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Coping with Undesirable Life Events¹

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INTRODUCTION

At some point, most people encounter stressful events that can have a major impact on the course and direction of their lives. They or those they love may be confronted with a disabling accident, serious illness, death, or violent crime. How do people respond to such outcomes? Over the past several decades, theorists and researchers from a variety of disciplines have devoted attention to this issue. In this chapter, we draw from these sources to address several questions that we believe to be central to the coping process: Are there any reactions such as shock, anger, or depression that are universally experienced when people encounter an aversive life event? Do persons who encounter life crises that are as different as physical disability and loss of a spouse show any similarities in response? Do people progress through an orderly sequence of stages as they attempt to cope with the outcome? Is it true that with time, people accept or recover from their crisis and move on to the next stage in their lives? Finally, what is successful adjustment to an aversive life event?

¹Support for the research and writing of this chapter was provided by National Science Foundation Grant BNS78-04743 to the second author.

Reading #11

YAS0030.V2000

Past Research in Social Psychology

As social psychologists, we began our investigation of these questions by considering the empirical research in our own field. Over the past two decades, this discipline has devoted a great deal of attention to understanding reactions to outcomes that are stressful or unpleasant. With some exceptions (e. g., Bulman & Wortman, 1977; Janis, 1958; Johnson & Leventhal, 1974; Langer, Janis, & Wolfer, 1975), the majority of these studies have been conducted in laboratory settings. Subjects have been exposed to a variety of mildly aversive outcomes such as electric shocks, noise bursts, or failure at problem-solving tasks. Although these studies have been conducted by investigators from many different theoretical orientations, they have focused primarily on two distinct issues. The first concerns specific factors that may reduce a person's subjective distress when an aversive event is encountered, such as whether the stressful event is predictable or controllable (e.g., Geer, Davison, & Gatchel, 1970; Pervin, 1963), or whether preparatory information is provided (e.g., Lanzetta & Driscoll, 1966; Staub & Kellet, 1976). A second issue concerns the conditions under which exposure to unpleasant outcomes results in undesirable aftereffects. Most of these latter studies have been designed to test predictions from the learned helplessness model developed by Seligman and his colleagues (see, e.g., Hiroto & Seligman, 1975), which predicts that exposure to uncontrollable stressors will result in subsequent cognitive and motivational deficits (see also Glass & Singer, 1972).

As this research has begun to accumulate, many investigators have become disillusioned with the laboratory paradigm as a vehicle for providing useful information about reactions to negative life events (see, e.g., Blaney, 1977; Bulman & Wortman, 1977; Lazarus & Launier, 1978; Roth, 1980; Wortman & Brehm, 1975). Despite the experimental control afforded by a laboratory approach, surprisingly few replicable findings have emerged, and a number of basic questions remain unanswered. For example, although it is commonly assumed that predictability and perceived control reduce the aversiveness of stressful outcomes, the research evidence on this question is inconsistent (Averill, 1973; Wortman, 1976). It is also not clear when exposure to uncontrollable outcomes will result in renewed determination to overcome one's obstacles and thus facilitate performance, and when it will result in feelings of helplessness, passivity and subsequent performance decrements. (See Dweck & Wortman, 1980; Miller & Norman, 1979; or Wortman & Dintzer, 1978, for a more detailed discussion of this issue.)

Moreover, there are fundamental differences between stressors encountered in the laboratory and most aversive life events that may limit the generalizability of results from laboratory paradigms (Wortman, Abbey, Holland, Silver, & Janoff-Bulman, 1980). Obviously, these outcomes differ in magnitude,

as well as in the length of time that a person is confronted with the consequences (Lazarus & Launier, 1978). Coping responses that are effective for minor, transitory stressors may have little impact on prolonged or severe distress. Human subjects' guidelines require that laboratory stressors be delivered with the subject's explicit consent, and subjects are generally provided with a "cover story" or rationale for any distress they are asked to endure. In contrast, undesirable life events often happen without foreknowledge, and frequently occur for no apparent purpose or reason (Bulman & Wortman, 1977). For all of these reasons, there is some question as to the applicability of the laboratory approach to understanding real world reactions.

Plan of the Chapter

Because of the problems inherent in applying laboratory research in our own discipline to the issue of how people respond to undesirable life events, we felt it was important to broaden our focus by examining data collected in natural settings. We have considered the limited work in social psychology, and have also turned to related disciplines such as medicine, clinical psychology, psychiatry, sociology, and social work. In each of these areas we have examined a number of articles, books, and book chapters on reactions to specific life crises, including acute, chronic, and life-threatening illness, physical disability, separation, bereavement and criminal victimization. Some of these works have proposed theoretical models of the coping process; others report empirical findings; still others consist primarily of impressions from interview data or clinical practice. Not surprisingly, the majority of these studies lack the methodological rigor that characterize most of the laboratory experiments on reactions to distress. Considered together, however, they suggest some preliminary answers to questions concerning reactions to undesirable life events.

In the remainder of the chapter we draw from these works in an attempt to examine how people cope with life crises. By "coping" we are referring to any and all responses made by an individual who encounters a potentially harmful outcome. In addition to overt behaviors, we would include cognitions (e.g., "I'm not really sick"), emotional reactions (e.g., anger, depression) and physiological responses (e.g., nausea, sleep disturbances). The particular means of coping employed by an individual may alleviate the problem or reduce the resulting distress, and may thus be considered effective coping. However, coping responses may also exacerbate the problem or may become problems themselves (e.g., alcohol or drug abuse). Our use of the term "coping" is somewhat broader than that employed by most other theorists and researchers in this area, who often restrict its use to problem-solving

utilized by individuals to master or overcome a potentially threatening one. (See Haan, 1977; Lazarus & Launier, 1978; and Lipowski, 1970, for a general discussion of the coping construct, and Chodoff, Friedman, & Burg, 1964; Friedman, Chodoff, Mason, & Hamburg, 1963; and White, 1974, for alternative definitions of the concept.)

In the discussion to follow, we have focused exclusively on how individuals cope with aversive life events of serious magnitude. We have not discussed the process of adjustment to life transitions, such as adolescence, marriage, parenting, and the aging process. We have also limited ourselves to events that are caused, at least in part, by factors that the individual is unable to influence. For example, some of the outcomes we have considered (e.g., cancer, accidents, rape) may stem partially from the individual's own behavior (e.g., smoking cigarettes, driving too fast, returning home late at night) and partially from external or uncontrollable factors (e.g., genetic predisposition, drunk drivers, poorly lit streets). We have not considered distress brought about primarily by the respondent's own behavior, such as that resulting from a suicide attempt or drug abuse; or outcomes associated with voluntary behaviors, such as the choice of a specific career or marriage (Lehman, 1962).

Because we feel that inquiries regarding reactions to aversive life events should be theory-based, we begin by examining five theoretical formulations proposed in this area (Abramson, Seligman, & Teasdale, 1978; Klinger, 1977; Lazarus & Launier, 1978; Shontz, 1965, 1975; Wortman & Klinger, 1975). In so doing, our interest is not in validating any specific model, but rather in highlighting some of the critical issues that surround theoretical development in this field. These models help to illustrate some promising directions for subsequent theoretical work, as well as some of the potential difficulties that remain to be resolved.

An interesting feature of these and other theories that have been added to the literature on coping is that they share some common assumptions about the adjustment process—assumptions that are also widely held by practitioners and the general public. It is commonly believed that there are universal reactions, such as shock or depression, that occur in response to crisis situations; that individuals go through stages of emotional response as they cope with an undesirable life event; and that the crisis is ultimately resolved. A careful examination of the available research data, however, suggests that each of these assumptions may be unwarranted. We consider a great deal of evidence indicating that people react to crises with considerable variability, and that they may recover less quickly or completely than they or others expect. Current theoretical frameworks afford little help in accounting for this variability or predicting effective adjustment. We therefore explore some conceptual variables not incorporated into prior theories that may influence the

coping process. Finally, we discuss the implications of the rich and diverse findings in this field for future theoretical work, for subsequent research, and for the treatment of individuals confronted with undesirable life events.

PAST THEORETICAL APPROACHES

During the past several decades, many theoretical approaches have been proposed that have potential relevance for understanding reactions to undesirable life events (Caplan, 1964; Engel, 1962; French, Rodgers, & Cobb, 1974; Haan, 1963, 1969, 1977; Harrison, 1978; Holmes & Masuda, 1974; Kahn, 1964; Kaufman & Rosenblum, 1967; Moos & Tsu, 1977; Murphy & Moriarty, 1976; Pearlin & Schooler, 1978; Riss & Scalia, 1967; Schneirla, 1959; Selye, 1946, 1976; Solomon & Corbit, 1974; White, 1974). We feel that by examining theorists' attempts to conceptualize the nature of the coping process, one can gain a better understanding of the problems and issues involved. Because a review of each of these theories is clearly beyond the scope of this chapter, however, we have chosen to focus on a representative but diverse sample of theoretical formulations: Klinger's (1975, 1977) theory of commitment to and disengagement from incentives; Wortman and Brehm's (1975) integrative model; Seligman's learned helplessness approach (Abramson et al., 1978; Seligman, 1975); Shontz's (1965, 1975) theory of reaction to crisis; and Lazarus' taxonomy of coping responses (Lazarus, Note 1; Lazarus & Launier, 1978). These models represent a variety of theoretical orientations and research traditions, ranging from experimental psychology to clinical and health fields. We have limited our discussion to models which are broad enough to have relevance to a number of different life crises, as opposed to those which are specific to a particular aversive outcome (e.g., Kubler-Ross, 1969). These particular models were selected not because they are necessarily the most precise, the best developed, or the most influential, but because we feel that each provides unique insights about the issues involved in the coping process. In the following sections, we briefly describe each of these models, highlight the intriguing issues they raise, and critically examine their ability to predict reactions to undesirable life events.

Klinger's Incentive-Disengagement Theory

Klinger's (1975, 1977) major interest concerns how people become committed to and disengaged from various incentives or goals. Drawing from his clinical background, as well as many other areas in psychology, he argues that commitment to a goal influences a person's patterns of attention,

information processing, and thought content. Klinger maintains that when an aversive life event removes or blocks a particular goal, individuals go through a process of disengagement in which their cognitions, feelings, and behaviors unfold in an orderly and predictable sequence.

According to this theory, a person initially responds to obstacles or to threatened loss of a goal with increased vigor. Efforts to achieve the goal may become more powerful and/or rapid, and concentration may become more intense. If these initial responses are unsuccessful in obtaining the incentive, however, the person becomes increasingly frustrated and angry, and his or her behavior becomes more stereotyped, primitive and often more aggressive. This phase may be characterized by disbelief or angry protest. After sustained but unsuccessful activity to achieve an outcome, however, individuals begin to abandon their pursuit. This phase of the cycle, called the "depression phase," is thought to be characterized by pessimism and apathy. Klinger argues that depression is a normal part of the process whereby individuals disengage themselves from incentives. As a person's commitment to the incentive slowly dissipates, so does the impulse to obtain it, and its influence on his or her thoughts and fantasies decreases as well. Over time, the incentive becomes a smaller and smaller part of the person's life, and he or she experiences longer and longer periods of pleasant feelings until recovery from the loss is complete.

According to Klinger (1977), people may be involved simultaneously in several incentive-disengagement cycles, which combine to determine their emotional state:

Since every loss produces an incentive-disengagement cycle, and since losses are likely to be staggered over time, a person may be in different phases of more than one incentive-disengagement cycle at a time. . . . [Thus,] if several ventures turn sour at about the same time—a special friend left town abruptly, the soup burned, and one misplaced one's notes for writing a term paper—one is likely a little later to feel somewhat blue [p. 140].

This view implies that individuals who are attempting to cope with a major life crisis may be particularly vulnerable to the effects of additional problems. Conversely, people faced with a large number of other problems may be especially vulnerable to life crises.

Wortman and Brehm's Integrative Model

Although Wortman and Brehm (1975) were working on an entirely different set of problems, they developed a model with some similarities to Klinger's invigoration-depression sequence. As social psychologists, Wortman and Brehm were quite interested in how people respond when their

freedom or control is taken away. Brehm (1966) had developed a theory of psychological reactance that suggested that when free behavior is restricted, people respond with feelings of hostility, anger, and enhanced motivation to obtain the outcome in question. This theoretical work, and the research supporting it, appeared to be inconsistent with the learned helplessness model (Seligman, 1975). This approach predicts that individuals who are exposed to uncontrollable outcomes become passive and depressed, and show subsequent motivational deficits and impairments in active problem-solving.

Wortman and Brehm were interested in developing an integrative model that would resolve the contradictions between these two formulations, and specify the precise conditions under which invigoration or depression would occur. Drawing from reactance theory, they maintained that the nature and intensity of an individual's response to an uncontrollable outcome would depend both on the expectation of control over the outcome, and the outcome's importance. The integrative model predicts that among individuals who expect to be able to influence an important outcome, exposure to loss of control results in enhanced motivation to obtain the outcome, and in aggressive and angry behaviors. However, expectations of control should diminish over time as people make repeated but unsuccessful attempts to change the situation. Once a person stops trying to alter the outcome, continued exposure to it should result in lowered motivation, passivity, and depression. Wortman and Brehm maintained that the greater the initial expectation of control, the more controlling behavior a person will show before giving up, and the more depressed he or she will become after giving up. They also argued that individuals who do not expect to be able to influence the outcome will become depressed without an initial period of invigoration. Wortman and Brehm's model is similar to Klinger's in that it proposes an invigoration-depression sequence of responses. Unlike Klinger, however, Wortman and Brehm do not assume that invigoration will generally precede depression. They have attempted to incorporate mediating variables which will determine whether invigoration or depression will occur, and how intense or long-lasting these responses will be.

The Learned Helplessness Approach

Like Wortman and Brehm's (1975) model, the learned helplessness model was originally developed to account for laboratory data on reactions to uncontrollable outcomes, rather than to explain reactions to life crises. Of course, the original helplessness model predates the theoretical statements of Klinger as well as Wortman and Brehm (Seligman, Maier, & Solomon, 1971). This approach had its origins in Seligman's work on Pavlovian fear conditioning with infrahuman species, where it was discovered that expo-

sure to uncontrollable shocks resulted in subsequent passivity and performance deficits (Overmier & Seligman, 1967; Seligman & Maier, 1967). When investigators began testing the model on human subjects, however, the findings were inconsistent. Exposure to insoluble problems or uncontrollable noise bursts or shocks did not always result in passivity, performance decrements, or depressed mood as the model would predict (see Miller & Norman, 1979; or Roth, 1980, for reviews).

On the basis of these data, investigators began to speculate that helplessness effects may stem not from the uncontrollability of an aversive stimulus, but from the way in which the stimulus is interpreted by the subject (see Dweck & Wortman, 1980). In an attempt to address these and other criticisms of the original theory, Abramson et al. (1978) proposed a reformulated model. They argued that the nature of the helplessness effects depends on the attribution of causality that a person makes when confronted with an uncontrollable outcome. According to Abramson et al., attributions can be categorized according to three orthogonal dimensions: internality, stability, and globality. They predict that attributions to internal factors (e.g., "I'm stupid") are characterized by loss of self-esteem, while attributions to external factors (e.g., "These problems are impossible") are not. Attributions to stable factors (e.g., "I was mugged because the streets of New York are never safe") are hypothesized to produce greater subsequent performance deficits than attributions to unstable factors (e.g., "I was mugged because I was unlucky"). Attributions to global factors, or those which occur across many situations (e.g., "My business failed because I am completely incompetent") should lead to deficits which generalize further than attributions to more specific factors (e.g., "My business failed because it was in the wrong location"). Unlike the models described previously, the reformulated helplessness model focuses solely on passivity, depression, and performance decrements as responses to uncontrollable outcomes. The model predicts no invigoration effects, nor does it focus on changes in reactions over time.

Shontz's Theory of Reaction to Crisis

The same year that models by Klinger (1975) and Wortman and Brehm (1975) were published, a book appeared by Shontz (1975) on the psychological aspects of physical illness and disability (see also Shontz, 1965). In this book, Shontz drew from his experience in rehabilitation and health settings to delineate a general model of reaction to crisis. Like Klinger, as well as Wortman and Brehm, Shontz maintains that individuals go through a series of stages as they attempt to cope with an aversive outcome. However, the sequence he proposes is quite different from that outlined by the others. Unlike the theorists described previously, Shontz considers the ways in

which individuals respond to and interpret information prior to the onset of a crisis. During this time, an effort is made to interpret any unusual symptoms as something benign or unthreatening. For example, a parent whose child is manifesting early signs of leukemia might regard the initial symptoms as evidence of a minor, transitory illness. As the symptoms or problems become more pressing, however, people realize that their existing patterns of adjustment are inadequate, and experience considerable anxiety and stress.

Once the inevitability of the crisis becomes clear, Shontz holds that a person's first reaction is one of shock. Shock is especially likely to be observed if the crisis occurs without warning, but occurs to some degree in virtually every crisis state. According to Shontz, this stage is characterized by a feeling of detachment and by a surprising efficiency of thought and action. Following the initial shock, an encounter phase occurs in which the individual begins to experience profound helplessness, disorganization and panic. During this phase, reality may seem overwhelming, and the individual may show an inability to plan, reason or engage in active problem-solving to improve the situation.

Because this period is so intense, individuals begin to manifest a type of avoidance that Shontz calls "retreat." During this phase, the individual may deny either the existence of the crisis or its serious implications. As time goes by, however, reality again imposes itself and the person learns that he or she cannot escape the implications of the outcome indefinitely. The individual then breaks down his or her defenses slowly in an attempt to deal with reality piece by piece. The most unique feature of Shontz's model is his view that the adaptive sequence is characterized by a continual shifting between encounter and retreat from crisis. Retreat provides a "base of operation from which forays into the future can be made and to which the person may withdraw for safety if they fail [1975, p. 172]."

Each time an individual begins to face reality, feelings of anxiety, frustration, and depression may occur. Shontz argues that such feelings are not necessarily maladaptive, but are necessary precursors to positive psychological growth. These cycles "occur progressively less frequently . . . until they become virtually unnoticeable when adaptation is complete [1975, p. 166]." A renewed sense of personal worth, a gradual lowering of anxiety, and an increase in feelings of satisfaction may be experienced as views of oneself and of the crisis become more stable.

Lazarus' Analysis of the Coping Process

Lazarus has been a major contributor to our understanding of the coping process for the past two decades. His earlier theoretical and empirical work (e.g., Lazarus, 1966; Lazarus & Alfert, 1964; Lazarus, Averill, & Opton,

1974; Speisman, Lazarus, Mordkoff, & Davison, 1964) has focused on how a person's cognitive appraisal of a stressful situation influences the emotional responses that are elicited, the coping strategies that are employed, and the ultimate success of a person's adjustment to the crisis. In his more recent papers, his emphasis has begun to shift toward the process of coping with undesirable life events of serious magnitude (Coyne & Lazarus, in press; Lazarus, Note 1; Lazarus & Launier, 1978).

Like Shontz, Lazarus is one of the few theorists to discuss how individuals respond to potentially harmful information before it has been defined as a crisis. He maintains that individuals appraise the significance of the situation for their well-being, as well as the coping responses at their disposal for dealing with the harm. In addition, Lazarus has recently suggested that an individual may appraise a potentially harmful situation as a threat and thus focus on the possible harm; or regard it as a challenge and focus on the potential for mastery or gain (Coyne & Lazarus, in press; Lazarus & Launier, 1978).

In their discussions of the coping process, most of the other theorists have focused on the conditions under which individuals will engage in direct actions to improve or change their stressful situations. Lazarus has considered several other kinds of coping strategies that he regards as equally important: inhibition of action (e.g., withholding insults or aggressive responses), information seeking (e.g., augmenting one's store of knowledge about a particular disease), and intrapsychic modes (e.g., denial or thinking calming thoughts). Lazarus has not provided a detailed analysis of the conditions under which each mode will be employed. However, he has noted that a high degree of uncertainty or ambiguity about a given outcome may result in decreased use of direct action and increased use of information seeking. If information is not available, the individual may resort to intrapsychic modes of coping. Intrapsychic modes may also be used if direct action has been unsuccessful and/or if harm has already occurred or is judged as inevitable (Lazarus & Launier, 1978). Finally, Lazarus has also emphasized that in addition to overcoming the crisis, coping responses may be directed toward controlling or regulating one's emotional reaction to the situation (see also Mechanic, 1962). For the most part, the other theorists have restricted their discussion to coping mechanisms directed toward the crisis itself.

IMPLICATIONS OF THE THEORIES

Because the aforementioned theorists represent diverse research traditions and focused their attention on a variety of problems and issues, we feel that each of them offers a valuable perspective on the coping process.

Some of the models reviewed are broad and general; others allow more specific predictions. Some were designed to account for serendipitous or contradictory laboratory findings; others are based more on clinical or practical experience. Some focus their attention on how individuals react to a single life crisis; others specifically discuss responses to outcomes that are repeated over time. In general, each theorist suggests an important aspect of the coping process that is unique to his or her model. In the following section, we explore an intriguing issue or point raised by each of these theoretical formulations and discuss their implications for coping research. We then examine the potential effectiveness of these models in predicting how individuals respond to an aversive life event.

Issues Raised by the Models

Klinger's Focus on Thoughts about the Crisis

While all of the theorists discussed previously have considered the role of cognitions in the coping process, Klinger (1975, 1977) has provided particular emphasis on the importance of thoughts about the crisis. He offers a cogent analysis of the effect of one's goals on the content of thoughts, fantasies, and dreams. For example, he suggests that immediately after a goal has been blocked, it completely dominates a person's thought content: "Very likely, this phenomenon accounts for the loss of 'perspective' often noted in people who have become embattled in pursuit of a blocked goal [1977, p. 144]." He argues that as the person recovers from the loss, it occupies less and less of his or her thoughts. Klinger also suggests that it may be possible to speed recovery by taking the person away from cues which are associated with the lost incentive.

An interesting issue addressed by Klinger, and also discussed briefly by Wortman and Brehm (1975), concerns the value of the lost goal. Both models predict that when a goal is initially blocked it becomes more attractive. But what happens to the evaluation of the loss over time? Do people gradually become indifferent to the lost object, or do they come to view it negatively? In an intriguing analysis, Klinger (1977) suggests that a person may develop feelings toward the goal that are highly ambivalent: "Whereas earlier the person wanted very much to achieve the incentive, he is now both attracted and repelled by it; and this ambivalence is so painful that he may avoid the very situations in which he can contemplate the incentive [p. 167]."

In our judgment, the question of how people evaluate the life crises that befall them has not received adequate attention from other theorists or researchers. When a person loses a spouse, for example, are the spouse's strengths and weaknesses judged objectively? Or does the spouse come to be idolized, as Engel (1964) suggests: "[The bereaved individual] finds it necessary to bring up, to think over, and to talk about memories of the dead

person . . . until there has been erected in the mind an image of the dead person almost devoid of negative or undesirable features [p. 96]" (see also Benson, McCubbin, Dahl, & Hunter, 1974; McCubbin, Hunter, & Metres, 1974b). How do these judgments influence a person's emotional reaction to the loss? Do these evaluations change over time? How are they related to effective long-term adjustment? Are people who become indifferent to a lost goal more likely to cope effectively than people who enhance the attractiveness of what they have lost?

Changes in Beliefs about Oneself and the World

Most of the models of life crises have explored reactions to a single undesirable event. A unique feature of the models proposed by Wortman and Brehm (1975) and by Abramson et al. (1978) is that they focus on reactions to repeated stressors. In the original laboratory research on which these models are based, subjects were exposed to several trials of uncontrollable stimulation. Both Seligman (1975) and Wortman and Brehm (1975) hypothesized that exposure to repeated uncontrollable outcomes alters people's beliefs about themselves and their ability to influence the environment. Such changes in underlying beliefs are not postulated by the other models. If they occur, these belief changes are likely to mediate whether a person's emotional and behavioral reactions will generalize to other settings.

Since the learned helplessness and integrative models were originally designed to account for the effects of a series of stressors, they may be particularly applicable to individuals who encounter a distressing experience several times. For example, do foster children become helpless if they are repeatedly uprooted? Do epileptics show invigoration and/or helplessness effects as they attempt to cope with recurrent uncontrollable seizures? At present it is unclear whether the predictions of these models are applicable to individuals who experience a single aversive life event. Nonetheless, the suggestion that such an outcome may change a person's enduring beliefs, and influence subsequent behavior, is an important one. To what extent does losing a spouse or being raped alter a person's beliefs about his or her ability to influence future outcomes, and thus influence subsequent persistence or passivity in the face of later goals? Under what conditions do the emotional reactions experienced by a bereaved person or a rape victim generalize to other areas of his or her life? By and large, other theorists have given no consideration to these important issues. In discussing invigoration effects, for example, Klinger maintains that feelings of anger and frustration will predominate. But are such feelings directed solely toward the blocked goal, or are these reactions manifested toward other factors in the environment?

What Behaviors Are Adaptive or Functional?

Unlike the other models reviewed, Shontz's (1965, 1975) theory was developed from his experience in health-care and rehabilitation settings. This orientation has led to a number of intriguing observations. For example, Shontz challenges the widely shared assumption that disabling accidents or serious illness invariably produce negative psychological effects. In Shontz's view, severe illness may not represent a crisis for all people; in fact, it may sometimes solve problems for a patient rather than create them. Some individuals may view their disease as a punishment for past sins, and, in so doing, may be able to alleviate destructive and oppressive feelings of guilt. For others, a disease may provide a welcome relief from stressful obligations and responsibilities. According to Shontz, health-care professionals must be sensitive to this possibility, and should avoid pressing patients to respond to crises that are not actually being experienced. (See Lipowski, 1970, for a similar analysis.)

Once a crisis occurs, Shontz maintains that individuals who fail to progress through the sequence of stages as he has delineated them are likely to have subsequent problems adjusting to their trauma. For example, if they retreat from the crisis too quickly, they may fail to assimilate any realistic information about their situation, and subsequent attempts to cope with the outcome may be hampered. But if they do not retreat fast enough and thus remain in a state of intense negative affect for too long, emotional and physical exhaustion can result. Regardless of one's adherence to Shontz's model, his suggestion that particular stages or responses may have functional value is intriguing. For the most part, the other theorists reviewed have not explored whether progression through particular stages is necessary. Must a person with a spinal cord injury experience depression if long-term adjustment is to occur, as some investigators have suggested (e.g., Dembo, Leviton, & Wright, 1956; Siller, 1969)? Does a bereaved person who initially becomes depressed, but later experiences intense anger, cope less effectively than a person who shows an invigoration-depression sequence?

Broadening Our View of Coping

Lazarus is unique among the theorists we have considered in his attention to the variety of coping responses that may be employed by individuals who encounter life crises. Other models we have reviewed have focused almost exclusively on when individuals will attempt to alter an aversive outcome, and when they will give up (Wortman & Brehm, 1975; Abramson et al., 1978). This question may be of central importance in understanding how individuals react to outcomes of limited duration and/or importance,

such as noise bursts administered in a laboratory setting. However, the available evidence suggests that when the outcomes are serious or permanent, people engage in a wide variety of responses in addition to direct action (Burgess & Holmstrom, 1976, 1979; Chodoff et al., 1964; Hamburg, Hamburg, & DeGoza, 1953; Katz, Weiner, Gallagher, & Hellman, 1970; Sanders & Kardinal, 1977; Visotsky, Hamburg, Goss, & Lebovits, 1961). (For a discussion of the diversity of coping strategies that can be employed and potential techniques of measurement, see McCubbin, Dahl, Lester, Benson, & Robertson, 1976; Penman, 1979; Sidle, Moos, Adams, & Cady, 1969; Weisman, 1974, 1979.)

A second feature of Lazarus' work that we feel is of critical importance is his distinction between coping responses that alter the stressful situation itself, and those that are designed to alter the emotional response to the crisis. An intriguing point made by Lazarus is that under certain circumstances, individuals may achieve one of these coping functions at the expense of another. For example, a woman may reduce her distress by denying initial symptoms of breast cancer, thus delaying treatment and reducing her chances for a favorable outcome. In our judgment, responses that palliate one's emotional reactions should receive careful attention. Intense emotional distress is not only unpleasant, but may impede coping or problem-solving efforts (cf. Anderson, 1976), particularly if the task in question is complex in nature (Broadhurst, 1959). For all these reasons, coping responses that can reduce the respondent's level of emotional distress to a moderate level might be adaptive or functional. Moreover, in cases where direct actions can be undertaken to alter the outcome, behaviors that might superficially be judged as maladaptive (e.g., increased alcohol consumption) may be functional if they do not reduce the level of arousal to a point too low for optimum performance.

Predictive Power of the Models

In the previous section, we have highlighted some of the unique insights that have been suggested by the theoretical models described. How do these models fare in predictive power? The most general of the models we have reviewed is that of Lazarus, who has maintained that there is a continuous interplay among cognitions, emotions, and coping strategies in which each influences the other as the individual struggles with a particular outcome. Although his rich account of the coping process has provided numerous insights and broadened the way we look at coping, his model does not offer precise predictions regarding an individual's behavior in a single instance. As individuals begin to appraise the potentially harmful

situation, for example, what antecedent factors will determine whether they will feel threatened, or whether they will regard the outcome as a challenge? Once the appraisal process has been completed, it is not clear which particular emotional reactions will predominate, or which coping mechanisms will be selected. Specifically how do these components of the coping process influence one another, and how do they relate to ultimate adjustment? As Lazarus himself acknowledges, his work represents more of a taxonomy of possible reactions to life crises than a formal model (Lazarus & Launier, 1978).

The models proposed by Shontz (1965, 1975) and Klinger (1975, 1977) are somewhat more specific in that each suggests that individuals progress through a particular sequence of stages as they attempt to cope with a crisis. In our judgment, however, neither of these theorists has given sufficient attention to specifying intervening variables that may affect the sequence. In Shontz's model, what factors determine the duration of particular phases such as encounter or retreat, or the length of the cycles that occur? Moreover, although Shontz clearly intends his model to be useful in understanding patient reactions, application is extremely difficult. Under what conditions should health care professionals conclude that the person is resisting a crisis that should be faced, and under what conditions should they conclude that the outcome does not constitute a crisis for the individual? Similarly, how is a health care professional to determine whether a person is remaining in a particular phase, such as retreat, for too long? Klinger has also noted that invigoration responses are sometimes absent, but provides no basis for predicting when this will occur. Do individuals respond with invigoration even when it is clear from the beginning that these responses will not be instrumental in altering the situation, such as when a spouse has died? In short, Klinger has given insufficient attention to specifying mediating variables that might affect the nature, course, or duration of the incentive-disengagement cycle or specific reactions that comprise the cycle.

A clear advantage of the models postulated by Wortman and Brehm (1975) and by Abramson et al. (1978) is that they have included mediating variables, and thus permit relatively precise predictions about reactions to life crises. Using the constructs of expectations of control and judged importance of the outcome, the Wortman and Brehm (1975) model makes clear predictions concerning when particular emotional reactions (anger or depression) will occur, and how intense such reactions will be. Similarly, by introducing subjects' attributions of causality as a mediating variable, the model proposed by Abramson et al. (1978) affords precise predictions regarding how long behavioral deficits will last and how far such deficits will generalize.

Unfortunately, there are other shortcomings associated with each of these models that limit their usefulness in understanding reactions to life crises. A major problem with the Abramson et al. (1978) model is that although the authors have argued that certain attributions are predictably followed by specific behavioral consequences, they have failed to specify the conditions under which a given attribution will be made. What determines whether a person facing a particular outcome (e.g., rape) will make internal, stable, and global attributions or external, unstable, and specific ones? Until the determinants of particular attributions can be delineated, the model will lack predictive power. (See Wortman & Dintzer, 1978, for a more detailed discussion of additional shortcomings of the reformulated model.)

One question that might be raised about Wortman and Brehm's (1975) model concerns their major variable, expectations of control. Unlike Abramson et al. (1978), Wortman and Brehm were precise about the antecedents of this variable, noting that expectations would be based on one's prior experience with the task, and/or one's observations of others' performance. This variable is relatively easy to operationalize and measure when dealing with such outcomes as failure on a problem-solving task. However, Wortman and Brehm (1975) did not explore how this variable might be extended to non-laboratory settings. Do people's reactions to outcomes like permanent paralysis or rape depend on their generalized expectations of control (Rotter, 1966) or on specific expectations associated with the accident or assault? Are emotional reactions and subsequent adjustment influenced primarily by expectations that the outcome could or should have been avoided, by expectations that the consequences can be altered or changed, or by expectations that the outcome can be prevented in the future?

An additional limitation of the models developed by Wortman and Brehm (1975) and by Abramson et al. (1978) is their narrowness, which may be a reflection of their original focus on animal and laboratory research. Wortman and Brehm focus only on invigoration and depression as reactions to uncontrollable outcomes. The reformulated helplessness model is narrower still, focusing solely on the reactions of helplessness and depression. These models have not incorporated other emotional reactions or coping mechanisms, and have devoted relatively little attention to the process by which individuals move from helplessness or depression to recovery or resolution.

In summary, we have attempted to highlight some of the difficulties associated with conceptual work in this area. Each of these theoretical formulations raises provocative questions about the coping process and suggests numerous hypotheses. However, the models fail to provide a clear basis for predicting which responses will predominate when life crises occur, how these responses influence one another, or which are associated with successful resolution of the crisis. Nonetheless, we feel that each model

brings an important perspective to the problem, and suggests some desirable features that should be incorporated in subsequent theoretical work.

EMPIRICAL RESEARCH ON REACTIONS TO UNDESIRABLE LIFE EVENTS

In the previous section we examined several theoretical models in order to illustrate specific problems and conceptual issues involved in the area of coping with life crises. In so doing, our purpose was not to validate any particular model, but rather to use the models as a springboard for subsequent discussion. At this point, we would like to move beyond the specific models to a consideration of the more general issues of the coping process that they raise. Despite their many differences, these and other models share some common assumptions. One such assumption concerns the existence of a general pattern or consensual response to life crises. Although there are differences from model to model, most have suggested that people respond to crises in specific, predictable ways (e.g., with shock, anger, or depression). Second, it is commonly assumed that individuals go through a series of stages over time in attempting to come to terms with an aversive life event. Of the theorists we have reviewed, Klinger, Shontz and Wortman and Brehm have proposed specific stage models, and this notion is quite popular among other theorists in the area. A third commonly held assumption is that individuals accept or resolve their crises. In fact, people are often expected to recover quite quickly, and thus move on to the next stage of their lives. In this section of the chapter, we examine the empirical evidence for each of these beliefs. We find that although these assumptions are widely shared by theorists and researchers in this area, there is little evidence to support any of them.

In the past, most critical discussions of research on undesirable life events have focused solely on studies within a particular type of life crisis. For example, critical reviews have appeared in such areas as physical illness and disability (McDaniel, 1976; Trieschmann, 1978), breast cancer (Meyerowitz, 1980), heart disease (Croog, Levine, & Lurie, 1968; Doehrmann, 1977; Garrity, Note 2), and grief and bereavement (Schulz, 1978; Vachon, 1976). While such a narrow focus may enhance our understanding of a particular life crisis, it is not appropriate for assessing the validity of the broad theoretical assumptions we have delineated. Therefore, we have examined the research across several areas of victimization, including acute, chronic, and terminal illness, physical disability, separation, bereavement, and criminal victimization. In the discussion to follow, we consider what we believe to be the best empirical work in each area.

Is There a General Pattern or Consensual Response to Undesirable Life Events?

Most of the models we have reviewed suggest that individuals react to crises in predictable ways. Shontz (1965, 1975) has proposed, for example, that once the inevitability of a crisis is realized, virtually all individuals experience shock. According to Klinger (1975, 1977), people initially respond to crises with invigoration, anger, and aggression. Wortman and Brehm (1975) have also maintained that invigoration will occur when people believe they can alter the outcome. Depression figures prominently in all of the models except Shontz's, although the models make different predictions about precisely when it will occur. Are there any universal reactions, such as shock, anger, or depression, that occur in response to aversive life events?

It is difficult to evaluate the prevalence of an initial "shock" response, since investigators are not typically present or able to question respondents at the time the crisis is encountered. We have been able to locate only one report in which on-the-spot observations were made. Tyhurst (1951) conducted immediate observations of individuals who were involved in community disasters such as apartment-house fires or floods. He observed three distinct reactions. Many individuals appeared to react with shock, and showed many of the behaviors that Shontz described as characteristic of a "shock" phase: a "stunned" or "bewildered" reaction, "a definite restriction of the field of attention," "lack of awareness of any subjective feeling or emotion," and "automatic or reflex behavior" (p. 766). But a second group of survivors were "cool and collected" during the acute situation. A third group responded with feelings of overwhelming confusion and manifested such reactions as "paralyzing anxiety" or "hysterical crying." Although shock was the most prevalent reaction, it was clearly not universal.

In most of the other studies that have assessed reactions of shock, respondents have been questioned at some time after the crisis and asked to report retrospectively about their initial feelings. However, several investigators have interviewed rape victims shortly after the attack and have mentioned that shock or disbelief are sometimes experienced (see, e.g., Burgess & Holmstrom, 1974; Sutherland & Scherl, 1970). McCombie (1975) also asked rape victims to describe their feelings during and immediately after the assault. Although precise figures are not reported, she indicates that feelings of numbness or disbelief were second in frequency; fear was the most common emotion reported.

In a prospective study of 14 wives of cancer patients, Schmale (1971) reports that "the only uniformity of response in these subjects was the reaction [of] disbelief and shock [p. 166]" to both the diagnosis and to the actual death of their spouses. Friedman et al. (1963) suggested that all of the 46

parents they interviewed recalled a feeling of "shock" or of being "stunned" upon learning the terminal diagnosis of their child. In contrast, Parkes (1972) interviewed both widows and amputees approximately one month after they lost a spouse or a limb, and indicated that initial feelings of shock and numbness were retrospectively reported by only about 50% of the respondents. In a later study of reactions to bereavement (Parkes, 1975b), the specific percentage of subjects experiencing shock is not reported. However, the immediate reaction of disbelief was retrospectively described more frequently by individuals who had less than 2 weeks forewarning of the impending death of their spouse than by those who had more foreknowledge.

Variable results also emerge when we explore whether individuals respond initially to aversive outcomes with invigoration or anger (cf. Klinger, 1975, 1977; Wortman & Brehm, 1975). Studies of rape victims have reported that anger is a relatively rare reaction, at least during and immediately after the assault (McCombie, 1975; Notman & Nadelson, 1976). Only 10% of the 70 women interviewed by McCombie reported that they felt angry during the rape, and only 20% reported feeling angry immediately after the attack. Less than one-half of the cancer patients interviewed by Peck (1972) expressed anger at having cancer. Similarly, only 28% of the parents studied by Kupst and Schulman (Note 3) reacted with anger to the leukemia diagnosis of their child. Among the bereaved, Glick, Weiss, and Parkes (1974) report that approximately 3 to 4 weeks after the loss, one-third of the widows in their sample were rated by interviewers as showing feelings of hostility, and about 20% expressed anger toward their husbands for not having taken better care of themselves. In contrast, feelings of anger were relatively absent among the widowers in Glick et al.'s sample.

Both Klinger (1975, 1977) and Wortman and Brehm (1975) have suggested that feelings of invigoration may be directed toward recovering an incentive that is blocked or removed. An interesting question not addressed by these models is whether such reactions will occur even when there is no realistic hope of recovering the lost object, such as when a spouse has died. Although no percentages are reported, Parkes (1972) suggests that such behaviors sometimes occur among the bereaved. He argues that the urge to recover the lost relationship is manifested in several ways: "in restless scanning of the environment, in the strong perceptual set which the bereaved person develops for the lost person, in the tendency to misperceive and thus to identify strangers as being the one who is lost, in the tendency to return to places associated with the lost person [p. 345]." Cornwell, Nurcombe, and Stevens (1977) report similar findings from parents who have lost an infant to the Sudden Infant Death Syndrome. These researchers indicate that "Parents often wandered to the baby's room in search of the child. Their minds were attuned to perceptions of the baby [and they remained] primed to search for

their lost baby for well over a year after its death [p. 657]." These data suggest that individuals' behaviors may be directed toward recovering a lost object even when the loss is irrevocable. However, it is not clear what evidence is required to convince a person that a loss is in fact permanent. Fully 8 weeks after losing a spouse, Glick et al. (1974) report that over one-half of the widows they interviewed, and about one-fifth of the widowers, reported believing that their spouse might actually return.

Even in cases where it is still possible to influence the outcome, however, it is by no means clear that anger is a universal response. A number of investigators have examined how children react to separations from their mothers, and have found their emotional reactions and behaviors to be highly variable. Some children show anger and/or increased activity, others show despair and/or immobility, others alternate between activity and immobility, and still others show no visible response of any sort (Heinicke, 1956; Heinicke & Westheimer, 1966; Maccoby & Feldman, 1972; Robertson & Robertson, 1971; Spitz, 1946).

Is depression commonly experienced following an undesirable life event? There is a fair amount of consensus that individuals experience feelings of sadness or depression soon after losing a spouse. Glick et al. (1974) report that 88% of the widows in their sample became sad and despairing. Similarly, Clayton, Desmarais, and Winokur (1968) found that 87% of the bereaved they interviewed reported experiencing sadness or depressed mood. These individuals showed considerable variability in the onset of their depression, however. While 41% became depressed for the first time during the bereavement period, 46% reported that they were depressed prior to the bereavement while their relative was ill, and 13% denied depressed mood at either time. The investigators report that neither the presence nor the onset of depression appeared to be related to such factors as the closeness of the relationship between the deceased and the respondent, or the length of time the relative had been ill prior to the death.

Several studies on psychological reactions to cancer have also found depression to be a prevalent response. Not surprisingly, however, the percentage of patients responding with depression varies from study to study. Peck (1972) indicated that 74% of the sample of cancer patients he interviewed appeared depressed. In contrast, Plumb and Holland (1977) studied 97 cancer patients with advanced disease and reported that almost all of these patients scored in the "non-depressed" range of the Beck Depression Inventory. Moreover, the patients were found to be significantly less depressed than physically healthy patients hospitalized for a suicide attempt. Maguire (1978) reports more variable data. Four months after a mastectomy, one woman in his sample was rated as severely depressed, 19 were thought to be moderately depressed, 24 were judged to exhibit minor de-

pression, and 31 showed no evidence of depression. However, breast cancer patients were found to be significantly more depressed than a control group of patients who had had a biopsy that was not malignant. Taken as a whole, these and other studies (Achte & Vauhkonen, 1971; Craig & Abeloff, 1974; Hinton, 1963) suggest that depression is a common, but far from universal response to cancer, and that while cancer patients may show significantly more depression than normal controls, a sizable minority of patients show no evidence of depression in response to the diagnosis or treatment.

Studies of the initial reactions to rape suggest that feelings of depression are uncommon (Burgess & Holmstrom, 1974; McCombie, 1975). In contrast, fear or anxiety appear to be the most prevalent responses (McCombie, 1975), and such feelings as fear of being alone or fears of being followed, nightmares, and obsessional thoughts concerning the rape appear to be very common (Burgess & Holmstrom 1974; Sutherland & Scherl, 1970). Feelings of anxiety are also frequently observed among bereaved widows, with a majority reporting anxieties concerning their financial status or their occupation and fears about raising their children (Glick et al., 1974). In most studies of reactions to life-threatening illness, the frequency of patients experiencing anxiety appears to be as high or higher than the frequency of those experiencing depression (see, e.g., Achte & Vauhkonen, 1971; Chessier & Anderson, 1975; Hinton, 1963; Maguire, 1978; Peck, 1972). In Peck's (1972) study, for example, 49 of 50 cancer patients responded with feelings of anxiety and this anxiety was rated as severe in almost one-half those interviewed. Moreover, the available evidence suggests that such feelings may persist for a considerable period of time. Maguire (1978) reports almost identical percentages of patients experiencing moderate or severe anxiety at 4 months after a mastectomy and again at 1 year. In a longitudinal study of reactions to bereavement, Parkes (1975b) found that the number of persons exhibiting moderate or severe anxiety increased from 26% at the initial interview 3 to 4 weeks after the loss, to 44% at the final interview 2 to 4 years later.

Despite the relatively high prevalence of anxiety among individuals confronted with undesirable life events, this emotional reaction has not been discussed by other theorists in the area. Except for Shontz, who has noted that encounters with reality are accompanied by anxiety, this response has not received more than cursory attention from the theorists discussed earlier. The available evidence suggests that in subsequent theoretical work, the role of anxiety in the coping process should be explored more fully.

Taken as a whole, the empirical evidence suggests that there is little consensus concerning how individuals react to undesirable life events, and there is a great deal of variability across life crises. We have noted, for

example, that depression is a very common reaction to bereavement, fairly typical of cancer patients, and relatively rare among rape victims, at least during the initial period following the attack. Perhaps even more noteworthy, however, is the variability of response that has been reported within a given type of life crisis. This was described very early in coping research by Hamburg et al. (1953), who studied the reactions of burn patients. They indicated that

When a psychiatric observer enters a ward in which there are a number of severely burned patients, all in the acute phase (covered with bandages, receiving transfusions and so on), he is likely to be impressed by the varieties of behavior evident. One patient is crying, moaning, complaining, demanding that more be done for him; another appears completely comfortable and unconcerned; another appears intensely preoccupied and seems to make very little contact with the observer; still another appears sad and troubled but friendly, responding with a weak smile to any approach made to him; and so it goes from one bed to the next [pp. 2-3].

In fact, it appears that respondents show considerable variability not only in the particular emotional responses demonstrated, but in whether they exhibit any reaction at all. Following the death of a terminally ill child, Natterson and Knudson (1960) report that a majority of mothers they studied reacted with feelings of "calm sorrow and relief," while the others reacted "hysterically" (pp. 462-463). Similarly, Burgess and Holmstrom (1974) report that when interviewed within a few hours of a rape, about half of the women in their study showed an "expressive style," in which feelings were expressed through such behavior as crying, sobbing, smiling, restlessness, and tenseness. In sharp contrast, the remaining women exhibited a "controlled style, in which feelings were masked or hidden and a calm, composed, or subdued affect was seen [p. 982]."

The theoretical formulations discussed earlier do not contend that all individuals will respond identically to all aversive outcomes. Nonetheless, they clearly suggest that there will be some common reactions in response to undesirable life events. Unfortunately, current theories are of limited utility in explaining the extreme pattern of variability that is demonstrated by the empirical data.

Do People Go through Stages of Emotional Reactions in Response to an Undesirable Life Event?

The notion that individuals follow a predictable, orderly path of emotional response following a life crisis is a popular one. Although they each propose different patterns, three of the general theories described previously (Klinger, 1975, 1977; Shontz, 1965, 1975; Wortman & Brehm, 1975) con-

tend that people will respond to an aversive outcome with a sequence of reactions, perhaps first with shock, then anger or invigoration, invariably depression, and ultimately recovery. Stage models of emotional response have also been proposed by theorists or clinicians for many specific life crises, including separation (Bowlby, 1960, 1973), physical disability (Gunter, 1969; Guttman, 1976; Hohmann, 1975; Siller, 1969), bereavement or loss (Bowlby, 1961; Engel, 1962, 1964), criminal victimization (Symonds, 1975), and terminal illness (Nighswonger, 1971). Do the available empirical data support the existence of stages of response?

Several research reports have claimed to provide support for a stage model. Some investigators have conducted retrospective interviews and reported the existence of stages of response (Fitzgerald, 1970; Randall, Ewalt, & Blair, 1945). For example, Fitzgerald (1970) interviewed individuals who had been blind for at least a year and asked them to describe their immediate and present reactions to the disability. The author contends that subjects reported a four-phase reaction of disbelief, protest, depression, and recovery. However, such retrospective assessments are necessarily hampered by the limitations of memory and the problems of hindsight.

Other researchers have reported that they longitudinally studied victims of life crises and maintain that these individuals go through stages of emotional response. Perhaps the best known is the pattern described by Kubler-Ross (1969) for the terminally ill: denial, anger, bargaining, depression, and acceptance. Investigators have also reported stage models of response to many other types of undesirable life events, including cancer (Gullo, Cherico, & Shadick, 1974), chronic hemodialysis (Beard, 1969; Reichsman & Levy, 1972), open heart surgery (Dlin, Fischer, & Huddell, 1968), miscarriage (Zahourek & Jensen, 1973), rape (Sutherland & Scherl, 1970), spinal cord injury (Bray, 1978; Cohn, 1961; Weller & Miller, 1977a), and loss of a limb, a spouse (Parkes, 1972), or a child (Natterson & Knudson, 1960). Nonetheless, each of these reports is merely descriptive in nature, often subjective impressions of interview data, or simply anecdotal reports. Sample sizes are often small, methodology for assessment is unspecified, and details of interview technique are generally not provided. Since there has been apparently no standardized assessment of emotional reactions, the aforementioned reports cannot be considered evidence for the existence of stages of response.

A number of empirical investigations have made systematic assessments of emotional reactions at more than one point in time. Such studies have been conducted primarily among the dying (Hinton, 1963; Lieberman, 1965), cancer patients (Bard & Waxenberg, 1957; Craig & Abeloff, 1974; Maguire, Lee, Bevington, Kuchemann, Crabtree, & Cornell, 1978; Morris, Greer, & White, 1977; Sobel & Worden, 1979; Vachon, Note 4; Weisman, 1976) and

the bereaved (Bornstein, Clayton, Halikas, Maurice, & Robins, 1973; Clayton et al., 1968). However, many of these reports do not discuss what percentage of respondents experience specific mood states or how these moods change over time (e.g., Bard & Waxenberg, 1957; Craig & Abeloff, 1974; Lieberman, 1965; Vachon, Note 4). Others repeatedly assess and report the incidence of such feelings as anxiety and depression, but do not discuss whether respondents move from one emotional state to another (e.g., Bornstein et al., 1973; Clayton et al., 1968; Hinton, 1963; Maguire et al., 1978; Morris et al., 1977). Some recent investigations have made frequent and repeated systematic assessments of several different emotional states (e.g., Sobel & Worden, 1979; Weisman, 1976). However, these researchers were apparently not interested in validating a stage model, and therefore do not report the frequency of emotional responses nor changes in emotional reactions over time.

Surprisingly, we have been unable to locate any studies that systematically measure several affective reactions and report their prevalence from one time point to the next. Nonetheless, a limited number of empirical reports do present data relevant to the stage concept (Dinardo, 1971; Glick et al., 1974; Kimball, 1969; McDaniel & Sexton, 1970). Although none of these studies were specifically designed to test the stage model, each has produced results that fail to conform to prevailing stage theories. For example, Dinardo (1971) conducted a systematic cross-sectional investigation of depression in a population of spinal cord injured patients who had been disabled between 0 and 15 months. He reported that the degree of depression experienced by his subjects was independent of the time that had elapsed since their injury. In a longitudinal investigation, McDaniel and Sexton (1970) studied 22 men who suffered a recent spinal cord injury and made assessments at four time points during their hospitalization and rehabilitation. Ratings by nurses, physical therapists, and occupational therapists indicated that levels of anxiety, depression, irritability, and the use of denial among these patients remained "relatively constant" over the entire period of study. In addition, anxiety and depression levels were found to be independent of staff ratings of patients' acceptance of their loss over time. It must be noted, however, that these data are reported as group means at each time point and there is no discussion of affective change within individual subjects.

Another study that provides data inconsistent with a stage model was conducted by Kimball (1969), who followed open heart surgical patients for approximately 15 months. He reports that responses during the preoperative period were highly variable, with some patients exhibiting denial, others showing depression, and still others reacting primarily with anxiety. Immediately following the operation, responses were again extremely variable.

Some patients appeared "euphoric": "They were radiant, confident, and demonstrated considerable bravado [p. 100]." Others showed a "catastrophic" reaction, laying immobile and behaving "as if they were afraid to move for fear of waking up to find themselves dead or severely mutilated [p. 100]." These differences emerged despite the fact that there were no significant group differences in the age of patients, the severity of their diseases, or the previous duration of their illnesses. The authors do note, however, that responses during the intermediate period of hospitalization were "roughly the same for all survivors regardless of their earlier or later responses [p. 101]." During this period, most patients experienced anxiety, then depression, and eventually a return to anxiety as plans for the future were formulated.

General stage models that have discussed anger and invigoration responses (e.g., Klinger, 1975, 1977; Wortman & Brehm, 1975) have maintained that if such reactions occur, they are likely to reach their maximum intensity fairly early in the process of adjustment to a loss. These models suggest that over time feelings of anger should be gradually replaced by feelings of depression. Few studies have reported a systematic and repeated assessment of respondent's feelings of anger. However, the data of Glick et al. (1974) suggest a different pattern. Interviewers in this study of the recently bereaved "felt that both men and women displayed increased anger toward family, friends, children, or others, as time went on [p. 266]." In fact, they maintained that 40% of the widows and 32% of the widowers displayed more anger at the second interview (conducted approximately 8 weeks after the loss) than they expressed approximately 3 weeks after their spouses' deaths.

As noted earlier, few investigators have made systematic efforts to validate some aspect of the stage model of response. In fact, we have been able to locate only one such study conducted with human subjects. In a sophisticated, comprehensive study, Lawson (1976) sought to test the assumption that spinal cord injured persons experience a period of depressive affect or grief in their psychological adjustment to the injury. Using a longitudinal approach, he took measures of depression 5 days per week on 10 patients for the entire length of their rehabilitation hospital stay, an average of 119 days. A multimethod assessment of depression included self-report, a behavioral measure, ratings by professional staff, and a psychoendocrine measure utilizing daily urinary output. His results indicated that there was no clear period of at least 1 week in which the dependent measures were consistently in the depressive range for any patient. Although other emotional reactions were not assessed in this investigation, its results suggest that all spinal cord injured patients do not experience a stage of depression during their adjustment to permanent paralysis.

Primate research on the effects of separation offer a large degree of experimental control in which to test a sequential pattern of response. Although perhaps limited in their generalizability to other aversive life events such as rape or chronic illness, several animal studies have been conducted to test Bowlby's (1973) model of protest-despair-detachment following separation. Although some of these primate investigations have found support for such a sequence following peer or maternal separation (Hinde, Spencer-Booth, & Bruce, 1966; Kaufman & Rosenblum, 1967; Schlottman & Seay, 1972; Seay, Hansen, & Harlow, 1962; Suomi & Harlow, 1975), the results have not always been consistent. Others have shown a mixed pattern of results or have not found any evidence of stages of response (Bowden & McKinney, 1972; Erwin, Mobaldi, & Mitchell, 1971; Jones & Clark, 1973; Kaplan, 1970; McKinney, Suomi, & Harlow, 1972; Preston, Baker, & Seay, 1970; Rosenblum & Kaufman, 1968). For example, Lewis, McKinney, Young, and Kraemer (1976) reported the results of five different studies of mother-infant separation in rhesus monkeys. While some animals showed a protest-despair response, some showed protest but not despair, others showed despair but not protest, and still others showed little behavioral response of any kind to the separation. In summarizing their findings, these authors concluded that the results "clearly do not support any unitary concept of a protest-despair response to mother-infant separation [p. 704]."

In summary, the limited data that are available do not appear to clearly fit a stage model of emotional response following life crises. In addition, the extreme pattern of variability that exists in response to aversive life events also does not support the notion of stages of response. In fact, it seems remarkable that there is no body of methodologically sophisticated research that has systematically assessed changes in emotional reactions over time and reported the existence of stages. We are not alone in questioning the validity of the stage concept (see, e.g., Schulz & Aderman, 1974; Trieschmann, 1978). However, it must be noted that there are numerous problems inherent in collecting data that are capable of testing a stage model. While it is desirable to assess respondents' emotional reactions soon after the crisis, it may be difficult to obtain cooperation at this time, and techniques used to enhance participation may raise serious ethical questions (see Wortman et al., 1980).

Since it is not clear from most theoretical formulations precisely how long a given stage will last or when a person will shift from one stage to another, it is also desirable to assess people's emotional reactions at several points in time. Moreover, within each time point it may be necessary to make more than one assessment in order to obtain a valid indication of a respondent's emotional reaction. As Lawson (1978) has demonstrated, hospitalized patients' moods may be strongly influenced by critical events that

have happened that day, such as receiving a visit from a family member or a report from one's physician. Similarly, Bruhn, Thurman, Chandler, and Bruce (1970) report that environmental influences such as witnessing a fellow patient die in a cardiac intensive care unit can significantly influence one's level of anxiety.

Of course, frequent and repeated assessment of individuals experiencing distress may be burdensome to respondents and thereby result in increased attrition. Reactivity may also be a problem when repeated assessments are made. Finally, many investigations may take the form of unplanned therapeutic interventions. Does merely asking respondents about their trauma and emotional reactions affect their responses or alter the adjustment process? Do they become sensitized to the emotional reactions being assessed? This problem is particularly important in longitudinal studies, and a control group of individuals who are studied only at the final assessment point would be helpful in interpreting the results.

While difficult to implement, a daily, multifaceted assessment of affect, such as that conducted by Lawson (1976), is probably the closest test of a stage model of response on a population of individuals who have encountered a life crisis. However, it must be recognized that some theorists contend that people may experience more than one stage simultaneously, may move back and forth among the stages, and may skip certain stages completely (see, e.g., Klinger, 1975, 1977; Kubler-Ross, 1969). For this reason, such models are particularly difficult to test and/or to disconfirm. Future models must therefore be more precise concerning the exact pattern of reactions to be expected.

Do People Accept or Recover Following an Undesirable Life Event?

Almost without exception (see, e.g., Bray, 1978), every stage model we have examined has postulated a final stage of resolution which most victims of aversive life events are expected to achieve. This is the case for both the general theoretical formulations we have reviewed, as well as for those models which focus on a specific life crisis. Whether called recovery (Klinger, 1975, 1977) or acceptance (Kubler-Ross, 1969), it is commonly suggested that individuals will resolve their crisis, thus moving on to the next stage of their lives. This is assumed not only when the person encounters a single aversive event (e.g., rape, loss, permanent injury), but also in the face of one's own deteriorating physical condition, when the next stage would be death. Is this view supported by the empirical evidence which bears on the question?

On the contrary, among the dying it appears that many people do not

approach death with the calm acceptance some authors have proposed. Plumb and Holland (1974) found little evidence for such an acceptance of death among the late adolescent/early adult group of terminally ill cancer patients they observed. In fact, they contend that such a state is a very difficult one for the young cancer patient to achieve. In their report of individuals who received fatal burns, Imbus and Zawacki (1977) observe that even "the most severely burned patient may speak of hope with his last breath [p. 308]." Hinton (1963) found depression prevalent in approximately 20 to 40% of the dying patients he prospectively studied during the last 8 weeks of their lives. This figure rose further in the last week or two before death, suggesting that for many patients, a state of acceptance was not reached. Moreover, in an analysis conducted after the death of chronically ill geriatric patients, Kastenbaum and Weisman (1972) report that approximately one-half did not passively accept their impending death, but rather "maintained their allegiance to life right up to the last possible moment [p. 216]."

It is difficult to postulate precisely how much time should elapse before recovery from a single traumatic life event. Yet an individual who has recovered would not be expected to experience a disrupted life style or extreme emotional distress after a rather lengthy period of time. Nonetheless, several studies on psychological reactions to mastectomy have found that many women show severe distress a year or more after surgery, even when the disease does not recur. For example, Maguire et al. (1978) found that 39% of the breast cancer patients they studied were still experiencing levels of anxiety or depression and/or sexual difficulties "serious enough . . . to warrant psychiatric help [p. 963]" 1 year after their mastectomy. In fact, these problems were significantly more prevalent than those in a matched control group of women with benign breast disease (see also Maguire, 1978). Similarly, Morris et al. (1977) found that 1 year after surgery, 30% of their breast cancer patients still appeared to be distressed by the operation and had "failed to adjust" (p. 2386). By the second year assessment only an additional 1% had improved further (see also Vachon, Note 4). Finally, Ray (1978) interviewed mastectomy patients 18 months to 5 years post surgery and found that they were more depressed and anxious than a control group of women who did not have the surgery. In fact, he reports that some women "felt considerable grief and resentment about their loss several years after the operation [p. 36]."

Investigators have found long-term negative effects from a trauma in other populations as well. Kaltreider, Wallace and Horowitz (1979) report that following a nonelective hysterectomy without resulting malignancy or with excellent future prognosis, almost 30% of the respondents were still experiencing stress symptoms including anxiety, depression, phobias, and

obsessive thoughts 1 year after the operation. In a longitudinal study of bereaved widows, Vachon (Note 4) found that 38% of the respondents were experiencing a high level of distress after 1 year. Two years after the loss, she reports that one-quarter of her sample was still experiencing a level of psychological distress sufficient to warrant psychiatric assessment. Fifty percent of the bereaved interviewed by Schwab, Chalmers, Conroy, Farris, and Markus (1975) over a year after the loss of a relative were rated as still grieving intensely. Similarly, 81% of the widows studied by Marris (1958) did not consider themselves to be completely recovered from the death of their spouse, even though they had been widowed an average of 2 years at the time of the interview. Most of the previously reported research has assessed respondents' reactions to the crisis within the first few years. In a longitudinal study of recovery from rape, however, Burgess and Holmstrom (1978) found that 26% of the rape victims they followed still did not feel they had recovered from their assault 4-6 years later.

Engel (1962) has written that "Some people never completely dissipate the sense of loss of and their dependence on the lost object and they remain in a prolonged, even permanent stage of unresolved grief. They continue actively to miss the dead person, feeling sadness or crying at every memory or reminder, even years later [p. 280]." This has been perhaps most convincingly demonstrated in the study of bereaved widows and widowers conducted by Glick et al. (and reported in Parkes, 1975b). After 2-4 years, 24% of the sample felt that the death was not real, and that they would wake up and it would not be true. The same percentage expressed agreement with the statement "Down deep, I wouldn't care if I died tomorrow." In fact, on a combined assessment of a number of psychological, social and physical health measures, 30% of the bereaved studied were judged as showing a "bad outcome" 2-4 years after their spouses' deaths. Parkes (1972) has also reported that 63% of the amputees and 76% of the widows he interviewed "still felt disinclined to think of the future even a year after the loss [p. 344]." Finally, Shadish, Hickman, and Arrick (Note 5) obtained similar findings in a cross-sectional study of the reactions of spinal cord injured patients. Individuals disabled up to 38 years before the assessment indicated that they still think about the things they cannot do since their injury and "really miss" these things almost weekly.

Clearly, the evidence reviewed suggests that a simple expectation of acceptance or recovery from a serious life crisis is unwarranted for a large minority of people. Most studies find significant levels of distress or disorganization after a year, and those that have continued to follow their sample for a longer period of time have not typically found substantial improvement (Glick et al., 1974; Morris et al., 1977; Parkes, 1975b; Vachon, Note 4). Nonetheless, many researchers have stressed that for most victims of life

crises, emotional distress is reduced and lives are reorganized with time. In emphasizing the number that do recover, however, we feel that others have not devoted enough attention to the sizable minority who do not. Of course, there are relatively few studies that have documented reactions to life crises several years after the event has occurred. Nevertheless, there is a clear suggestion from the available evidence that for many people acceptance or recovery is not apparent despite the passage of a long period of time.

Even when individuals appear to recover from an aversive life event, there is some limited evidence to suggest that feelings of severe distress and disorganization may emerge at a later date. Lindemann (1944) was the first to report such a delayed grief reaction. He maintained that these reactions often arise following "deliberate recall of circumstances surrounding the death or spontaneous occurrences in the patient's life" and may appear "after an interval which was not marked by any abnormal behavior or distress [p. 144]." Similarly, Burgess and Holmstrom (1974) identified a silent rape reaction in which unresolved feelings from an earlier assault can resurface years later. Notman and Nadelson (1976) contend that among rape victims, anxiety and depression may reemerge long after the rape has occurred, "often precipitated by seemingly unrelated events that in some small details bring back the original trauma [p. 412]." Among the bereaved, Bornstein and Clayton (1972) found that 67% of the widows and widowers they interviewed reported a mild or severe anniversary reaction to their loss. Similarly, Wiener, Gerber, Battin, and Arkin (1975) report that some bereavement symptoms "tend to recur at various times, precipitated by anniversaries, memories, meetings, geographical locale, etc. [p. 64]." Parkes (1970) suggests that during these times, "all the feelings of acute pining and sadness return and the bereaved person goes through, in miniature, another bereavement [p. 464]." In their study of the chronically ill, Reichsman and Levy (1972) report that long-term adaptation to maintenance hemodialysis was "marked by fluctuations in the patient's sense of emotional and physical well-being All patients experienced prolonged states of contentment alternating with episodes of depression of varying duration [p. 862]."

In conclusion, it is clear that prevailing notions of recovery need to be reconsidered. There is evidence that a substantial minority of individuals exhibit distress for a much longer period of time than would be commonly expected. There are also a number of indications that people continually reexperience the crisis for the rest of their lives. While some theorists have mentioned this possibility (e.g., Benner, Roskies, & Lazarus, 1980; Klinger, 1977), only Shontz's (1965, 1975) model can account for the slow, unsteady progress and subsequent distress that seems to occur. Unfortunately, none of the previously discussed models, including the one proposed by Shontz, are useful in identifying those individuals who are particularly likely to have difficulty in resolving their crisis successfully.

EXTENDING THE THEORETICAL MODELS

Our review of the available literature suggests that a great deal of variability exists in individual reactions to negative life events, both within a particular life crisis and across different crises. We have found little reliable evidence to indicate that people go through stages of emotional response following an undesirable life event. We have also reviewed substantial evidence suggesting that a large minority of victims of aversive life events experience distress or disorganization long after recovery might be expected. Current theoretical models of reactions to aversive outcomes cannot account for the variety of responses that appear. Variables that may mediate individual coping responses are clearly necessary to explain the diverse pattern of results. With few exceptions, however (cf. Abramson et al., 1978; Wortman & Brehm, 1975), most theorists have not incorporated any intervening variables into their models. Without such mediators, general theoretical models have limited utility in predicting reactions to undesirable life events.

As a result of our review of the literature, as well as our clinical experiences with people who have encountered life crises (see Wortman et al., 1980), a number of conceptual variables have emerged that may further our understanding of people's responses to stressful outcomes and increase our ability to predict the nature, sequence, duration, and intensity of their reactions. In this section of the chapter, we discuss some variables that we feel are especially promising for subsequent theoretical and empirical work. These include perceived social support, the opportunity for ventilation or free expression of feelings, the ability to find meaning in the crisis, and experience with other stressors. (For a discussion of additional variables see Wortman et al., 1980; Wortman & Dintzer, 1978.) With the exception of perceived social support, these variables have not been extensively researched. Therefore, we rely on the limited evidence that is available in the discussion to follow.

Perceived Social Support

In a recent survey concerning how Americans view their mental health (Veroff, Douvan, & Kulka, in press), respondents were asked to indicate whether they had encountered any life crises such as becoming ill, losing a job, or the death of a loved one, and if so, where they turned for help. These authors concluded that "informal support systems [family members, friends, and neighbors] are probably the critical way that people in the new generation have adopted to deal with their life problems [p. 19]." Does expecting and receiving support from family and friends influence people's emotional reactions to a crisis, or help them cope more effectively with the outcome and its ramifications?

A number of investigators have explored the issue of how interpersonal relationships influence people's responses to a variety of stressful events. Almost without exception, these studies have clearly demonstrated a relationship between perceived social support and effective adjustment. In a longitudinal study of reactions to job termination due to a plant closing, Cobb and Kasl (1977) report that social support from one's spouse, relatives, and friends reduced much of the distress associated with the loss. Among the physically disabled, support from the family has been associated with rehabilitation success both in the hospital and in the community (Kelman, Lowenthal, & Muller, 1966; Litman, 1962; Smits, 1974). In fact, it has been suggested that such support may be particularly critical for the most severely disabled (Kemp & Vash, 1971). The benefits of social support have also been demonstrated in a longitudinal study of 81 victims of rape (Burgess & Holmstrom, 1978). Among those women who were judged to have adequate social support, 45% reported 4 to 6 years later that they felt they had recovered from the rape within months; without support not one woman reported recovering within months. In fact, at the 4- to 6-year follow-up interview, 53% of the victims who did not have adequate social support still did not feel they had recovered from the attack.

Perceived support has also been shown to be associated with emotional adjustment among the bereaved. Depression evident 1 month following the death of a spouse was significantly correlated with fewer children whom the bereaved considered close and therefore able to provide support (Clayton, Halikas, & Maurice, 1972). Even after 13 months, the availability of supportive others still influenced the level of depression in this population (Bornstein et al., 1973). Similarly, the contribution of perceived support toward successful adjustment has been reported for the terminally ill (Carey, 1974) and for cancer patients (Jamison, Wellisch, & Pasnau, 1978; Weisman, 1976). In a comparison study, Vachon (Note 4) sought to explore the differing effects of social support on the cancer patient and the bereaved. In her 24-month longitudinal investigation of psychological adjustment to breast cancer and widowhood, she found that perceived lack of support was associated with high psychological distress for both groups of women. While lack of social support was most clearly associated with distress in the first year following bereavement, it appeared most important for breast cancer patients 1 to 2 years after diagnosis.

There is some evidence that perceived social support influences health status and physical well-being as well as psychological adjustment. In a prospective study of response to open heart surgery, Kimball (1969) reported that those patients who were classified as clinically depressed preoperatively "were characterized by a past, present, and projected future of weak or absent object relationships in terms of spouses, parents, children, and jobs

[p. 103]." Despite the fact that there were no significant differences in the severity of their conditions, these same individuals were significantly more likely to be dead within 15 months of their surgery than others in the sample. Weisman and Worden (1975) report similar effects on survival rates of the cancer patients they studied. Maddison and Walker (1967) questioned widows 13 months after their loss, and asked them to report retrospectively on their perceived social support during the first 3 months of bereavement. According to the authors, widows who reported a bad health outcome at 13 months "perceived themselves as having many more unsatisfied needs in interpersonal exchanges during the bereavement crisis than did those with a good outcome [p. 1062]." Finally, adult asthmatics undergoing life changes of various kinds required less medication if they were receiving high levels of social support than if they were not (de Araujo, van Arsdell, Holmes, & Dudley, 1973).

On the basis of the aforementioned studies, many investigators have concluded that social support facilitates the coping process. Because of the correlational nature of this research, however, such a causal inference may be unwarranted. As Heller (1979) has noted, people who are poorly adjusted or in ill health may underestimate the amount of support available to them. It is also possible that coping and social support are causally related, but that one's coping or prognosis determines the amount of support available. There are also many reasons why others may be unwilling or unable to provide support for people who are extremely ill or coping poorly (Coates, Wortman, & Abbey, 1979; Wortman & Dunkel-Schetter, 1979, Note 6). Such individuals may unwittingly create discomfort in others by making them feel vulnerable to a similar fate. Interacting with people who are suffering can also produce feelings of awkwardness and inadequacy because there may be little that one can say or do to help.

Finally, it has been suggested that the very ill or poorly adjusted may lack social competence (Heller, 1979), and therefore drive others away by engaging in socially inappropriate behaviors (Maddison & Walker, 1967). In fact, Heller has suggested that deficits in social competence may "produce the poorer levels of adjustment reported for unsupported individuals, as well as accounting for the lower levels of support they receive [p. 375]." Many of these ambiguities could be resolved by longitudinal research which assessed available social support at one point in time and examined its ability to predict distress or physical deterioration at a later point.

A causal relationship between support and effective long-term adjustment could also be established by intervention studies in which participants are assigned to treatments which supplement the support available to them. In fact, many health-care professionals, suspecting the benefits of supportive interpersonal relationships for individuals in distress, have sought to

augment existing social contacts with professional or peer support. Each of these interventions has produced positive psychological and/or medical benefits compared to control groups which received no treatment following cancer surgery (Bloom & Ross, Note 7; Ferlic, Goldman, & Kennedy, 1979), heart attack (Gruen, 1975), and bereavement (Gerber, Wiener, Battin, & Arkin, 1975; Parkes, 1975a; Raphael, 1977). Most of these interventions have been multifaceted, sometimes including psychotherapy and information as well as emotional support. For this reason, it is not clear which specific components of the supportive treatment were most important in producing the desired effect.

In recent years, investigators have moved away from considering social support as a unitary concept, and have attempted to increase the specificity of the term by identifying its components. One type of support involves the expression of positive affect (Kahn & Antonucci, *in press*); this may include information that one is cared for and loved, or that one is esteemed and respected (Cobb, 1976, 1979). A second distinct kind of support involves expressing agreement with, or acknowledgment of the appropriateness of a person's beliefs, interpretations, or feelings (Kahn, 1979; Kahn & Antonucci, *in press*; Walker, MacBride, & Vachon, 1977; Wortman & Dunkel-Schetter, 1979, Note 6). A third, closely related aspect of support involves encouraging the open expression of such beliefs and feelings (Wortman & Dunkel-Schetter, 1979, Note 6). A fourth type of social support is the provision of material aid (Kahn, 1979; Kahn & Antonucci, *in press*; Pinneau, 1975). Finally, support may be conveyed by providing information that the distressed person is part of a network (Cobb, 1976, 1979; Kahn & Antonucci, *in press*; Walker et al., 1977) or support system (Caplan, 1976) of mutual obligation or reciprocal help. To our knowledge, these particular components of social support have not been assessed separately in research. Thus, it is not clear which parameters are most important in the process of coping with life crises. (For a more detailed discussion of the construct of social support, see Caplan, 1979; Cobb, 1976; Heller, 1979; House, *in press*; and Walker et al., 1977.)

How does social support influence or facilitate the coping process? Both Cobb (1979) and Caplan (1979) have suggested that social support might provide a climate in which self-identity changes can more readily occur. According to Caplan (1979), people who receive adequate social support are less likely to employ counterproductive "defensive mechanisms" such as denial or distortion when they encounter information that does not confirm their perceptions or beliefs. Similarly, Cobb (1979) has argued that individuals who receive support are likely to develop greater self-confidence, and thus are able to change themselves to adapt to any modifications that occur in the environment. He has maintained that such individuals may also

be more likely to develop feelings of autonomy, therefore making more attempts to control and modify their environment. Kemp and Vash (1971) have suggested that supportive others may be quite helpful in reinforcing realistic, goal-setting behavior. This may be particularly important for physically disabled or chronically ill populations who face a long and difficult course of rehabilitation and/or treatment.

The mechanisms through which perceived support influences health outcomes is not well understood at present, although some initial speculations have been offered by Cobb (1976, 1979). He has noted two possibilities: a direct effect through neuroendocrine pathways, or an indirect effect through the facilitation of compliance with prescribed medical regimens. With regard to the latter possibility, there is abundant evidence indicating that patients who receive social support are more likely to stay in treatment and follow the recommendations of their doctors. Baekeland and Lundwall (1975) reviewed studies on the predictors of dropping out of treatment and found a relationship between social isolation and dropout rate in every one of the 19 studies that had assessed both variables. In fact, Cobb (1979) has concluded that the association of cooperative patient behavior with various components of the social support complex is "one of the best documented relationships in all of medical sociology [p. 98]."

For the most part, both theorists and researchers in this area have emphasized the presumed benefits of social support. In our judgment, more attention should be paid to the possible deleterious effect of behaviors that are intended to be supportive. For example, several investigators have noted that others' attempts to encourage false hopes or maladaptive denial can make it more difficult for persons to accept the reality of the situation and thereby impede effective adjustment (Caplan, 1960; Visotsky et al., 1961). Similarly, Friedman et al. (1963) pointed out that the parents of leukemic children they studied were often distressed by optimistic statements of others (e.g., the child "could not possibly have leukemia as he looked too well [p. 618]"). Such well-intentioned remarks placed parents "in the uncomfortable position of having to 'defend' their child's diagnosis and prognosis, sometimes experiencing the feeling that others thought they were therefore 'condemning' their own child [p. 618]." In a systematic investigation of the perceived helpfulness of others' attempts to provide support, Maddison and Walker (1967) asked widows to indicate how people had responded to them during the first 3 months after their loss, and to indicate further which reactions were helpful. They report that a number of responses that are frequently made to widows (e.g. being told "about the need to get out among people again and make new friends" or being told that "I must control myself and pull myself together [p. 1066]") were actually regarded as unhelpful.

Why do attempts to provide support sometimes fail? Caplan (1979) has suggested that certain types of support may threaten the person's freedom to make his or her own decisions, and thus elicit a negative reaction. In his discussion of "mothering-smothering," Cobb (1979) has argued that some attempts to be supportive may interfere with the development of coping mechanisms. Similarly, Brickman and his associates have pointed out that help often fosters dependence and passivity among recipients (Brickman, Rabinowitz, Coates, Cohn, & Karuza, Note 8). Brickman et al. maintain that the very label of "help" or "support" often carries the implicit assumption that people are incapable of solving their own problems, and therefore "works against the perception of recipients as active, responsible agents [p. 20]." Finally, Wortman and her associates (Coates & Wortman, 1980; Coates et al., 1979; Wortman & Dunkel-Schetter, 1979, Note 6) have provided a theoretical analysis that illustrates how others well-intentioned statements (e.g., "cheer up," "it's not as bad as it seems") can hamper meaningful communication about the crisis. They suggest that others can best support the distressed person by providing an opportunity for the free expression of feelings and concerns. This latter topic is considered in greater detail in the following section.

The Opportunity for Ventilation or Free Expression of Feelings

Those who are confronted with undesirable life events may wish to talk about their experiences with others. This may reflect not only a desire to obtain support, but also a desire to express one's feelings and concerns, and to receive feedback that those feelings are understood by others and are appropriate under the circumstances (Coates & Wortman, 1980; Coates et al., 1979; Wortman & Dunkel-Schetter, 1979, Note 6). Unfortunately, people who are in the throes of serious life crises often report that they are encouraged to be "strong" and are prevented from a free expression of their feelings, and are thus denied the ventilation they frequently need and want (Andreasen & Norris, 1972; Glick et al., 1974; Helmrich & Steinitz, 1978; McCombie, 1975; Mitchell & Glicksman, 1977; Schwab et al., 1975). For example, Helmrich and Steinitz (1978) interviewed couples who lost newborn infants and reported that "each [mother] described a strong need to talk about the physical characteristics of the baby, the details of the hospital course and death, and her desires, expectations and fantasies for the baby. . . . At the same time, friends and family steadfastly avoided mentioning the infant or the death [pp. 787-788]."

Although open encounters appear to be infrequent, evidence does suggest that victims appreciate the opportunity to express their feelings. While

less than one-half of Glick et al.'s (1974) sample of widows were able to express their grief freely with at least one other person, 67% reported that those who allowed or encouraged such conversations were helpful. Over 88% of those bereaved surveyed by Schoenberg, Carr, Peretz, Kutscher, and Cherico (1975) felt that "expression rather than repression of feelings, and crying, should be encouraged at least sometimes [p. 365]." Similarly, Mitchell and Glicksman (1977) report that 86% of the cancer patients they studied wished that they could discuss their situation more fully with someone. Perhaps for this reason, researchers investigating reactions to undesirable life events have reported that many respondents are quite eager to discuss their experiences and concerns and readily cooperate with an interviewer (Bulman & Wortman, 1977; Hamburg & Adams, 1967; Hinton, 1963; Marris, 1958; McCubbin, Hunter, & Metres, 1974a; Schwab et al., 1975).

There is also some evidence to suggest that the opportunities to discuss one's feelings are beneficial and that, conversely, lack of communication may intensify the strain of a victimization. Vachon, Freedman, Formo, Rogers, Lyall, and Freeman (1977) found that 81% of those cancer widows they interviewed who openly discussed death with their dying spouses reported that talking about death made it easier to face the bereavement. In fact, although a majority of those widows who had not talked about death with their terminally ill husbands said it made no difference in their bereavement experience, a sizable percentage (36%) said that not talking about death made things more difficult. Kennell, Slyter, and Klaus (1970) studied women who suffered the loss of a newborn infant, and found that a high degree of mourning was marginally associated with a lack of communication between the infant's mother and her husband. Burgess and Holmstrom (1974) report that when a rape or assault is not discussed with anyone, a "tremendous psychological burden" (p. 985) is carried with the victim for years, and these unresolved feelings may resurface at a later date. Finally, Maddison and Walker (1967) interviewed women approximately 13 months after the loss of their spouses and attempted to identify those factors associated with a decline in physical and/or mental health during the first year of bereavement. Those widows who experienced such a deterioration retrospectively reported a large number of unhelpful interactions at the time of the loss in which expression of negative feelings was directly or indirectly blocked. The authors conclude that the widow who showed a poor outcome may have "felt that she needed more encouragement, support, and understanding to permit her to indulge in a freer expression of affects, particularly grief and anger; [in addition] she may have felt a need to talk more actively and in greater detail about her husband and their past life together, but had experienced the environment as failing to provide an opportunity for this [p. 1062]."

The value of many intervention studies reviewed earlier may stem not only from their provision of information and emotional support, but also from their ability to offer an opportunity for ventilation. Such interventions typically provided an environment in which expression of feelings was encouraged in the presence of supportive others, whether they were health care professionals (Gerber et al., 1975; Gruen, 1975; Parkes, 1975a; Raphael, 1977), peers (Ferlic et al., 1979), or both (Bloom & Ross, Note 7). For example, Raphael (1977) specifically described her intervention with widows at risk for post bereavement morbidity as involving "support for the expression of grieving affects such as sadness, anger, anxiety, hopelessness, helplessness and despair [p. 1451]." This treatment was continued for a maximum of 3 months and included an average of only four sessions per widow. Nonetheless, when assessed 13 months after their spouses' deaths, women who had been randomly assigned to the intervention group reported significantly better psychological and physical health than those assigned to a no-treatment control group.

Although there is some evidence that ventilation of one's feelings may facilitate coping, a number of critical issues remain to be resolved. One important question concerns precisely how talking about one's feelings influences the nature and magnitude of these feelings, as well as subsequent coping. There are a number of intriguing possibilities. Some have suggested that expressing one's feelings is necessary for adjustment to occur (see, e.g., Lindemann, 1944). Theoretically, such expression leads to a "catharsis" or draining of the intensity of the feelings. This view was held by some of the widows studied by Glick et al. (1974), who believed that "sorrow can be treated as an entity that exists in a certain quantity, and that expressing sorrow uses it up or expels it. Therefore, it should be possible for the individual to 'get it all out,' to fully externalize or discharge it [pp. 58-59]." Expressing one's feelings might also be beneficial because it enables a person to receive information about the appropriateness of those feelings. Learning that certain emotions or reactions are common or justified may lessen the anxiety and distress associated with them. Finally, discussion of one's feelings may facilitate active problem-solving, or may enable people to view their situation from a more meaningful perspective.

In subsequent research, it is also important to identify any limiting conditions on the value of discussing one's feelings. Are the benefits of ventilation dependent on the type of feedback one receives from others? Are victims who express their feelings but elicit negative responses from others better off than those who withhold their feelings? Under what conditions are others most likely to respond empathically to a victim's displays of anguish and distress, and when will they come to regard ventilation as merely dwelling on problems? Is beneficial feedback more likely to occur

when discussing one's feelings with some targets (e.g., similar others) than others? Wortman and Dunkel-Schetter (1979) have suggested, for example, that it may be particularly useful for cancer patients to discuss their feelings with other patients, since they may be more capable of providing validating feedback than others. Are certain types of people less likely to profit from open discussion of feelings? For example, some investigators have reported that males have less desire to ventilate than females (Carey, 1977; Glick et al., 1974). Is this because they are less in need of clarifying feedback or because they fear others will be intolerant of their emotional displays?

If victims show little interest in sharing their feelings, should others encourage them to do so? By encouraging others to express their feelings, do we intensify their short-term distress and unhappiness? Data bearing on this final point were collected in an interesting intervention study conducted by Bloom and Ross (Note 7). Women facing breast biopsy were allowed to ventilate their feelings as part of a comprehensive counseling and information treatment. Within a few days of mastectomy, those women in the intervention group reported significantly more depression, anxiety, hostility, and confusion than a control group who received no such intervention. However, 2 months later, the treatment group showed higher levels of self-esteem and self-efficacy than the controls. Although the authors do not report a longer follow-up, this study suggests that both the immediate and long-term effects of open expression of feelings must be considered in any future research effort.

The Ability to Find Meaning in the Outcome

When a person is suddenly, uncontrollably victimized by criminal assault, disease, physical disability, or loss of a loved one, psychological adjustment may well be influenced by the individual's ability to find meaning or purpose in his or her misfortune. Such traumas often shatter people's views of living in an orderly, understandable, meaningful world (Cornwell et al., 1977; Glick et al., 1974; Parkes, 1971). As Glick et al. (1974) describe: "Widows and widowers sustain a loss of a major part of their lives and with it, of assumptions about themselves and their futures, about their roles and responsibilities, about the fundamental meaning of their lives [p. 300]."

A number of investigators have commented that after a crisis occurs, respondents seem compelled to make sense out of their experiences (Bulman & Wortman, 1977; Chodoff et al., 1964; Cornwell et al., 1977; Glick et al., 1974). In fact, Frankl (1963) has suggested that the search for meaning may be a powerful human motivation. Glick et al. (1974) write that their widows "return in their minds again and again to the events of their husband's death, compulsively reviewing the course of the illness or accident . . . Again and

again they asked themselves why it had happened [p. 126]." Similarly, Helmrath and Steinitz (1978) report that mothers who had lost a newborn infant asked themselves such questions as "What did I do during the pregnancy to cause this?" "What didn't I do?" "What should I have done differently?" "What am I being punished for" [p. 787]?"

Apparently, many people come to view their aversive experience from a purposeful or meaningful perspective. For example, Cornwell et al. (1977) report that, in trying to come to terms with the death of their infant, several parents rationalized that had he or she lived, the child would have been "physically, intellectually or morally defective [p. 658]." Following the drowning of a mentally retarded youngster in a public pool, lifeguards dismissed the death with the notion that the child and his family were actually better off now that he was dead (Doka & Schwarz, 1978). Chodoff et al. (1964) report that many parents of leukemic children they studied "took comfort in the thought that the treatment administered to their child, even though bound to fail, would contribute to scientific progress . . . and thus to the saving of some other child in the future [p. 747]." A number of the severely burned patients interviewed by Andreasen and Norris (1972) saw their injury as helping to make them better people, and saw the experience as "a trial by fire or a purgatory through which they have passed, having proved themselves and improved themselves by surviving [p. 359]." Many were also "appreciative of being given a second chance to show their love for their partner [p. 359]." Finally, Helmrath and Steinitz (1978) found that five out of the seven couples they interviewed came to view the death of their baby as an opportunity for growth in their lives, and all couples felt that their relationships had been deepened and improved because of the death.

Do those individuals who are able to find some meaning in an aversive life event respond differently to the misfortune than those who are unable to do so? Although the evidence bearing on this question is extremely limited, a few studies suggest that ability to find meaning may be important. In a study of parents with fatally ill children, Natterson and Knudson (1960) report an association between calm acceptance of their child's death and a "tendency to see the medical problem in its broader aspects, with the beginning of an expressed desire to help all children [p. 463]." Similarly, Weisman and Worden (1976) suggest that those cancer patients who were able to find something favorable in their illness were the least distressed by the disease. In contrast, anger toward God following loss of a spouse, perhaps representing an inability to find meaning in the experience, was found to be a strong predictor of intense grief and depression among women who had been widowed an average of five years (Barrett & Larson, Note 9).

There are, of course, many different ways in which an individual can view an aversive life event from a meaningful perspective. In a systematic

investigation of this issue, Bulman and Wortman (1977) asked 29 spinal cord injured patients whether they had ever posed the question "Why me?" and if so, how they had answered it. All respondents had asked themselves this question, and all but one had come up with an explanation. These explanations were highly varied: Some individuals felt that God had a reason for what had happened to them (e.g., "He's trying to help me learn about Him"); others reinterpreted the consequences of their accident as positive (e.g., "I see the accident as the best thing that could have happened because it brought me and my girlfriend closer together"); others maintained that the accident had been predetermined (e.g., "Things are always planned before your time by a Supreme Power"); and still others regarded their accident as deserved because of past misdeeds. Are some of these ascriptions of meaning more adaptive for successful coping than others? Unfortunately, the sample size in Bulman and Wortman's (1977) study was too small to provide an answer to this question and as yet, no other studies have specifically addressed this issue.

If subsequent research should support the notion that certain ascriptions of meaning are associated with improved long-term adjustment, should caregivers then encourage these views or beliefs among others? We think not. The limited evidence that is available suggests that others' well-intentioned attempts to impart meaning do not have a beneficial effect. Although widows are frequently told that the death of their spouse is the "will of God," for example, such comments are generally not seen as helpful (Glick et al., 1974; Maddison & Walker, 1967). In fact, Maddison and Walker (1967) observed that "subjects who had beliefs of this type tended to regard such interventions as gratuitous and unnecessary, while other subjects without any profound religious conviction found such attempts at comfort meaningless and often extremely irritating [p. 1063]." Similarly, being told that the loss of an older child would have been worse than the loss of a newborn only led to anger and resentment in mourning parents interviewed by Helmrath and Steinitz (1978). We might postulate that a more effective strategy would be to provide an opportunity for distressed people to ventilate their feelings in the presence of a supportive other, and let them generate such meaningful explanations on their own.

Of course, the ability to find meaning may be more difficult when the circumstances surrounding a crisis are particularly unjust. This may be the case when one is injured by a perpetrator (e.g., a drunk driver) who walks away from an accident unharmed (cf. Bulman & Wortman, 1977). Ascriptions of meaning may also be difficult when one's life has been repeatedly disappointing and unfulfilled in the past. As Hinton (1967) has written, "death can be very distressing if viewed as the final disillusionment, and this can well occur in those who have seen their lives as a sequence of blighted

hopes [p. 88]." A similar difficulty can arise when one's life had been changing for the better, only to be unfairly interrupted by misfortune. Glick et al. (1974) report in their study of young widows: "As if to underline the injustice, a number of respondents stressed how their lives had only recently become easier, how their husband had just begun earning more money, how their marital relationship had just improved, or how the children were doing better in school, when death came along to make it all futile [p. 131]." Because the death of a child is often seen as a violation of nature, it is perhaps one of the most painful of all life crises (DeFraim & Ernst, 1978; Szybist, 1978). In fact, Vachon, Formo, Freedman, Lyall, Rogers, and Freeman (1976) report that many of the recently bereaved widows they interviewed "stated spontaneously that as difficult as the loss of their husband was, the loss of a child would have been worse [p. 29]." Finally, coping may be more difficult when a crisis occurs during young adulthood, since the person may feel cheated from achieving desired goals. In support of this notion, age has been found to be a significant factor in the adjustment process to some life crises, with more difficulty occurring in younger persons who develop cancer (Craig & Abeloff, 1974; Hinton, 1963; Plumb & Holland, 1977); lose a limb (Randall et al., 1945), or experience the death of their spouse (Carey, 1977; Maddison & Walker, 1967).

Experience with Other Stressors

How is an individual's adjustment to a particular life crisis influenced by past crises or by concomitant stressors? Will a woman who has previously lost a close friend or relative react differently to a criminal assault, for example, than a woman who has not encountered such a loss? Are people strengthened with each crisis, and made more capable of dealing with subsequent stressors? Or do life crises have a cumulative effect and become more difficult to cope with over time? Theorists have offered conflicting answers to these questions.

It has been suggested that experiencing prior losses may bolster a person's ability to cope with later losses (Huston, 1971). For example, Shontz (1975) has argued that the coping process "can ultimately produce a more healthy, mature, and satisfying personality than existed before the crisis [p. 166]." Hamburg and Adams (1967) contend that an individual will develop new coping strategies as a response to distress of "high intensity or long duration." They write that if effective, these strategies "are likely to become available for use in future crises, and indeed may broaden the individual's problem solving capacity [p. 283]." In contrast, others argue that losses may be cumulative in their effects (e.g., Engel, 1964). Some maintain that the negative effects of a previous experience are especially likely if the prior

crisis has not been satisfactorily resolved (Caplan, 1964; Moos & Tsu, 1977; Visotsky et al., 1961). Haan (1977) has noted, for example, that a crisis may trigger "ominous meaning" or associations for people because of past unresolved conflicts. What specific factors might explain the influence of past stressors? Are some aversive life events more "strengthening" than others? What is the impact on coping of having previously experienced a similar trauma, as opposed to a different type of crisis? Of concomitant as opposed to prior stressors? Some intriguing conclusions are suggested by the limited research that has addressed this topic.

Prior Stressors

Among mothers who had lost a newborn infant, Kennell et al. (1970) found that a high degree of mourning assessed shortly after the loss was significantly associated with a previous loss through miscarriage or a newborn infant's death. However, Bornstein et al. (1973) found that previously experiencing the death of a relative aided in the adjustment of the bereaved men and women they studied. Those respondents who were found to be depressed 13 months after the loss of their spouse were significantly more likely than the nondepressed never to have encountered a previous loss. Few investigators have examined the effect of prior loss of a loved one on coping with one's own illness and disability, and the limited evidence is inconsistent. Carey (1974) found that having a close relationship with a dying person had a positive influence, particularly if this person had "accepted death with inner peace [p. 436]," rather than having been angry and upset until he or she died. It has also been suggested that experiencing a recent bereavement may lead to increased distress following being severely burned (Pavlovsky, 1972). Perhaps coping with one's own illness or severe disability is more difficult following loss of another because it leads to feelings of increased vulnerability, pessimism and fear regarding one's own future. However, after recognizing one's illness as being fatal, adjustment may be facilitated by a strong role model.

The above research suggests that various types of prior stressors may influence subsequent coping very differently, sometimes having a positive effect and sometimes proving deleterious. However, it is difficult to compare the impact of different life crises from one research report to another. Fortunately, one study has contrasted the effect of two different crises, bereavement and criminal victimization, on coping with a subsequent rape. In a 4- to 6-year longitudinal investigation, Burgess and Holmstrom (1978) found that women who had experienced a criminal assault prior to the rape (sexual assault, physical assault, mugging, or verbal or physical sexual harassment) took significantly longer to recover than individuals who had experienced no such victimization. However, women who had previously

lost a parent, spouse or child through death, divorce or separation, recovered significantly more rapidly from the rape than women who had not had such an experience.

Taken together, this evidence suggests that experiencing the loss of a child twice or repeated criminal victimization may be extremely difficult, whereas losing a relative may facilitate adjustment to subsequent loss or rape. Why might this be the case? Burgess and Holmstrom (1978) have speculated that the successful resolution of "family grief" may facilitate the development of coping skills that are useful in other situations, and may also "strengthen a person psychologically [p. 173]." It is unclear, however, why these skills and self-insights are not imparted to victims of repeated assault or loss of a child. There are a number of intriguing possibilities that may be worthwhile investigating in subsequent research. First, people often react to the loss of a child or to criminal victimization with feelings of self-blame (Burgess & Holmstrom, 1974; DeFraim & Ernst, 1978; Friedman, 1974). For example, rape victims commonly attribute the attack to some modifiable aspect of their behavior [e.g., "I should have been more careful"; "I should not have been out so late at night" (Janoff-Bulman, 1979)]. Such an attribution implies that a change in the behavior in question will protect the individual from encountering the outcome in the future. If the event happens again, it may shatter one's previous resolution, and may make the victim feel especially vulnerable and helpless (cf. Abramson et al., 1978).

Alternatively, repeated criminal assaults might create difficulties in coping by intensifying one's feelings of personal inadequacy. A victim may feel that there must really be something wrong with his or her behavior if such an event happens more than once. Moreover, reactions of others may change for the worse when the victimization occurs a second time. The first time a woman is raped or loses a child, significant others may be willing to believe that it was not her fault and that there was nothing she could have done to prevent it. But if she is raped or victimized again, others may feel that she must be doing something wrong or must be "asking for it." Of course, direct or implied blame from others may hamper open communication and limit social support. These interpersonal difficulties would certainly be exacerbated for people who had been victimized more than once.

Another possibility is that certain kinds of undesirable life events, such as violent assault or loss of a child, are likely to result in feelings of injustice. Such losses may be more difficult to view from a meaningful perspective than other stressors—particularly if they occur more than once. One outcome that may be especially likely to engender feelings of overwhelming injustice, as well as the inability to find meaning, is the concentration camp experience. In fact, this may help to account for the widespread pathology often observed among concentration camp survivors, as well as their appar-

ent enhanced vulnerability to subsequent stressors (Benner et al., 1980). Benner et al. suggest that survivors may react in this manner, rather than with a sense of power or mastery, because they are unable to generate a meaningful explanation for such events. According to these investigators, survivors find themselves "isolated and cut off from a meaningful cultural framework. To know that life is absurd is bad enough, but to struggle with this knowledge in a world where others are unaware of or uninterested in the catastrophe is far worse [p. 54]."

The notion that exposure to repeated stressors can change one's conception of oneself or the world, and thus result in subsequent decrements, is consistent with the models proposed by Wortman and Brehm (1975) and by Seligman and his associates (Abramson et al., 1978; Seligman, 1975). In fact, these models suggest that exposure to stressors not only influences one's reaction to subsequent crises, but behavior in non-crisis situations as well. As noted earlier, however, these models are based on laboratory research involving many trials. Can exposure to a single life crisis produce fundamental changes in one's beliefs, and thereby alter one's behavior in subsequent settings? Benner et al. (1980) have suggested that the concentration camp experience has had this kind of impact, and hypothesize that it

permanently altered the individual's evaluation of his or her relationship with the world The person has learned that he or she is living in a potentially hostile environment with inadequate resources for mastery. Having experienced what humans can do, every new encounter carries with it the potential for the most savage attack against which one is relatively helpless [pp. 36–37].

At present, it remains to be demonstrated whether exposure to a single life crisis, or even to a small number of similar or dissimilar crises widely separated in time, can result in long-term helplessness effects that generalize to other settings. These models appear to have particular relevance, however, for individuals who repeatedly encounter an uncontrollable stressor. This may be the case for epileptics, for example, who frequently experience severe and uncontrollable seizures. In fact, DeVellis, DeVellis, Wallston, and Wallston (Note 10) found that depression and attenuated expectations of control were more prevalent among these individuals than a normative population. Interestingly, such feelings were intensified for epileptics who were unable to predict or control their seizures. Similarly, Belle (Note 11) has found a significant association between the amount of chronic stress experienced by low-income mothers [e.g., "poor housing, dependence on social agencies for the necessities of life, entrapment in low-paying, low-status, dead-end jobs, and the experience of discrimination and violent crime (p. 434)"] and depressive symptomology.

Wortman and Brehm (1975) have suggested that individuals who are

repeatedly exposed to uncontrollable outcomes respond initially with anger or invigoration, but become increasingly helpless over time. It is difficult to validate this prediction, since there is virtually no longitudinal research on reactions to repeated life crises. An intriguing and carefully controlled study of primate reactions to repeated separations, however, suggests that this may be the case. Suomi, Mineka, and Delizio (in press) report two experiments in which subjects were exposed to 16 or 24 weekly peer separations, each of a duration of 4 days. Most of the subjects in each study showed severe protest-despair reactions to the first few separations. Over time, however, the protest behaviors gradually disappeared, and subjects began showing "despair" reactions as soon as each separation began.

Concomitant Stressors

What is the effect of chronic stress on coping with an aversive life event? Is an event such as rape less traumatic to a person with many other problems because it is less salient? Or is coping with a new crisis more difficult when one is under stress (cf. Coleman, 1973)? As noted earlier, Klinger's (1975, 1977) model would suggest that individuals who are experiencing many problems simultaneously may have difficulty, since the incentive-disengagement cycles for each loss combine to determine their emotional state.

At present, there is limited research that has addressed this question. Maddison and Raphael (1975) contend that the presence of additional concurrent crises among the bereaved leads to health deterioration. They maintain that such individuals are "facing such an overwhelming mass of problems demanding solution that the coping requirements are likely to be beyond the adaptive capacities of most people [p. 31]." Weisman (1979) found that cancer patients who exhibited higher levels of emotional distress had long-standing marital problems, came from lower socioeconomic strata, and had marginal resources. Similarly, Kupst and Schulman (Note 3) report that those parents who coped poorly with their child's leukemia had "pre-existing multiple problems, such as marital, relationship, financial, and occupational [p. 23]" difficulties. However, in a systematic investigation of the predictors of emotional distress over a 24-month period, Vachon (Note 4) found that little variance was accounted for by concomitant stress among the bereaved.

Burgess and Holmstrom (1978) also examined the effects of chronic stress in their investigation of recovery from rape. They found that those women who were experiencing chronic life stressors, such as economic stress, lack of social support or "preexisting biopsychosocial problems such as psychosis, alcoholism, drug use, mental retardation or homosexuality [pp. 170-171]" tended to have long-term difficulty recovering from the rape. Unfortunately, the authors' statistical analysis does not allow for a determi-

nation of the relative influence of each of these stressors on subsequent adjustment. Nonetheless, it appears that for some people, particularly those with limited social support, daily struggling with problems such as poverty or alcoholism may "use up" one's coping reserves, and leave one especially vulnerable for adjustment problems should a crisis occur.

POSSIBLE DIRECTIONS FOR SUBSEQUENT WORK

Our review of past theories and their inability to account for the diverse empirical results concerning responses to negative life events led us to suggest some variables that might mediate individual reactions. As we described, such variables might be incorporated into future theoretical formulations in this area. In this section of the chapter, we suggest further areas for subsequent work in the field of coping with life crises, on both theoretical and empirical grounds. Two general areas are explored in some detail. We first draw from our previous discussions to summarize implications of past work for future theoretical development. We discuss the need for theoretical statements that capture the complexity of the coping process, yet make precise predictions regarding the relationships among particular variables and successful coping or resolution. We then explore the problems associated with providing a clear conceptual definition of successful coping. We discuss how the difficulties with present conceptualizations of good coping have hampered theoretical and empirical work in this area, and consider possible solutions to these problems.

Theoretical Development

Our discussion of past theories, as well as the existing empirical research, has suggested some promising directions for the development of theory in this area. Earlier, we noted that the perspectives we presented contrast markedly in their breadth of focus and in their precision. Lazarus (Note 1; Lazarus & Launier, 1978) highlights the full variety of coping responses that can be made when confronted with a life crisis. Shontz's (1965, 1975) account of the adjustment process is filled with provocative insights from his experience in health-care settings. Klinger (1975, 1977) draws from work in many areas of psychology to provide a stimulating account of how life crises can dominate our thoughts and fantasies. Although each of these models provides a rich discussion of the coping process, none offers a basis for predicting the nature, sequence, or duration of particular responses elicited by victims of life crises. Wortman and Brehm (1975) and Abramson et al. (1978), on the other hand, have included mediating variables that afford

more precise predictions about when people will become angry or depressed (Wortman & Brehm, 1975), and how far depressive reactions will generalize (Abramson et al., 1978). Perhaps because of their laboratory origins, however, these models fail to capture the complexity of coping with significant negative outcomes. Clearly, theoretical formulations that incorporate the best features of each of these models are desirable. Hopefully, such models will include a broad range of cognitions, emotional reactions, and coping responses, as well as incorporate mediating variables that specify when particular reactions will occur.

The importance of incorporating a broad range of emotional responses and coping strategies was also suggested in our review of the available research on reactions to life crises. One clear implication of the empirical research is that those models which have focused almost entirely on depression (Abramson et al., 1978; Seligman, 1975) or on both anger and depression (Klinger, 1975, 1977; Wortman & Brehm, 1975) are unnecessarily restrictive. The available research suggests that other reactions, particularly shock and anxiety, are widely experienced and are thus in need of increased theoretical attention. Similarly, past research suggests that people employ many different kinds of coping strategies, including denial and information seeking, as well as efforts to change the outcome in question. Unfortunately, some theories have limited their focus to predictions regarding a single strategy, such as when people will try to alter the outcome and when they will give up (Abramson et al., 1978; Wortman & Brehm, 1975). In our judgment, such theories are likely to have little predictive power in accounting for the diverse reactions to most life crises.

The empirical work reviewed also highlights the importance of incorporating mediating variables into subsequent theoretical statements. Perhaps the most striking feature of available research, considered as a whole, is the variability in the nature and sequence of people's emotional reactions and coping mechanisms as they attempt to resolve their crises. How can we account for the fact that depression is a fairly common initial reaction to some life crises (e.g., bereavement) but not to others (e.g., rape)? Within a particular life crisis, like rape, why do some women show intense emotional reactions while others appear numb or calm? Similarly, when do people decide to fight a fatal diagnosis, and when do they instead deny the diagnosis or its ramifications? Perhaps by incorporating mediating variables such as perceived social support, the opportunity for free expression of feelings, the ability to find meaning in the crisis, or experience with other stressors, future theoretical statements can offer more precise predictions about the conditions under which particular reactions will occur.

The empirical research documents considerable variability not only in the initial reaction to the negative event and in the coping strategies employed,

but also in the time necessary for successful resolution of the crisis. Why do 40% of the bereaved continue to experience intense anxiety 2–4 years after their loss (Glick et al., 1974)? What factors are helpful in determining why one-quarter of rape victims do not feel recovered from a rape as long as 4–6 years later (Burgess & Holmstrom, 1978)? It is important that mediating variables be incorporated into future theories as a way of enhancing their ability to identify those individuals especially likely to experience subsequent difficulties.

Conceptual Problems in Defining Successful Adjustment

In order to develop precise theoretical statements about the relationship among particular variables and successful resolution or adjustment to a crisis, it is necessary to address a central question: What is successful adjustment? In our judgment, the difficulties involved in providing a clear conceptual definition of effective coping have hindered potential advancement in this field. Many characteristics thought to reflect successful recovery or adaptation have been identified, including keeping one's distress within manageable limits, maintaining a realistic appraisal of the situation, being able to function or carry out socially desired goals, maintaining a positive self-concept, and maintaining a positive outlook on the situation (see, e.g., Friedman et al., 1963; Haan, 1977; Hamburg & Adams, 1967; Myers, Friedman, & Weiner, 1970). To what extent can we assume that these qualities are synonymous with successful coping?

In order to illustrate some of the complexities involved in regarding these qualities as indicative of good coping, let us consider one of them in some detail. The view that people who are coping well are able to control their emotional distress, and keep their anxiety within manageable limits, appears to be quite common (cf. Friedman et al., 1963; Haan, 1977; Hamburg & Adams, 1967; Mechanic, 1962). This focus on emotional regulation (cf. Lazarus & Launier, 1978) is not surprising, since there is some evidence that high levels of emotional distress can disrupt coping behavior in a natural setting (cf. Anderson, 1976). Moreover, emotional stress may be associated with endocrine changes (Mason, 1975) and with poor physical prognosis among people who are seriously ill (see, e.g., Achte & Vauhkonen, 1971; Garrity & Klein, 1975). (See Cohen, 1979, for a review of the role of stress in the development of physical illness, and for a full discussion of possible mediating mechanisms underlying such a relationship.) In fact, it has even been suggested that encouraging the expression of positive emotions like joy and laughter at a time of crisis can reverse the course of a progressive disease (Cousins, 1976).

While most theorists have assumed that the inability to keep one's

emotional distress within manageable limits is indicative of poor adjustment, recent work suggests that this might not always be the case. Wortman and Dintzer (1978) have argued that relatively intense distress can play an important role in motivating individuals to initiate coping attempts. Consistent with this view, Goldsmith (1955) reports that patients with spinal cord injuries who were actively upset about their disability, and who expressed angry and aggressive feelings about what happened to them, were subsequently judged as showing more progress in rehabilitation than patients who appeared to be less distressed. In fact, there is even some recent evidence suggesting that reacting to a crisis with expressions of emotional distress may favorably influence a person's physical prognosis. Derogatis, Abelloff, and Melisaratos (1979) collected a variety of psychological measures on 35 women with breast cancer and correlated the results with length of survival. Interestingly, those women who reported higher levels of hostility, anxiety, and dysphoric mood at the initial assessment were likely to survive the longest. Moreover, long-term survivors were rated by their oncologists as less well adjusted to their illness. Consistent findings were also obtained in a prospective study of patients with malignant melanoma (Rogentine, van Kammen, Fox, Docherty, Rosenblatt, Boyd, & Bunney, 1979). Respondents were asked to indicate how much adjustment was needed to cope with their disease. Those who reported that little adjustment was required, thus suggesting that their illness had caused them little distress, were significantly more likely to experience a relapse 1 year later. Interestingly, this variable was found to be independent of known biological prognostic factors, including the number of positive lymph nodes.

At present, these results are merely suggestive, and we can only speculate about the mediating mechanisms. What causes the pathogenic impact found in the aforementioned studies? The respondents in Rogentine et al.'s (1979) study indicated that little coping effort was required, but it is unclear whether they experienced little distress or were unable or unwilling to admit to their feelings. Does health deteriorate because the suppression of negative feelings "use up" energy that could be used in fighting the disease, as Klopfer (1957) has suggested? Or is emotional distress simply more likely to be expressed by patients who have a desire to fight the disease? Does a desire to fight an illness, or suppression of one's emotions, influence physical prognosis via the immune or endocrine systems (cf. Cohen, 1979; Lazarus, Cohen, Folkman, Kanner, & Schaefer, 1980; Pettingale, Greer, & Tee, 1977; Solomon, 1969a, b)? Or do people who are more distressed about what is happening to them show a better prognosis because they are more likely to take other actions (e.g., seeking out better doctors; getting more information about treatments) than people who are less distressed? Do

individuals who express anger and frustration show the same physiological reactions as individuals who voice helplessness and despair (cf. Mason, 1975; Mason, Maher, Hartley, Mougey, Perlow, & Jones, 1976)? While a full discussion of these issues is beyond the scope of this chapter, several studies suggest that the ability to keep one's distress manageable or controllable may not always be synonymous with good adjustment, and may in fact entail certain costs.

When one examines other factors often considered to be indicative of effective coping, similar problems emerge. This is the case for the ability to maintain a positive attitude, which has been mentioned by several investigators as characteristic of good adjustment (see, e.g., Visotsky et al., 1961). Like controlling one's emotional expression, however, focusing on the positive may result in subsequent difficulties. For example, Derogatis et al. (1979) found that those breast cancer patients who survived the longest were rated by their oncologists as possessing more negative attitudes toward their illness and its treatment, and were judged by interviewers as manifesting significantly poorer attitudes toward their physicians. The ability to maintain a positive self-concept has also been mentioned by several researchers as indicative of good adjustment (e.g., Hamburg & Adams, 1967; Visotsky et al., 1961). In fact, measures of self-esteem have comprised the central operational definition of coping in several studies (see, e.g., Bloom & Ross, Note 7). Yet, individuals whose self-esteem is threatened by the crisis may be especially likely to engage in coping efforts. For example, Litman (1962) found that, at least early in hospitalization, physically disabled

patients with negative conceptions of self . . . exhibited a great deal of motivation and were considered excellent rehabilitation candidates by the clinical staff. [This type of patient] possessed such a distasteful conception of himself that every effort was directed toward alteration of the physical state believed to be the cause of it [p. 252].

Taken as a whole, this work suggests that providing a conceptual definition of effective coping may be extremely complex. In our judgment, there are a number of points that may be worth considering when attempting to develop operational definitions of successful adjustment. Since different ways of coping are unlikely to be correlated positively with one another, it may be unwise to formulate theoretical hypotheses concerning the relationship between specific variables and "good coping" in a general sense. It is also clear from our discussion of past work that certain factors may influence some types of coping but not others. For example, an individual who denies the seriousness of his or her child's leukemia may be relatively

free from emotional distress, but may fail to carry out the functions necessary for the child's care. Ideally, our theoretical statements should be more precise, indicating specifically how particular variables are related to particular components of effective adjustment. Finally, the lack of association among the various components of effective coping also suggests that empirical researchers should employ multiple measures of this construct. In studying the predictors of successful adjustment to spinal cord injury, for example, investigators may wish to assess many specific types of effective coping, including absence of somatic complaints, freedom from extreme emotional distress, cooperation with rehabilitation treatment regimens, and resumption of social and vocational activities (see Wortman et al., 1980).

Another conclusion that might be drawn from the aforementioned work is that the relationships that emerge among particular variables and indices of successful adjustment may not remain stable over time. Responses that are functional at one point in time may prove to be counterproductive as the situation changes (cf. Pearlin & Schooler, 1978). Specifically, there is evidence to suggest that denying the implications of one's predicament may be helpful in alleviating distress in the short run but dysfunctional in the long run. For example, Kimball (1969) identified a group of patients who appeared "euphoric" after open heart surgery, "greeting the staff enthusiastically as though the operation had been 'nothing at all' [p. 100]." Although this group had the fewest early complications and were transferred out of intensive care sooner than other patients, they "demonstrated a number of complications, e.g., conversion reactions, gastrointestinal hemorrhages, and pyrexias of undetectable etiology [p. 100]" days later. (See Lazarus, Note 12, for a more complete discussion of the consequences of denial.)

In past theoretical and empirical work, the various components of effective coping have been frequently conceptualized as dependent variables. The research we have reviewed, however, suggests that causal relationships among such variables as emotional reactions, coping strategies, and indices of effective coping are likely to be complex and multidirectional. For example, lack of social support may result in greater expression of emotional distress, which may in turn reduce social support still further. Moreover, the various indices of coping that we have discussed may causally influence one another. Carrying out appropriate functions at the time of crisis, for example, may lead to an increase in one's self-concept. A central question concerns how the broad classes of variables influence one another and change over time as the coping process unfolds. In our judgment, the relationships among these variables can best be explored in longitudinal designs that include frequent and repeated assessments of these variables. In light of the evidence that life crises may have impact on an individual for a considerable period of time,

long-term follow-up is clearly desirable. As we noted earlier, however, investigators must devote considerable attention to the problems of reactivity, attrition, and the ethical considerations that normally accompany this type of research (see also Wortman et al., 1980).

Since individual indices of coping are unlikely to be correlated with one another and may change over time, how are we to differentiate those people who are coping poorly from those who are coping well? In our judgment, there are a number of factors that should be considered by those interested in making such distinctions. First, as other investigators have noted, the decision of what comprises good coping is intricately tied up with questions of values (cf. Lazarus & Launier, 1978). Most people would probably agree that a mother who is caring effectively for her fatally ill child, showing few somatic complaints, maintaining a realistic appraisal of the situation and keeping her emotions under control is coping more effectively than a woman who is having difficulty in all of these areas. Our discussion has suggested, however, that such clear-cut cases will rarely occur. More frequently, we will be faced with the following dilemma: Is a mother who is caring effectively for her child but subjecting herself to repeated and continual distress coping more effectively than one who spends very little time with the ill child, but is less stressed? The latter mother may be less capable of caring for her ill child, but may be more available to her spouse and other children.

Second, we believe that it may be difficult to conceptualize or define good coping with a particular life crisis in the absence of normative data regarding how people respond to that event. For example, it is difficult to regard "freedom from intense emotional distress" as an indication of good coping among the recently bereaved, since the available evidence suggests that virtually all bereaved manifest such distress. Because it is now recognized that depression is a common feature of the bereavement experience, this symptom may no longer be regarded as having diagnostic value. In fact, depression following the loss of a loved one has been dropped from the diagnostic categories of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1980).

Our previous review has shown, however, that such normative data are rarely available. It is therefore difficult to make judgments about good and bad coping in particular instances. Respondents in a study conducted by Coates et al. (1979) rated a rape victim as maladjusted and in need of professional help when she indicated, 6 months after the assault, that she was still having some difficulty in dealing with the rape. Would they have made so harsh a judgment had they known that 25% of rape victims do not regard themselves as recovered from the assault as long as 4 to 6 years later (cf. Burgess & Holmstrom, 1978)?

CONCLUSIONS AND IMPLICATIONS

What conclusions can be drawn from the diverse material that we have attempted to synthesize in this chapter? We have considered several general theoretical statements which address the issue of how people respond to undesirable life events, and the body of research that bears on the topic. Our examination of this material has suggested some intriguing discrepancies between theoretical and empirical work. Most theoretical statements indicate that people will respond to crises with a consensual pattern of response, and many theorists predict that these responses will fall into an orderly sequence of stages. In contrast, the empirical data reveal extreme variability of response and offer no clear evidence for stages. Similarly, while many theorists imply that people will recover from life crises and resume their lives, the available data suggest that the difficulties following a crisis may be experienced indefinitely.

Taken together, this past work suggests that theorists have often made inaccurate predictions about how people will react to undesirable life events. This possibility raises a series of intriguing questions. First, how widespread are such inaccurate expectations? Are they shared by care-givers, significant others, or distressed individuals themselves? Second, why might others maintain expectations concerning reactions to life crises that are so discrepant from the distressed person's experience? Finally, if such views about the course and impact of life crises are widely believed in our society, what are the implications of these beliefs for the care and treatment received by the distressed? Answers to these questions are considered in some detail below.

The Belief in a Consensual Pattern or Stage Model

As demonstrated earlier, there is a surprising lack of methodologically rigorous data indicating that individuals respond to aversive life events with a predictable pattern of emotional reactions. Despite the absence of any sound empirical evidence for the existence of sequential stage models for any negative outcomes, however, there is a pervasive belief among care-givers and helping professionals in such models of emotional response. So widespread is this belief that references to stage models can be found in books and articles written by and for nurses (Engel, 1964; Stitt, 1971; Zahourek & Jensen, 1973), therapists (Bromley, 1976), social workers (Weller & Miller, 1977a,b), clergymen (Nighswonger, 1971), health-care professionals (Bernstein, Bernstein, & Dana, 1974), and patients and their families (Kubler-Ross, 1969; Meyer, Meyer, & Garrett, 1977). For example, the following statements have been written by care-givers to provide guidance to others in their field:

Awareness of the normal stages of dying and the behavior and feelings likely to appear at each of them will assist the health professional . . . to enable the patient to achieve a state of relatively peaceful acceptance. In this manner death with dignity can be achieved [Bernstein et al., 1974, p. 188].

In order to give real assistance, care-givers should be competent in four areas. First, they must know what the usual responses to a given illness situation are, including the sequence of stages in emotional processes like mourning . . . Staff should understand the time dimension involved, for example, in grieving for a loss. . . . It entails a progression from an initial reaction of numbness or disbelief . . . [Moos & Tsu, 1977, p. 18].

Similarly, the statement below appeared in a pamphlet for patients with spinal cord injuries and their families:

Patients react to spinal cord injury in a similar fashion as those who respond to the death of a loved one—"mourning." The process of mourning has several stages, the first being Depression [Meyer et al., 1977, p. 36].

Of course, if it truly exists, there is much utility in a clinical stage model. Not only would it enable the care-giver to better prepare both distressed persons and their loved ones for the type and length of expected reactions, but it would also enable health-care professionals to identify those individuals who, in manifesting unusual reactions, are in need of professional assistance (Bernstein et al., 1974; Fitzgerald, 1970). As Parkes (1975a) has suggested, a stage model would also afford the professional "some kind of yardstick by which we can assess progress and evaluate the consequences of our care [p. 1274]."

In the absence of validating data, however, and data indicating the extreme variability of response to the contrary, the pervasive belief in the stage concept may have unfortunate consequences for victimized individuals. Pattison (1977) reports that, as a result of the 'widely held belief in Kubler-Ross' (1969) stages of dying, "dying persons who did not follow these stages were labeled 'deviant,' 'neurotic,' or 'pathological dyers.' Clinical personnel became angry at patients who did not move from one stage to the next. . . . I began to observe professional personnel demand that the dying person 'die in the right way' [p. 304]." Kastenbaum and Costa (1977) contend that acceptance of such a model "encourages an attitude in which, for example, staff or family can say 'He's just going through the anger stage' when there may, in fact, be specific realistic factors that are arousing the patient's ire [p. 242]." Thus, as Goldiamond (1976) argues, hospital staff may be "relieved of the necessity for asking how their actions might have helped cause these reactions [p. 122]."

Such widespread beliefs of family and care-givers, as well as researchers,

make the stage model particularly resistant to disconfirming evidence. Nisbett and Ross (1980) have provided a detailed and cogent analysis of how a researcher's, clinician's, or layperson's interpretation of data is strongly biased by expectations based on implicit theories. They review numerous studies indicating that "people tend to seek out, recall, and interpret evidence in a manner that sustains beliefs [p. 192]." Similarly, Goldiamond (1975) has explained that "one not only superimposes a classification system, but the very classification system will dictate categories and therefore what it is that will be admitted for categorization; that is, the data [p. 107]." In summarizing the research on this problem, Nisbett and Ross (1980) have concluded that people not only recall ambiguous data as supporting their beliefs, but also dismiss any evidence that contradicts or opposes their assumptions: "If the evidence cannot be discredited outright, it may nonetheless be given little weight and treated as if it were of little consequence [p. 169]." According to these authors, such errors in information processing make people's theories "almost impervious to data [p. 169]." This work may explain why the stage model has persisted tenaciously in the absence of empirical support. Nonetheless, until methodologically sophisticated research has documented specific reactions and confirmed the existence of stages of response, re-education of the public as well as health-care professionals should be our necessary, albeit difficult, goal.

The Belief in Recovery or Acceptance

An implicit assumption of the pervasive belief in the stage model is the expectation that people will accept or recover from their crises. We reported earlier, however, that there is evidence indicating that for a sizable minority, such an assumption is unfounded. Despite this fact, the belief that people will ultimately reach a final stage of acceptance of the event, and presumably move on to the next stage in their lives, appears to be quite common.

Schoenberg, Carr, Peretz, and Kutscher (1969) surveyed physicians and found that 52% expect the bereaved to have early "experiences of pleasure"—within a few weeks after the death of a spouse. In contrast, only 19% of the bereaved widows and widowers they surveyed anticipate such pleasant feelings (Schoenberg et al., 1975). The lay public appears even less aware of the adjustment problems of the individual coping with an undesirable life event. As Vachon (Note 4) indicates: "The woman with breast cancer is expected to quickly 'get back on her feet'; resume her role within the family. The assumption is that once treatment is completed, the disease shouldn't have much effect on her life [p. 12]." Similarly, in their review of the literature on the bereavement crisis, Walker et al. (1977) conclude that

"widows frequently report that even intimates do not support the need to mourn their loss beyond the first few days after the death [p. 38]."

It is also apparent that because recovery is expected, progression to the next stage in one's life is encouraged rather quickly. For example, the topic of remarriage seems to be brought up by others quite early in the bereavement period. Maddison and Walker (1967), in their study of bereaved widows, found that "it was not uncommon for this topic to have been introduced within a few days or weeks of the husband's death, particularly with the younger widows [p. 1063]." Widows in the sample studied by Glick et al. (1974) report similar encounters: Others "tactfully suggested that they make themselves available for dating or plan eventually to remarry [p. 222]" by the second month after the death of their spouse. In their discussion of the expectation for rapid recovery among parents who lost a newborn infant, Helmrath and Steinitz (1978) indicate that "the external expectations were that the couple would not grieve and would 'put the death behind them and get on with life.'" Couples were also reminded that "you're young, you can always have another one [p. 788]."

Although statements by others encouraging "moving on" may be well-intentioned, there is some indication that they are not viewed favorably by the victimized individual. In fact, rather than being seen as helpful, directions toward one's future life after a crisis often lead to feelings of frustration and disappointment (see, e.g., Helmrath & Steinitz, 1978). Maddison and Walker (1967) report that "conversations which aroused interest in new activities, development of new friendships, resumption of old hobbies or occupations [p. 1063]" during the first 3 months after death of a spouse were greeted with hostility. Similarly, Glick et al. (1974) report that "widows invariably found early suggestions that they consider remarriage unpleasant and even jarring [p. 222]."

The aforementioned evidence, while limited, is consistent in suggesting a discrepancy between the way a person is expected to respond to a negative life event, and the way he or she actually reacts. Outsiders apparently unaware of the impact of a life crisis are quick to encourage the distressed

"It must also be noted that while most individuals expect the victim of a life crisis to recover, norms also dictate that he or she should experience some period of initial distress. A spinal cord injured person who was not depressed following his injury has noted that he 'adjusted to the fact so quickly that they sent me to a psychiatrist to find out if I was okay [Goldiamond, 1976, p. 134].' A widow who remarries a few months after her spouse's death 'might well be censured for displaying too little grief for her loss [Glick et al., 1974, p. 222].' Finally, Calhoun, Cann, Selby, and Magee (in press) have found that a rape victim who appears controlled immediately after the attack may be judged more negatively by others, and even viewed as less credible than a victim who is more emotional. (See also Friedman et al., 1963, and Benson et al., 1974, for a discussion of the particular problems encountered by victims whose behaviors fail to meet the expectations of those in their social environment.)

to move on with their lives. We believe that others' misconceptions about the recovery process may lead them to behave toward the distressed in ways that are unintentionally harmful, and thus intensify the strain from the life crisis itself. For example, the death of a newborn child commonly elicits such responses as "It was only a baby whom you didn't know"; "It's worse to lose a child you know" (Helmuth & Steinitz, 1978, p. 788). There is apparently no acknowledgment of the fact that, as Kennell et al. (1970) found, "clearly identifiable mourning was present in the mother of each infant who died—whether the infant lived for one hour or for 12 days, whether the infant was 3000 grams or a nonviable 580 grams . . . whether or not the mother had touched the baby [p. 348]." What factors might explain why others' expectations about responses to undesirable life events are so discrepant from the reactions that apparently occur? We know of virtually no systematic research of direct relevance to this issue. Because we believe that this problem is of paramount importance, however, we draw from the limited information available to discuss some possible mechanisms that may underlie this intriguing phenomenon.

Differences in Salience and Information

One explanation for the discrepancy between outsiders' expectations and the experiences of the victimized may simply be a difference in the amount and kinds of information to which the observers are privy (cf. Jones & Nisbett, 1972). Others may regard the inability to walk as the major problem faced by the spinal cord injured. They may not realize that permanent paralysis can be associated with a host of other difficulties, including the possible development of debilitating pressure ulcers or the worry of potential embarrassment from a broken catheter bag. Similarly, the experience of rape may frequently involve repeated sex acts or such degrading behavior as the assailant urinating on the victim (McCombie, 1975)—information to which outsiders may be unaware. Such memories are undoubtedly more salient to the victim, and may be withheld from the observer out of shame. Other pieces of information that may be available to the distressed person but not to the observer are such experiences as repeated visual or auditory hallucinations of the lost object (e.g., amputated limb) or of the deceased (see, e.g., Cornwell et al., 1977; Glick et al., 1974; Lindemann, 1944; Marris, 1958; Parkes, 1972, 1975a). In fact, the observer is unlikely to be aware that such common bereavement experiences as seeing one's dead spouse or hearing his voice or footsteps (cf. Marris, 1958) continue long after the death, and that a persistent sense of the dead person's presence does not appear to diminish for several years (Glick et al., 1974). Because such information is unavailable to outsiders, they may not be able to comprehend what the victim is going through. It is likely that such differences will interfere with the delivery of empathic responses to distressed individuals by others around them.

The Generation of Future Plans

Another factor that might explain why those involved in life crises react with more intense and prolonged distress than others expect is because the distressed individual must contend, not only with the loss itself, but with the simultaneous destruction of future plans and fantasies (Carr, 1975; Parkes, 1971). For example, the parent who experiences a miscarriage, stillbirth or loss of a child must cope with loss of hopes and dreams he or she had held for the baby (cf. Cornwell et al., 1977). The parent may have fantasized, perhaps before the baby was conceived, of buying clothes and toys for the child, of taking the child to sporting events, or even of helping the child in the choice of a career. It is unlikely, however, that others generate such thoughts, or are aware that they are salient for those involved in life crises. As Helmuth and Steinitz (1978) have noted, the loss of a fetus or newborn may appear to the observer as an "it" without an identity.

This tendency to generate future plans that are vitiated with the life crisis may also help explain why the ramifications of the loss may be very salient to the distressed person years later. A young widow who had expected her husband to assist in the raising of their children may grieve the loss if she encounters difficulties when the children become teenagers. Similarly, a mother who loses a newborn baby may become distressed each time she thinks of the child growing up. This latter point was poignantly illustrated in a poem written by a mother who had lost her baby to Sudden Infant Death Syndrome 14 years earlier:

My mind does not mourn yesterday
It mourns today
The images that pass before my eyes
Do not recall the infant son
But see you running through my house
A teenage child in search of food and gym shoes and maybe me.

I do not mourn you for what you were,
But for what can't be . . . [Anonymous, 1979].

This disruption of future hopes and plans is unlikely to be apparent to outsiders, who might be puzzled by displays of distress years after the life crisis.

Generalization of the Experience

As noted earlier, one of the most devastating aspects of many undesirable life events may be their tendency to alter one's view of the world. The distress associated with a rape may stem, not only from the violent act, but also from the resultant feeling that people cannot be trusted (cf. McCombie, 1975). Learning that one has heart disease or cancer is likely to high-

light the unpredictability and uncontrollability of one's life in the future. Such permanent alterations following a temporary event are probably not salient to the observer, whose broader perspectives may not have been modified by the experience.

The Involuntary Nature of Cognitions and Emotional Reactions

Another reason why others may encourage victims to move on with their lives may stem from their belief that thoughts and emotions surrounding the crisis are voluntary. On the contrary, it appears that, at least in the early period of coping with an aversive event, the distressed person's illusions and reactions are often involuntary in nature. Marris (1958) writes that widows were "troubled by illusions of [their spouses'] presence or obsessive memories of the dead man and the circumstances in which he died [p. 14]." Kaltreider et al. (1979) noted the frequent appearance of "intrusive symptoms such as 'flooding with memories in response to sudden reminders' and 'unwanted thoughts about the surgery' [p. 1501]" among women who had undergone hysterectomies. In their discussion of the common "obsessional review" of a husband's death among widows who had recently lost their spouses, Glick et al. (1974) note that these women "seemed to have little control over 'dwelling' so on their experience [p. 126]." It is probable that outsiders find it difficult to believe that such thoughts and feelings are not volitional. The fact that others often implore distressed persons to control their expressions of grief, and to stop "dwelling" on their problems (cf. Glick et al. 1974; Maddison & Walker, 1967), suggests that they believe that distressed individuals could behave more appropriately if they wished.

Implications for Those Who Encounter Undesirable Life Events

Throughout this section of the chapter, we have suggested that outsiders frequently underestimate the nature and duration of the distress encountered by victims. We have also identified several factors that may make it difficult for outsiders to comprehend what the distressed person is going through. What are the implications of these erroneous expectations for the victims themselves? The transition from an outsider to the ranks of the victimized often happens within minutes. One suddenly learns that he or she has cancer, has lost a spouse, or will be permanently paralyzed. In all likelihood, views concerning how people should respond to crises have been internalized by the distressed person even before the negative outcome is experienced. For this reason, individuals are likely to hold unrealistic expectations regarding the nature and duration of their own responses. Unfortunately, this in turn may serve to intensify their distress. Kennell et al. (1970) report

that the parents who lost infants in their study "were not well prepared for their own mourning responses—their reactions worried and perplexed them [p. 347]." Pattison (1977) writes of a woman who, during the course of her own dying experience, "began to doubt her own sanity when her self-observations revealed that she did not follow the stages of dying [p. 304]." The appearance of illusions and recurrent feelings of anxiety and depression over time may also be viewed by the individual experiencing them as a sign of "going crazy" (Kaltreider et al., 1979). In fact, fears of approaching insanity or of losing one's mind have frequently been reported among the bereaved (Bergman, Pomeroy, & Beckwith, 1969; Lindemann, 1944).

In addition to enhancing their difficulties, the view that one's behavior is inappropriate may prevent persons from seeking support from others in their time of distress. Kaltreider et al. (1979) found that although almost one-third of the young women who had undergone a hysterectomy were still experiencing intrusive feelings, nightmares, and other symptoms of stress a year after their operation, they "were hesitant to seek medical or psychological help because they thought they should be able to cope with this normal crisis [p. 1503]."

It behooves the health-care professional to legitimize the feelings and reactions that commonly occur among people who have encountered negative life events. The value of peer support groups (see, e.g., D'Afflitti & Weitz, 1977; Vachon, Lyall, Rogers, Formo, Freedman, Cochrane, & Freeman, 1979) may stem in part from their ability to help realign the norms of the distressed. Thus, a group of peers can assist the distressed in forming more accurate perceptions of what behaviors are, in fact, normative. Since outsiders may have a false understanding of the common experiences of victimized individuals, they may see such support groups as having a detrimental influence. As a woman who became involved in one of these groups writes:

The majority of my relatives and friends, particularly my health professional friends, were concerned and fearful that this kind of activity could only be destructive—especially three years later. How could I go about the business of forgetting, which I should have already done, and at the same time associate with families who had lost children [Szybist, 1978, p. 286]?"

In general, outsiders must be sensitive to the fact that for most people, an aversive life event is never really forgotten and the experience is likely to be carried with them for the remainder of their lives. The transient return of unresolved feelings must not be viewed as an indication of instability or mental illness, but rather as an acceptable way of living with the crisis. It still remains to be determined whether preparing the individual for the variety of responses he or she may encounter and the length of time they may persist will be beneficial for all those who experience aversive outcomes. For example, will expectations of possible long-term difficulties result in added

distress for those who are able to adjust more quickly? Nonetheless, it is our hope that a recognition of the issues discussed in this chapter will encourage further research, as well as more sensitive, empathic, and helpful treatment of those who are coping with undesirable life events.

ACKNOWLEDGMENTS

The authors would like to thank Philip Brickman and Joan Robinson for helpful comments on an earlier version of this chapter.

REFERENCE NOTES

1. Lazarus, R. S. *The stress and coping paradigm*. Paper presented at conference entitled "The critical evaluation of behavioral paradigms for psychiatric science," Gleneden Beach, Oregon, November 1978.
2. Garrity, T. F. *Behavioral adjustment after myocardial infarction: A selective review of recent descriptive, correlational and intervention research*. Paper presented at the meeting of the Academy of Behavioral Medicine Research, Snowbird, Utah, June 1979.
3. Kupst, M. J., & Schulman, J. L. *Family coping with childhood leukemia: The first six months*. Unpublished manuscript, Northwestern University Medical School, 1980.
4. Vachon, M. L. S. *The importance of social support in the longitudinal adaptation to bereavement and breast cancer*. Paper presented at the meeting of the American Psychological Association, New York, September 1979.
5. Shadish, W. R., Hickman, D., & Arrick, M. C. *Psychological adjustment to spinal cord injury: The moderating effect of time and locus of control*. Unpublished manuscript, Northwestern University, 1980.
6. Wortman, C. B., & Dunkel-Schetter, C. *Dilemmas of social support: Parallels between victimization and aging*. Paper presented at National Research Council Committee on Aging workshop entitled "The future of the elderly," Annapolis, Maryland, May 1979.
7. Bloom, J. R., & Ross, R. D. *Comprehensive psychosocial support for initial breast cancer: Preliminary report of results*. Paper presented at the meeting of the American Psychological Association, San Francisco, September 1977.
8. Brickman, P., Rabinowitz, V. C., Coates, D., Cohn, E., & Karuza, J. *Helping*. Unpublished manuscript, University of Michigan, 1979.
9. Barrett, C. J., & Larson, D. W. *Psychological functions of religion in widowhood: Attribution versus evidence*. Unpublished manuscript, Wichita State University, 1977.
10. DeVellis, R. F., DeVellis, B. M., Wallston, B. S., & Wallston, K. A. *Epilepsy and learned helplessness*. Unpublished manuscript, University of North Carolina at Chapel Hill, 1979.
11. Belle, D. (Ed.). *Lives in stress: A context for depression*. Unpublished manuscript, Harvard University, 1980.
12. Lazarus, R. S. *The power of positive thinking: or, was Norman Vincent Peale right? Paper presented at conference entitled "Effectiveness and costs of denial," Haifa University, June 1979.*

References

- Abramson, L. Y., Garber, J., Edwards, N. B., & Seligman, M. E. P. Expectancy changes in depression and schizophrenia. *Journal of Abnormal Psychology*, 1978, 87, 102-109.
- Abramson, L. Y., & Sackeim, H. A. A paradox in depression: Uncontrollability and self-blame. *Psychological Bulletin*, 1977, 84, 838-851.
- Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 1978, 87, 49-74.
- Achte, K. A., & Vauhkonen, M. L. Cancer and the psyche. *Omega*, 1971, 2, 46-56.
- Adler, A. *Practice and theory of individual psychology*. New York: Harcourt, Brace, & World, 1927.
- Adler, R. Experimentally induced gastric lesions: Results and implications of studies in animals. *Advances in Psychosomatic Medicine*, 1971, 6, 1-39.
- Akiskal, H. S., & McKinney, W. T. Overview of recent research in depression: Ten conceptual models. *Archives of General Psychiatry*, 1975, 32, 285-305.
- Alloy, L. B., & Abramson, L. Y. Judgement of contingency in depressed and nondepressed students: Sadder but wiser? *Journal of Experimental Psychology: General*, 1979, 108, 441-485.
- Alloy, L. B., & Seligman, M. E. P. On the cognitive component of learned helplessness and depression. In G. H. Bower (Ed.), *The psychology of learning and motivation*. (Vol. 13) New York: Academic Press, 1979.
- American Psychiatric Association, *Diagnostic and statistical manual of mental disorders (DSM-III)* Third edition. Washington, D.C.: American Psychiatric Association, 1980.
- Anastasi, A. *Differential psychology; individual and group differences in behavior* (3rd ed.) New York: Macmillan, 1958.