding thoughts

What will the lasting impact of the terrorist attacks of September 11 be on psychology?

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