

# Stress, Positive Emotion, and Coping

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## Abstract

There is growing interest in positive aspects of the stress process, including positive outcomes of stress and antecedents that dispose individuals to appraise stressful situations more as a challenge than as a threat. Less attention has been given to the adaptational significance of positive emotions during stress or to the coping processes that sustain positive emotions. We review evidence for the occurrence of positive emotions under conditions of stress, discuss the functional role that positive emotions play under such conditions, and present three types of coping that are associated with positive emotion during chronic stress. These findings point to new research questions about the role of positive emotions during stress and the nature of the coping processes that generate these positive emotions.

## Keywords

coping; positive emotion; chronic stress

Decades of research have shown that stress is associated with a wide array of negative outcomes, such as depression, anxiety, physical symptoms, disease, and even death in extreme cases. In recent years, however, there has been a growing interest in positive aspects of the stress process, including positive outcomes such as personal transformation or growth (for review,

see Tedeschi, Park, & Calhoun, 1998) and antecedents that dispose individuals to appraise situations more as a challenge than as a threat. With the exception of a few investigators such as Affleck and Tennen (1996), however, researchers have not given much attention to the actual coping mechanisms that link the positive dispositions, on the one hand, and the positive outcomes of stressful situations, on the other.

The growing interest in positive aspects of the stress process is paralleled by a growing interest in positive emotions and, of particular relevance here, the possibility that they may have important adaptational significance during the stress process. Fredrickson (1998), for example, cited evidence that positive emotions broaden the scope of attention, cognition, and action, and help build physical, intellectual, and social resources. Her "Broaden and Build Model of Positive Emotions," which is premised on this evidence, raises the possibility that positive emotions are important facilitators of adaptive coping and adjustment to acute and chronic stress and may underlie the beneficial effects of interventions such as relaxation therapies (Fredrickson, 2000). Twenty years ago, we (Lazarus, Kanner, & Folkman, 1980) suggested that positive emotions may have three important adaptive functions during stress: sustaining coping efforts, providing a "breather," and restoring depleted resources. However, until recently, there has been little effort to provide empirical support for these ideas.

The idea that people even experience positive emotions in the midst of acute or chronic stress may at first seem counterintuitive. But people do experience these emotions, even under the most difficult of circumstances. For example, when we monitored gay men who were the primary informal caregivers of partners with AIDS for up to 5 years, the caregivers reported levels of depressed mood that were more than one standard deviation above levels in the general population, and increased to more than two standard deviations above the general population's levels during periods of crisis. Throughout the study, with the exception of the weeks immediately preceding and following their partners' deaths, however, the caregivers also reported experiencing positive mood at a frequency comparable to the frequency of their negative mood (Folkman, 1997).

## COPING AND POSITIVE EMOTION

Given data demonstrating that positive emotions occur even under the most dire of circumstances, the compelling question becomes not whether people experience positive emotions during long periods of severe stress, but rather, how they do it. In our study of caregivers, we identified three classes of coping mechanisms that help answer this question: positive reappraisal, problem-focused coping, and the creation of positive events (Folkman, 1997; Folkman & Moskowitz, in press).

### Positive Reappraisal

Positive reappraisal is a cognitive process through which people focus on the good in what is happening or what has happened.

Forms of positive reappraisal include discovering opportunities for personal growth, perceiving actual personal growth, and seeing how one's own efforts can benefit other people. Through the process of positive reappraisal, the meaning of a situation is changed in a way that allows the person to experience positive emotion and psychological well-being. In our study of AIDS-related caregiving, we found that positive reappraisal was consistently associated with positive emotion both during caregiving and after the death of the partner. This association remained significant even when emotion at the previous interview and the other types of coping were statistically controlled (Moskowitz, Folkman, Collette, & Vittinghoff, 1996).

Not all forms of positive reappraisal necessarily generate positive emotion. For example, a cognitive reappraisal through which an individual devalues an important goal that has proven to be unrealistic, such as gaining admission to a prestigious Ivy League school, may be positive in that it lessens the personal significance of failing to achieve the goal, but it may do more to reduce distress than to enhance positive emotion.

### **Problem-Focused Coping**

Problem-focused coping includes thoughts and instrumental behaviors that manage or solve the underlying cause of distress. It tends to be used more in situations in which there is personal control over an outcome and less in situations in which there is an absence of personal control. Problem-focused coping is usually considered maladaptive when there is no personal control (Lazarus & Folkman, 1984), but this general formula may be overly simplified; a situation that appears on its surface to be uncontrollable may still have controllable aspects.

In our research, for example, we found a significant increase in problem-focused coping by caregivers during the weeks leading up to the partner's death, a period of profound lack of control. A review of narrative data showed that during this period caregivers were often creating the proverbial "to-do" list, usually comprising seemingly mundane tasks such as getting a prescription filled, successfully administering a medication, or changing the partner's bed linens. Such lists served multiple purposes: In attending to even the most trivial task, the caregiver had an opportunity to feel effective and in control, thereby helping to combat the feelings of helplessness and lack of control that often characterized the overall situation; working on tasks helped the caregiver feel mobilized and focused, which was energizing; and the successful accomplishment of the various tasks was often helpful, in which case the caregiver often benefited from positive feedback from his partner or other people involved in the partner's care. An important finding was that this type of coping was responsible for increases in positive mood (as distinct from decreases in distress) during these weeks (Moskowitz et al., 1996).

### **Creation of Positive Events**

This coping mechanism involves creating a positive psychological time-out by infusing ordinary events with positive meaning (Folkman, Moskowitz, Ozer, & Park, 1997), as when a person reflects on a compliment that was offered in passing, or pauses to take note of a beautiful sunset. Such time-outs provide momentary respite from the ongoing stress. In our study of caregivers, we were struck by the pervasiveness of this method of coping throughout caregiving and bereavement. Month after month,

for example, more than 99% of the caregivers noted and remembered positive events in the midst of some of the most psychologically stressful circumstances people encounter. For the most part, these events were ordinary events of daily life that in less stressful moments might not even have been noted. We believe the occurrence of these positive events was not random. Rather, caregivers created them deliberately by planning positive events, noting positive events when they occurred serendipitously, or infusing neutral events with positive meaning, as a way of having a few moments of relief from the intense stress.

Sometimes the creation of these meaningful events depended on the caregiver's ability to find humor in the situation. Humor, which has long been recognized for its tension-reducing properties (e.g., Menninger, 1963), has the added benefit of generating positive emotion in the very darkest of moments, which may, in turn, help build social bonds that can be beneficial under conditions of stress. The term gallows humor attests to the widespread use of humor in situations that are particularly grim. Humor was common in the accounts provided by caregivers, even the accounts that described partners' deaths. The humor usually managed to capture positive qualities of the dying partner in a loving manner, which had the additional benefit of helping the caregiver create images of the partner that he wanted to remember.

### **COMPELLING UNANSWERED QUESTIONS**

Research on coping and positive emotions is still in its earliest stages, and each new finding raises

new questions. For example, researchers have only begun to understand the adaptive functions of positive emotions in the midst of stressful circumstances. Laboratory studies have provided provocative suggestions regarding the ways positive emotions may help people endure stress (e.g., Fredrickson & Levenson, 1998). But because constraints of the laboratory limit researchers' ability to simulate the meaning or duration of serious real-life stressors, we strongly encourage pursuing research under real-life circumstances, with all their complexity. In our newly launched study of maternal caregivers, for example, we are investigating positive emotions and relevant coping processes in the daily lives of women providing care for a child with HIV or other serious chronic illness.

There are several issues regarding measurement and conceptualization of emotion that need to be addressed in order to advance knowledge of the role of positive emotion in the stress process. At this point, there is little in the literature about the intensity and duration of positive emotions necessary to activate their adaptive functions during stress. In our study of AIDS-related caregiving, the quantitative measures assessed the frequency of emotions, not their duration or intensity. But qualitative data suggested that positive emotions were less intense and less enduring than negative emotions (Folkman et al., 1997). It may be that it is the frequency of positive emotion, and not its intensity or duration, that confers benefits on the individual.

A related issue has to do with whether different positive emotions are differentially effective with respect to motivating and sustaining coping, and if so, under what circumstances. For example, is excitement more adaptive than happiness at the outset of a stress-

ful undertaking, but less so while the situation unfolds?

Answering these questions regarding intensity, duration, and differential effects of positive emotions will require close attention to the measurement and conceptualization of emotion. Recent debates regarding whether positive and negative emotion are independent or bipolar constructs (i.e., opposite extremes of the same construct) have reignited interest in these issues (see Russell & Carroll, 1999, for a review). As Russell and Carroll (1999) noted, when all the measurement issues are considered, a bipolar model fits the data best. By making the assertion that both positive and negative emotion occur in chronically stressful situations, we are not implying that they are independent and that at any given moment high levels of negative emotion co-occur with high levels of positive emotion. Rather, our point is that over a period of time, people in stressful situations experience not only negative emotion, but also positive emotion. Thus, in the case of our caregiver study, when participants reported their emotions over the previous week, as expected, they indicated that they experienced frequent negative affect, but they also experienced fairly frequent positive affect.

The coping processes that are associated with positive emotion involve another set of questions. Are the coping processes that generate positive emotion truly different from those that regulate distress? If so, how are they different? For example, many of the positive reappraisal processes that generate positive emotion depend on the individual's ability to access deeply held values that enhance the personal significance of ongoing coping activity. In contrast, coping processes that people are more likely to use to regulate distress (such as escape-avoidance or dis-

tancing), or even strategies that are intended to reduce tension (such as relaxation or meditation), do not seem to depend on accessing values in the same way. Further work that specifically addresses the distinction between coping processes that are associated with positive as opposed to negative emotions is clearly needed. If the ways of coping that decrease negative emotion differ from those that increase positive emotion, it may be necessary for researchers to expand the repertoire of coping measures in order to more fully tap into these positive ways of coping.

Another set of questions concerns the importance of the duration of stress, and whether the capacity or need for positive emotions differs in acute versus chronic stressful situations. Does the novelty, immediacy, or urgency of the demands of an acute stressful situation reduce the person's capacity for engaging in the coping strategies that generate positive emotions? Or perhaps it is not as important to generate positive emotions during an acute, time-limited situation as it is when a stressful situation persists over time, and the person needs to have respite from distress to become re-dedicated to the coping efforts in order to keep going. Studies directly comparing coping with acute, relatively short-lived stressors and coping with chronic stressors are necessary to answer this question.

Finally, to what extent can people be taught to generate positive emotions while they are also regulating distress? Is the ability to generate positive emotions attached to underlying personality dimensions, such as optimism, that may be relatively immutable? Or are there teachable skills that are independent of the underlying personality dimensions? Lewinsohn and his colleagues recognized the importance of pleasant events (and the

associated positive emotions) in the treatment of depression years ago (e.g., Lewinsohn, Sullivan, & Grosscup, 1980). More recent work has pursued the idea that helping clients identify thoughts and beliefs that interfere with positive experiences is an important component of therapy (Fava, Rafanelli, Cazzaro, Conti, & Grandi, 1998).

We have highlighted some of the exciting new developments in the areas of stress, positive emotions, and coping. These developments point the way for systematic, programmatic research that may help explain the fascinating, fundamental question, namely, why it is that some people not only survive adversity mentally and physically, but manage somehow even to thrive.

### Recommended Reading

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Tedeschi, R.G., Park, C.L., & Calhoun, L.G. (Eds.). (1998). (See References)

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### Note

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