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In the shadow of terror: Posttraumatic stress and psychiatric co-morbidity following bombing in Iraq: The role of shattered world assumptions and altered self-capacities

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ABSTRACT

Whilst research has looked at posttraumatic stress disorder (PTSD) and psychiatric co-morbidity among civilians exposed to bombing, there is a lack of longitudinal data on the development of these outcomes and the psychological factors associated with them, particularly among Iraqi civilians. This study aimed to: investigate 1) the trajectory of PTSD and psychiatric co-morbidity following bombing among civilians in Iraq and 2) the link between shattered world assumptions, altered self-capacities and identified health outcomes. One hundred and eighty (F = 90, M = 90) Iraqi civilians exposed to first time bombing were recruited approximately one month (time 1) after the bombing and five months (time 2) after the baseline assessment. A control group data (178, F = 91, M = 87) from people who were not exposed to bombing was also collected. They completed the Posttraumatic Stress Diagnostic Scale, the General Health Questionnaire-28, the World Assumptions Questionnaire and the Inventory of Altered Self-Capacities. The results showed that there was a significant decline in the proportion of people meeting the screening criteria for PTSD and psychiatric co-morbidity symptoms over time. For the cross-sectional analysis, controlling for demographic variables, regression analysis showed that severity of the bombing ($\beta = .16$), controllability of events ($\beta = -.21$), safety and vulnerability ($\beta = .31$) and affect dysregulation ($\beta = .37$) significantly predicted PTSD time 1. Controllability of events ($\beta = -.20$) and affect dysregulation ($\beta = .37$) also predicted psychiatric co-morbidity at time 1. For the prospective analysis, controlling for PTSD and psychiatric co-morbidity at time 1, none of these dimensions predicted PTSD and psychiatric co-morbidity at time 2. Findings are discussed in terms of individual resilience. It can be concluded that following bombing, civilians developed PTSD and psychiatric co-morbidity which declined over time. Civilians' perceptions of their ability to control events in the world and regulate their affect had a short term impact on the severity of these symptoms.

1. Introduction

Since 2003, there has been a dramatic increase in severe conflict, including war and terrorist attacks in Iraq. The capital, Baghdad, and several other cities have been repeatedly subjected to terrorist bombings (see Fig. 1). Thousands of Iraqi people have been killed and wounded, mostly by suicide bombers in crowded public places. Existing studies indicate that people who live in war and conflict zones are at a high risk of psychological and emotional instability that is considered of sufficient severity to be diagnosed as psychological disorders (Mollica et al., 2001; Smith et al., 2001).

These bombing attacks have been found to lead to many facets and complexities of posttraumatic and psychiatric co-morbidity among survivors (North et al., 2011). Studies conducted following the Oklahoma City bombing in 1995 and other bombing attacks around the world broadly support findings of severe consequences. North et al. (2011) found the prevalence of PostTraumatic Stress Disorder (PTSD) symptoms among survivors of the Oklahoma City bombing ranging from 34% to 41% and 45% had post-disaster psychiatric symptoms. Verger et al. (2004) propose that 31% developed PTSD symptoms after the France bombing in 1994–1996. Moreover, 35.6% of the bombing attack survivors in Istanbul in 2003 have since developed PTSD symptoms (Page et al., 2009).

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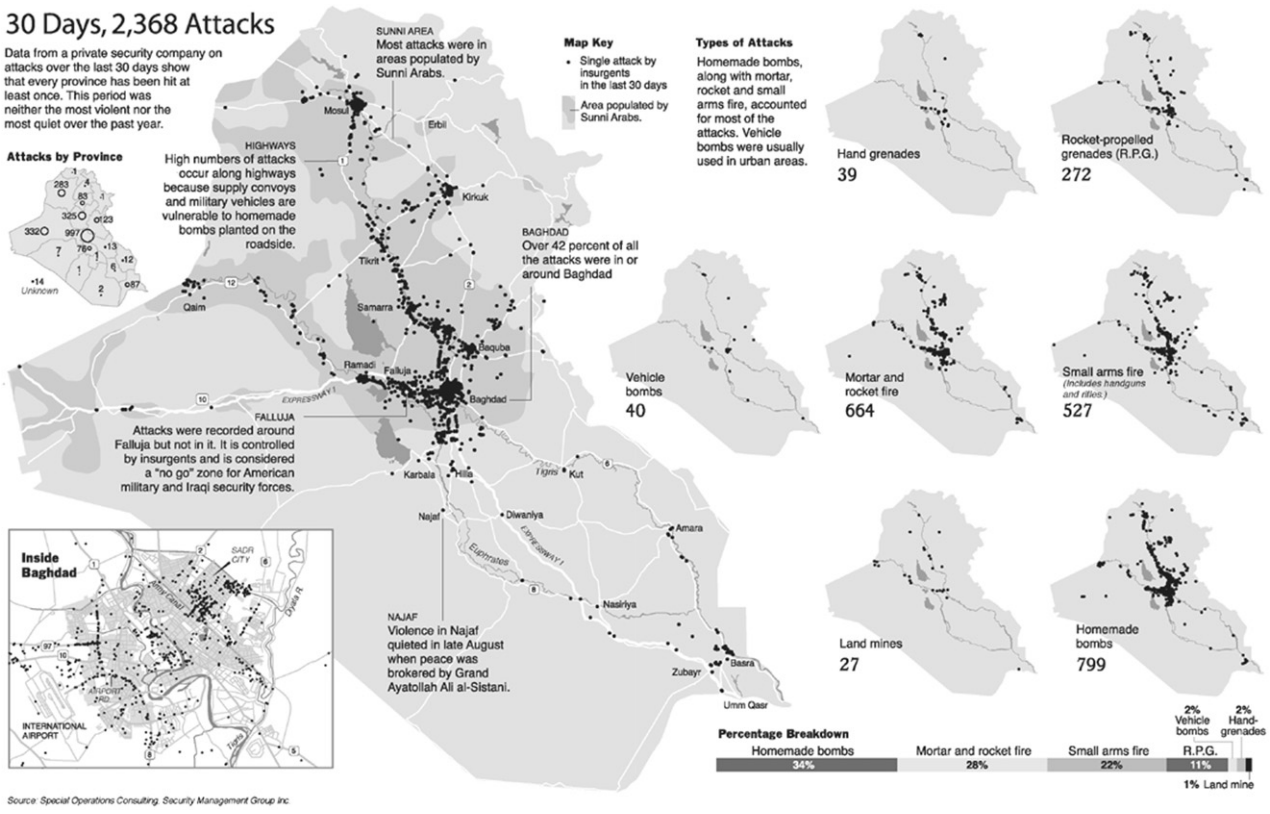

Fig. 1. Bombing attacks in Iraqis' provinces and Baghdad.

Besides the development of PTSD symptoms, exposure to a bomb attack has been found to promote numerous long-term psychological disorders among its survivors (North et al., 2011). It has been found that 22% of the people who were exposed to the 1995 Oklahoma City bombing suffered depression, 9% agoraphobia, 7% panic disorder, 4% had generalized anxiety disorder, 9% experienced alcohol abuse, and 2% had drug use disorders (North et al., 1999). It has also been discovered that bombing attack survivors experience a negative impact on their general mood (Somer et al., 2005), phobic fear of public transport and travel phobia (Handley et al., 2009), intrusive and avoidant symptoms in the months following the incident (Essar et al., 2007), grief and lost sense of personhood (Allen, 2006), and personal guilt (Ankri et al., 2010).

However, there are scarcely any studies examining PTSD and psychiatric co-morbidity following bombing attacks generally, and specifically in relation to civilians in Iraq. Only one published study has addressed psychological effects among Iraqi children who were exposed to the bombing of Al-Ameriyah shelter on February 13th, 1991. This was one of the most extreme attacks targeted on Iraqi civilians. Following the bombing, Dyregrov et al. (2002) interviewed a group of 94 Iraqi children who had lost family member(s) and/or friend(s) after 6 months, 1 year, and 2 years. The Impact of Event Scale (IES) (Horowitz et al., 1979) was chosen to assess the reaction of the sample. Around 80% of the 94 children were found to have developed PTSD symptoms. The majority of them also experienced sadness and were afraid of losing family members. The study also showed that there was no significant decline in PTSD symptoms over time; neither after 6 months or one year. After two years, however, there was a significant decline in intrusive and avoidance symptoms (Dyregrov et al., 2002).

Recently a qualitative study was also carried out to explore how people who have experienced a bomb attack in Iraq make sense of their experience. Nine survivors were recruited (M = 4, F = 5), with an average age of between 19 and 33. Interviews based on a semi-structured schedule showed that being in a bombing experience had considerable impacts of loss of personal interest, deterioration in relationships with others and other significant negative aspects of personality changes, such as withdrawal. This loss of self was conspicuous and adopted several patterns such as; changing mood and psychological imbalance "altered self-capacities". The experience was also found to have a negative impact on their sense of safety and personal and familial vulnerability. Furthermore, there was found to be a "shattering of the world assumptions" whereby the world and its populations being seen as risky, untrustworthy coupled with feeling negative about the future and potential for positive change (Freh et al., 2012).

A number of theories have been developed regarding the course of outcomes following a traumatic life event. Janoff-Bulman (1992) argues that PTSD or psychiatric co-morbidity arises in two different ways. First, PTSD is thought to occur when survivors fail to readily assimilate or accommodate the lessons from the traumatic event into their global meaning systems or assumptive worlds. That is, people experience symptomatic oscillations between avoiding the trauma material through avoidance (e.g. dissociation and emotional numbing) and confronting the memory of the trauma through intrusive thoughts and nightmares. These symptoms will persist until they engage in sufficient cognitive processing which challenges the assumptions they hold about the world, and then lessons learned from the trauma can be reconciled. Secondly, trauma-induced reactive depressive symptoms are thought to occur when the assumptive world is revised to reflect uniform negative beliefs (e.g., events that occur at random, the self is unlucky, and the world is a malevolent place) about the world and self (Foa et al., 1999).