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Abstract

Two months after the terrorist attacks of September 11th, we examined the responses of 163 ethnically diverse west coast college students. Using the Interpersonal Guilt Questionnaire, the Responses to Terrorism Scale, and the Brief Big Five Inventory, we found that students who were high on broadly defined trait survivor guilt (worry about being better off than others), separation guilt, and omnipotent responsibility guilt suffered from significantly higher cognitive (obsessions), emotional (fear), and/or behavioral responses, even while controlling for neuroticism. Women were significantly higher than men in fear. We discuss clinical implications and hypothesize that people who are high in guilt proneness may be more likely to develop PTSDlike syndromes or depression, in the wake of future terrorist attacks or other significant traumas.

Introduction

While the terrorist attacks on the World Trade Center and the Pentagon on September 11th changed the lives of most Americans, including those who neither lived near the event nor had friends or relatives directly impacted, some people appear to have suffered more extreme and protracted effects from the terrorist attacks than others. It was our clinical judgement that people who suffered from more extreme reactions would be more likely to be susceptible to Post Traumatic Stress Disorder-like symptoms, either in the wake of September 11th or in the future. From prior studies of interpersonal guilt and its association with psychological problems, as well as its known association with PTSD, we hypothesized that people who were higher in proneness to interpersonal guilt and particularly to survivor and omnipotent responsibility guilt would be significantly more effected by the terrorist attacks.

Methods

PARTICIPANTS

Participants were 163 (42 male and 121 female) college students. Participants received additional credit in their class, for participation in the study.

INSTRUMENTS

Responses to Terrorism Scale (RTS: O'Connor & Berry, 2001) is a 28-item self report measure. The RTS includes three subscales: Obsession with Terrorism (OT) includes obsessive cognitions related to the events of September 11th and the bioterrorist attack that followed

Emotionality and Terrorism (ET) includes items related to fear and anxiety in the wake of the terrorist attacks

Inhibition due to Terrorism (IT) includes items that describe changes in routine and pleasurable activities since the terrorist attacks.

The Interpersonal Guilt Questionnaire-67 (IGQ-67: O'Connor,

Berry, Weiss, Bush & Sampson, 1997) is a 67-item, self-report questionnaire designed to assess guilt related to the fear of harming others, with four subscales, Survivor Guilt, Separation Guilt, and Omnipotent Responsibility Guilt.

Survivor Guilt is characterized by the belief that pursuing normal goals will harm others. Examples of Survivor Guilt items include: "I often conceal or minimize my my successes."; "It makes me uncomfortable if Iam more successful at something than are my friends or family members."; "It makes me uncomfortable to receive better treatment than the people I am with."

Separation Guilt is characterized by the belief that if a person separates from their loved ones, leads their own life, or differs from their loved ones in some way, they will cause their loved ones to suffer. Examples of Separation Guilt items include: "I feel that bad things may happen to my family if Ido not stay in close contact with them."; "I prefer to do things the way my parents did them."; "I am

reluctant to express an opinion that is different from the opinions held by my family or friends?

Omnipotent Responsibility Guilt is characterized by the belief that one is responsible for the happiness and well-being of others. Examples of Omnipotent Responsibility Guilt include: "It is hard for me to cancel plans if Iknow the other person is looking forward to seeing me."; "I often find myself doing what someone else wants me to do rather than doing what I would most enjoy."; "I feel responsible at social gatherings for people who are not able to enter into conver-

People who feel survivor and/or separation guilt invariably feel omnipotent responsibility guilt. However, there are instances in which a person may feel omnipotently responsible for others without specifically feeling survivor or separation guilt.

The Brief Big Five Inventory (BFI: John, Donahue & Kentle, 1991) is a 45-item self-report inventory for assessing the big five personality traits: extraversion, agreeableness, openness, neuroticism, and consci-

The Social Support Survey is an eight item inventory assessing a person's social support network. It includes items such as "If I needed an emergency loan of \$100, there is someone I could get it from" and "If I needed an early morning ride to the airport, there's no one I would feel comfortable asking to take me."

We administered the RTS, the IGQ, the BFI, and the SS, along with demographic information including religion and ethnicity. In addition participants responded to open-ended questions about how they heard about the terrorist attacks and what their first feelings and thoughts consisted of. We asked if and how the events have changed their lives subsequently









From left, San Francisco Examiner, 9/12/01; San Francisco Chronicle. 9/12/01: San Francisco Examiner, 9/13/01; People, 10/1/01.

TABLE 1 personal Guilt, Personality Factors, and Responses to Terrorism

Predictors	Inhibition (Behavior)	Obsession (Cognitions)	Fear (Emotionality)
Survivor Guilt Omnipotent Guilt Separation Guilt	.33*** .34*** .41***	.18* .39*** .40***	.14 .45*** .47***
Extraversion Agreeableness Conscientiousness Neuroticism Openness	.02 .01 02 .25**	02 .11 08 .25**	.05 .12 06 .37***
Social Support	04	.09	.03

Guilt and Responses to Terrorism Controllin

Predictors	Inhibition	Obsession	Fear
	(Behavior)	(Cognitions)	(Emotionality)
Survivor Guilt	.29***	.12	.06
Neuroticism	.16*	.19*	.33***
Omnipotent Guilt	.29***	.35***	.38***
Neuroticism	.02	02	.05
Separation Guilt	.38***	.38***	.45***
Neuroticism	.17*	.14*	.25**

Results

The internal consistencies of the three subscales of the RTS were acceptable: IT, alpha = .73; OT, alpha = .78; ET, alpha = .87. Of the five personality factors, only neuroticism was significantly correlated with the responses to terrorism subscales (see Table 1). We found a significant correlation between survivor guilt and inhibition of routine or pleasurable behaviors, even when controlling for neuroticism (see Table 2). We found significant correlations between omnipotent responsibility guilt and all three subscales of responses to terrorism while controlling for neuroticism (see Table 2). Finally, we found significant correlations between separation guilt and all three subscales of responses to terrorism, even when controlling for neuroticism (see Table 2). There were no significant differences between religious or ethnic groups. Females were significantly higher than males in the obsession and emotionality subscales. In coding open ended questions we found that of 134 subjects who responded, 58 described feeling shock; 30 felt disbelief; 20 described feeling sad, depressed or bad; 14 said they felt fearful, "scared", or paniced; 4 described confusion as their primary initial feeling; 3 felt anger; and 4 students described feeling indifferent.

Discussion

These results may have clinical significance. As an increasing number of people are seeking mental health care in the wake of the terrorist attacks, we predict that people who are more highly prone to a dispositional tendency to take responsibility for others, that is who are significantly higher in guilt proneness are more likely to present with PTSD-like symptoms. People who are prone to broadly defined survivor guilt are more likely to present with increased depression and inhibition of normal activities. Finally, these results suggest that women may be more likely to present with PTSD-like symptoms.

Responses to Terrorism Scale (excerpts)

The following study is about emotions, the experience of terrorism that we are going through, and the communities we live in. Please check the box that best applies to you Not at all true of me, Slightly true of me, Moderately true of me, Very true of me, or Extremely true of me.

- Since the terrorist attacks on the World Trade Center (WTC) and the Pentagon on
- September 11th, I have lost my interest in shopping.

- 3. I am afraid of getting anthrax myself.
- 4. I am worried about my friends and/or family being harmed by a terrorist attack. 5. Since September 11th, I have not wanted to go out as much as usual.
- 6. Since September 11th, I feel obligated to watch the news.
- . I am afraid of getting sick due to anthrax or some other form of bioterrorism. 8. Since September 11th, I have felt guilty for enjoying myself
- 9. I rarely think about bioterrorism
- 10. My life has not been affected by the events of September 11th.