

Coping With Crises: An Examination of the Impact of Traumatic Events on Religious Beliefs

WENDY S. OVERCASH
LAWRENCE G. CALHOUN
ARNIE CANN
RICHARD G. TEDESCHI

University of North Carolina at Charlotte

ABSTRACT. The impact of traumatic events on empirical and metaphysical assumptions was examined, by comparing assumptions of a group of 25 persons who had recently experienced a major stressor with assumptions of a group of 25 persons who had not had such an experience. Each group was composed of 22 women and 3 men, with a mean age of 20 years. Participants completed written measures assessing level of adjustment, empirical world assumptions, religious motivation, and religious and spiritual experiences. Naturalistic interviews were conducted with the trauma group. The trauma group obtained significantly higher scores on symptoms of psychological distress but did not differ in evaluations of the empirical world as predictable, safe, or controllable. Interviews suggested that the metaphysical assumptions were not challenged by trauma; rather, they provided a framework for understanding and coping with trauma.

HIGHLY STRESSFUL EVENTS can have profoundly negative psychological effects on the persons who experience them. Such effects can include confusion, anger, anxiety, feelings of helplessness, and depression (McCann & Perlman, 1990; Rubonis & Bickman, 1991). The impact of these negative effects depends on how successful the individual is at coping with the situation.

Although there are many ways of understanding what happens when persons are coping with trauma, a prevailing theme in the literature is the role of the cog-

Address correspondence to Wendy S. Overcash, 1511-204 Pine Winds Dr., Raleigh, NC 27603.

nitive tasks faced by the individual. Traumas may violate the individual's assumptions about an orderly, stable, and predictable world (Epstein, 1990; Janoff-Bulman, 1989, 1992). The violation of those fundamental assumptions is assumed to produce psychological distress. The process of coping involves reducing this distress by restoring a cognitive equilibrium, which can be accomplished through the processes of accommodation or assimilation (Collins, Taylor, & Skokan, 1990; Taylor, 1983).

Accommodation involves changing one's beliefs to be consistent with experiences. Various researchers (Janoff-Bulman, 1989; Schwartzberg & Janoff-Bulman, 1991) have predicted that this process of accommodation will be evident after trauma. The other process, assimilation, occurs when one incorporates traumatic experiences into existing belief structures.

The results of some studies have demonstrated that persons who have experienced major stressors tend to consider the world as a less controllable, safe, and predictable place than comparison groups of persons who have not experienced major stressors (Janoff-Bulman, 1992; Schwartzberg & Janoff-Bulman, 1991). One limitation of these studies is that they have focused exclusively on empirical assumptions while ignoring metaphysical assumptions.

Metaphysical assumptions, particularly religious beliefs, can serve a useful function in allowing the individual to cope with traumatic events (Pargament, 1990; Pargament et al., 1994). In addition, although the empirical assumptions about the safety and predictability of one's world can be directly disconfirmed by traumatic events, most fundamental religious assumptions (e.g., "God has a plan") cannot be so viewed. Given the potential resilience of religious beliefs to empirical disconfirmation, then, it seems reasonable to expect that such beliefs will be less likely to be accommodated when an individual experiences major stressful events.

Public opinion polls have indicated that religion is considered an important part of the lives of many Americans (Princeton Religious Research Center, 1988); therefore, understanding the role of religious beliefs in the coping process is important. Although there are limited data suggesting that the individual's religious or metaphysical assumptions may not require any accommodation to traumatic events (Calhoun, Tedeschi, & Lincourt, 1992; Decker, 1993), systematic comparisons of persons who have experienced trauma with those who have not are lacking.

Our purpose in this study was to examine the role and resilience of metaphysical and empirical assumptions in coping with traumatic events. We expected that religious beliefs would be less likely to evidence change following traumatic events than would empirical assumptions about the world.

We also expected that (a) persons who had experienced a major trauma would show signs of greater psychological distress than persons who had not; (b) persons who had experienced a major trauma would hold more negative empirical

assumptions about the world than persons who had not; and (c) unlike empirical assumptions, religious beliefs would not be accommodated but would be used to assimilate traumatic events.

Method

Participants

The 50 participants were selected from a larger sample of undergraduate students at a state-supported university in the southeastern United States. They were selected on the basis of responses to a screening instrument (Norris, 1990) designed to identify persons who have been exposed to traumatic events. The participants were classified into two groups.

The traumatic-events group consisted of 25 participants who had experienced a major stressor some time in the previous 3 years. Of this group, 10 reported the death of a close loved one (e.g., parent, sibling), 6 reported being victims of armed robbery, 5 reported being victims of rape, 1 reported being the victim of an attempted carjacking and shooting, 1 reported sexual harassment and stalking, and 1 reported the sexual abuse of her daughter.

We also selected a comparison group of 25 participants who had not experienced a major stressor and who were similar to the trauma group on demographic variables. The mean age of the participants in the trauma group was 20.00 years, and that of the comparison group was 20.08 years. Each group was composed of 19 Caucasian women, 3 African American women, and 3 Caucasian men. The traumatic events group was composed of 21 single persons, 3 married persons, and 1 widowed person. The comparison group consisted of 21 single persons and 4 married persons. Reported religious preferences were also similar: The trauma group included 16 Protestants, 4 Catholics, and 5 participants with no religious preference; the comparison group consisted of 18 Protestants, 2 Catholics, and 5 participants reporting no religious preference.

Materials

The participants were asked to complete a number of written measures. Two instruments, the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983) and the Satisfaction With Life Scale (SWLS; Deiner, Emmons, Larsen, & Griffin, 1985), served as measures of current adjustment. The BSI, a 53-item measure of general mental health, assesses symptomatology. The SWLS is a 5-item measure designed to reveal the individual's own judgment of quality of life.

The participants also completed the Intrinsic Religious Motivation Scale (Hoge, 1972), which assesses the motivation for religious behavior along the intrinsic and extrinsic dimensions formulated by Allport and Ross (1967). An "intrinsically" motivated person is one who lives for his or her religion; the reli-

gion is a central part of his or her life. For an "extrinsically" motivated person, religion serves a more instrumental function (e.g., to gain status).

The participants also completed the Index of Core Religious Experience (INSPIRIT; Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991), which assesses experiences of a higher power and spiritual experiences.

The World Assumptions Scale (Janoff-Bulman, 1989) was included to assess empirical assumptions. This scale measures assumptions about the benevolence of the world, the predictability and controllability of the world, and self-worth.

Procedure

After reviewing responses to the screening instrument, we contacted eligible persons and asked if they would be willing to participate in the study. They were told that participation would involve completing a number of written measures assessing their views of the world, values, and attitudes. Additionally, each of the participants in the traumatic-events group participated in a naturalistic interview. The purpose of the interview was to obtain more comprehensive information about the adjustment process—specifically, the role of religion in coping, as well as changes in religious convictions after the traumatic event.

All interviews were conducted by the first author, who assured the interviewees that no identifying information would be used in conjunction with interview responses. The lengths of the interviews varied, ranging from 20 min to 1 hr 15 min. Interviews were conducted according to established guidelines for qualitative research (Lincoln & Guba, 1985).

The participants were first asked to describe the beliefs they used in their lives or to guide their decisions. They were asked to describe the traumatic event they had experienced and were then asked if the beliefs discussed previously were involved in any way. If the interviewee responded in the affirmative, he or she was asked to describe in what ways the beliefs were involved. Finally, the participants were asked how their beliefs after the event compared with their beliefs before the event.

Because the main purpose of the interview was to obtain the individual's perspective, the content reflected the individual's construction of reality, rather than objective reality. The interview was used because it has several advantages over objective measures. Because the interviewer becomes the primary data-gathering instrument during the interview, he or she has the ability to attend to the interviewee and to verify and clarify his or her understanding of the individual's experience (Lincoln & Guba, 1985). This ability is especially important when one is attempting to understand very personal and complex aspects of an individual's experience, such as his or her religious beliefs (Pargament et al., 1990). The interview provided the opportunity to examine each participant's belief system in his or her own words and within his or her own framework.

The order of completion of the written materials and interview was counter-balanced, and the order of the written materials was randomized.

Results

Quantitative Results

We conducted a one-way multivariate analysis of variance (MANOVA), to compare the trauma and comparison groups on the Brief Symptom Inventory, the Satisfaction With Life Scale, the INSPIRIT, the Intrinsic Religious Motivation Scale, and the World Assumptions Scale. The MANOVA revealed no significant overall differences between the two groups, Pillai's trace $F(8, 41) = 1.512, p > .05$. Because specific differences between the groups were expected, based on previous research (Schwartzberg & Janoff-Bulman, 1991), we examined the univariate results. There was a significant difference on the BSI, with the trauma group reporting more symptoms ($M = 47.8$ for the trauma group and $M = 30.68$ for the comparison group), $F(1, 48) = 3.963, p < 0.05$. This was the only significant difference between the two groups.

Qualitative Results

The content of the interviews was analyzed with the constant comparison method described by Lincoln and Guba (1985). After being transcribed, the material was "unitized" (divided) into separate and complete pieces of information or ideas. These units were then categorized, based on comparisons with other units. If the units fit together, they formed a category involving a specific theme. These categories or themes were grounded in the responses of the participants.

These categories were described to an independent rater, who was then asked to classify the units according to the established categories. The independent rater classified a sample of 25% of the units, which were selected using a random number table, to serve as a measure of the trustworthiness of the categorization. Analysis revealed 91% interrater agreement in the categorization of units.

Four main categories emerged from the interviews (see Table 1). The first category was personal belief systems and decision-making processes. This category, which was addressed by all 25 participants, included statements used to describe personal beliefs and values as well as important principles used in making life decisions.

The majority of participants ($n = 19, 76%$) made reference to a belief in God or a higher power as central to their beliefs. They made such comments as "I believe there is a God and that He created us in some form," "I believe God is the light to my life," and "I believe in a higher power that exerts control over our lives."

Statements describing or implying the importance (or lack of importance) of religious beliefs were made by 15 participants (60%) and were also considered a subtheme of the first category. Nine persons indicated that the beliefs were important, making statements such as "They [religious beliefs] are the most important thing to me," and "My religious beliefs are the biggest thing that affect my life." The remaining 6 students made statements denying the importance of religious

TABLE 1
Interview Themes

Category/Theme	Participants reporting theme	
	<i>n</i>	%
Personal belief systems and decision-making processes	25	100
Importance of religious beliefs	15	60
Descriptions of self as religious/possessing religious beliefs	7	28
Belief in God/higher power	19	76
Belief in salvation/afterlife	9	36
Bible/Ten Commandments	12	48
Religious activities	11	44
Religious background/upbringing	11	44
Decision-making processes/principles	19	76
Experience of the traumatic event	25	100
Narratives of the event	25	100
Qualities of the event	11	44
Personal reactions/consequences of the event	17	68
Factors affecting the difficulty of the event	11	44
Personal responsibility for the event	7	28
Coping with the event	22	88
Beliefs/faith	15	60
Specific beliefs involved	12	48
Religious activities	5	20
Defense mechanism	3	12
Perceiving benefits	3	12
Impact of event on beliefs and lifestyle	25	100
Religious beliefs	17	68
No change	4	16
Same beliefs, change in importance or meaning	6	24
Same beliefs, change in behavior or lifestyle	2	8
Questioned beliefs	4	8
Development of spiritual beliefs	1	4
Secular beliefs	10	40
Same beliefs, change in behavior or lifestyle	4	16
Specific beliefs changed	6	24

beliefs in making decisions in life, with statements such as "I believe in God, but those beliefs don't necessarily affect my decisions or actions."

Nineteen participants (76%) gave descriptions of nonreligious decision-making processes and principles as important components of their belief systems. Examples of units classified here include reliance on ethical or legal principles ($n = 14$, 56%), problem-solving methods ($n = 6$, 24%), and gut instinct ($n = 2$, 8%).

Other subthemes of a religious nature were belief in salvation/afterlife ($n = 9$, 36%), belief in the authority and relevance of the Bible/Ten Commandments ($n = 12$, 48%), importance of religious activities in their lives for guidance ($n = 11$, 44%), and general comments about their religious background ($n = 11$, 44%). This first theme suggests that metaphysical assumptions of a religious nature are salient cognitive elements for many persons in this sample.

The second category was experience of the traumatic event. This category included descriptions and evaluations of the event. All 25 participants in the trauma group provided narratives of the events they had experienced, as illustrated by the following examples.

Well, my friends and I were all out and my brother was coming to meet us. It was just an ordinary day. They think he swerved to miss an animal or something in the road, but he ran into a tree and when the car crashed it killed him.

I was fifteen years old. I had gone over to a neighbor's house. It was a guy a few years older than me that I had had a crush on for a long time. We were kissing, and I guess necking too. But then he forced me to have sex.

The third category identified from interview data was coping with the event. Fifteen respondents (60%) discussed the involvement of their belief systems in coping with the events. Seven of these 15 explicitly stated that their religious beliefs were not involved. The other 8 indicated that their religious beliefs were definitely involved and helpful in coping with the events, through comments such as "My beliefs definitely determined how I handled it," "My faith did eventually help me through the whole thing," and "When you get right down to it, they're [religious beliefs] the only thing that's gotten me through it [husband's death]."

Specific beliefs involved in coping were described by some respondents. Seven (28%) who had experienced the death of a loved one indicated that their belief in heaven/afterlife had aided in the coping process, whereas 5 participants (20%) described a belief that God is in control as a factor that comforted and aided them during the grieving process. Religious activities such as praying were used by 5 respondents.

Two types of nonreligious coping were identified. One was the use of defense mechanisms (e.g., denial), and the other was perceiving benefits from the negative event. One rape victim used a combination of her religious beliefs, faith, and perceiving benefits, as revealed in her comments:

I believe that God lets things like that happen to make you stronger and to help you grow. Adversity matures your faith. And my faith and prayers helped me through the whole thing—coping with it I mean. I know God was with me. I've been able to turn it into a stepping stone. You know, I've learned from it and I've grown. And if I can do something to help other people then that makes the whole thing less horrible.

The final category was impact of the event on beliefs and lifestyles. Seventeen participants (68%) discussed the impact of the event on their religious/spiritual

tual beliefs. Four participants simply stated that the beliefs had not changed; 6 indicated that the beliefs themselves had not changed but that they were held more strongly or were more important; 2 reported changing behavior in a positive manner to be more consistent with their beliefs; and 1 person said that the events she experienced led her to spiritual beliefs that she had not previously possessed. Only 4 participants indicated that the events experienced had caused them to question their religious beliefs. Of these 4, however, 3 indicated that as a result of the questioning, they had come to hold their beliefs more strongly or had changed their behavior to be more consistent with their beliefs, but they had not changed the beliefs themselves. The fourth participant indicated that he was still questioning his religious beliefs and that he was still very confused about them. This young man had been questioning those beliefs even before the event occurred.

Overall, 17 persons discussed the impact of the trauma on their beliefs. Of these, 60% (15) reported that their beliefs had either remained unchanged ($n = 4$), their beliefs had become stronger or more important ($n = 9$), new spiritual beliefs had been developed ($n = 1$), or they had begun to live more consistently with their beliefs ($n = 2$).

Discussion

Previous research (McCann & Perlman, 1990; Rubonis & Bickman, 1991) has indicated that persons who experience traumatic events are likely to experience psychological distress. This was evident in this sample; members of the trauma group reported significantly more symptoms on the BSI than did those in the comparison group.

Those in the trauma group did not differ significantly from the comparison group on the Satisfaction With Life Scale. Thus, although they reported being more symptomatic, their ratings of quality of life were not significantly lower.

The results of this study do not replicate previous findings of shattered assumptions about the empirical world after traumatic experiences (Schwartzberg & Janoff-Bulman, 1991). There were no reliable differences in world assumptions between the two groups. This finding may be related to the role of religious beliefs in the lives of the participants.

Thus, the challenge of traumatic events to religious beliefs seems to have been minimal for these persons. For many persons, the events actually resulted in beliefs being held with greater conviction. Additionally, the lack of difference between the trauma group and the comparison group on the religious measures can be interpreted as providing additional, although indirect, support for the resilience of religious beliefs in the face of crises.

On the basis of the data collected, particularly the qualitative material, we suggest that religious beliefs may be more resilient than empirical assumptions about the world, perhaps because religious beliefs are less subject to empirical disconfirmation.

Metaphysical assumptions seem also to have aided in the coping process. For some participants, the beliefs seemed to provide an explanation for the event; for others, specific beliefs were comforting after the negative experience. The religious beliefs were important in terms of providing a sense of meaning to the events. Thus, the beliefs may not have been changed in response to the events; rather, they were used as a framework within which to assimilate the events.

This process of assimilating the events using existing religious beliefs may also contribute to the lack of difference between the two groups on the empirical assumptions. Because religious beliefs provided a framework for assimilation, accommodation of empirical beliefs may not have been as necessary for many participants. Religious beliefs may be more salient for the current sample, selected from the southeast United States, than for previous samples drawn mainly from the northeast (Janoff-Bulman, 1989; Schwartzberg & Janoff-Bulman, 1991), because the southern United States leads the nation in religious devotion (Gallup Organization, 1992).

To the extent that religious devotion is greater, one would expect religious beliefs to play a more central role in an individual's life. When religious beliefs occupy a central role and are more salient, there is greater involvement of those beliefs across situations, especially in response to difficult events. The more salient the disconfirmable beliefs, the more likely assimilation is to occur, and the less accommodation is needed in world assumptions. Thus, the sample for this study provided no evidence that traumatic events have a negative impact on religious beliefs or necessarily shatter empirical world assumptions. In future investigations, researchers should consider religious convictions when examining the effects of trauma on the trauma sufferers' belief systems.

REFERENCES

- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432-443.
- Calhoun, L. G., Tedeschi, R. G., & Lincourt, A. (1992, August). *Life crises and religious beliefs: Changed beliefs or assimilated events?* Paper presented at the annual meeting of the American Psychological Association, Washington, DC.
- Collins, R. L., Taylor, S. E., & Skokan, L. A. (1990). A better world or a shattered vision? Changes in life perspectives following victimization. *Social Cognition*, 8, 263-285.
- Decker, L. R. (1993). The role of trauma in spiritual development. *Journal of Humanistic Psychology*, 33(4), 33-46.
- Deiner, R., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-74.
- Derogatis, L. R., & Melisartos, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine*, 15, 595-605.
- Epstein, S. (1990). The self-concept, the traumatic neurosis, and the structure of personality. In D. Oser, J. M. Healy, Jr., & A. J. Stewart (Eds.), *Perspectives on personality* (Vol. 3, pp. 63-98). London: Jessica Kingsley.
- Gallup Organization. (1992). *Religion in America*. Princeton, NJ: Author.
- Hoge, D. R. (1972). A validated intrinsic religious motivation scale. *Journal for the Sci-*

- entific Study of Religion*, 11, 369-376.
- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Application of the schema construct. *Social Cognition*, 7, 113-136.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Toward a new psychology of trauma*. New York: The Free Press.
- Kass, J. D., Friedman, R., Leserman, F., Zuttermeister, P. C., & Benson, H. (1991). Health outcomes and a new index of spiritual experience. *Journal for the Scientific Study of Religion*, 30, 203-211.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- McCann, I. L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy, and transformation*. New York: Brunner/Mazel.
- Norris, F. H. (1990). Screening for traumatic stress: A scale for use in the general population. *Journal of Applied Social Psychology*, 20, 1704-1718.
- Pargament, K. I. (1990). God help me: Toward a theoretical framework of coping for the psychology of religion. *Research in the Social Scientific Study of Religion*, 2, 195-224.
- Pargament, K. I., Ishler, K., Dubow, E. F., Stanik, P., Rouiller, R., Crowe, P., Cullman, E. P., Albert, M., & Royster, B. J. (1994). Methods of religious coping with the Gulf War: Cross-sectional and longitudinal analyses. *Journal for the Scientific Study of Religion*, 33, 347-361.
- Pargament, K. I., Royster, B. J. T., Albert, M., Crowe, P., Cullman, E. P., Holley, R., Schaefer, D., Syriak, B., & Wood, M. (1990). *A qualitative approach to the study of religion and coping: Four tentative conclusions*. Paper presented at the meeting of the American Psychological Association, Boston, MA.
- Princeton Religious Research Center. (1988). *Emerging trends*. Princeton, NJ: Author.
- Rubonis, A. V., & Bickman, L. (1991). Psychological impairment in the wake of disaster: The disaster-psychotherapy relationship. *Psychological Bulletin*, 109, 384-399.
- Schwartzberg, S. S., & Janoff-Bulman, R. (1991). Grief and the search for meaning: Exploring the assumptive worlds of bereaved college students. *Journal of Social and Clinical Psychology*, 10, 270-288.
- Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, 38, 1161-1173.

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