- Watson, D., & Pennebaker, J. W. (in press). Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Psychological Review*.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. Psychological Bulletin, 98, 219–235.
- Wegner, D. M. (1988). Stress and mental control. In S. Fisher & J. Reason (Eds.), Handbook of life stress, cognition, and health (pp. 683-698). Chichester, England: Wiley.
- Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical effects of thought suppression. *Journal of Personality and Social Psychology*, 53, 5-13.
- Weinberger, D. A., Schwartz, G. E., & Davidson, R. J. (1979). Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology*, 88, 369–380.
- Wicklund, R. A. (1975). Objective self-awareness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 8, pp. 233–275). New York: Academic Press.
- Witkin, H. A., Goodenough, D. R., & Oltman, P. K. (1979). Psychological differentiation: Current status. Journal of Personality and Social Psychology, 37, 1127-1145.
- Wyer, R. S., & Srull, T. K. (1986). Human cognition in its social context. *Psychological Review*, 93, 322-359.

12

Coming to Terms with Major Negative Life Events

ROSEMARY TAIT ROXANE COHEN SILVER

University of Waterloo

Remember Terry Howard? He's the University of Louisville guard who had made 28 of 28 free throws before going to the line in the final seconds of the NCAA Final Four game against UCLA in 1974–75. He missed the front end of a one-on-one, letting UCLA off the hook, and Louisville lost in overtime.

Asked not long ago if he ever thought of that fateful night,

Howard said, "Every day of the week."

Now listen to Abel Kiviat, silver medalist in the Olympic 1,500 meters in 1912 at Stockholm. Kiviat had the race won until Britain's Arnold Jackson came from nowhere to beat him by one-tenth of a second.

Kiviat: "I wake up sometimes and say, 'What the heck happened to me?' It's like a nightmare."

Kiviat is 91 years old.

Los Angeles Times, January 15, 19841

People experience a variety of negative life events over the course of their lives. No one is immune to their occurrence, and the longer the lifespan, the greater the number of undesirable events one is likely to encounter. It is also popularly assumed in our society that "Time heals all wounds," and that psychological recovery will occur within a relatively brief period of time (Silver & Wortman, 1980). However, an increasing body of research evidence is calling these assumptions into question (see Silver & Wortman, 1980; Tait & Silver, 1989; Wortman & Silver, 1987, for re-

views of this literature). In fact, evidence has begun to accumulate indicating that the psychological impact of negative life events may persist for many years for a significant proportion of the population.

Although theoretical and empirical attention devoted to the long-term effects of negative life events has increased steadily over the past few decades, no comprehensive view has yet emerged of the nature, prevalence, or chronicity of their psychological impact. In fact, the extent to which persistent effects can be seen as abnormal or normative consequences of these events remains unclear. However, one of the major impediments to the development of a model to predict or explain the long-term psychological impact of negative life events has been the wide range of interindividual variability in responses to a similar type of event (cf. Silver & Wortman, 1980; Wortman & Silver, 1987, 1989). The fact that people respond so differently to the same type of event suggests that the type of event per se may be less relevant to psychological impact and its persistence than are factors that influence how the event is experienced. In this chapter, we first describe the ways in which we feel major negative life events may continue to have an impact on those who encounter them. We then describe in some detail a study we recently conducted to examine the long-term impact of undesirable life experiences (Tait & Silver, 1989). Finally, we consider a number of situational, psychological, and social factors that may contribute to individuals' continuing cognitive and emotional involvement in the major events of their lives.

A GENERAL MEASURE OF IMPACT: EVENT-RELATED RUMINATIONS

Much of the past research on the psychological effects of negative life events has been concerned with clinical or dysfunctional levels of emotional impact. In contrast, our work has focused on a more subtle form of impact, which is believed to constitute a relatively common pattern of response to these events, at least over the short term. Previous work has pointed to a tendency among those who have undergone major negative events to experience involuntary, intrusive, and distressing ruminations (i.e., thoughts, memories, and/or mental images related to the event; see Silver, Wortman, & Klos, 1982). Horowitz (1975) has described such ruminations as a general stress response tendency. Their occurrence has been documented across different nonclinical populations with varying predispositions; following low, moderate, and high levels of stress; and for both natural and contrived stressors (see Horowitz, 1976, 1982, and Wegner, 1988, for reviews of this work). The experience of these ruminations tends to be correlated positively with the degree of reported stress and with levels of negative affect, and inversely related to indices of positive emotion (Horowitz,

1975). Though less extreme, the general stress response tendency is similar in many respects to the intrusive element of Posttraumatic Stress Disorder (PTSD), as observed clinically and described in the Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM-III; American Psychiatric Association, 1980). PTSD may persist for extended time periods (see, e.g., Brende & Parson, 1985; Horowitz, Wilner, Kaltreider, & Alvarez, 1980); however, with few exceptions (e.g., Lehman, Wortman, & Williams, 1987; Silver, Boon, & Stones, 1983), the general stress response has tended to be examined only over the short term. We believe that continuing ruminations about major stressful events constitute a rich but largely untapped source of information about the psychological aftereffects of negative life experiences.

Event-Related Ruminations and the Process of Recovery

Event-related ruminations have been linked to the Freudian theory of the compulsive repetition of reminiscences subsequent to traumatic events (see, e.g., Horowitz, 1979). In clinical investigations, Breuer and Freud (1895/1955) considered them to be hysterical symptoms precipitated by a traumatic event or series of events, and noted in particular the inordinate length of time they may persist. Breuer and Freud interpreted this persistence as symptomatic of an event that has not been sufficiently "abreacted" or discharged, due either to the nature of the event itself or to the psychological state of the individual confronted with it.

Although event-related ruminations of the type described by Horowitz and his colleagues occur involuntarily, they are believed to play an integral role in the "working through" or processing of a negative life event whereby an individual gradually comes to terms with it (Horowitz, 1976, 1985; Janis, 1971; Parkes, 1972; Silver et al., 1983). It is hypothesized that the occurrence of these ruminations, in alternation with periods of denial, allows the individual to come gradually to tolerate increasing doses of distressing aspects of the event. Event-related ruminations are believed to diminish over time as the event is worked through or resolved. Distressing ruminations are seen as falling within normal limits when they occur and subside within a relatively brief period of time following a disturbing event (Horowitz, 1985; Parkinson & Rachman, 1981a, 1981b, 1981c; Rachman, 1979, 1981); the persistence or recurrence of these ruminations is regarded as "the central, indispensable index of unsatisfactory . . . processing" (Rachman, 1979, p. 51).

However, the nature of this "working-through" process is unclear. Horowitz (1975) describes a cognitive process, involving "matching and integrating . . . new or massive information about the self or world," including "the assessment of the meaning, interpretations and implications of [the] incoming information" (p. 1462). Rachman (1979) favors an emotional-processing view, whereby "emotional disturbances are absorbed, and

decline to the extent that other experiences and behavior can proceed without disruption" (p. 51). It seems most probable that cognitions and emotions are equally essential, and that the working-through process involves a dynamic interplay between them. Thus, thoughts, memories, or mental images related to a negative life event may elicit certain types of affect (Folkman, Schaefer, & Lazarus, 1979; Lazarus, Kanner, & Folkman, 1980; Singer, 1978), and certain moods or feelings may evoke event-related ruminations (e.g., Bower, 1981; Clark & Isen, 1982; Snyder & White, 1982; Wenzlaff, Wegner, & Roper, 1988; Zajonc, 1980). The general measure of psychological impact adopted in our work—the experience of involuntary, intense, intrusive, and distressing ruminations related to a negative life event—addresses the extent of ongoing cognitive and emotional involvement with an event's occurrence.

TRIGGERS OF ONGOING COGNITIVE AND EMOTIONAL INVOLVEMENT IN EVENTS

The literature has suggested three factors that may be particularly relevant to understanding reasons for the persistence of psychological impact over time. They include the ongoing implications of the event (i.e., changes in life circumstances brought about by its occurrence); the need to interpret or appraise the meaning or personal significance of the event; and social responses to the occurrence of the event and/or to the expression of event-related difficulties or distress. Each of these is considered in turn below.

The Ongoing Implications

The occurrence of a major negative event may engender changes in an individual's life circumstances (e.g., alterations in social roles and/or relationships) or in related considerations (c.g., finances, environment). Studies by Pearlin and his colleagues (see, e.g., Pearlin, 1983; Pearlin & Lieberman, 1979; Pearlin, Lieberman, Menaghan, & Mullan, 1981) have demonstrated the importance of these changes as possible enduring sources of strain. This work suggests that the psychological impact of major negative events is largely channeled through the persistent situational difficulties that may follow them (see also Antonovsky, 1982; Parkes, 1971; Thoits, 1983; Vachon et al., 1982). From this perspective, the negative implications of an event can be seen as referring to the loss of important aspects of the past—that is, of life prior to the event's occurrence.

However, the negative implications of an event may also include the loss of important aspects of the future. For example, an event's occurrence may preclude the realization of plans, possibilities, or aspirations in which an individual may be heavily invested (cf. Carr, 1975; Neugarten, 1979; Parkes, 1971; see, e.g., Kaltreider, Wallace, & Horowitz, 1979; Szybist,

1978). Although they cannot be considered aspects of one's actual life circumstances at the time of an event's occurrence, the preclusion of these possibilities may nonetheless represent a significant loss.

The ongoing negative implications of an event may differ widely in both nature and salience even among individuals confronting the same type of event, and may be experienced as part and parcel of an event's occurrence. We believe that they constitute an integral aspect of the experience of an event, and that without consideration of their implications, the psychological impact of an event can only partially be understood. In addition to coming to terms with the event itself, one must also come to terms with these implications. As long as they are salient and problematic, cognitive and emotional involvement in the event may persist. The continuing salience of an event's negative implications may be represented by ongoing unfavorable comparisons between aspects of one's life given the event's occurrence, and life as it might have been had the negative event not occurred (cf. Glick, Weiss, & Parkes, 1974; Kahneman & Tversky, 1982).

The Need to Find Meaning

Meaning has been described as the crucial organizing principle of human behavior (Marris, 1986). The need to find meaning in events—that is, to construe their personal significance in cognitive and affective terms-has been proposed as a fundamental and universal motive (see, e.g., Frankl, 1963; Marris, 1986). The search for a meaningful perspective of, or rationale for, the occurrence of a negative life event is believed to play an integral role in the process of adjustment (Benner, Roskies, & Lazarus, 1980; Bulman & Wortman, 1977; Moos & Tsu, 1977; Silver et al., 1983; Taylor, 1983). Since individuals respond not to events in and of themselves, but to their interpretations of events (cf. Beck, 1975; Epstein, 1983, in press; Frankl, 1963; Kelly, 1955; Lazarus & Folkman, 1984; Parkes & Weiss, 1983), we believe that the ability to find meaning in an event plays a key role in influencing psychological impact and the process of recovery. Moreover, meaning must also be found in an event's negative implications—that is, in life given its occurrence (see also Epstein, in press; Frankl, 1963). Thus, thoughts about an event's ongoing implications may be related to a continuing search for meaning in the event. When a meaningful and acceptable interpretation is not forthcoming, the search may persist for extended time periods, contributing to ongoing cognitive and emotional involvement in the event. A persistent search for meaning has been found to be inversely related to psychological recovery and positively related to the occurrence of involuntary, intrusive, and distressing event-related ruminations (Silver et al., 1983).

Social Responses to the Need for Discussion

Individuals confronting major negative events frequently report feeling a need to discuss the event or their responses to it with others (Coates &

Wortman, 1980; Coates, Wortman, & Abbey, 1979; Dunkel-Schetter & Wortman, 1981, 1982; Silver & Wortman, 1980; Wortman & Dunkel-Schetter, 1979). The persistence of such a need has been described as a direct sign of incomplete processing of the event (Rachman, 1979). There is some evidence that ruminating about an event and discussing its occurrence or related concerns with others may represent personal and social aspects of the same process of "working through" the event (Pennebaker & O'Heeron, 1984; see also Breuer & Freud, 1895/1955). Thus, a persistent need for discussion may be related to the continuing salience of an event's negative implications, and/or to an ongoing search for meaning in the event's occurrence.

When an ongoing need for discussion is met by a supportive environment, adjustment or acceptance may be facilitated in a number of ways (cf. Silver & Wortman, 1980). For example, free discussion may allow a cathartic discharge of emotion. Even in the absence of such a discharge, the act of putting the experience into words may provide useful insight or increase one's sense of control (cf. Pennebaker, 1989; Pennebaker & Hoover, 1985). Most importantly, perhaps, confiding in others about the event or related concerns or difficulties can serve to clarify and convey relevant coping needs. This may increase the probability that the support provided will be appropriate to these needs, and therefore effective (cf. Thoits, 1985; Wortman & Lehman, 1985).

However, the literature suggests that the need for discussion may frequently go unmet (see, e.g., Dunkel-Schetter & Wortman, 1982, for a review of this literature). In these cases, cognitive and emotional involvement in the event may continue. Moreover, it appears that social responses to the expression of event-related difficulties or distress are often negative (e.g., derogation and rejection; see Coates et al., 1979; Lazarus, 1985; Strack & Coyne, 1983). We would expect this to be particularly the case when these expressions persist over or after extended time periods (see, e.g., Coyne, 1976a, 1976b). We believe that the dynamics of the social situation that arise when continuing distress is communicated may not only fail to facilitate the process of recovery, but may also enhance the difficulty of that process. That is, the individual who consults a friend, relative, or colleague about one event-related problem may find himself or herself returning from the interaction with two problems.

In short, persistent thoughts about an event's negative implications, involvement in a continuing search for meaning, and feeling a need to discuss the event or related concerns or difficulties with others can all be seen as aspects of ongoing cognitive and emotional involvement with an event's occurrence. We believe that each of these responses reflects a particular dimension of the experience of a major negative event—situational, psychological, and social—that may account for continuing difficulties in

coming to terms with it. We also see these responses as likely to be dynamic, transactional, and reciprocal in nature.

Recently, we have made an initial attempt to explore some of these issues in the context of a study of the long-term impact of stressful life events. In this research (Tait & Silver, 1989), we chose to examine the prevalence of the aforementioned responses and of persistent ruminations across a number of different types of major negative life events-"major" not according to any predetermined or objective criteria, but in terms of our respondents' subjective, relative assessments. Given our interest in time as a factor potentially related to impact and recovery, we also chose to examine effects across a wide range of time periods since an event's occurrence. Finally, we chose to assess long-term psychological effects among a group of people who continue to function more or less successfully in their day-to-day social roles. With these purposes in mind, we approached senior citizens residing in the community for our study (Tait & Silver, 1989). We assumed that respondents aged 60 and over would have experienced a variety of negative life events, one of which would be perceived by each individual as his or her "most negative event," providing us with a wide range of types of major negative events and of time periods elapsed since their occurrence.

THE STUDY

In our study, we sought to explore the association between our measures of continuing impact and subjects' self-assessed recovery from their most negative event, their overall level of life satisfaction, and the number of years that had passed since the event's occurrence. Potential respondents were contacted initially by means of a letter describing our research as an investigation of the long-term impact of major life events (see Tait & Silver, 1989, for a more detailed discussion). Structured interviews were conducted in respondents' homes, lasting an average of 2 hours. The interview consisted of a series of open- and closed-ended questions, many of which were developed for the particular purposes of our research.

Following completion of a measure of psychological well-being (Neugarten, Havighurst, & Tobin, 1961), respondents were asked to describe the negative events they had experienced over the course of their lives, and to state when each event had occurred. From this list, subjects were asked to select the particular event they considered to have been "the worst thing that had ever happened" to them. The questions that followed focused on the ongoing psychological effects of this particular event.

Closed-ended questions assessed the general frequency of ruminations about the most negative event and the frequency of deliberate event-related

ruminations, as well as the frequency, intensity, and intrusiveness of involuntary ruminations and the kinds of affect associated with their occurrence. Closed-ended questions were also used to assess the persistence of thoughts about the event's negative implications, involvement in a continuing search for meaning in the event's occurrence, and an ongoing need to discuss the event or one's responses to it with others. Open-ended questions explored the content of ongoing event-related ruminations.

The 45 respondents who met our eligibility requirements ranged in age from 60 to 93; the mean age of the final sample was 76. The gender composition of the sample was 76% female and 24% male. The various types of major events reported by our respondents included the death of a spouse, other family member or friend; desertion by a spouse; health problems; and the like (see Tait & Silver, 1989, for a more detailed discussion). The average time period that had elapsed since the occurrence of these events was 22.8 years; the range was from 2 to 50 years.

Thematic Content of Typical Event-Related Ruminations

For the purposes of our research, event-related ruminations were described to respondents as "thoughts, mental images, or memories related to the [reported most negative] event or to the person or people associated with it." Respondents' descriptions of "typical" event-related ruminations were assessed for thematic content. Rumination themes fell into three major categories. Forty-nine percent of these ruminations centered on the event itself. This type of rumination is exemplified by the following, in which a widow of 10 years described a rumination related to her husband's death:

When he was in the hospital, I used to visit him every night. The week before he died, he said, "We have to talk." I said, "Why?" He said, "Because I'm going to die." I said, "Don't talk silly." I didn't let him speak. I always wonder what he would have said if I had let him talk.

Twenty-one percent of the ruminations described referred to aspects of life prior to the event that had changed as a result of its occurrence. An illustration of this type of rumination is provided in the following statement, in which a widow of 7 years described ongoing ruminations about her deceased spouse:

I think about him every day. I never go to bed at night without thinking of him before I settle down. We'd go out together a lot, go for walks. We'd usually talk together for an hour before going to sleep.

Nine percent of the typical ruminations reported focused on aspects of life at present that might have been different had the event not occurred. Exemplifying this type of rumination is the following statement by a respondent who had lost his only child in an automobile accident 20 years earlier:

If she was living, it'd give me something to get out of life—I'd have her, and grandchildren, which would mean a lot to me.

The remaining 21% of the ruminations described by our respondents involved a combination of two of these three themes.

Characteristics of Event-Related Ruminations

A number of aspects of event-related ruminations were examined in our study, including the general frequency of ruminations related to the given event and the frequency of deliberate ruminations about it. Of particular interest, however, were the frequency, intensity, and intrusiveness of involuntary ruminations related to the respondent's most negative event. Each of the latter three characteristics was tapped by two separate items, which are described below. Table 12.1 presents a breakdown of subjects' responses to each of these questions.

TABLE 12.1. Characteristics of Event-Related Ruminations: Percentage of Sample Reporting in Each Response Category

Frequency	Never	Rarely	Sometimes	Frequently	All the
General	4	24	47	20	4
Deliberate Involuntary	83	5	10	2	_
Thinking without meaning to	19	24	41	12	5
Thoughts "pop into mind"	9	33	33	23	2
Intensity	Not at all	Just a little	Somewhat	Quite a bit	A great deal
How "real," vivid, clear	2	14	19	35	30
How absorbing, involving	21	33	26	14	7
ntrusiveness	Never	Rarely	Sometimes	Frequently	All the time
Difficulty dispelling	63	16	12	9	
Trouble doing other things	84	2	7	7	-

Note. Adapted from The Long-Term Psychological Impact of Major Negative Life Events by R. Tait and R. C. Silver, 1989, manuscript submitted for publication. Adapted by permission of the authors.

General Frequency of Ruminations

An average of 22.8 years following their most stressful experience, 71% of our sample reported that they continued to experience thoughts, memories, and/or mental images related to their most negative event at least sometimes. This percentage included 47% who sometimes had ruminations about the experience, 20% who ruminated frequently, and 4% for whom these ruminations occurred all the time. Only 4% of the sample reported never experiencing ruminations about their most negative life event. The frequency of event-related ruminations in general was inversely related to both self-assessed recovery from the event, r(40) = -.51, $p \le .001$, and current life satisfaction, r(41) = -.48, $p \le .001$, but was not significantly related to the number of years that had passed since the event occurred.

Frequency of Deliberate Thoughts, Memories, or Mental Images

Deliberate thoughts, memories, or mental images related to the most negative event were relatively infrequent: 12% of the sample reported intentionally ruminating about the event at least sometimes; 83% reported never doing so. The frequency of deliberate thoughts, memories, or mental images was not related significantly to the frequency of involuntary event-related ruminations. In addition, no significant relations emerged between deliberate ruminations and self-assessed recovery, current life satisfaction, or the number of years clapsed since the occurrence of the event.

Frequency of Involuntary Ruminations

Two questions examined the frequency of involuntary event-related ruminations. Fifty-seven percent of the sample reported at least sometimes finding themselves ruminating about the event without really meaning to, including 12% for whom this happened frequently and 5% for whom these ruminations occurred all the time. Fifty-eight percent of respondents reported that thoughts, memories, and/or mental images related to the event "popped into" their minds at least sometimes, including 23% for whom this occurred frequently, and 2% for whom this happened all the time.

These two items were significantly related, r(40) = .33, p < .05, and were combined into an index representing the frequency of involuntary event-related ruminations. This index was negatively correlated with both self-assessed recovery from the event, r(39) = -.51, $p \le .001$, and current life satisfaction, r(40) = -.56, p < .001. No significant association emerged between the frequency of involuntary ruminations and the amount of time that had passed since the event's occurrence.

The Intensity of Ongoing Ruminations: Vividness and Absorption

The intensity of event-related ruminations was conceptualized as involving two components: their perceived vividness or clarity, and the extent to which the individual reported becoming absorbed or "caught up" in them.

Eighty-four percent of the sample described their ruminations as at least somewhat clear or vivid, including 35% who described them as quite vivid and 30% who reported them as extremely vivid. Forty-seven percent of the sample reported becoming at least somewhat caught up or absorbed in them, including 14% who became quite absorbed and 7% who became extremely absorbed.

The perceived clarity of and absorption in these ruminations were significantly related, r(41) = .53, p < .001, and were combined into an index of intensity. This index was inversely related to both self-assessed recovery from the event, r(41) = -.45, p < .01, and current life satisfaction, r(41) = -.33, p < .05. However, the intensity of event-related ruminations was not significantly related to the number of years that had elapsed since the event's occurrence.

Intrusiveness: Difficulty Dispelling Ruminations and Interference with Other Activities

Intrusiveness was assessed through the use of two items examining respondents' perceived difficulty in dispelling ongoing event-related ruminations and the degree of interference with other activities that was experienced when they occurred. Twenty-one percent of the sample reported at least sometimes having difficulty dispelling event-related ruminations, including 9% for whom this difficulty occurred frequently. Fourteen percent reported at least sometimes having trouble engaging in other activities when these ruminations occurred, including 7% for whom this was frequently the case. Difficulty in dispelling ruminations and in engaging in other activities when they occurred were significantly related, r(41) = .58, p < .001, and were combined into an index of intrusiveness. This index was only marginally related to self-assessed recovery, r(40) = -.27, p = .08, but was negatively related to current life satisfaction, r(41) = -.50, $p \le .001$. The intrusiveness of ongoing ruminations was, however, unrelated to the amount of time that had passed since the event.

Types of Affect Associated with Event-Related Ruminations

Six closed-ended questions assessed the frequency of a variety of emotions experienced in conjunction with ruminations related to the most negative event. The specific types of affect examined included feelings of sadness, upset, anger, and anxiety, as well as feelings of happiness and of being "at peace." For 67% of the sample, feelings of sadness were at least sometimes associated with event-related ruminations, including 10% for whom sadness occurred frequently and 19% who always felt sad when these ruminations occurred. Thirty percent of respondents reported finding these ruminations upsetting at least sometimes, including 7% who were frequently upset and 9% who were always upset. Smaller proportions of our sample reported that feelings of anger and anxiety at least sometimes accompanied these ruminations (17% and 21%, respectively).

These four emotions (sadness, upset, anger, anxiety) were significantly interrelated (Cronbach's alpha for interitem reliability = .73), and were combined into an index representing general distress. This index was inversely related to both self-assessed recovery, r(40) = -.52, p < .001, and current life satisfaction, r(41) = -.57, p < .001, but was unrelated to the amount of time that had passed since the event.

Sixty-two percent of the sample reported that feelings of happiness were at least sometimes associated with event-related ruminations, including 7% who reported feeling happy frequently and 19% who always felt happy when these ruminations occurred. Seventy-two percent reported at least sometimes feeling "at peace" (26% frequently, 31% always). Feelings of happiness and feeling "at peace" were positively related, r (40) = .26, p = .05, and these two items were combined into an index representing the degree to which ruminations were associated with positive emotions. This index was positively related to both self-assessed recovery, r (40) = .39, $p \le .01$, and current life satisfaction, r (41) = .30, $p \le .05$. It was also inversely related to the number of years that had elapsed since the event, r (41) = -.38, $p \le .01$.

Additional Dimensions of Ongoing Cognitive and Emotional Involvement

Thirty-nine percent of our sample at least sometimes found themselves thinking about ways in which life might have been different had the event not occurred. Thirty-seven percent of the sample reported still searching at least sometimes for a meaningful perspective from which to view their most negative life event. Twenty-one percent frequently or always felt a need to discuss the event or their responses to it with others. These three variables were positively interrelated and were combined into an index representing aspects of ongoing cognitive and emotional involvement with the given event.

This index of ongoing involvement was negatively related to both self-assessed recovery from the event, r(39) = -.41, p < .01, and current life satisfaction, r(40) = -.48, p < .01, but was unrelated to the number of years that had passed since the event's occurrence. This index was positively related to the frequency of involuntary event-related ruminations, r(39) = .45, p < .01; to their intensity, r(40) = .32, p < .05, and their intrusiveness, r(40) = .47, p < .01; and to the experience of distress in association with them, r(39) = .72, p < .001.

In summary, for a considerable proportion of the cases examined in our study, the psychological impact of major negative events persisted after an extended period of time had passed. In fact, the ongoing experience of involuntary, intense, intrusive, and distressing ruminations related to our subjects' most negative life events was inversely related to both perceived recovery from the event and life satisfaction, after an average of more than 22 years since the events' occurrence. Moreover, the negative relations ob-

served between these ruminations and subjective assessments of recovery provide some support for the validity of the former as a measure of persistent impact. With the single exception of the experience of positive emotions in association with event-related ruminations, which was inversely related to the number of years that had elapsed since the event, none of these measures of impact were significantly related to the amount of time that had passed since the event.

Since change over time was not examined in our study, it remains unclear to what extent the ruminations described by our respondents reflected a fairly steady perseverance as opposed to widely fluctuating levels of impact during the years between the occurrence of the event and our interview. Our data indicate only that, for many of our subjects, cognitive and emotional involvement in the event was ongoing. For these individuals, in Lewin's (1951) terminology, the event still "had existence"; that is, it was not a closed issue, but remained a part of psychological reality, exerting demonstrable influence that was measurable in both quantitative and qualitative terms.

Despite evidence of ongoing cognitive and emotional impact, our respondents appeared to be functioning at least adequately in their day-to-day social roles. Exactly half the sample reported that they felt they had completely recovered from the event in question, and the mean life satisfaction score compared favorably with established norms (see Tait & Silver, 1989). Nonetheless, the pattern of significant relations that emerged between self-assessed recovery and life satisfaction and our measures of ongoing impact underscores the importance of considering the various factors that may contribute to or maintain psychological impact or impede the process of recovery.

Our research addressed such factors through the examination of three additional indicators of ongoing cognitive and emotional involvement in a negative life event. Persistent thoughts about the negative implications of the event, a continuing search for meaning in the event's occurrence, and feeling a need to discuss the event or related concerns or distress with others were conceptualized as referring to aspects of ongoing difficulty in coming to terms with the given event. As was the case for our more general measure of impact, the index formed by combining these responses was inversely related to both self-assessed recovery and life satisfaction, and unrelated to the amount of time that had passed since the event.

RUMINATIONS, LIFE SATISFACTION, AND THE CONTINUING IMPLICATIONS OF AN EVENT

Since the correlational nature of the relations examined in our work precludes the formulation of causal statements, it remains unclear whether event-related ruminations contribute to or arise from lower levels of life satisfaction, or whether the inverse relation between them is attributable to the influence of other factors. However, studies by Schwarz and Strack and their colleagues (see, e.g., Schwarz & Clore, 1983; Strack, Schwarz, & Gschneidinger, 1985) provide some evidence that ruminations about a past event can influence current evaluations of life satisfaction. Their analysis suggests that a key factor determining the nature of this influence is the kind of affect elicited by these ruminations in the present. Thus, negatively valenced ruminations about a past event may bias judgments of life satisfaction downward, whereas positively valenced ruminations may exert the opposite effect. Because of its focus on voluntary rather than involuntary ruminations, it is unclear to what extent valid extrapolations can be made from this work to our research. Nonetheless, it may be the case that distressing event-related ruminations, regardless of their voluntary or involuntary nature, can exert a considerable negative influence on judgments of satisfaction with life.

Perhaps a clearer argument can be made that factors contributing to lower levels of life satisfaction may directly or indirectly enhance the likelihood of distressing event-related ruminations, particularly when these factors are attributed to the occurrence of the given event, as in the case of its ongoing negative implications. Some evidence for the relevance of an event's implications to long-term psychological impact and life satisfaction can be found in the results of the thematic analysis of the content of the "typical" event-related ruminations described by subjects in our study. In addition to thoughts, memories, or mental images centering on the event itself, respondents described ruminations about negative implications of the event in terms of either aspects of life prior to the event that had changed as a result of its occurrence, or aspects of life in the present that might have been different had the event not occurred. Responses to our question specifically addressing the experience of thoughts about the ongoing implications of the most negative event also suggest the importance of this consideration to both psychological recovery and satisfaction with life.

When the continuing salience of an event's negative implications results in unfavorable comparisons between aspects of the past (i.e., of life prior to the event's occurrence) and one's present circumstances (cf. Brickman, Coates, & Janoff-Bulman, 1978; Strack et al., 1985), even pleasant thoughts, memories, or mental images may be a source of current distress. In the words of one of our respondents,

Sometimes I remember the good times we used to have, and how good he was to me and the children. He certainly was a very good husband. He had his temper, like any man; we had our ups and downs, and our quarrels. But most of them are very good memories. They hurt now, too. They hurt since he died. Although they are good memories, they still hurt me.

Aspects of one's present life circumstances may also be unfavorably compared against plans, hopes, or goals that were precluded by the occur-

rence of the negative event. In discussing thoughts about the implications of the death of her husband after his decision to postpone retirement for 2 years, another of our respondents described them in the following terms:

We would have gone to Europe. We would have tried to enjoy life without working: the friends, the relatives, a better social life. I'd still be living with him in the same house; I wouldn't have to live in Ontario [Public] Housing. . . . These things keep coming back.

The continuing negative implications of an event, when they result in unfavorable comparisons between life as it is and life as it might have been had the event not occurred, may make a substantial contribution to lower life satisfaction, and may also act as persistent triggers of distressing event-related ruminations.

An event's implications may contribute to ongoing cognitive and emotional involvement in three ways. First, the implications of an event may remain salient and problematic over time. It is also possible that an event's implications may only become salient and problematic with the passing of time. Such a case has been illustrated earlier by the respondent in our study who described ongoing ruminations related to the death of his adolescent daughter 20 years earlier; his ruminations centered on the loss not only of his only child, but also of the grandchildren he could have expected had her death not occurred (see also Carr, 1975; Parkes, 1971). A final possibility is suggested by the significant inverse relation observed in our study between the experience of positive emotions (happiness, feeling "at peace") in association with event-related ruminations and the number of years that had passed since the event. In explaining these positive emotions, many of our subjects referred to the fact that the event was over, and with it had terminated the suffering of a loved one. It is possible that this type of positive implication, while potentially of great salience in the immediate aftermath of an event, may decrease in salience over time relative to negative implications that remain or become salient or problematic.

Salient negative implications of an event that remain operative in the individual's current life situation represent potential sources of ongoing psychological impact above and beyond the occurrence of the event. Through these implications, an event may continue, long after its termination, to exert considerable influence on one's life. However, as is the case for the occurrence of the event itself, the actual implications of an event may be of less importance to understanding psychological impact and recovery than the interpretation of their meaning or personal significance.

PSYCHOLOGICAL RECOVERY: INTERPRETATION AND INTEGRATION

The process of "working through" a negative life event (cf. Freud, 1914/1958), optimally leading to resolution or recovery, has been described as

involving two interrelated tasks: the interpretation of the event in meaningful terms, and the integration of this information into a coherent, stable, and adaptive conceptual framework (see, e.g., Marris, 1986; Piaget, 1926, 1952). The conceptual framework represents the individual's assumptive world (Janoff-Bulman, 1985, in press; Janoff-Bulman & Timko, 1987; Parkes, 1975), models or theories of reality (Bowlby, 1980; Epstein, 1973, 1979, 1981; Parkes, 1971, 1972, 1975; Parkes & Weiss, 1983), or structures of meaning (Marris, 1986; see also Horowitz, Wilner, Marmar, & Krupnick, 1980). It consists of descriptive and prescriptive postulates, interwoven into a system of beliefs, assumptions, or expectations related to oneself, others, and the world, and of various emotions associated with them. It functions as a frame of reference, guiding both interpretations of the data of experience and the selection of appropriate responses, and providing a sense of coherence, predictability, and control over reality. The need to interpret and integrate experience into constructions of reality has been described as a fundamental and universal motive related to adaptation and survival (e.g., Marris, 1986; see also Frankl, 1963).

Events are interpreted in light of the existing conceptual structure. Aspects of the extant framework may preclude the appraisal of an event as stressful, even when it is considered to be objectively so (see, e.g., Baluk & O'Neill, 1980; May, 1977; Wortman & Silver, 1987, 1989). Conversely, an event that may be considered objectively innocuous may yet be appraised as quite stressful by the individual confronted with its occurrence.²

Integration of the information inherent in an event's interpretation may occur in two ways, as a function of its consistency or incompatibility with the existing system. When an event is interpreted in terms that are consistent with operative conceptual models or theories of self, others, and the world, this information may be assimilated relatively easily into the extant framework. When the event's interpretation is inconsistent or incompatible with aspects of the conceptual framework, either these aspects of the existing system must be altered to accommodate the information, or the event must be reinterpreted in terms that are more assimilable (see also Horowitz, 1975; Lazarus, 1966; Lazarus & Folkman, 1984; Lerner, 1980; May, 1977). Persistent event-related ruminations are believed to represent attempts to integrate such inconsistent information (cf. Epstein, 1987).

Complications in the Process

Several types of complications may arise in the process of formulating a meaningful and acceptable interpretation of a negative life event. First, an event may prove to be difficult to interpret in meaningful terms. Since the conceptual framework is built up as a function of direct and vicarious

experience, it may be that problems in interpretation can arise in particular for events that are beyond the range of common experience. Examples of such events include incest (Silver et al., 1983); the accidental, suicidal, or homicidal death of a loved one (Lehman et al., 1987; Rynearson, 1986); and catastrophic events, such as natural or human-caused disasters (e.g., Eitinger, 1980; Lifton, 1968; Titchener & Kapp, 1976). Individual characteristics or motives may also influence the search for a meaningful interpretation; for example, a need for validity (Kruglanski, Baldwin, & Towson, 1983) may prolong the search for extended periods of time.

A second type of complication may arise when an event is interpreted in terms that are meaningful, but inconsistent with aspects of the existing system—challenging or violating, for example, fundamental beliefs, assumptions, or expectations (e.g., Janoff-Bulman, 1985, in press; Lerner, 1980). In these cases, the information may be integrated by altering the existing belief system to accommodate it. However, the process of accommodation may prove to be both time-consuming and distressing. Marris (1986) has proposed the influence of a general "conservative impulse," an initial and potentially persistent resistance against change in aspects of the prevailing conceptual structure, which have probably established some validity over time. Dissonance between an event's interpretation and operative beliefs, theories, or models has been associated with a sense of discontinuity or disorganization, a sense of incoherence or unpredictability, and feelings of the loss or absence of control (cf. Antonovsky, 1982; Epstein, 1982; Festinger, 1957; Kruglanski et al., 1983). Again, individual characteristics or motives may play an important role in determining the extent of resistance to inconsistent information. Resistance may be stronger, for example, with higher levels of the need for structure or of the need for specific conclusions (Kruglanski et al., 1983).

Factors that may influence the process of accommodation include the nature and centrality of the threatened or violated construct, and its interrelatedness with other aspects of the existing system. We would expect that the more central or deeply embedded the relevant belief or model, the more difficult and prolonged the process is likely to be. For example, applying Bem's (1970) hierarchical model of cognitive structures, one might anticipate that zero-order beliefs would be more resistant to alteration than first- or second-order beliefs. On the other hand, the greater the individual's cognitive complexity—that is, the greater the extent to which beliefs or models are compartmentalized or discrete—the easier the process may be (see, e.g., Linville, 1985). The influence of individual characteristics or motives may also come into play in the accommodation process. For example, a high need for structure (Kruglanski et al., 1983) may intensify the distress associated with dissonance between an event's interpretation and aspects of the existing conceptual framework.

When the interpretation of an event is inconsistent or incompatible with the extant conceptual framework, integration may also be achieved

by reinterpreting the event in terms that are assimilable within the given structure (see, e.g., Frankl, 1963; Lerner, 1980). In some cases, reinterpreting an event in terms that are acceptable may prove to be as difficult as, or more difficult than, the initial formulation of meaning. As long as a meaningful and acceptable interpretation remains clusive, the search for meaning may continue for extended time periods. Moreover, we believe that the implications of an event constitute an integral aspect of its overall meaning or personal significance, and that long-term psychological resolution requires the development of a meaningful and acceptable interpretation not only of the event, but also of its ongoing implications (i.e., of life given the occurrence of the event). The positive relation that emerged in our research (Tait & Silver, 1989) between ruminations about an event's implications and a continuing search for meaning suggests that this may be the case. Whether a continuing search for meaning elicits thoughts about an event's implications, or whether problematic implications cause one to consider the meaning of an event, is unclear. It may be, however, that the clearest interpretation of a major negative event can be made only from a long-term perspective, in light of its full range of negative and positive implications.

PSYCHOLOGICAL IMPACT AND THE SOCIAL MILIEU

Lazarus (see, e.g., Lazarus & Folkman, 1984) has suggested that an individual confronting a major negative life event may face two sources of threat or stress—that arising from the event itself, and that arising from his or her responses to the event. The literature indicates that people are frequently surprised by the nature and intensity (and, perhaps, persistence) of their own responses to these events (cf. Horowitz, 1985; Silver & Wortman, 1980). In fact, the need to discuss an event or one's responses to it with others has been linked to the need to receive validation—that is, feedback from others indicating that these responses are normal and appropriate to the circumstances (e.g., Dunkel-Schetter & Wortman, 1981, 1982).

Individuals who experience major negative life events or difficulty in coming to terms with them may frequently turn to significant others in the social milieu for assistance or support. Prior work has identified various forms of social support that may facilitate the process of recovery by reducing the demands associated with an event's occurrence or by enhancing the individual's ability to meet these demands (for reviews, see Cohen & Wills, 1985; Kessler & McLeod, 1985; Kessler, Price, & Wortman, 1985; Turner, 1983). In order for social support to be effective, however, it must be appropriate to the particular needs or difficulties experienced by the individual (cf. Lehman, Ellard, & Wortman, 1986; Thoits, 1985; Wortman & Lehman, 1985). Ineffective or inappropriate responses can contrib-

ute to the maintenance of psychological impact, or may add to the complexity of the recovery process by increasing the sources of strain with which the individual must cope. The likelihood of effective support may be a direct function of the individual's ability to communicate openly with others about the event and/or event-related difficulties or distress. We believe that social responses to these communications may play an integral role in the mediation or moderation of psychological impact (cf. Strack & Coyne, 1983).

Whether social responses effectively enhance or impede the process of recovery, we believe that they may be more clearly understood by drawing a parallel between the sources of threat or stress that may be faced by the individual and those that may be faced by members of his or her social milieu (cf. Thoits, 1985). That is, the occurrence of a negative event or of continuing event-related difficulties or distress may pose a threat not only for the individual directly confronted with the event, but also for members of the social network. This parallel is based on empirical evidence that people respond not only to their own events and outcomes, but also to those of relevant others. When these events or outcomes involve another's suffering or distress, observers frequently respond with physiological and psychological arousal (see, e.g., Lazarus, Speisman, Mordkof, & Davison, 1962; Lerner, 1980). Merely viewing a film depicting the suffering and distress of an unknown other may result in marked mood changes (Tannenbaum & Gaer, 1965) or in the experience of involuntary and distressing ruminations related to the material observed (Horowitz, 1975, 1976; Horowitz & Wilner, 1976; Wilner & Horowitz, 1975), or both. The personal experience of witnessing the ongoing event-related difficulties or distress of a significant other may have considerably greater impact.

Given some basic degree of perspective-taking ability, observing another's suffering and distress can also elicit two qualitatively different and apparently independent kinds of empathic arousal (Coke, Batson, & McDavis, 1978; see also Davis, 1983). Observers may experience personal distress (feelings of fear, apprehension, or discomfort) or empathic concern (feelings of warmth and compassionate concern for the other's welfare). Lerner (1980) has described a similar dichotomy in responses to another's suffering, distinguishing "empathy," defined as the automatic arousal experienced in response to evidence of another's suffering, from "sympathy," described as the compassionate concern that may be elicited when one identifies with the distressed individual.

We believe that these two forms of empathic arousal (cf. Batson & Coke, 1981) may be particularly useful in explaining social responses to the need to discuss the event or event-related difficulties or distress. The experience of personal distress in response to these communications may be more likely to result in responses of flight (i.e., avoidance of the individual or of attempts to discuss the event or related problems), fight (i.e.,

hostility toward or rejection of the individual or his or her attempts at discussion), or freezing (no response or "cliche" response). All of these reactions may serve to inhibit expressions of the need for discussion. In comparison, the experience of empathic concern may result in greater openness to manifestations of this need—that is, in more willingness to confront evidence of continuing difficulty or distress, and in a higher probability that attention will be directed to relevant contributing factors.

To some extent, these two basic empathic responses may reflect underlying differences in general orientations to stress or threat (i.e., avoidance vs. approach or confrontation; Roth & Cohen, 1986). However, other factors may also influence the nature and extent of arousal elicited by observing another's ongoing distress. Most relevant to the present analysis are the nature and extent of the threat that may be posed to the observer by the occurrence of the event and/or of continuing event-related difficulties or distress, or, more precisely, by the interpretation of the event and/or of its persistent impact.

Drawing a parallel between the sources of threat that may be faced by the individual and those that may be posed for members of the social milieu broadens our perspective on the psychological impact of a negative event. This broader perspective allows us to look beyond the individual confronted with its occurrence, and to consider the event's potential impact on members of the social milieu, the relation between this impact and social responses, and the potential effects of these responses on the individual's experience of the event. From this perspective, the model of psychological impact and recovery described above may be extended to members of the individual's social network. That is, the occurrence of a major negative event and/or of ongoing difficulties in coming to terms with it may threaten or violate important beliefs, assumptions, theories, or models of self, others, or the world, not only for the individual, but also for members of his or her social environment. To the extent that this is the case, both parties may experience direct threat or stress, and both may be faced with similar tasks of interpretation, assimilation, accommodation, or reinterpretation. The basic motive to find meaning in events or outcomes characterizes both parties of a social relationship, and extends beyond one's own outcomes to include those of significant others. Thus, for both parties, the actual event or outcome may be of less relevance to the process of recovery than their interpretation of its meaning or personal significance, and the consistency or inconsistency of this interpretation with important aspects of existing conceptual frameworks or structures of meaning. In cases of inconsistency, significant others may be directly, rather than just vicariously, threatened by the occurrence of the event and/or evidence of persistent difficulty in resolving it. The experience of direct threat or stress may increase the likelihood of responding to the event or to evidence of its continuing impact with personal distress rather than with empathic concern.

As in the case of the individual, the extent of threat directly experienced among members of the social milieu may be a function of the nature and centrality of the particular beliefs, assumptions, theories, or models that are challenged or violated by the interpretation of these events or outcomes, and the degree of inconsistency between them. One kind of belief, assumption, or expectation of particular relevance has been identified as the "assumption of invulnerability" (i.e., the belief that major negative events are unlikely to happen to us; Janoff-Bulman & Frieze, 1983; Perloff, 1983; Perloff & Fetzer, 1986), and as the "optimistic bias" (i.e., the tendency to underestimate the probability of personally experiencing major negative events; Weinstein, 1980, 1984; Weinstein & Lachendro, 1982). We believe that this kind of assumption or expectation may also extend to one's perceived probability of experiencing persistent event-related difficulties or distress (Olshansky, 1962; Wikler, Wasow, & Hatfield, 1981). That is, the motives or processes underlying the tendency to assume invulnerability to, or to underestimate the probability of, the occurrence of negative events in one's own life may contribute to a similar tendency to minimize the perceived likelihood of experiencing persistent event-related difficulties or distress. Indeed, since we are generally held less responsible for the events that happen to us than for our responses to these events (cf. Brickman et al., 1982), there may be an even greater tendency to underestimate the likelihood of experiencing persistent distress. Moreover, this same tendency toward underestimation may exert a similar biasing influence with regard to one's beliefs about the probability of major negative events occurring and of their persistent impact among those who are closest to us-that is, those with whom we share an identity relationship (cf. Lerner, 1981). This tendency may make a substantial contribution to a more general belief, assumption, or expectation that the psychological impact of these events is normally limited within relatively narrow temporal parameters, and that persistent psychological impact represents an "abnormal" outcome of these events.

THE INDIVIDUAL'S RESPONSES TO SOCIAL RESPONSES

When the need for discussion is inhibited by members of the social milieu, the individual may find himself or herself caught in a conflict between the need to discuss a major negative event or related concerns or distress with others, and the need to maintain stable and harmonious social relations (Epstein, 1985). The individual may respond by persisting in his or her attempts to involve others in discussion, or may acquiesce to strong social sanctions against the persistent expression of event-related distress. In the former case, others may respond with increasing hostility toward, or rejection or avoidance of, the individual or his or her communications (e.g.,

Coates et al., 1979; Strack & Coyne, 1983), or with a complex sequence of mixed responses, some positively reinforcing the need to talk, others inhibiting this need (Coyne, 1976a, 1976b). Some social responses may effectively eliminate attempts at discussion. However, mixed responses may contribute to the persistence of these attempts, and to an escalating cycle of mutual hostility, frustration, and perhaps alienation.

Alternatively, negative social responses to the expression of continuing difficulty or distress may result in a split between the private experience and the public expression of ongoing impact. Together with the paucity of clear norms, roles, or guidelines outlining effective behavior for either the distressed individual or members of the social milieu, and with the influence of frequent media depictions of "super copers" (Wood, Taylor, & Lichtman, 1985) who deal with major negative events quickly, effectively, and with little apparent need for continuing social support, the stigma that may be associated with persistent psychological impact can result in the adoption of self-presentational strategies that are more in line with social expectations (see, e.g., Goffman, 1959, 1963), and perhaps with one's own prior expectations. Insofar as these strategies are effective, the actual extent or persistence of psychological impact may be underrepresented in the perceptions of members of the social milieu.

Both of these responses to the inhibition of the need for discussion may ultimately contribute to the belief that persistent psychological impact represents an "abnormal" outcome. The findings of our research, as well as of related work, strongly suggest that this is not the case. The attribution of abnormality to what is essentially a normal response (see, e.g., Goin, Burgoyne, & Goin, 1979; Szybist, 1978) by health care professionals, laypersons, and distressed individuals alike may make a significant contribution to the maintenance or enhancement of ongoing psychological impact.

Because members of the social milieu may exert a significant influence in mediating or moderating the impact of negative events, and may also directly or vicariously share in the psychological impact of these events, it may be that psychological recovery is most appropriately conceptualized not as an individual but as a social process. However, recognizing persistent impact as a "normal" outcome of major negative events does not imply that the best response for either the individual or members of the social network would be one of passive acquiescence to an inevitable outcome. We cannot prevent the occurrence of these events; speaking in relative and subjective terms, everyone will experience a "most negative event" over the course of his or her life. Nonetheless, awareness of continuing impact as a relatively normal response to these events can reduce or eliminate a potential source of stress for both the individual and members of his or her social milieu, and may enhance the ability of both parties to deal effectively with the factors contributing to its persistence.

CONCLUSIONS

The purpose of this chapter has been to contribute to a normative view of the long-term psychological impact of major negative life events, and to apply to this description a theoretically based explanation. In attempting to do so, we have adopted a broader frame of reference than is usually the case in studies of the psychological impact of events. Rather than examining impact within a given type of event, we have attempted to establish some basis for comparison across different types of events, according to subjective and relative judgments of severity. Comparison across event types is not a novel approach. For example, Parkes (1972) compared the psychological impact of the loss of a limb, the death of a spouse, and forced relocation due to urban renewal. Marris (1986) points to the commonalities in patterns of response to bereavement, slum clearance, and the experience of colonization and industrialization in Third World countries. Similarily, Parkes and Weiss (1983) suggest that studies of the process of recovery from bereavement and the ways in which this process may be impeded can provide a viable model of recovery from any irremediable

The experience of loss may represent a significant common denominator among the major negative events described by respondents in our research (Tait & Silver, 1989). This loss may be literal (e.g., the loss of a particular person, environment, role, or relationship) and/or symbolic (e.g., the loss of future possibilities, cherished hopes, goals, or plans). Our basic emphasis is on the meaning of events, situations, or responses, and represents a symbolic interactionist approach. From this perspective, any event that threatens or violates important models or theories of self, others, or the world may represent a loss (cf. Viorst, 1986). Moreover, dissonance between the meaning of experience and central models or theories of reality may pose a significant threat or loss, insofar as they undermine the predictability of one's situational and/or social experience (cf. Marris, 1986; Simos, 1979).

Rather than concentrating primarily on the occurrence of the event as the single determinant of impact, the focus of our work has been on the nature and influence of potential contributing factors that are dependent on the event's occurrence and widely variable across individuals and over time. These factors (i.e., the ongoing negative implications of an event, the need or motive to find meaning in it, and social responses to the occurrence of the event and/or to expressions of continuing difficulty or distress) may be thought of as referring to situational, psychological, and social dimensions of the experience of a major negative event. Persistent cognitive and emotional involvement along these dimensions has been considered as indicative of ongoing difficulty in resolving the experience. This view of impact and recovery is essentially transactional, assuming that the

375

individual and his or her situational and social environment are involved in a continuing dynamic and reciprocal relation (cf. Lazarus & Folkman, 1984).

PART III. REGAINING CONTROL OF UNINTENDED THOUGHT

Our concern with normative long-term psychological responses to negative life events reflects a developmental as opposed to a disease perspective (cf. Sugarman, 1986). Rather than viewing these events as pathological causes of dysfunctional impact, we see them as normative transitions that carry the potential for growth and development, as well as for persistent difficulty or distress. Normative data provide a description of average or typical impact, and do not refer to optimal or ideal responses or effects. It is important to distinguish between normative and prescriptive approaches; in acknowledging lasting impact as a normal outcome, it is necessary to avoid contributing to the belief that a brief, uncomplicated recovery is in any way abnormal.

The individual confronted with a major negative event may encounter a number of obstacles on the road to recovery, and there is considerable potential for associated impact to persist for years or even decades. However, it is also possible for such an individual to meet the demands of the event's negative implications and to develop a meaningful and acceptable interpretation of the experience over the short or long term. It is also possible for members of the social milieu to respond to the event and its continuing impact with maximal empathic concern and a minimum of personal distress. The probability of these latter outcomes may be significantly enhanced by recognition of the prevalence of persistent psychological impact of negative life events. We believe that the absence of clear normative information about the possible long-term effects of these events has played a major role in the perpetuation of overly optimistic beliefs, assumptions, or expectations regarding the potential complexity and duration of the recovery process. Ironically, these optimistic assumptions or expectations may themselves make a substantial contribution to the persistence of distress.

NOTES

- 1. We wish to thank David Hamilton for bringing this item to our attention.
- 2. Is the type of negative event that occurs an adequate basis for arriving at objective ratings of its severity? In addition, is there a relation between these objective assessments and the individual's subjective experience of a given type of event? Because of potential differential access to relevant information (see, e.g., Jones & Nisbett, 1971), we would expect to find a considerable discrepancy in assessments of the severity of various types of events between the individuals confronted with them and those viewing the events from an outsider's perspective. Our study (Tait & Silver, 1989) provided some evidence that this is, in fact, the case. Two independent raters were presented with a list of all negative events each subject had

reported having experienced over the course of his or her life, and were asked to select for each subject the particular event they believed would have been the most negative. These raters agreed in their initial selections of most negative events in only 55% of the cases. In only 50% of the cases did the raters' final selection of the most negative events correspond with the events reported by the respondents as the most severe. This finding calls into question the viability of attempts to predict or explain the impact of negative life events as a function of objective group ratings of the severity or stressfulness of various types of events (e.g., Holmes &

REFERENCES

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.

Antonovsky, A. (1982). Health, stress, and coping. San Francisco: Jossey-Bass.

Baluk, U., & O'Neill, P. (1980). Health professionals' perceptions of the psychological consequences of abortion. American Journal of Community Psychol-

Batson, C. D., & Coke, J. S. (1981). Empathy: A source of altruistic motivation for helping. In J. P. Rushton & R. M. Sorrentino (Eds.), Altruism and helping behavior (pp. 167-187). New York: Academic Press.

Beck, A. T. (1975). Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press.

Bem, D. J. (1970). Beliefs, attitudes, and human affairs. Monterey, CA: Brooks/

Benner, P., Roskies, E., & Lazarus, R. S. (1980). Stress and coping under extreme conditions. In J. E. Dimsdale (Ed.), Survivors, victims and perpetrators: Essays on the Nazi Holocaust (pp. 219-258). Washington, DC: Hemisphere.

Bower, G. H. (1981). Mood and memory. American Psychologist, 36, 129-148.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss: Sadness and depression. New York: Basic Books.

Brende, J. E., & Parson, E. R. (1985). Vietnam veterans: The road to recovery. New York: Plenum.

Breuer, J., & Freud, S. (1955). Studies on hysteria. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 2, pp. 1-305). London: Hogarth Press. (Original work published 1895)

Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? Journal of Personality and Social Psychology, 36, 917-927.

Brickman, P., Rabinowitz, V. C., Karuza, J., Coates, D., Cohn, E., & Kidder, L. (1982). Models of helping and coping. American Psychologist, 37, 203-212.

Bulman, R. J., & Wortman, C. B. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. Journal of Personality and Social Psychology, 35, 351-363.

Carr, A. C. (1975). Bereavement as a relative experience. In B. Schoenberg, A. Wiener, A. H. Kutscher, D. Peretz, & A. C. Carr (Eds.), Bereavement: Its psychosocial aspects (pp. 3-8). New York: Columbia University Press.

- Clark, M., & Isen, A. (1982). Toward understanding the relationship between feeling states and social behavior. In A. H. Hastorf & A. M. Isen (Eds.), Cognitive social psychology (pp. 73–108). New York: Elsevier.
- Coates, D., & Wortman, C. B. (1980). Depression maintenance and interpersonal control. In A. Baum & J. Singer (Eds.), Advances in environmental psychology (Vol. 2, pp. 149–182). Hillsdale, NJ: Erlbaum.
- Coates, D., Wortman, C. B., & Abbey, A. (1979). Reactions to victims. In I. H. Frieze, D. Bar-Tal, & J. S. Carroll (Eds.), New approaches to social problems (pp. 21–52). San Francisco: Jossey-Bass.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Coke, J., Batson, D., & McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology*, 36, 752-766.
- Coyne, J. C. (1976a). Depression and the response of others. Journal of Abnormal Psychology, 85, 186-193.
- Coyne, J. C. (1976b). Toward an interactional description of depression. *Psychiatry*, 39, 28-40.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113-136.
- Dunkel-Schetter, C., & Wortman, C. B. (1981). Dilemmas of social support: Parallels between victimization and aging. In S. B. Kiesler, J. N. Morgan, & V. K. Oppenheimer (Eds.), Aging: Social change (pp. 349–381). New York: Academic Press.
- Dunkel-Schetter, C., & Wortman, C. B. (1982). The interpersonal dynamics of cancer: Problems in social relationships and their impact on the patient. In H. S. Friedman & M. R. DiMatteo (Eds.), *Interpersonal issues in health care* (pp. 69–100). New York: Academic Press.
- Eitinger, L. (1980). The concentration camp syndrome and its late sequelae. In J. E. Dimsdale (Ed.), Survivors, victims and perpetrators: Essays on the Nazi Holocaust (pp. 127-162). Washington, DC: Hemisphere.
- Epstein, S. (1973). The self-concept revisited, or a theory of a theory. American Psychologist, 28, 404-416.
- Epstein, S. (1979). The ecological study of emotions in humans. In P. Pliner, K. R. Blankenstein, & I. M. Spigel (Eds.), Advances in the study of communication and affect: Vol. 5. Perceptions of emotions in self and others (pp. 47-83). New York: Plenum.
- Epstein, S. (1982). Conflict and stress. In L. Goldberger & S. Breznitz (Eds.). Handbook of stress (pp. 49-68). New York: Free Press.
- Epstein, S. (1983). Natural healing processes of the mind. In D. Meichenbaum & M. E. Jaremko (Eds.), Stress reduction and prevention (pp. 39-66). New York: Plenum.
- Epstein, S. (1985). The implications of cognitive-experiential self-theory for research in social psychology and personality [Special issue]. *Journal for the Theory of Social Behavior*, 15, 283-310.
- Epstein, S. (1987). Implications of cognitive self-theory for psychopathology and psychotherapy. In N. Cheshire & H. Thomae (Eds.), Self, symptoms and psychotherapy (pp. 43–58). New York: Wiley.
- Epstein, S. (in press). The self-concept, the traumatic neurosis, and the structure of

- personality In D. Ozer, J. M. Healy, & A. J. Stewart (Eds.), Perspectives on personality (Vol. 3). Greenwich, CT: IAI Press.
- Festinger, L. (1957). A theory of cognitive dissonance. Evanston, IL: Row-Peterson.
- Folkman, S., Schaefer, C., & Lazarus, R. S. (1979). Cognitive processes as mediators of stress and coping. In V. Hamilton & D. M. Warburton (Eds.), Human stress and cognition: An information-processing approach (pp. 265-298). Chichester, England: Wiley.
- Frankl, V. E. (1963). Man's search for meaning: An introduction to logotherapy. New York: Washington Square Press.
- Freud, S. (1958). Remembering, repeating, and working-through. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 12, pp. 145-150). London: Hogarth Press. (Original work published 1914)
- Glick, I. O., Weiss, R. S., & Parkes, C. M. (1974). The first year of bereavement. New York: Wiley.
- Goin, M. K., Burgoyne, R. W., & Goin, J. M. (1979). Timeless attachment to a dead relative. *American Journal of Psychiatry*, 136, 988–989.
- Goffman, F. (1959). The presentation of self in everyday life. New York: Double-day.
- Goffman E. (1963). Stigma: Notes on the management of a spoiled identity. Englewood Cliffs, NJ: Prentice-Hall.
- Holmes, T. H., & Rahe, R. H. (1967). The Social Readjustment Rating Scale. Journal of Psychosomatic Research, 11, 213-218.
- Horowitz, M. J. (1975). Intrusive and repetitive thoughts after experimental stress: A summary. Archives of General Psychiatry, 32, 1457-1463.
- Horowitz, M. J. (1976). Stress response syndromes. New York: Jason Aronson.
- Horowitz, M. J. (1979). Psychological response to serious life events. In V. Hamilton & D. M. Warburton (Eds.), *Human stress and cognition: An information-processing approach* (pp. 235-263). Chichester, England: Wiley.
- Horowitz, M. J. (1982). Stress response syndromes and their treatment. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress* (pp. 711–732). New York: Free Press.
- Horowitz, M. J. (1985). Disasters and psychological response to stress. *Psychiatric Annals*, 15, 161–167.
- Horowitz, M. J., & Wilner, N. (1976). Stress films, emotion, and cognitive response. Archives of General Psychiatry, 33, 1339-1344.
- Horowitz, M. J., Wilner, N., Kaltreider, N., & Alvarez, W. (1980). Signs and symptoms of posttraumatic stress disorder. Archives of General Psychiatry, 37, 85-92.
- Horowitz, M. J., Wilner, N., Marmar, C., & Krupnick, J. (1980). Pathological grief and the activation of latent self-images. American Journal of Psychiatry, 137, 1157-1162.
- Janis, I. L. (1971). Stress and frustration. New York: Harcourt Brace Jovanovich. Janoff-Bulman, R. (1985). The aftermath of victimization: Rebuilding shattered assumptions. In C. R. Figley (Ed.), Trauma and its wake (pp. 15-35). New York: Brunner/Mazel.
- Janoff-Bulman, R. (in press). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. Social Cognition.

- Janoff-Bulman, R., & Frieze, I. H. (1983). A theoretical perspective for understanding responses to victimization. *Journal of Social Issues*, 39(2), 1–17.
- Janoff-Bulman, R., & Timko, C. (1987). Coping with traumatic life events: The role of denial in light of people's assumptive worlds. In C. R. Snyder & C. E. Ford (Eds.), Coping with negative life events: Clinical and social psychological perspectives (pp. 135-159). New York: Plenum.
- Jones, E. E., & Nisbett, R. E. (1971). The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior (pp. 79-94). Morristown, NJ: General Learning Press.
- Kahneman, D., & Tversky, A. (1982). The simulation heuristic. In D. Kahneman & A. Tversky (Eds.), *Judgment under uncertainty: Heuristics and biases* (pp. 201–208). Cambridge, England: Cambridge University Press.
- Kaltreider, N. B., Wallace, A., & Horowitz, M. J. (1979). A field study of the stress response syndrome. Journal of the American Medical Association, 242, 1499-1503.
- Kelly, G. A. (1955). The psychology of personal constructs (Vol. 1). New York: Norton.
- Kessler, R. C., & McLeod, J. D. (1985). Social support and mental health in community samples. In S. Cohen & S. L. Syme (Eds.), Social support and health (pp. 219–240). New York: Academic Press.
- Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. Annual Review of Psychology, 36, 531–572.
- Kruglanski, A. W., Baldwin, M. W., & Towson, S. M. J. (1983). The lay-epistemic process in attribution-making. In M. Hewstone (Ed.), Attribution theory: Social and functional extensions (pp. 81–95). Oxford: Blackwell.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S. (1985). The trivialization of distress. In J. C. Rose & L. J. Solomon (Eds.), Primary prevention of psychopathology: Vol. 8. Prevention in Health Psychology (pp. 279–298). Hanover, NH: University Press of New England.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.
- Lazarus, R. S., Kanner, A. D., & Folkman, S. (1980). Emotions: A cognitive—phenomenological analysis. In R. Plutchik & H. Kellerman (Eds.), Theories of emotion (pp. 189-214). New York: Academic Press.
- Lazarus, R. S., Speisman, J. C., Mordkof, A. M., & Davison, L. A. (1962). A laboratory study of psychological stress produced by a motion picture film. *Psychological Monographs*, 76(34, Whole No. 553).
- Lehman, D. R., Ellard, J. H., & Wortman, C. B. (1986). Social support for the bereaved: Recipients' and providers' perspectives on what is helpful. *Journal* of Consulting and Clinical Psychology, 54, 438-446.
- Lehman, D. R., Wortman, C. B., & Williams, A. F. (1987). Long-term effects of losing a spouse or child in a motor vehicle crash. *Journal of Personality and Social Psychology*, 52, 218-231.
- Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York: Plenum.

- Lerner, M. J. (1981). The justice motive in human relations: Some thoughts on what we know and need to know about justice. In M. J. Lerner & S. C. Lerner (Eds.), The justice motive in social behavior: Adapting to times of scarcity and change (pp. 11-35). New York: Plenum.
- Lewin, K. (1951). Field theory in social science. New York: Harper & Brothers. Lifton, R. J. (1968). Death in life: Survivors of Hiroshima. New York: Random House.
- Linville, P. W. (1985). Self-complexity and affective extremity: Don't put all of your eggs in one cognitive basket. *Social Cognition*. 3, 94–120.
- Los Angeles Times. (1984, January 15). Morning Briefing, Part III, p. 3.
- Marris, P. (1986). Loss and change (rev. ed.). London: Routledge & Kegan Paul. May, R. (1977). The meaning of anxiety. New York: Washington Square Press.
- Moos, R. H., & Tsu, V. D. (1977). The crisis of physical illness: An overview. In R. H. Moos (Ed.), Coping with physical illness (pp. 3-21). New York: Plenum.
- Neugarten, B. L. (1979). Time, age, and the life cycle. American Journal of Psychiatry, 136, 887-894.
- Neugarten, B. L., Havighurst, R. J., & Tobin, S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology*, 16, 134-143.
- Olshansky, S. (1962). Chronic sorrow: A response to having a mentally defective child. Social Casework, 43, 190-193.
- Parkes, C. M. (1971). Psychosocial transitions: A field for study. Social Science and Medicine, 5, 101-115.
- Parkes, C. M. (1972). Components of the reaction to loss of a limb, spouse or home. *Journal of Psychosomatic Research*, 16, 343-349.
- Parkes, C. M. (1975). What becomes of redundant world models? A contribution to the study of adaptation to change. *British Journal of Medical Psychology*, 48, 131–137.
- Parkes, C. M., & Weiss, R. S. (1983). Recovery from bereavement. New York: Basic Books.
- Parkinson, L., & Rachman, S. (1981a). Intrusive thoughts: The effects of an uncontrived stressor. Advances in Behaviour Research and Therapy, 3, 111-118.
- Parkinson, L., & Rachman, S. (1981b). The nature of intrusive thoughts. Advances in Behaviour Research and Therapy, 3, 101-110.
- Parkinson, L., & Rachman, S. (1981c). Speed of recovery from an uncontrived stress. Advances in Behaviour Research and Therapy, 3, 119-123.
- Pearlin, L. I. (1983). Role strains and personal stress. In H. B. Kaplan (Ed.), Psychosocial stress: Trends in theory and research (pp. 3-32). New York: Academic Press.
- Pearlin, L. I., & Lieberman, M. A. (1979). Social sources of emotional distress. In R. Simmons (Ed.), Research in community and mental health (Vol. 1, pp. 217–248). Greenwich, CT: JAI Press.
- Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, 22, 337-356.
- Pennebaker, J. W. (1989). Confession, inhibition, and disease. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 22, pp. 211-244). Orlando, FL: Academic Press.
- Pennebaker, J. W., & Hoover, C. W. (1985). Inhibition and cognition: Toward an understanding of trauma and disease. In R. J. Davidson, G. E. Schwarz, & D.

- Shapiro (Eds.), Consciousness and self-regulation (Vol. 4, pp. 107-136). New York: Plenum.
- Pennebaker, J. W., & O'Heeron, R. C. (1984). Confiding in others and illness rate among spouses of suicide and accidental-death victims. *Journal of Abnormal Psychology*, 93, 473–476.
- Perloff, L. S. (1983). Perception of invulnerability to victimization. *Journal of Social Issues*, 39(2), 41–61.
- Perloff, L. S., & Fetzer, B. K. (1986). Self-other judgements and perceived vulnerability to victimization. *Journal of Personality and Social Psychology*, 50, 502–510.
- Piaget, J. (1926). The language and thought of the child. New York: Harcourt.
- Piaget, J. (1952). The origins of intelligence in children. New York: International Universities Press.
- Rachman, S. (1979). Emotional processing. Behaviour Research and Therapy, 18, 51-60.
- Rachman, S. (1981). Unwanted intrusive cognitions. Advances in Behaviour Research and Therapy, 3, 89-99.
- Roth, S., & Cohen, L. J. (1986). Approach, avoidance and coping with stress. American Psychologist, 41, 813-819.
- Rynearson, E. K. (1986). Psychological effects of unnatural dying on bereavement. *Psychiatric Annals*, 15, 272–275.
- Schwarz, N., & Clore, G. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective status. Journal of Personality and Social Psychology, 45, 513-523.
- Silver, R. L., Boon, C., & Stones, M. H. (1983). Searching for meaning in misfortune: Making sense of incest. *Journal of Social Issues*, 39(2), 81–102.
- Silver, R. L., & Wortman, C. B. (1980). Coping with undesirable life events. In J. Garber & M. E. P. Seligman (Eds.), Human helplessness (pp. 279-340). New York: Academic Press.
- Silver, R. L., Wortman, C. B., & Klos, D. S. (1982). Cognition, affect, and behavior following uncontrollable outcomes: A response to current human helplessness research. *Journal of Personality*, 50, 480-514.
- Simos, B. G. (1979). A time to grieve: Loss as a universal human experience. New York: Family Service Association of America.
- Singer, J. L. (1978). Experimental studies of daydreaming and stream of thought. In K. S. Pope & J. L. Singer (Eds.), The stream of consciousness (pp. 187–223). New York: Plenum.
- Snyder, M., & White, P. (1982). Moods and memories: Elation, depression, and the remembering of the events of one's life. *Journal of Personality*, 50, 149– 167.
- Strack, S., & Coyne, J. C. (1983). Shared and private reactions to depression. Journal of Personality and Social Psychology, 44, 798-806.
- Strack, F., Schwarz, N., & Gschneidinger, E. (1985). Happiness and reminiscing: The role of time perspective, affect, and mode of thinking. *Journal of Personality and Social Psychology*, 49, 1460–1469.
- Sugarman, L. (1986). Life-span development: Concepts, theories and interventions. New York: Methuen.
- Szybist, C. (1978). Thoughts of a mother. In O. J. Z. Sahler (Ed.), The child and death (pp. 283-288). St. Louis: C. V. Mosby.

- Tait, R., & Silver, R. C. (1989). The long-term psychological impact of major negative life events. Manuscript submitted for publication.
- Tannenbaum, P. H., & Gaer, E. P. (1965). Mood changes as a function of stress of protagonist and degree of identification in a film viewing situation. *Journal of Personality and Social Psychology*, 2, 612–616.
- Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, 38, 1161-1173.
- Thoits, P. A. (1983). Dimensions of life events that influence psychological distress: An evaluation and synthesis of the literature. In H. B. Kaplan (Ed.), *Psychosocial stress: Trends in theory and research* (pp. 33–103). New York: Academic Press.
- Thoits, P. A. (1985). Social support as coping assistance. Journal of Consulting and Clinical Psychology, 54, 416–423.
- Titchener, J. L., & Kapp, F. T. (1976). Family and character change at Buffalo Creek. *American Journal of Psychiatry*, 133, 295–299.
- Turner, R. J. (1983). Direct, indirect, and moderating effects of social support on psychological distress and associated conditions. In H. B. Kaplan (Ed.), *Psychosocial stress: Trends in theory and research* (pp. 105-155). New York: Academic Press.
- Vachon, M. L. S., Sheldon, A. R., Lancee, W. J., Lyall, W. A. L., Rogers, J., & Freeman, S. J. J. (1982). Correlates of enduring distress patterns following bereavement: Social network, life situation and personality. *Psychological Medicine*, 12, 783–788.
- Viorst, J. (1986). Necessary losses. New York: Simon & Schuster.
- Wegner, D. M. (1988). Stress and mental control. In S. Fisher & J. Reason (Eds.), Handbook of life stress, cognition, and health (pp. 685-699). Chichester, England: Wiley.
- Weinstein, N. D. (1980). Unrealistic optimism about future life events. Journal of Personality and Social Psychology, 39, 806-820.
- Weinstein, N. D. (1984). Why it won't happen to me: Perceptions of risk factors and susceptibility. *Health Psychology*, 3, 431–457.
- Weinstein, N. D., & Lachendro, E. (1982). Egocentrism as a source of unrealistic optimism. Personality and Social Psychology Bulletin, 8, 195-200.
- Wenzlaff, R. M., Wegner, D. M., & Roper, D. W. (1988). Depression and mental control: The resurgence of unwanted negative thoughts. *Journal of Personality* and Social Psychology, 55, 882-892.
- Wikler, L., Wasow, M., & Hatfield, E. (1981). Chronic sorrow revisited. American Journal of Orthopsychiatry, 51, 63-70.
- Wilner, N., & Horowitz, M. J. (1975). Intrusive and repetitive thoughts after a depressing film: A pilot study. *Psychological Reports*, 37, 135–138.
- Wood, J. V., Taylor, S. E., & Lichtman, R. R. (1985). Social comparison in adjustment to breast cancer. Journal of Personality and Social Psychology, 49, 1169–1183.
- Wortman, C. B., & Dunkel-Schetter, C. (1979). Interpersonal relationships and cancer: A theoretical analysis. *Journal of Social Issues*, 35(1), 120–155.
- Wortman, C. B., & Lehman, D. R. (1985). Reactions to victims of life crises: Support attempts that fail. In I. G. Sarason & B. R. Sarason (Eds.), Social support: Theory, research and applications (pp. 463–489). Dordrecht, The Netherlands: Martinus Nijhoff.

- Wortman, C. B., & Silver, R. C. (1987). Coping with irrevocable loss. In G. R. VandenBos & B. K. Bryant (Eds.), Cataclysms, crises, and catastrophes: Psychology in action (Master Lecture Series, Vol. 6, pp. 189–235). Washington, DC: American Psychological Association.
- Wortman, C. B., & Silver, R. C. (1989). The myths of coping with loss. Journal of Consulting and Clinical Psychology, 55, 349–357.
- Zajonc, R. (1980). Feeling and thinking. American Psychologist, 35, 151-175.

13

Automatic and Dysfunctional Cognitive Processes in Depression

MARLENE M. MORETTI University of Waterloo

> BRIAN F. SHAW University of Toronto Toronto General Hospital

Intrusive negative thoughts are among the most distressing symptoms of depression. The content of these thoughts can vary widely from one depressed person to another: Some individuals may complain that they are preoccupied with thoughts of failure in their career, whereas others are plagued with intrusive thoughts concerning their inability to establish close relationships. Although the content of these thoughts varies among depressed patients, the theme of negative self-evaluation and self-reproach remains constant. Depressed individuals also complain that their negative thoughts "have a life of their own"—their onset occurs without intention, and their relation to environmental events is unclear. In addition, depressed individuals often regard their negative thoughts as "uncontrollable," since their attempts to inhibit or suppress them are futile. For example, a patient may report that while he or she is engaged in a conversation with a close friend, thoughts of personal inadequacy and rejection (e.g., "I'm boring," "I know they don't like me") intrude into awareness, even though the negative content of these thoughts seems incongruent with the situation. And the depressive thoughts persist "like a broken record," despite attempts to inhibit or distract attention away from them.

The intrusive nature of depressive thought has led researchers and