

Posttraumatic Growth: Progress and Problems

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During the past 20 years, there has been a dramatic increase in research on life events. The majority of these studies have focused on documenting the negative sequelae of events. Tedeschi, Calhoun, and others (e.g., Taylor, 1989) have emphasized that stressful life events can bring about posttraumatic growth, or "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, this issue). These investigators were among the first to focus attention on such positive changes. By so doing, they have encouraged all of us to take a more comprehensive look at the effects of stress, trauma, and loss. To their credit, Tedeschi and Calhoun's (this issue) work has been careful and programmatic. They have given considerable thought to how posttraumatic growth should be measured, and have developed a scale to assess the major domains of posttraumatic growth (Tedeschi & Calhoun, 1996). They have developed a model of posttraumatic growth, and in so doing, have attempted to clarify the conditions under which growth is most likely to occur. They have also discussed how posttraumatic growth relates to ostensibly similar concepts, such as resilience and optimism. Although the evidence regarding many of these links is speculative, the authors' hypotheses are likely to encourage more and better theory-based research.

Yet despite what has been accomplished, many questions remain unanswered. Perhaps the most important question concerns what the data really show. Here, I argue that the type of growth Tedeschi and Calhoun (this issue) describe in their target article—a significant life change that is viewed as highly positive—is not necessarily the same as what is reported to be growth in most of the empirical studies that they cite. In fact, I suggest that what is called growth in many studies may not be growth at all. In addition, I maintain that Tedeschi and Calhoun need to give far more consideration to whether the purported changes they identify are veridical. If people say the crisis has made them stronger, should this be accepted at face value?

Tedeschi and Calhoun (this issue) have maintained that there are two factors that can facilitate posttraumatic growth: cognitive processing and disclosure. I present data indicating that in many cases, cognitive processing does not seem to be involved in growth, as those who do best following adversity frequently show little evidence of processing. Although I agree with the authors about the importance of disclo-

sure, I maintain that they have been far too optimistic in assuming that others will respond to disclosures of distress with empathy and concern. There is evidence to suggest that, in fact, others are typically made uncomfortable by displays of distress. Consequently, they often use a variety of strategies to discourage such displays. The end result is that social interactions often impede growth rather than facilitating it.

Although some of the research that has been done is encouraging, I believe that overall, we are a long way from being able to say that following a stressful or traumatic event, a substantial percentage of people show important psychological growth. I feel that propagating this belief in the absence of more convincing data can have very adverse effects on those who experience trauma. As health care providers, will we be disappointed if a particular client does not show personal growth? Will survivors of trauma experience feelings of inadequacy and shame if they are not able to find something good in what has happened?

Evidence of Significant Psychological Growth

How Prevalent Is Growth, and What Constitutes Significant Growth?

As noted earlier, Tedeschi and Calhoun (this issue) define posttraumatic growth as positive psychological change experienced as a result of a struggle with highly challenging life circumstances. Drawing primarily from memoirs, magazines, and newspaper articles, they present several first-person accounts to help us understand what they mean by growth. For example, international cycling champion Lance Armstrong was diagnosed with testicular cancer that later spread to his brain and lungs. He indicated that, "Looking back, I wouldn't change anything ... I learned a lot and grew tremendously the last two years." Similarly, a musician who suffered permanent paralysis said that this "was probably the best thing that ever happened to me ... If I had it to do all over again I would want it to happen the same way." The way they describe the phenomenon, it appears that Tedeschi and Calhoun (this issue) are talking about significant psychological changes. For example, they indicate that the individual has experienced "changes that are viewed as important, and that go beyond what was the previous status quo. Posttraumatic growth is not simply a return to

baseline—it is an experience of improvement that for some persons is deeply profound.” In summarizing the empirical evidence for posttraumatic growth, they cite a host of studies focusing on people who have experienced a wide variety of negative events including bereavement, rheumatoid arthritis, sexual assault, sexual abuse, combat, fires, cancer, heart attacks, and being taken hostage, among others. They state that “the evidence is overwhelming that individuals facing a wide variety of very difficult circumstances experience significant changes in their lives that they view as highly positive.”

However, is the evidence really as strong as Tedeschi and Calhoun (this issue) suggest? In many of the studies that Tedeschi and Calhoun cite as evidence for posttraumatic growth, growth was measured by a single open-ended question asking about any changes that occurred. If a respondent mentions one thing—for example, “I spend more time with people who are important to me,”—that person is categorized as demonstrating growth. There is no information obtained to indicate whether this change is judged as significant or meaningful by the respondent, or as more significant than any of the negative changes that the person may be experiencing.

Tedeschi and Calhoun (this issue) acknowledge that people facing major life crises typically experience distressing emotions and dysfunctional patterns of thinking, and that the presence of growth does not signal an end to the distress. However, they strongly imply that even though growth and distress coexist, the positive psychological changes predominate over any negative changes that occur. This is typified by their comments that “out of loss there is gain” and that posttraumatic growth “has a quality of transformation.” In my judgment, Tedeschi and Calhoun (this issue) have not given sufficient consideration to the many negative changes that can occur following trauma. Available evidence suggests that exposure to trauma often brings about permanent neurobiological changes that can cause persistent hyperarousal, resulting in posttraumatic stress disorder (PTSD) symptoms such as difficulty concentrating and sleep problems. Moreover, the symptoms that occur following trauma or loss can develop into chronic and debilitating changes in personality. After a traumatic loss, for example, people may manifest such personality changes as increased hostility, suspiciousness or paranoia, feelings of emptiness or hopelessness, impulsivity, and constant feelings of impending doom. Survivors may also adopt more negative views of the world. They may come to feel that there is danger lurking everywhere and that no matter what they do, they cannot keep themselves or their loved ones safe. In addition, they may see the world as more cold, uncaring, and unjust. People may also experience difficulties in functioning following a trauma. For example, fatigue and concen-

tration problems may impede their ability to perform well at work. Finally, many people find great difficulty getting enjoyment out of things that formerly brought them pleasure. Occasions like holidays, birthdays, and anniversaries are often associated with feelings of emptiness and pain. Leisure activities enjoyed with the deceased, such as fishing or going to art galleries, are almost impossible to enjoy without him or her. In determining whether growth has occurred, it is necessary to consider the impact of such negative changes along with any positive changes that have been reported.

The importance of considering negative as well as positive changes is illustrated in a study that my colleagues and I completed to assess the long-term consequences of traumatic loss (Lehman, Wortman, & Williams, 1987). Interviews were conducted with people who lost a spouse or child in a motor vehicle accident that occurred 4 to 7 years previously, and with a control group of nonbereaved individuals. To assess perceived positive changes, people were asked to answer an open-ended question about their life (“Tell me what your life is like these days”). In addition, they were asked to complete scales designed to assess psychological symptomatology, functioning, and quality of life.

The results provide support for the idea that most people perceived positive change as a result of the tragedy—in fact, 74% of the bereaved respondents reported at least one positive life change ($M = 1.49$). The two most frequent changes mentioned were increased self-confidence and focusing more on enjoying the present. However, our results provided compelling evidence that the traumatic loss of one’s spouse or child brings about enduring negative changes. Comparisons between bereaved persons and controls revealed significant differences on several psychological symptoms, including depression, phobic anxiety, and hostility. Bereaved persons also tended to experience a significantly lower quality of life than control respondents, and to worry more than controls that harm would befall them or their family members.

People who lost a spouse experienced significantly more difficulty in getting involved in leisure activities, and in carrying out their housework, than did control respondents. They scored significantly higher on loneliness than did controls. People who lost a child were significantly more likely to seek and obtain a divorce than controls. They were also significantly less likely to be working for pay, and less likely to be working at the same job, than controls. People who lost a spouse or child earned significantly less following the crash than did controls.

Those who lost a spouse or child reported significantly more stress than controls in dealing with their children. Moreover, in answer to an open-ended question about the impact of the death on surviving children, an overwhelming majority of respondents (73%)

reported that their children had suffered negative effects. Forty-seven percent of responses were coded as extremely negative effects, including depression, drug abuse, and suicide.

The study also revealed significant differences in mortality between bereaved and control respondents. More than 6% of the respondents who lost a spouse or child had died; none of the respondents in the control group had died. This is a very high mortality rate for such a young population (most of our respondents were in their early 40s).

Our results revealed that the majority of people who lost a spouse or child continued to have painful memories about their loved one, and continued to have distressing thoughts about the accident. Approximately 80% of the respondents in this study reported that they were unable to make any sense of or find any meaning in the loss.

Tedeschi and Calhoun (this issue) listed this study as providing support for posttraumatic growth. However, when we consider all of the data together, are we really seeing significant growth? If a person reports one positive change but is also experiencing significant depression and PTSD symptomology after several years, sees the world as a more dangerous place, is experiencing impaired quality of life, is having trouble at work, cannot keep up with the housework, feels alienated from her husband and is seeking a divorce, has a teenager who has become argumentative and depressed, and is unable to make any sense out of what has happened, is this growth? In the 20 years I have been doing this kind of work, I have never heard a person who lost a spouse or child in this way say that their loved one's accident was the best thing that ever happened to them. I have never heard anyone say that if they could undo it, they would not do so. I have never once had anyone experience a sense of "being so lucky," which Tedeschi and Calhoun say is not uncommon. Tedeschi and Calhoun talk about people ending up better than they were prior to the tragedy. Most of the people we have interviewed, in contrast, appeared to be clearly diminished by what has happened.

In short, of the dozens of people we have studied following the traumatic death of a loved one, I have almost never seen the sort of growth that Tedeschi and Calhoun (this issue) describe. Other trauma researchers have also emphasized that any positive changes that occur as a result of trauma are typically accompanied by negative changes that are every bit as significant. In their longitudinal study of survivors of sexual assault, Frazier, Conlon, and Glaser (2001) found that beliefs about the goodness of other people and the safety and fairness of the world continued to be negatively affected among most survivors at their final assessment, which was 1 year after the assault. Similarly, in a study of perceived benefits from child abuse (McMillen, Zuravin, & Rideout, 1995), 47% of the re-

spondents reported finding some benefit to their abuse. However, 88.9% of those who perceived benefit also perceived harm.

The real question is not what percentage of people show a few self-reported positive changes following a crisis, but what percentage of people show positive changes they would judge as significant and that are not overshadowed or dwarfed by any negative changes that may have occurred. It is important to document both positive and negative changes that may have been caused by a trauma. When both kinds of changes have occurred, we need to think hard about when it is appropriate to conclude that positive changes are indeed indicative of growth.

Is Perceived Growth Real or Illusory?

Tedeschi and Calhoun (this issue) define posttraumatic growth as the experience of positive change that occurs as a result of struggling with highly challenging life crises. Nonetheless, it is clear from their account that they believe such changes are real: "In contrast to the terms that emphasize the 'illusions' of people who report these changes, there do appear to be veridical transformative life changes that go beyond illusion."

Unfortunately, Tedeschi and Calhoun (this issue) fail to include any evidence in support of this contention. There are several reasons why people might mention positive life changes that are not veridical. First, reports of positive life changes may be self-presentational in nature. To depict a more positive view of their lives than is actually the case and convey that they are coping well, respondents may exaggerate the extent to which various kinds of personal growth have occurred. In fact, our earlier research suggests that people in the survivor's social network might "pull" for expressions of positive changes, in part by reacting negatively to expressions of distress (see, e.g., Lehman, Ellard, & Wortman, 1986; Silver, Wortman, & Crofton, 1990).

A second possibility is that statements of positive change represent defensive illusions. Several authors, including Tedeschi and Calhoun (this issue), have argued that when people are confronted by a trauma or loss, they often struggle to understand why the event happened and to make sense out of the tragedy (see, e.g., Davis, Wortman, Lehman, & Silver, 2000). Given all that may be lost following a trauma, it is understandable that survivors may want to convince themselves that something good has come out of it. Consistent with the notion that reports of positive change may represent defensive illusions, McMillen, Smith, and Fisher (1997) found that among people who were exposed to one of three disasters (a plane crash, a tornado, or a mass murder), those with higher numbers of preincident diagnoses reflecting mental health prob-

lems were most likely to find benefit in the disaster. The authors suggested that this occurred because those whose lives are in worse shape may have the most to gain.

In many studies, it is certainly open to question whether changes identified as positive by the respondent are in fact positive. In a study on perceived benefits from sexual abuse, McMillen et al. (1995) found that in response to an open-ended question, nearly 50% of the sample reported some benefit from the abuse. One of the most frequently endorsed categories was self-protection (e.g., "I don't fall in love with people. I have never given myself wholly to anyone. As a result, I don't get hurt."). Is this orientation toward others in fact positive, or is it likely to severely limit any chance for meaningful interaction in the future?

If perceived growth is genuine, people's answers to questions about positive changes following the tragedy should be consistent with answers provided elsewhere in the interview. Inconsistencies suggest that defensive distortion may be driving reports of growth. In the study described previously, a significant percentage of people indicated that as a result of losing their spouse or child in a motor vehicle accident, they focus more on enjoying the present (Lehman et al., 1987). However, those endorsing this item were no more likely than their bereaved counterparts or controls to endorse items designed to assess individuals' ability to get pleasure out of the good things in their lives. Similarly, some individuals mentioned an increased emphasis on family in response to our open-ended question about how life is going at this point. However, when asked to complete a scale assessing interest in one's children and level of contact with family, there was no tendency for those who mentioned valuing family more to score higher on these items than other bereaved respondents or than controls.

In fact, Tedeschi and Calhoun (this issue) list warmer, more intimate relationships with others as one of the major elements of growth. About 20% of the respondents from the motor vehicle study indicated that they emphasized family more as a result of the accident. However, comparisons between bereaved and control respondents call this idea into question. As noted previously, those who lost a child tended to feel more bothered, tense, and neglected when thinking about their spouse, and were more likely than controls to seek and obtain a divorce. Bereaved parents also reported more difficulties than controls in getting along with neighbors and relatives. Those who lost a child or spouse reported feeling more tense, upset, unhappy, and emotionally worn out than controls when reflecting on their experiences as a parent. Those who lost a spouse reported spending less time with their friends, having more arguments with them, and feeling offended by them more of the time than did controls. They also reported feeling more lonely than controls.

Taken together, these data fail to support Tedeschi and Calhoun's assertion that social relationships become more warm and intimate following a crisis. In contrast, the loss of a spouse or child appears to have a decidedly negative impact on relationships with family and friends.

How can researchers determine whether reports of positive change are veridical? Perhaps the best strategy is to utilize a prospective design (see e.g., Bonanno, Wortman, et al., 2002) in which people are asked questions relevant to the domains of personal growth prior to a stressful life event and then again at various points in time following the event. People who become more interested in interpersonal relationships, more self-confident, and so on, might be considered to have shown personal growth. Of course, such prospective designs are challenging to conduct. For some traumas, such as AIDS, it is possible to identify a group who is at risk to develop AIDS because they are HIV positive (cf. Bower, Kemeny, Taylor, & Fahey, 1998). Of course, such individuals are likely to be experiencing stress at baseline because of their HIV status. In other cases, investigators have collected baseline data on a group of people who are subsequently exposed to a stressful life event such as an earthquake, and it is then possible to collect follow-up data, achieving a prospective design (see, e.g., Nolen-Hoeksema, & Morrow, 1991).

A second means of clarifying the validity of positive changes is to obtain validating information from others in the respondent's social network. Do others, for example, view the survivor as more self-confident or more fragile?

Facilitators of Growth

Types of Events That Promote Growth

Tedeschi and Calhoun (this issue) indicate that posttraumatic growth occurs in a wide range of people facing a wide variety of traumatic circumstances. However, they take care to point out that growth does not occur as a direct result of exposure to trauma. According to these investigators, it is "the individual's struggle with the new reality in the aftermath of trauma that is crucial in determining the extent to which posttraumatic growth occurs." They use the metaphor of an earthquake to describe this process, noting that a traumatic event, like an earthquake, "can severely shake, threaten, or reduce to rubble many of the schematic structures that have guided understanding, decision making, and meaningfulness." They suggest that life events are most likely to promote growth if they challenge an individual's fundamental assumptions about the world, including assumptions that the world is predictable and controllable, that one is safe and se-

cure, and that, generally speaking, others are benevolent and can be trusted (cf. Janoff-Bulman, 1992).

To my knowledge, there is no real evidence in support of the hypothesis that events that shatter one's basic assumptions are most likely to promote growth. I have worked primarily with three different populations over the past three decades: people who experienced the sudden, traumatic death of a loved one; cancer patients; and elderly people who have lost a spouse. On the basis of this work (see, e.g., Bonanno, Wortman, et al., 2002; Dunkel-Schetter & Wortman, 1982; Lehman et al., 1987), it is my clear impression that those whose assumptions about the world have been most shattered by the event—those who experienced a sudden traumatic loss—are far less likely to experience growth than those in the other groups. Consistent with this reasoning, Murphy, Johnson, and Lohan (2003) interviewed parents who lost a spouse or child by accident, suicide, or homicide. Parents were interviewed at several different time points following the loss (4, 12, 24, and 60 months). Only 3 of the 138 parents reported finding any positive benefits following their child's death.

A number of studies provide support for the notion that cancer patients show psychological growth (see, e.g., Cordova, Cunningham, Carlson, & Andrykowski, 2001), and this was certainly my impression on the basis of leading peer support groups for cancer patients (Wortman & Dunkel-Schetter, 1979). I even heard some people say that they were glad they got cancer. Perhaps the threat to mortality that often accompanies cancer leads people to rethink the direction of their lives and to reevaluate their priorities. Consistent with this notion, Cordova et al. (2001) found a significant relation between perceived threat from the experience of having cancer and posttraumatic growth. Similar findings were obtained in the aforementioned study by McMillen et al. (1997), in which respondents were exposed to one of three disasters (a plane crash, a tornado, or a mass shooting). Across all the disasters, people who thought that they were going to die were most likely to report personal growth as a result of their experience. Taken together, these studies suggest that threats to mortality may facilitate growth, and that the shattering of one's assumptions about the world may not be a necessary component.

There is also evidence of psychological growth among elderly people who lose a spouse. Several studies have reported that following the death of a spouse, the surviving spouse may manifest such changes as greater feelings of self-confidence, a greater inclination to try new experiences, a greater awareness of one's strengths, and so on (Bernard & Schneider, 1996; Hogan, Morse, & Tason, 1996; Lieberman, 1996; Lopata, 1973; Silverman, 1987). One particularly interesting aspect of these findings is that they are strongly influenced by gender, with women showing

significantly more personal growth than men. For example, in a study of a nationally representative sample of approximately 800 widows and widowers who lost their spouse anywhere between 3 months and 60 years previously, women were more likely to agree that they had become a stronger person as a result of having to deal with their spouse's death (for more details about this study, see, Wortman, Silver, & Kessler, 1993).

Similar results emerged from a prospective study in which bereaved men and women were interviewed prior to the loss of their spouse and at 6 and 18 months following the loss (Bonanno, Wortman, et al., 2002; Carr, 2002). Still-married controls were also interviewed at each time point. Results revealed that widowed men's self-esteem was lower than that of married men, whereas widowed women's self-esteem was higher than that of married women. Would these gender differences be predicted by Tedeschi and Calhoun's (this issue) model? As I understand it, their model would predict these differences only if the event of widowhood were more disruptive, shattering, or challenging for women than it is for men. In fact, the data are clear in indicating that the opposite is true: Widowhood is a far more difficult transition for men than it is for women. It is well-established that widowed men, in comparison to married controls, are more likely to become depressed, and to experience greater mortality and morbidity than are widowed women (Miller & Wortman, 2002; Stroebe, Stroebe, & Schut, 2001).

Perhaps growth is promoted when people are placed in a situation in which they are required to perform tasks that enhance their feelings of competence and effectance, and they are able to perform these tasks successfully. Carr (2002) reported that as a result of having to do things they have never done before, women develop new coping skills as well as an awareness of their own strengths. Men may be less likely to show personal growth because the tasks they typically assume following spousal loss, such as responsibility for household chores, may be less likely to impart feelings of competence, effectiveness, and personal strength.

I am only aware of one study that has compared rates of personal growth among people who experienced different life events. As noted previously, McMillen et al. (1997) conducted a longitudinal study among people who were exposed to one of three different disasters: a plane crash, a tornado, or a mass shooting. Three years after the disaster, respondents were asked whether they were able to identify any kind of benefit that occurred as a result of the disaster. Nearly 95% of those who were exposed to a tornado were able to identify some benefit, but only 35% of those who witnessed a plane crash were able to do so (among those who witnessed a mass shooting, 69.2% were able to identify some benefit). The authors suggested that

such factors as where the disaster occurs and how much community support is available following the disaster can influence perceived growth. The tornado occurred in a small town, and was followed by a great social outpouring, which the authors believed may have influenced perceptions of benefit. In contrast, the plane crash occurred in a larger city where less support from the community may have been forthcoming.

In sum, Tedeschi and Calhoun (this issue) have maintained that personal growth is most likely to occur following an event that shatters one's basic assumptions about themselves and the world. However, a review of past research suggests that it may be worthwhile to consider other factors that may be important in promoting growth. The more we can learn about what promotes growth, the more we can intervene effectively among people who have experienced traumatic life experiences.

Just as it is worthwhile to identify those conditions that facilitate growth, we must be aware of those conditions that impede it. Although there is little research to guide us in this endeavor, I would hypothesize that growth may be impeded if: (a) the trauma involves violence, mutilation, or destruction; (b) the trauma is brought about by another's negligence and is therefore seen as unnecessary and preventable; (c) the trauma was brought about by someone who intended to do harm; (d) the perpetrator does not admit fault or show remorse for what has happened; and (e) the perpetrator is not brought to justice (see Wortman, Battle, & Lemkau, 1997, for a more detailed discussion).

Cognitive Processing and Growth

Tedeschi and Calhoun (this issue) maintain that cognitive processing is central to growth. According to these authors, trauma is typically followed by cognitive restructuring or rebuilding, and growth is a by-product of this rebuilding process. They suggest that cognitive processing must be persistent and sustained for growth to occur.

Available data fail to support the claim that cognitive processing is necessary to achieve growth. Although they do not include measures of posttraumatic growth, many studies have found that those who show evidence of processing their trauma or loss do no better, and often worse, than people who do not (see Bonanno & Kaltman, 1999, or Wortman & Silver, 2001, for reviews). For example, Bonanno and Keltner (1997) found that those who expressed negative feelings or showed negative facial expressions in an interview showed higher interviewer-rated grief 14 months postloss, even when initial levels of grief were controlled. Similarly, Nolen-Hoeksema, McBride, and Larson (1997) found that among homosexual men who had lost a partner to AIDS, those who had thought

about their life without the partner, and how they had changed as a result of the loss, showed more persistent depression over the 12 months following the loss. Among people who have lost a loved one, those who reported never searching for meaning reported fewer symptoms, reported higher well-being, and rated themselves as more recovered from the loss than those who reported searching for meaning (Davis et al., 2000). There is also evidence to suggest that individuals who show a propensity to minimize or avoid processing a loss, either through self-deception (Bonanno, Field, Kovacevic, & Kaltman 2002), distraction (Stroebe & Stroebe, 1991), or repressive coping (Bonanno, Keltner, Holen, & Horowitz, 1995), typically exhibit fewer grief symptoms over time than those who do not use such strategies.

This research suggests that cognitive processing does not necessarily result in growth. Moreover, those who try in vain to resolve what has happened may show more deleterious effects from the trauma than those who do not engage in cognitive processing. For example, in a study of homosexual men who lost a partner to AIDS (Bower et al., 1998), half of those who engaged in cognitive processing were unable to find meaning in the loss. These same individuals showed a drop in T-cells over the course of the study, suggesting a compromised immune response. The authors speculated that the failed attempt to find meaning may have resulted in elevated depression and intrusive thoughts as well.

At several points in their target article, Tedeschi and Calhoun (this issue) indicate that the cognitive processing involved in promoting growth is effortful and takes time. They note that the process is "often lengthy." However, there are several studies illustrating that people perceive and report posttraumatic growth rather quickly after a crisis. In a longitudinal study of life changes following sexual assault, Frazier et al. (2001) found that many respondents reported positive changes after 2 weeks. Moreover, most of the change in finding something positive in the assault occurred between 2 weeks and 2 months after the assault, contrary to the notion that such change is a long, gradual process. Similarly, in their longitudinal study of the consequences of exposure to a plane crash, a tornado, or a mass shooting, McMillen et al. (1997) found that it was common for people to report growth at the first interview (4–6 weeks after the disaster). For example, 90.5% of those people who were exposed to a tornado reported some kind of benefit after 4 to 6 weeks; a similar percentage (94.7%) reported some kind of benefit after 3 years. We have obtained similar results in our work on whether parents search for meaning following the loss of their infant to sudden infant death syndrome (Davis et al., 2000). If people are going to find meaning in their baby's death, they are most likely to do so between 2 and 4 weeks following the baby's death.

Tedeschi and Calhoun's (this issue) analysis would predict increased growth over time as people continue to process what has happened. However, some studies have found a different pattern: People report growth or benefit shortly after the crisis has occurred, but then show a decrease or decline in growth or perceived benefits over time. For example, in a study of survivors of sexual assault, Frazier et al. (2001) interviewed people at 2 weeks, 2 months, 6 months, and 1 year following a sexual assault. A significant percentage of respondents mentioned benefits after 2 weeks but then no longer reported these benefits when questioned in a subsequent interview (for similar findings, see Davis, Nolen-Hoeksema, & Larson, 1998). In both of these studies, those who showed a decrease in benefits over time showed a corresponding increase in distress.

Taken together, available data indicate that processing sometimes leads to improvements in self-understanding and perhaps to growth. However, there may be significant costs to processing in those cases where growth is not achieved. Moreover, just as some show an increase in growth over time, others show a decrease. We need to learn more about how to facilitate processing that is ultimately successful.

Disclosure and Posttraumatic Growth

According to Tedeschi and Calhoun (this issue), posttraumatic growth can be facilitated by the process of self-disclosure in the context of a supportive social environment. They suggest that when others can tolerate our distress, this sustains cognitive processing and thereby encourages growth. Tedeschi and Calhoun also note that supportive others can aid growth through the provision of new schemas, and by offering perspectives on what happened that can be integrated into schematic change. I agree with the first part of what Tedeschi and Calhoun are saying—that healing is facilitated when others are willing to listen to what the trauma survivor is going through. However, I am far more skeptical than they are about how often this is likely to occur. In the following, I draw from past studies to suggest that most people are uncomfortable with trauma survivors' displays of distress, and actively attempt to discourage such displays. I disagree with the second part of Tedeschi and Calhoun's argument—that trauma survivors will benefit from others offering perspectives and alternative schemas. I believe that the social support literature is clear in indicating that survivors do not appreciate others providing philosophical perspectives about their situation (see, e.g., Lehman et al., 1986).

Tedeschi and Calhoun (this issue) acknowledge that social support is not always beneficial. In fact, there is a growing consensus that researchers must pay more attention to the negative aspects of relationships (Ingram, Betz, Mindes, Schmitt, & Smith, 2001; Rook,

1984, 1992). It is becoming increasingly clear that the negative elements of social interactions are more strongly related to mental health than positive elements (see, e.g., Manne, Taylor, Dougherty, & Kemeny, 1997; Morgan, Neal, & Carder, 1997; Schuster, Kessler, & Aseltine, 1990). There is also clear evidence that when left to their own devices, others often make support attempts that are judged to be unhelpful by the recipient (see Wortman, Wolff, & Bonanno, in press, for a review).

Why is it that people often make support attempts that fail? One factor has to do with the kinds of feelings that are elicited by exposure to others' misfortune. Interacting with someone who has experienced a life crisis can evoke powerful feelings of helplessness. People often have no idea what to say or do to help the survivor. Consequently, encounters with survivors of trauma are often awkward and uncomfortable. Interactions with people who are suffering can also heighten feelings of personal vulnerability. There are several theories in social psychology, such as Lerner's just world theory, that suggest that peoples' feelings about others who are less fortunate are determined in large part by their own needs for security (cf. Wortman et al., in press). Feelings of vulnerability can lead people to react to those who have suffered misfortune with a lack of sympathy. By believing that others deserve their fate, people can maintain their belief that the world is just and that nothing bad will happen to them.

As a result of these feelings of vulnerability and helplessness, people often respond to survivors of misfortune in ways that are unintentionally damaging. Chief among these is discouraging open expression or discussion of feelings about the loss. Survivors of misfortune commonly report that when they attempt to discuss or display feelings about what has happened, they are blocked from doing so and experience this as upsetting (Lehman et al., 1986; Ingram et al., 2001). For example, one person who lost her husband in an accident said, "I needed to talk about the accident, but when I started talking to my closest friend about it for the second time, she became visibly annoyed. 'You told me that already,' she said" (Wortman, Carnelley, Lehman, Davis, & Juola Exline, 1995, p. 92). Attempts to prevent or discourage open communication about negative feelings may take many specific forms, such as minimizing the loss or trauma (e.g., "you had many good years together") or encouraging the survivor to look on the bright side (e.g., "you have so many things to be thankful for"). In addition to blocking expressions of feeling, support providers engage in other kinds of support attempts that are also regarded as unhelpful, such as giving advice (e.g., "Now that your husband has died you should consider getting a dog—they are wonderful companions"), or attempting to identify with the survivor's feelings (e.g., "I know how you feel—I lost my second cousin").

Tedeschi and Calhoun (this issue) suggest that one function those in the support network can serve is to offer perspectives on what has happened, and thereby facilitate the survivor's cognitive processing about the event and subsequent growth. Although this would seem possible in theory, the support literature suggests that in most cases, people do not react positively to others' attempts to provide a new perspective on what has happened. Such comments as "It was his time to go," "It's time you moved on," or "God needed him more than you did," are typically greeted with hostility (see Wortman et al., in press, for a review). It is not clear whether most people have the social skills required to help the survivor develop a new schema or perspective on what happened. Perhaps the best way to help is simply to listen to the survivor—a task that is very challenging for most people.

It might be expected that unhelpful remarks such as those just illustrated would be more prevalent among strangers or casual acquaintances than among survivors' relatives or close friends. However, this does not appear to be the case. In our study of people who lost a loved one in a motor vehicle accident, we found that slightly more than half of all unhelpful comments were made by relatives or friends (Lehman et al., 1986). Similarly, Marwit and Carusa (1998) found that family members were consistently rated by the bereaved as less helpful than friends. Because those who are closest to the survivor may have the greatest stake in his or her recovery, it is perhaps not surprising that they have little tolerance for displays of distress.

In addition to discouraging attempts to express negative feelings, others' feelings of helplessness and vulnerability can also lead them to respond to survivors with other kinds of self-protective responses including avoidance, derogation, and blame. One woman whose child was murdered confided that people avoided her at the supermarket, presumably because they were uncomfortable in her presence and did not know what to say. This was so painful that she drove to the next town to do her grocery shopping (Wortman et al., 1997). In another case, a child had climbed out of his car seat shortly before a drunk driver collided with their car, and the child was killed. His mother reported that several people said, "If he had been secured in his seat, he probably would have lived." As she expressed it, "It may be true, but it broke my heart to hear them say it" (Wortman et al., 1997, p. 116).

So in contrast to Tedeschi and Calhoun's (this issue) position, I would maintain that in most cases, disclosure of one's trauma is unlikely to facilitate cognitive processing and result in growth. The literature reviewed here indicates that for a variety of reasons, support providers find it difficult to listen to trauma survivors' accounts of what they have been through. Consequently, others respond to survivors of trauma in ways that are alienating or upsetting. More-

over, those who have been through the most upsetting traumas, and who are the most distressed, may have the greatest problem in finding people who are willing to listen to them. This means that those most in need of support will be least likely to get it. People cannot necessarily count on those in their immediate family, who are as likely, or possibly even more likely to react insensitively than friends or acquaintances. In fact, the comments that people receive from others, in combination with hurtful behaviors such as avoidance and blame, are likely to be experienced by survivors as deeply wounding. As one parent who lost his only child indicated, "Everywhere we have turned, we have received such a lack of compassion and understanding that we are nearly insane."

Concluding Comments

The issues that Tedeschi and Calhoun (this issue) address in their target article are indeed important ones. If we are to have a full appreciation of the impact of life events, we must give serious consideration to their claim that such events often bring about posttraumatic growth. At this point, have they made a convincing case that individuals facing a wide variety of difficult circumstances experience "significant changes in their lives that they view as highly positive?" Is the evidence for such changes indeed "overwhelming" (p. 8)? For the reasons detailed already, I do not feel that at this point, the available data support such claims.

I am very concerned that readers of this work will come away with the impression that posttraumatic growth is more prevalent than it actually is. I have already raised the possibility that survivors will be motivated to see more or greater positive changes than may actually exist. I believe that as researchers and health care professionals, we share these motivations as well. We want to feel some control over the horrible things that can happen to us, our loved ones, and our clients. Our culture champions people who are strong, invulnerable, and independent in the face of adversity. As any examination of the daily news reminds us, adversity cannot be avoided. Hence, the only way to maintain psychological comfort is to believe that adversity can be transcended.

Yet there are dangers inherent in these views. First, we have to consider the burden such views place on survivors. Even without these notions of growth, survivors often suffer at the hands of others who expect them to be recovered from their trauma or loss rather quickly. If they show distress, they are often regarded as poor copers who are wallowing in their pain. We honor people by acknowledging what they are up against following a trauma, not by holding out false hope that if they have the right personality characteris-

tics, if they process the event the right way, and if they adopt the right coping strategies, they will be able to grow from their experience. If outsiders believe that growth is prevalent, this can become a new standard that survivors' progress is measured against. Such a standard may lead to negative judgments toward those who do not show personal growth, making them feel like coping failures. There is already some evidence to suggest that survivors dislike pressure to respond positively in a crisis. Cordova et al. (2001) pointed out that cancer patients often complain of the "prison of positive thinking as they are encouraged by others to look at the bright side or to keep a good attitude" (p. 182).

An even more insidious implication of Tedeschi and Calhoun's (this issue) work is that their analysis may make us more complacent toward evil or harm. As a society, will we worry a little less about social conditions that cause suffering and distress because we have faith that people will be able to master and transcend adversity?

In those cases in which significant personal growth occurs following trauma or loss, it should indeed be celebrated. However, we need to be more tough-minded about what the data actually show before we reify this concept and pave the way for it to be embraced by the popular culture.

Note

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The Implications of Near-Death Experiences for Understanding Posttraumatic Growth

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At first reading, I was surprised and puzzled by the fact that Tedeschi and Calhoun's (this issue) conceptual analysis of what they call posttraumatic growth contained not a single reference to the phenomenon that in recent decades has come to be widely known as near-death experience (NDE), wherein highly positive life changes are often reported by people who have in one way or another been snatched back from the very brink of death itself. On further reflection, however, it became evident that the undeniably impressive life improvements studied by Tedeschi and Calhoun were significantly different in kind from the change I underwent in 1983 when a medical team in Thailand resuscitated me, after a long struggle, from deep anoxic coma caused by potentially fatal opiate poisoning, a radical identity change that I have since found echoed in hundreds of other NDE reports from all around the world

(Wren-Lewis, 1994, 1999; Wren-Lewis & Faraday, forthcoming). Moreover, the difference seems to me very important for the conceptual understanding of both NDEs and posttraumatic growth.

The contrast is epitomized in the word *trauma* itself, which is commonly associated in psychiatric circles with subsequent mental disorder or neurosis, as Tedeschi and Calhoun (this issue) emphasize. In fact a key element in their presentation is insistence that even in cases where a severe crisis experience has led to very positive life change, this often coexists with continuing personal distress, sometimes even to the point where the experiencer says he or she would prefer it had not happened at all, despite having grown emotionally by living through it. (Rabbi Harold Kushner's widely known experience of having become a better rabbi by living through his son's terrible disability and

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