CHAPTER 7

THE SELF, APPRAISAL, AND COPING

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The focus of this chapter is on emotion and its role in coping and adaptation. When most social scientists think of affective phenomena associated with coping, they think of stress, not emotion. This association reflects a curious state of affairs. There are currently two distinct literatures, one on emotion (e.g., Frijda, 1986; Izard, 1977; Lazarus, 1982; Roseman, 1984; Scherer & Ekman, 1984; Smith & Ellsworth, 1985) and one on stress and coping (e.g., Fleming, Baum, & Singer, 1984; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Holahan & Moos, 1985; McCrae, 1984; Schroeder & Costa, 1984; Selye, 1974, 1976; Stone & Neale, 1984); and with a few notable exceptions (e.g., Ellsworth & Smith, 1988a, 1988b; Folkman & Lazarus, 1985, 1988a, 1988b; Lazarus, Kanner, & Folkman, 1980), there has been little interchange between the two.

The segregation of these literatures is intriguing because the conceptual overlap between emotion and stress is enormous (cf. Lazarus, 1968, in press-b; Lazarus & Folkman, 1984; Lazarus & Launier, 1978; Smith & Lazarus, in press). In fact, there originally was a single literature, and emotion was the construct of choice for describing affective reactions to stressful conditions (e.g., Cannon, 1929). However, with the rise of behaviorism and the shift to unidimensional drive theories of emotion (e.g., Lindsley, 1951), the utility of the emotion construct was severely questioned (e.g., Duffy, 1941), and “emotion” was largely replaced by “stress” in the study of coping and adaptation. For obscure reasons the current resurgent interest in emotion, which began in the 1960s (e.g., Arnold, 1960; Lazarus, 1968; Tomkins, 1962, 1963), has not yet resulted in the reintegra-

The model advanced in this chapter has evolved over the past several years in close collaboration with Phoebe C. Ellsworth and Richard S. Lazarus. Their contributions to my developing theoretical perspective are immeasurable and gratefully acknowledged. I also thank Richard Lazarus and C. R. Snyder for their helpful comments on an earlier version of this chapter. Preparation of this chapter was supported in part by National Research Service Award (NRSA) Postdoctoral Fellowship MH-09445.
tion of a coherent literature concerned with emotion, coping, and adaptation.

Nonetheless, the overlap between emotion and stress is implicitly acknowledged within both contemporary literatures. Most emotions researchers view emotions as fulfilling important functions in the service of adaptation and survival (e.g., Ekman, 1984; Ellsworth & Smith, 1988a, 1988b; Epstein, 1984; Izard, 1977; Lazarus, 1968; Lazarus et al., 1980; Leventhal, 1980; Plutchik, 1980; Roseman, 1984; Scherer, 1984b; Tomkins, 1962). They consider emotion to be an evolutionary advance over reflex and instinct that mediates between environmental stimulation and behavioral response in a highly flexible manner (cf. Ellsworth & Smith, 1988a, 1988b; Epstein, 1984; Leeper, 1948, 1965; Scherer, 1984b; Smith & Ellsworth, 1987; Smith & Lazarus, in press). Emotions arise when the organism perceives itself to be in a relationship with its environment that has particular implications for its well-being (e.g., perceives itself to be facing a particular kind of stressor), and emotions physically prepare and motivate the organism to respond to (i.e., cope with) that situation in an adaptive manner. In a complementary fashion, subjective stress is universally considered an affective reaction, and measures of emotion and mood are often used as indices (e.g., Billings & Moos, 1984; Eckenrode, 1984; Holahan & Moos, 1985; Sarason, 1984). Given this overlap, each literature should have much to offer the other.

Although there are exceptions (e.g., Epstein, 1984; Larsen, Diener, & Emmons, 1986; Lazarus et al., 1980), many emotions researchers are social psychologists (e.g., Ekman, 1984; Ellsworth & Smith, 1988a, 1988b; Roseman, 1984; Schachter & Singer, 1962; Scherer, 1984b), whereas most research on stress and coping is conducted by personality and clinical psychologists (e.g., Ganellen & Blaney, 1984; Holahan & Moos, 1985; Scheier, Weintraub, & Carver, 1986; Snyder & Smith, 1982). Consistent with the mission of this handbook, this chapter will explore the potential benefits of a perspective that integrates emotion with stress and coping.

It will be argued that adopting a coping perspective provides the emotions researcher with invaluable conceptual tools for solving some of the perennial problems in emotion theory, including specification of both the appraisal processes producing emotion and the organization of patterned physiological activity in emotion. It will be also argued that coping researchers have as much to gain by replacing the essentially unidimensional construct of stress with the richer, broader, multidimensional construct of emotion depicted in recent theories. Consideration of specific emotions and their adaptive functions has direct implications for the variables to be included in coping research. These implications not only touch on appraisal, but also extend to the personality variables, including facets of the self, most likely to be relevant to stress and coping, as well as to the nature of coping itself.

These themes will be developed by examining a general model of the emotion system that is emerging from ongoing attempts (e.g., Lazarus & Smith, 1988; Smith & Lazarus, in press; Smith, Lazarus, & Novacek, in preparation) to explicitly integrate recent theoretical and empirical work on specific emotions (e.g., Ellsworth & Smith, 1988a, 1988b; Frijda, 1986, 1987; Roseman, 1984; Scherer, 1984b; Smith & Ellsworth, 1985, 1987; Weiner, 1985) into the more general theory of appraisal, stress, and coping developed by Lazarus and his colleagues (e.g., Lazarus, 1966, 1968; Lazarus, Averill, & Opton, 1970; Lazarus & Folkman, 1984). The outlines of this model are presented in Figure 7.1.

The centerpiece and foundation of the model is the role of appraisal in emotion (e.g., Lazarus & Smith, 1988; Smith, 1989; Smith et al., in preparation), and this issue will be considered first. However, as indicated in the figure, the model builds on this foundation to consider the joint contributions of the person and the situation to appraisal, the contributions of both personality and emotion to coping, and the effects of coping on both the person and the situation. Each of these issues will be considered in turn.

**DIFFERENTIATION OF EMOTION THROUGH APPRAISAL**

The view of emotion embraced by the model is relational. Emotion is considered a reaction to a person-environment relationship, not a response to a simple stimulus situation (cf. Lazarus, 1968, in press-a; Smith & Lazarus, in press). That is, the environmental demands, constraints, and resources confronting the individual are combined with the individual's motivations and beliefs to produce a cognitive evaluation—an appraisal—of the significance of the person-environment relationship for personal well-being. Each distinct
emotion reflects the appraisal of a different kind of adaptationally relevant person-environment relationship—a different kind of harm or benefit (Lazarus, 1968, 1982; Lazarus & Smith, 1988; Smith & Lazarus, in press). The outcome of the appraisal process—the cognitive evaluation itself—is a continuing part of the emotional response, but it is by no means the entire response. Instead, specific motivational urges (action tendencies) relevant to the appraised harm or benefit (Frijda, 1986; Scherer, 1984b) and a distinct subjective feeling state (subjective affect) follow from the appraisal outcome. The action tendencies are not abstract, but are embodied in a particular physiological pattern associated with the emotion (Lazarus, 1968; Smith & Lazarus, in press). The physiological changes producing this pattern serve the two general functions of communicating the person's emotional state to others in the social environment (Scherer, 1982, 1984a; Smith, 1989) and physically preparing the person to cope with the appraised environmental demands (Frijda, 1986; Lazarus, 1968; Smith, 1989).

In other words, the entire emotional response,
including action tendencies, physiological activity, and subjective affect, is hypothesized to be organized around and shaped by the appraisal of the person-environment relationship. Not surprisingly, considerable effort has been directed toward explicating the role of appraisal in emotion. A large portion of my own work, in collaboration with Phoebe Ellsworth (e.g., Ellsworth & Smith, 1988a, 1988b; Smith & Ellsworth, 1985, 1987) and Richard Lazarus (e.g., Lazarus & Smith, 1988; Smith & Lazarus, in press; Smith et al., in preparation), has been directed at specifying the appraisals that lead to each kind of emotion.

The only major claim about the organization of the emotional response advanced in the present model is that the action tendencies, physiological activity, and subjective affect are caused by and organized around the appraised significance of the person-environment relationship. The model does not attempt to depict further interrelationships among the response components. Both within and across theoretical perspectives there is considerable debate as to how these components are organized. For instance, the subjective experience of emotion has been conceived of as (a) a centrally mediated neuropsychological event that is distinct from, and causally prior to, the physiological activity (e.g., Cannon, 1927); (b) the conscious perception of the physiological activity (e.g., Izard, 1971; James, 1890/1950; Tomkins, 1962); and (c) the view I favor, a gestalt presented into consciousness that reflects all the other components combined (i.e., a conscious perception that combines the appraisal outcome, action tendencies, and physiological activity). Similarly, the action tendencies might be conceptualized as (a) purely centrally mediated and largely independent of the physiological activity; (b) the perception of the physiological activity; or (c) something that combines a centrally mediated motivational urge with the perception of physiological activity, perhaps with the physiological activity serving to intensify the urge. Obviously, a complete theory of emotion must resolve these ambiguities. However, their resolution is not central to the issues discussed in this chapter, and they will not be considered further here. Again, the important claim made by the present model is that, whatever their interrelationships, the action tendencies, physiological activity, and subjective experience of emotion are all caused by and organized around the outcome of the appraisal process.

The Nature of Appraisal

Although emotions are produced as a result of a cognitive evaluation, not all cognitive activity is relevant to emotion, and even relevant cognitive activities are not all equally relevant. The task of interpreting the adaptational significance of one’s circumstances is quite difficult. The person must draw on a highly complicated and only partially reliable arrangement of cues to determine what, if anything, his or her relationship to the environment implies for personal well-being. There are at least two distinct types of cognition involved in this process, only one of which is directly related to emotion.

To assess adaptational significance, the person needs a representation of the factual nature of his or her circumstances. Considerable social psychological work has been devoted to describing a vast array of attributional and inferential strategies that people use to go beyond the often paltry data directly available to them and construct rich representations of their circumstances (e.g., Fiske & Taylor, 1984; Heider, 1958; Jones, Kanouse, Kelley, Nisbett, Valins, & Weiner, 1972; Lewin, 1936; Nisbett & Ross, 1980; Ross, 1977, 1987). These representations, or situational construals, reflect the person’s knowledge and beliefs about their objective circumstances. They are highly relevant to emotion because they are the data the person evaluates to determine adaptational significance, but they do not directly produce emotion. Instead, an additional step—in which the person considers the perceived circumstances in relation to his or her personal goals, needs, and abilities to determine the implications, if any, for personal well-being—is needed to produce the emotion. This further evaluation, which directly produces the emotional reaction, is what is meant by appraisal (cf. Lazarus & Folkman, 1984; Lazarus & Smith, 1988; Smith & Lazarus, in press). Thus, it is often the case that two individuals, with different configurations of motivations and abilities, will construe their situations similarly (agree on all the facts) and yet react with different emotions because they have appraised the adaptational significance of those facts differently.

In mapping the relations between appraisal and emotion it is important to carefully distinguish appraisal from other cognitive activities, and in formulating our specific appraisal model, Richard Lazarus and I have been quite restrictive about what we include as appraisal. As we have detailed
elsewhere (Lazarus & Smith, 1988), we have not included a number of cognitive variables previously proposed or found to be relevant to emotion because on close inspection we have found them to reflect either the construal-related cognitive activities discussed above (e.g., locus of causality/control [Roseman, 1984; Smith & Ellsworth, 1985; Weiner, 1985]), or the subjective properties of the emotional response itself (e.g., subjective pleasantness [Scherer, 1984b; Smith & Ellsworth, 1985]) instead of appraisal.

Core Relational Themes and Appraisal Components

Even when appraisal is considered by itself, it is probably best to include two distinct levels of analysis, one categorical and one dimensional. The ultimate goal of appraisal is to classify one's perceived circumstances in terms of a relatively small number of categories of adaptational significance, corresponding to different types of benefit or harm, each with different implications for coping. Each of these categories corresponds to a different emotion; each positive emotion reflects a particular kind of appraised benefit, and each negative emotion a particular kind of appraised harm (Lazarus & Smith, 1988; Smith & Lazarus, in press). Thus, one way to describe appraisal is at this categorical level. For each distinct emotion there should be a distinct core relational theme, which in a single categorical construct summarizes the person's relationship to the environment in terms of a particular type of harm or benefit. For instance, the global evaluation that one is facing a potential danger or threat produces anxiety, while the overall evaluation that one has suffered an irremedial loss produces sadness, and so on (cf. Abramson, Seligman, & Teasdale, 1978; Plutchik, 1980).

Analysis of appraisal at the level of core relational themes provides an economical summary of the appraised meaning leading to each distinct emotion. However, this level of description is incomplete because it reveals very little about the individual evaluations leading to the appraisal. For example, knowing that an appraisal of danger produces anxiety indicates very little about the issues considered in determining that the situation is dangerous. Therefore, the categorical level of analysis should be supplemented with a more molecular one that describes the particular issues or questions evaluated in appraisal. These issues are the components of appraisal.

The present model considers appraisal in terms of both components and core relational themes. The components reflect the molecular questions evaluated in appraisal, the answers to which combine to produce the molar personal meanings—the core relational themes—that directly produce specific emotions (cf. Lazarus & Smith, 1988; Smith & Lazarus, in press). Past attempts to identify the component cognitions associated with particular emotions (e.g., Frijda, 1986; Roseman, 1984; Scherer, 1984b; Smith & Ellsworth, 1985, 1987; Weiner, 1985) have implicitly drawn on a coping perspective. The present model benefits from these previous efforts, but makes the connection to coping theory explicit. Each component addresses one of the two global appraisal issues originally proposed by Lazarus and his colleagues in their theory of appraisal, stress, and coping (e.g., Lazarus, 1966; Lazarus et al., 1970; Lazarus & Folkman, 1984): Primary appraisal, which concerns whether and how the encounter is relevant to the person's well-being, or secondary appraisal, which concerns the person's resources and options for coping with the encounter. Both of these issues can be further subdivided, and at present the model includes a total of six appraisal components, two related to primary appraisal and four to secondary appraisal (cf. Lazarus & Smith, 1988; Smith & Lazarus, in press).

The two components of primary appraisal are motivational relevance (or importance) and motivational congruence. Motivational relevance is an evaluation of the extent to which the encounter touches on personal goals and concerns, or in other words, issues the person cares about or has a stake in. This component also is included in the dimensional systems of Frijda (1986), Scherer (1984b), and Smith and Ellsworth (1987). Motivational congruence refers to the extent to which a transaction is consistent or inconsistent with what the person wants; that is, either thwarts or facilitates personal goals. It corresponds closely to Roseman's (1984) concept of motive consistency, Scherer's (1984b) goal conduciveness, and Smith and Ellsworth's (1985) perceived obstacle.

The four components of secondary appraisal are accountability, problem-focused coping potential, emotion-focused coping potential, and future expectancy. The accountability evaluation provides direction and focus to the emotional response and the coping efforts motivated by it. The
outcome of the accountability judgment determines who (oneself or someone else) is to receive the credit (if the encounter is motivationally congruent) or the blame (if it is motivationally incongruent) for the encounter. The other three components all have to do with the evaluation of the potential for improvement of an undesirable situation or the maintenance of a desirable one. The two components of coping potential correspond to the person's evaluations of his or her abilities to engage in the two major types of coping identified by Folkman and Lazarus (1980, 1985; Folkman et al., 1986; Lazarus & Folkman, 1984). Problem-focused coping potential reflects evaluations of the person's ability to act directly on the situation to manage the demands of the encounter and actualize the personal commitments brought to it. This evaluation is closely related to the concepts of power as discussed by Roseman (1984), and control and power as discussed by Scherer (1984b). Emotion-focused coping potential refers to the perceived prospects of psychologically adjusting to the encounter or, in other words, of regulating the emotional state that harmful or threatening consequences generate. This evaluation is closely related to Scherer's concept of adjustment, which he defines as "the potential for adjustment to the final outcome via internal restructuring" (Scherer, 1984a, p. 39). Future expectancy refers to the perceived possibilities, for any reason (i.e., independent of whether the individual plays a role), for changes in the actual or psychological situation that could make the encounter more or less motivationally congruent.

**Specific Appraisals in Specific Emotions**

The two components of primary appraisal are involved in every emotional encounter. Evaluation of motivational relevance is necessary for strong emotion, because it indicates whether there is any personal stake in the encounter, and thus defines the person's level of affective involvement. In the absence of motivational relevance, the person's state is likely to be one of either apathy on the negative side of things, or of quiet tranquility on the positive side (cf. Ellsworth & Smith, 1988b). Assessments of motivational congruence combine with relevance to determine whether the encounter is stressful or benign (Lazarus et al., 1980). Benign encounters are ones that are appraised as both motivationally relevant and motivationally congruent (i.e., both important and desired), whereas stressful ones are appraised as both relevant and motivationally incongruent (i.e., important but in some way not as desired).

Although sufficient to define the encounter as stressful or benign, the two components of primary appraisal are generally not sufficient to define the core relational themes associated with individual emotions. The components of secondary appraisal must be added to determine the specific emotions that will be experienced. Thus, examination of the appraisal components and core relational themes associated with specific emotions vividly illustrates how emotion is a much richer, more informative construct than stress.

First, consider the so-called negative or harm-related emotions, such as anger, guilt, anxiety, sadness, and so forth that tend to be equated with stress in many minds—those of layperson and researcher alike (cf. Lazarus, 1968; Lazarus & Launier, 1978; Lazarus et al., 1980). Table 7.1 depicts the specific appraisals for illustrative harm-related emotions. This analysis is generally consistent with the findings of a number of previous studies that examined the relationships between cognitively active and emotions (e.g., Ellsworth & Smith, 1988a, 1988b; Frijda, 1987; Roseman, 1984; Scherer, Wallbott, & Summefield, 1986; Smith & Ellsworth, 1985, 1987; Weiner, Graham, & Chandler, 1982), and has received direct support in an initial study explicitly designed to test it (Smith et al., in preparation). For each emotion, Table 7.1 first lists the emotion's proposed adaptive function, then the core relational theme corresponding to the particular relationship with environment in which that function is likely to be useful, and finally the major appraisal components that combine to define the core relational theme.

For instance, the proposed function of anger is to motivate the person to remove a source of harm from the environment, and to undo the harm, if possible (cf. Cannon, 1929; Ellsworth & Smith, 1988a; Izard, 1977; Plutchik, 1980; Tomkins, 1963). The core relational theme that defines the circumstances under which this motivation is likely to be useful is *other-blame*, which is defined by the components of motivational relevance, motivational incongruence, and other-accountability. In other words, anger arises when someone else is being blamed for a stressful situation, and it motivates the person to do something to remove the source of harm. Importantly, the as-
Table 7.1. Some Illustrative Harm-related Emotions

<table>
<thead>
<tr>
<th>EMOTION</th>
<th>PROPOSED ADAPTIVE FUNCTION</th>
<th>CORE RELATIONAL THEME</th>
<th>IMPORTANT APPRAISAL COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>Remove source of harm from environment and undo harm</td>
<td>Other-blame</td>
<td>Motivationally relevant</td>
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<td></td>
<td></td>
<td></td>
<td>Motivationally incongruent</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Other-accountability</td>
</tr>
<tr>
<td>Guilt</td>
<td>Reparation for harm to others/motivate socially responsible behavior</td>
<td>Self-blame</td>
<td>Motivationally relevant</td>
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<td></td>
<td>Motivationally incongruent</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Self-accountability</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Avoid potential harm</td>
<td>Ambiguous danger/threat</td>
<td>Motivationally relevant</td>
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<td></td>
<td>Motivationally incongruent</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Low/uncertain (emotion-focused) coping potential</td>
</tr>
<tr>
<td>Sadness</td>
<td>Get help and support in the face of harm/disenage from a lost commitment</td>
<td>Irrevocable loss/helplessness</td>
<td>Motivationally relevant</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Motivationally incongruent</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Low (problem-focused) coping potential</td>
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<td></td>
<td></td>
<td></td>
<td>Low future-expectancy</td>
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</table>

Assignment of accountability to someone else provides a target for these coping efforts.

In an analogous fashion, guilt has been proposed to contribute to the development of one's conscience and the maintenance of social order. It motivates the individual to make reparations for harm he or she has caused to others, and to generally engage in socially responsible behavior (cf. Ellsworth & Smith, 1988a; Izard, 1977). Consistent with these functions, the core relational theme producing guilt is self-blame. This theme is defined by holding oneself accountable for a stressful (important, motivationally incongruent) situation. Like anger, guilt is hypothesized to motivate the person to do something to remove the source of harm from the environment, but, because the focus in guilt is on oneself, this motivation takes the form of a desire to make reparations for any harm the self has caused (e.g., Carlsmitth & Gross, 1969; Freedman, Wallington, & Bless, 1967). In addition, this motivation tends to be quite punishing (Wallington, 1973), and therefore reduces the probability that the person will continue to engage in the harmful behavior in the future.

Whereas the accountability component is important in differentiating the core relational themes responsible for anger and guilt, the three components addressing the potential for improving the stressful situation are important in defining the themes for anxiety and sadness. Both emotions are associated with stressful situations in which the prospects for improvement are uncertain or poor. However, they have distinct motivational functions, and their core relational themes, as well as the appraisal components that define them, reflect these differences.

The proposed function of fear is to motivate the person to avoid potential harm (cf. Cannon, 1929; Izard, 1977; Plutchik, 1980; Tomkins, 1963), and appropriate to this function, the core relational theme is an appraisal of danger or threat. The component of secondary appraisal that defines this sense of danger is an assessment of uncertain or low coping potential. Although uncertainty about either problem- or emotion-focused coping potential can contribute to the appraisal of danger, the evaluation of emotion-focused coping potential appears to be especially relevant. This component reflects the person's assessment of his or her ability to adjust to a bad situation should things not work out as desired, and the person's sense of danger, and hence his or her anxiety, should be particularly acute when, beyond seeing potential or actual harm in the situation, the person believes that he or she may not be able to adjust to this harm in the event it occurs (or has occurred).

In contrast, the function proposed for sadness is to motivate the person to get help and support in the face of harm, and to motivate disengagement from any commitments destroyed by the harm (cf. Izard, 1977; Klinger, 1975; Plutchik, 1980). The theme that produces this emotion is an appraisal of irrevocable loss or helplessness—the perception that the person is in a bad situa-
tion that he or she is powerless to change, and in which there is little expectation for improvement (Abramson et al., 1978). The components of secondary appraisal hypothesized to produce the theme of loss/helplessness are a combination of low future expectancy and low coping potential. The appraisals of low coping potential in sadness can be distinguished from those in anxiety in two ways. First, they tend to be more pessimistic. In threat there is considerable doubt and uncertainty about whether the person can cope, but in loss/helplessness there is little doubt—the person is sure he or she cannot. Second, although emotion-focused coping potential is most relevant for threat and anxiety, problem-focused coping potential is more relevant for loss/helplessness and sadness, because in loss and helplessness the focus is on the inability to do anything to improve the situation.

These “negative” harm-related emotions are highly relevant to theories of stress and coping. They motivate the person to act in ways that will eliminate or reduce the harm, or to adapt to the harm if it cannot be avoided or undone. As such, they are vital to the survival of the individual and the species. The above descriptions of specific emotions and their associated appraisals illustrate how knowledge about a person’s emotional state—that the person is experiencing anger, guilt, shame, anxiety, sadness, or so forth—can provide a wealth of information about how the person is interpreting and likely to cope with the encounter that is not available from knowledge that the person is undergoing “stress” (cf. Lazarus, 1968, in press-b; Lazarus & Folkman, 1984; Lazarus & Launier, 1978; Smith & Lazarus, in press).

Nonetheless, as some have argued in differentiating between harm, threat, and challenge (Lazarus et al., 1980), or between “eustress” and “distress” (Selye, 1974), stress and coping are not limited to the avoidance or amelioration of actual and potential harm. There is also a more positive side to stress, involving sustained striving toward mastery and gain, that enables the individual and the species to grow and flourish (Ellsworth & Smith, 1988b; Lazarus et al., 1980; Smith & Lazarus, in press). Motivational incongruence can involve the perceived absence of potential benefits and gains in addition to the presence of actual and potential harms. Just as consideration of specific harm-related emotions and their associated appraisals enriches one’s understanding of the stress process, so does consideration of emotions associated with potential benefit. Further, conditions of actual benefit, such as when a sought-after goal has been achieved, or a threat has been successfully removed, are outside the pale of stress, but are clearly encompassed by emotion (cf. Ellsworth & Smith, 1988b; Lazarus, 1968; Lazarus et al., 1980). Thus, consideration of emotion instead of stress not only provides more detail, but also expands the domain of inquiry in important, adaptationally relevant ways.

Table 7.2 describes the adaptive functions and appraisals associated with some illustrative emotions associated with potential and actual benefit. Both hope and challenge serve to sustain coping efforts to improve one’s situation, and motivate striving toward mastery or gain (Ellsworth & Smith, 1988b; Lazarus et al., 1980). Of the two, hope is structurally simpler, and hence more general. The core relational theme producing hope is the possibility of amelioration or success—the belief that there is the possibility that things will improve. A high degree of future expectancy is what distinguishes this theme from most other core relational themes involving stress. In hope it is not necessary to personally be able to do anything to bring about the improvement, and evaluations of coping potential need not be involved. Thus, hope serves the very important function of motivating the person to maintain commitments, even under dire circumstances, so long as some chance for improvement is perceived (Lazarus et al., 1980).

In contrast, the function of challenge is to motivate more active coping toward mastery or gain. Hence, beyond the general sense of optimism leading to hope, the core relational theme leading to challenge is a more restrictive appraisal of effortful optimism, the belief that if the person tries hard enough, there is a good chance he or she will be able to improve the situation. Therefore, in challenge, positive future expectancy is accompanied by the additional appraisal that the person has the capability to act on the situation to bring about the improvement. In other words, a high degree of problem-focused coping potential, not required to sustain hope, is required to produce a strong sense of challenge.

Finally, there are a cluster of emotions to reward “success,” that is, a change in an important situation that increases its degree of motivational congruence. Happiness appears to be a general response to this benign state of affairs, and all that seems necessary for happiness are the combined
components of motivational relevance and motivational congruence (cf. Ellsworth & Smith, 1988b; Weiner, 1985). Secondary appraisals of coping potential and future expectancy do not appear to provide much differentiation among the benefit emotions, perhaps because it may be difficult to sustain appraisals of motivational congruence if one believes that the situation will soon deteriorate or that one will not be able to cope (Ellsworth & Smith, 1988b). However, the accountability component appears to provide some differentiation. If accountability is assigned to oneself, to produce a theme of self-credit, pride results. Feeling proud makes the situation particularly rewarding, and by strongly reinforcing successful coping efforts, increases the probability they will be repeated in the future. If accountability is assigned to someone else, to produce a theme of other-credit, gratitude results, which motivates the person to reinforce the other’s prosocial behaviors.

These examples vividly illustrate some of the benefits of a theoretical perspective that combines emotion with stress and coping. The appraisal model draws heavily on a coping perspective to identify the individual appraisal components most relevant to emotion. The identification of these components is invaluable to emotions research. Once they have been identified it is a relatively straightforward matter to derive a host of specific, testable hypotheses regarding the appraisal patterns differentiating among the various emotions. Knowledge of these patterns provides a firm foundation for further research on fundamental issues in emotion theory, including the nature of the appraisal process and the degree and organization of physiological patterning in emotion—both of which are considered briefly below. In return, the development of a specific appraisal model of emotion contributes substantial detail to theories of stress and coping. Moreover, the move from stress to emotion broadens the scope of the study of coping and adaptation. There is a shift from a bleak view of humanity that exclusively emphasizes the struggle against potential and actual harm, to a more balanced view that supplements this struggle with active striving for mastery and beneficial gain, and the enjoyment of that gain when achieved.

Nonetheless, these examples are not meant to be exhaustive, and they in no way represent the full range of human emotions. Instead, the attempt has been to provide a representative sample of some of the more basic categories of appraised harm and benefit, in order to illustrate both the broad range of adaptive functions the emotion system is designed to serve and the high degree of organization it brings to the task. The richness of emotion in our English vocabulary (cf. Averill, 1975; Ortony, Clore, & Foss, 1987; Shaver, Schwartz, Kirson, & O’Connor, 1987) suggests the existence of many more emotional states, each produced by distinctive appraisals and serving distinctive adaptive functions, than has been

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<th>CORE RELATIONAL THEME</th>
<th>IMPORTANT APPRAISAL COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope</td>
<td>Sustainer</td>
<td>Possibility of amelioration/success</td>
<td>Motivationally relevant</td>
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<td></td>
<td></td>
<td></td>
<td>Motivationally incongruent</td>
</tr>
<tr>
<td>Challenge</td>
<td>Sustainer/motivate mastery</td>
<td>Effortful optimism</td>
<td>Motivationally relevant</td>
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<td></td>
<td></td>
<td></td>
<td>Motivationally incongruent</td>
</tr>
<tr>
<td>Happiness</td>
<td>Reward success</td>
<td>Success</td>
<td>Motivationally relevant</td>
</tr>
<tr>
<td>Pride</td>
<td>Reinforce one’s own successful efforts</td>
<td>Self-credit</td>
<td>Motivationally congruent</td>
</tr>
<tr>
<td>Gratitude</td>
<td>Reinforce pro-social behavior in others</td>
<td>Other-credit</td>
<td>Motivationally congruent</td>
</tr>
</tbody>
</table>

Table 7.2. Some Illustrative Benefit-related Emotions
considered here. For example, within the general rubric of “sadness” there is a diverse range of states, ranging from distress to resignation, associated with various stages of disengagement from a harmed or lost commitment (cf. Klinger, 1975).

A Note on Process

The above examples have focused on the contents of the specific appraisals producing individual emotions, and very little has been said or implied about the formal cognitive processes that underlie these contents. In particular, it would be a mistake to assume that the model implies that appraisal along the individual components follows a predefined sequence, or that appraisal is necessarily conscious, volitional, verbally accessible, and time consuming (although it can be). To the contrary, proponents of this model have consistently maintained that appraisal can be automatic, nonverbal, instantaneous, and occur outside of consciousness (cf. Lazarus, 1966, 1968, 1982, 1984; Lazarus & Folkman, 1984; Lazarus & Smith, 1988; Smith & Lazarus, in press).

For example, the distinction between primary and secondary appraisal is not meant to imply a sequence in which primary appraisal necessarily precedes secondary appraisal. Instead, primary appraisal is primary because it establishes the personal relevance of the encounter, and, as discussed above, this relevance is a prerequisite for strong emotion. If the encounter is appraised as not relevant to well-being then secondary appraisal is relatively unimportant because there will be little emotion of any kind (cf. Lazarus, in press-a; Lazarus & Folkman, 1984; Lazarus & Smith, 1988; Smith & Lazarus, in press). However, if primary appraisal indicates that the situation is relevant to well-being then secondary appraisal plays a vital role in differentiating the emotional experience. Thus, secondary appraisal is secondary because its role in differentiating the emotional response is highly dependent on the outcome of primary appraisal, not because of its temporal characteristics (cf. Lazarus, 1968).

In understanding how appraisal can be unconscious and nearly instantaneous, and why it is often inappropriate to think of appraisal as following a predetermined sequence, it is useful to maintain a distinction advanced by Leventhal (1980, 1984; Leventhal & Scherer, 1987) between schematic and conceptual processing. These two forms of qualitatively distinct cognitive processing, which also have been discussed by others (e.g., Buck, 1985; Lazarus, 1982, 1984), provide the emotion system with the ability to react nearly instantaneously to adaptationally significant events, and yet to draw fully on the power and flexibility of human cognitive capacities (cf. Smith & Lazarus, in press).

In schematic processing the personal significance of an encounter is appraised automatically and nearly instantaneously on the basis of past experiences with similar encounters. How this is achieved can be understood using the concepts of activation and associative networks commonly invoked in the study of memory (e.g., Anderson & Bower, 1973), although alternative accounts also can describe this type of processing. When a person finds him or herself in an encounter similar to some in the past, memories of these past encounters are likely to become quickly activated. Personal meanings strongly associated with those memories also are likely to be activated, and hence to be available as contributors to the person’s current emotional state. Through this activation process, complicated and involved appraisals can be arrived at quickly, automatically, and in a single step.

Schematic processing is passive, however, and human beings are sentient, problem-solving creatures who actively seek to understand the world and their reactions to it. Thus, schematic processing is accompanied by conceptual processing—a set of more abstract, conscious, deliberate, and time-consuming cognitive processes through which the person is able to evaluate the significance of the encounter more actively. This more deliberate evaluation process might follow a predetermined sequence of components (cf. Scherer, 1984b), but it seems more likely that whatever issues are especially salient or pressing at any given moment will preempt attention. Conceptual processing is an important kind of appraisal because it not only actively draws on the person’s complex and highly symbolic knowledge, but also permits the evaluation of the adaptive significance of the encounter to be finely tuned to the specific, and often changing, environmental circumstances. To the extent that they become associated with the encounter in memory, the products of conceptual processing become available for subsequent schematic processing, and thus contribute to the power and flexibility of that faster, more automatic form of processing. In any case, appraisal is a
set of complex processes that occur on multiple cognitive processing levels, and simple assumptions about the timing or sequencing of appraisal are unwarranted.

**Appraisal and Physiological Activity in Emotion**

In addition to its contributions to identifying the specific components of appraisal, use of a coping perspective may prove indispensable to understanding the organization of physiological activity in emotion. The questions of whether and how various emotions are distinguished by distinct patterns of physiological activity, particularly autonomic activity, have been enigmatic for decades (cf. Levenson, 1988; Smith, 1989).

There is good evidence that distinctive facial expressions are closely associated with a number of different emotions, and the specific facial actions that combine to produce these expressions have been well documented (e.g., Darwin, 1872/1965; Ekman & Freisen, 1975, 1978; Frois-Wittmann, 1930; Izard, 1971; reviewed in Ekman, Friesen, & Ellsworth, 1982). The evidence for autonomic patterning in emotion is less clear. There is considerable evidence that autonomic activity is differentiated along multiple dimensions (e.g., Ax, 1953; Ekman, Levenson, & Friesen, 1983; Elliott, Bankart, & Light, 1970; Lacey & Lacey, 1958; Schwartz, Weinberger, & Singer, 1981; Winton, Putnam, & Krauss, 1984), but the patterns of activity associated with different emotions have not yet been clearly specified (cf. Levenson, 1988; Smith, 1989). Further, for both facial and autonomic activity, it is unclear whether any emotion-specific patterns that might exist are organized at only the molar, categorical level of discrete emotions, or are further organized at a more molecular, dimensional level, such that the individual activities contributing to the global patterns are themselves meaningful.

However, appraisal theory, with its emphasis on the role of emotion in coping, not only predicts considerable patterned physiological activity, organized at both the categorical and dimensional levels, but also provides some basic principles for predicting the specific nature of this organization. As previously noted, the appraisal is hypothesized to cause and shape the physiological activity produced in emotion in a manner that serves two general functions: (a) communicating the person’s appraisals and intentions to others (Scherer, 1982, 1984a; Smith, 1989) and (b) physically preparing the person to cope with the adaptive implications of the appraised person-environment relationship (Frijda, 1986; Lazarus, 1968; Smith, 1989). Thus, as Lazarus (1968, p. 206) has stated: “The physiological patterns should be associated with the different adaptive tasks which the appraisals leading to the different emotions seem to require.” That is, for communication purposes appraisals should be at least partially encoded in the externally observable components of the emotion’s physiological expression (e.g., facial expression, posture, vocal tone, etc.; see Ekman, 1984; Riskind, 1984; Scherer, 1986), and aspects of appraisal having direct implications for coping should be directly related to the properties of the physiological response that prepare the person to cope in particular ways (cf. Smith, 1989; Smith & Lazarus, in press).

The linkages between appraisal and physiological activity can occur at both the level of core relational themes and individual appraisal components. The existence of universally recognized facial expressions corresponding to individual emotions such as happiness, sadness, fear, anger, disgust, and surprise (Ekman et al., 1982) attests to a categorical organization of facial activity. It is also likely that autonomic and other activities related to the preparation for coping are partially organized in a categorical, emotion-specific manner. Because each core relational theme reflects the identification of a particular type of harm or benefit, with particular implications for coping, it is likely that the motivational action tendencies produced in emotion are emotion specific and linked to specific relational themes. Accordingly, any physiological activities specific to performing the behaviors motivated by the action tendency are also likely to be emotion specific and linked to the theme. For example, other-blame generates anger and the impulse to attack the blameworthy agent, whereas threat or danger generates anxiety and the impulse to avoid or escape the threat. Any physiological activities that meet requirements specific to attack, or specific to avoidance, are likely to be emotion specific and linked to the appropriate core relational theme.

Nonetheless, it is also likely that some physiological activities are directly linked to specific molecular components of appraisal. Beyond contributing to the global patterns of facial activity associated with specific emotions, some individual facial actions might convey specific informa-
tion about the person's appraisals along particular component dimensions (cf. Darwin, 1872/1965; Scherer, 1984a; Smith, 1989). In addition, it is possible that secondary appraisals having direct implications for subsequent coping (e.g., evaluations related to the assessment of coping potential) have direct autonomic and postural effects consistent with the implied coping requirements (cf. Smith & Lazarus, in press).

Preliminary evidence that some facial and autonomic activities are linked directly to specific appraisal components was obtained in my dissertation research (Smith, 1987, 1989). For instance, activity of the corrugator supercilii to pull the eyebrows together and down into a frown was found to be produced by the perception of goal-obstacles (appraisals of motivational incongruence), and this relationship did not depend on the identity of the particular emotions experienced. The relationship between motivational incongruence and corrugator activity not only applied to an array of negative emotions, including anger, fear, and sadness, but also extended to highly pleasant experiences involving motivational incongruence, such as those associated with hope and challenge. Specific autonomic activities also were found to be differentially associated with cognitive outcomes related to evaluations of coping potential in ways that are consistent with previous proposals and findings (e.g., Elliott, 1969; Elliott et al., 1970; Kilpatrick, 1972). First, increasing the amount of effort believed to be required to contend with the situation produced increases in heart rate. Second, skin conductance level was not only elevated under conditions of high anticipated effort, but also was found to be positively correlated with the amount of attention and thought the person wanted to devote to his or her circumstances.

These findings only scratch the surface of the potential organization in emotional response. Although the global patterns of facial activity associated with various emotions have been fairly well described, the extent to which most of the individual facial actions are directly linked to particular appraisal components awaits investigation. For most other physiological parameters implicated in emotion, both the extent and organization of systematic activity remain to be specified (cf. Levenson, 1988; Smith, 1989). Nonetheless, appraisal theory offers considerable guidance as to how analyses might proceed. Quite simply, one should be able to derive specific relationships between appraisal and coping-related physiological activity by carefully comparing the adaptive implications of particular appraisals with the adaptive functions of particular physiological activities or the physiological subsystems those activities represent. The prediction of specific relationships between appraisal and purely communicative physiological activity is less straightforward because such activities need not be directly linked to any physiological demands implied by the appraisals. However, a careful analysis of the functions once served by specific communicative actions, or their progenitors, in our evolutionary past may suggest some of the important appraisal-related meanings they currently convey (cf. Andrew, 1963, 1965; Darwin, 1872/1965; Fröjd, in press; Smith, 1989). Whatever the outcome of such analyses, it is evident that a consideration of emotion in light of its coping functions provides substantially richer leads into the difficult puzzle of physiological patterning than have previously been offered by less theoretical approaches.

THE SELF AND APPRAISAL

The analysis so far has focused on the affective response and what can be learned about it from a coping perspective, as well as what studying this response might offer to students of coping and adaptation. However, as suggested by Figure 1, the implications of the combined perspective extend beyond the properties of the affective response, and include the contributions of personality to appraisal, the contributions of both personality and emotion to coping, and the role of coping in adaptation. Each of these areas will now be considered.

An appreciation of the role of individual differences is fundamental to understanding both emotion and coping. One of the first harsh realities facing a student of emotion is that there is no such thing as a universal emotional stimulus. It is easy to demonstrate that under the appropriate circumstances just about any stimulus can produce just about any emotion, and no single stimulus will always elicit the same emotion under all conditions (Ekman, 1984; Frijda, 1986). This property is often used to differentiate emotion from reflex and instinct (cf. Ekman, 1984; Ekman, Friesen, & Simons, 1985). In fact, the desire to understand the vast individual variation in emotional response provided much of the impetus for developing a cognitive-relational theory of emotion (cf. Lazarus, 1968, in press-a; Smith & Lazarus, in press). If an individual's emotional
reaction could be adequately predicted and understood solely on the basis of a sufficiently developed description of the objective stimulus situation, then there would be little need to consider constructs like cognitive appraisal. Individual variation is no less important to understanding coping and adaptation. One of the central agendas in coping research is to understand how and why some people appear to thrive under conditions that are devastating to others, and, especially, to understand the nature and functioning of personal resources that make the individual especially vulnerable or resistant to particular sources of stress (cf. Cohen & Wills, 1985; Ganellen & Blaney, 1984; Holahan & Moos, 1985; Lazarus & Folkman, 1984; Scheier & Carver, 1987).

As indicated in the top portion of Figure 1, the present model implicates two general classes of personality variables, one motivational and one knowledge-based, as being especially relevant to appraisal, emotion, and coping. The identification of these person characteristics, and their hypothesized contributions to appraisal, are derived directly from the specific appraisal model that was outlined above. Figure 1 depicts these factors as contributing to both the construal of the factual representation of the situation and the appraisal of that representation as to its implications for well-being. The present focus will be on the latter contributions, but there is also ample documentation within the social psychological and personality literatures indicating that the motivations, goals, beliefs, and expectations one brings into a situation strongly influence how that situation is construed (e.g., Asch, 1946; Fiske & Taylor, 1984; Hastorf & Cantril, 1954; Ross, 1987; see Smith & Lazarus, in press, for a more complete discussion of these influences and their relevance to emotion).

The motivational factors relevant to appraisal include the values, goals, and commitments that the person brings into every encounter. These factors are closely related to such motivational constructs as "current concerns" (Klinger, 1975), "personal projects" (Little, 1983; Pals & Little, 1983), and "personal strivings" (Emmons, 1986). These factors, which are important components of the person's self-concept (Markus, 1977; Rosenberg, 1979), are indispensable to the appraisal process. The very construct of primary appraisal makes sense only when the person's circumstances are considered in relation to what the person wants, needs, or otherwise cares about in the situation. It is impossible to assess either the motivational relevance or motivational congruence of an encounter without referring to the personal goals and commitments that are, or might be, at stake in the encounter. If nothing the person cares about is at stake, then little or no emotion will result (cf. Lazarus, in press-a; Lazarus & Folkman, 1984; Lazarus & Smith, 1988; Smith & Lazarus, in press).

The theoretical relationship between goal commitments and primary appraisal suggests that knowledge of motivations, goals, and concerns should make it possible to identify both the individuals who will react to certain situations with especially strong emotion, and the particular kinds of situations to which a given individual is likely to react strongly. A number of studies illustrate the promise of this proposition (e.g., Bergman & Magnusson, 1979; Kasl, Evans, & Niederman, 1979). For example, Vogel, Raymond, and Lazarus (1959) found that subjects with strong achievement goals and weak affiliation goals react to achievement-related threats with more psychophysiological arousal than they do to affiliation-related threats, while the reverse pattern was found for subjects with strong affiliation and weak achievement goals. Similarly, Hammen, Marks, Mayol, and deMayo (1985) have recently found that students who consider interpersonal goals to be central to their self-concepts are more likely to experience depression in relation to negative events involving interpersonal relationships than they are to stressful events involving achievement concerns, and the reverse tends to be true for students who identify with strong achievement goals.

The second type of personality factor the model identifies as relevant to appraisal is the person's knowledge base, which consists of beliefs, both concrete and abstract, about the way things are, how they work, the nature of the world, and the person's place in it. It also contains attitudes, expectations, and intuitive theories about the self (cf. Epstein, 1983; Smith & Lazarus, in press). Whereas the motivational factors are most relevant to primary appraisal, these knowledge-based factors can contribute to both primary and secondary appraisal.

For instance, one's beliefs and expectations about the probable effectiveness of various courses of action, and one's ability to perform those actions, contribute to judgments of self-efficacy (Bandura, 1977, 1982) and, therefore, to
appraisals of coping potential and future expectancy. Thus, these expectations partially determine whether a stressful situation will be appraised as a loss, a threat, or a potential gain, and hence will be reacted to with sadness, anxiety, or challenge. Similarly, beliefs about what is normatively appropriate, avoidable, legitimate, or excusable in a given situation influence whether, to what extent, and on whom an appraisal of accountability for a stressful encounter will be made (cf. Pastore, 1952; Shaver, 1985; Weiner, Amirkhan, Folkes, & Verette, 1987), and therefore, whether the encounter will result in any guilt or anger.

In addition, knowledge and beliefs can contribute to primary appraisal by helping to define what is relevant to particular goal-commitments and what constitutes harm or benefit. For example, beliefs and expectations about what it is normal to experience and what benefits are likely to result from a necessary but aversive procedure (e.g., surgery) can strongly influence the degree to which the encounter is appraised as motivationally incongruent, as well as influence appraisals of coping potential and future expectancy.

Obviously, these few examples do not exhaustively catalog the ways in which a person’s knowledge and beliefs are relevant to appraisal and emotion. Nor are all knowledge and beliefs relevant. However, as the above examples illustrate, one good place to start a search for the most relevant knowledge and beliefs is with the individual appraisal components. Careful consideration of the types of information and beliefs that should influence how these specific issues are evaluated, perhaps drawing on the literatures on attribution and social cognition (e.g., Fiske & Taylor, 1984; Jones et al., 1972), should provide considerable guidance toward the most emotionally relevant kinds of knowledge, beliefs, and attitudes.

The recent work of Higgins and his colleagues (e.g., Higgins, 1987; Strauman & Higgins, 1987; Van Hook & Higgins, 1988) illustrates still another way that self-related goals and beliefs contribute to emotion. Their work builds on the observation that in addition to knowledge and beliefs about the way they actually are (actual selves), which comprise most of the self-relevant beliefs considered in the above examples, most people possess goals and beliefs regarding the way they would ideally like to be (ideal selves), the way they believe they should be in light of social norms and demands (ought selves), as well as beliefs about numerous other possible selves (e.g., James, 1890/1950; Markus & Nurius, 1986). They have found that when discrepancies between the actual self and particular potential selves (self-guides), or even discrepancies among different potential selves, are made salient to the person, specific emotional consequences tend to follow. For example, salient discrepancies between the real and ideal selves tend to produce emotions related to sadness and depression, while discrepancies between the real and ought selves tend to produce emotions related to fear and anxiety (Higgins, 1987).

A future challenge is to integrate these findings with the model presented here. Such an integration should provide a more microanalytic, process-oriented view of the relationships between self-discrepancies and emotion. According to the present model, self-discrepancies do not directly produce particular emotional reactions. Instead, they represent particular kinds of knowledge or beliefs about the self that are available for appraisal, and it is how the discrepancies are appraised, not their objective properties, that determines the emotional reaction. In other words, appraisal is hypothesized to mediate between the self-discrepancy and the emotional reaction. Thus, actual-ideal discrepancies tend to result in sadness because they tend to be appraised as important, undesirable aspects of the self that the person feels powerless to change, whereas actual-ought discrepancies tend to result in anxiety because they are more likely to generate appraisals of uncertainty about what the person can and should do to resolve the discrepancy. To the extent that a particular individual appraises a particular discrepancy differently from the norm, that person would be expected to experience a nonnormative emotional reaction consistent with his or her appraisal. For example, someone who appraises an actual-ought discrepancy as an irremedial harm will react with sadness, whereas someone who appraises an actual-ideal discrepancy as a threat with uncertain coping implications will react with anxiety.

**THE SELF AND EMOTION IN COPING**

As the bottom portion of Figure 1 indicates, what the person actually does to cope with the adaptive implications of an encounter is a joint function of the person’s current emotional state and his or her more stable personality characteris-
tics. Importantly, the contributions of personality that directly influence coping are distinct from the personality contributions to appraisal that were discussed above.

A central tenet of emotion-theory is that each emotion produces its own action-tendency, consisting of a motivational urge to respond to the encounter in a particular way—to cry in sadness, to flee or avoid in anxiety, to attack in anger, to make amends in guilt, and so on (cf. Frijda, 1986; Plutchik, 1980; Scherer, 1984b; Smith & Lazarus, in press).

However, these action tendencies are not the sole determinants of coping. At all but the most extreme levels of emotional arousal people have the ability to suppress the specific action tendency and select from a wide array of coping options. The person is free to engage in any number of problem-focused coping activities in an active attempt to increase or maintain the motivational congruence of the person-environment relationship. He or she is also free to engage in any of a number of emotion-focused coping strategies that attempt to regulate the emotional response itself (cf. Folkman & Lazarus, 1980, 1985; Lazarus & Folkman, 1984). The person is not constrained to engage in a single coping strategy, and under stressful circumstances most people tend to engage in complex combinations of both problem-focused and emotion-focused coping (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984).

The person's knowledge and beliefs are important determinants of the actual coping strategies employed in any given encounter. For instance, knowledge and beliefs about the availability and likely effectiveness of various coping options, as well as beliefs concerning their social appropriateness and their congruence with the person's own self-concept, are likely to be important influences. The emotional response compellingly alerts the person that he or she is in an adaptationally important encounter, provides strong motivational incentive to react to the encounter in some way, and through the action tendency even suggests a particular approach to take. However, the person is left relatively free to draw on his or her powerful intellectual capacities to select the coping alternatives most likely to be effective under the particular circumstances.

This view of coping raises important issues for its study and measurement. The influence on coping of action tendencies and their interactions with knowledge and beliefs has been severely neglected as a research area. This is likely because coping has traditionally been studied within the framework of stress-theory rather than emotion-theory (cf. Folkman & Lazarus, 1988b). The unidimensional nature of the stress-construct encourages a view, quite at odds with the notion of discrete action tendencies, of the affective reaction merely providing a very diffuse mobilization to alleviate the source of motivational incongruence, with the specifics of the coping to be determined solely by the person's personality, knowledge, and skills. A shift from stress to emotion demands that the influences of specific emotion-driven action tendencies be taken into account as well.

One basic implication of this shift is that it is important to make sure that behaviors related to the various action tendencies are sufficiently represented in measures of coping, such as the Ways of Coping Scale (e.g., Folkman & Lazarus, 1980; Folkman et al., 1986). In addition, it would seem important not only to assess the actual coping activities the person engaged in, but also to measure the motivational urges they experienced, and to compare what the person wanted to do in the encounter with the coping activities he or she actually performed. The possibility of discrepancies between the coping activities motivated by the emotion and those actually employed raises a number of important issues.

For instance, an initial question is how often, or to what degree, the adaptive functions of the various emotions are still served when the action tendencies themselves are not directly acted on. For example, to what extent does experiencing anxiety increase the probability that a potential harm will be successfully averted—perhaps through increased vigilance or a preemptive attack—even though the specific urge to flee the threatening situation is not consummated? Or, to what extent does the experience of anger result in the effective removal of the identified source of harm, even though, as Averill (1983) has observed in college students, overt aggression may be relatively uncommon in angry encounters?

A further issue concerns the health implications of not performing the behaviors directly motivated by the action tendencies. For instance, are people who habitually suppress their aggressive urges and respond to anger-inducing provocations in a pacificistic manner necessarily placing themselves at a greater health risk than people who
habitually act directly on those urges? Or, as seems more likely, is it the adequacy of the ultimate resolution of the underlying anger-inducing conflict that truly matters for long-term health and adaptation? These issues are fundamental to understanding coping, but they are difficult to conceptualize, let alone investigate, without a consideration of the role of emotion in the coping process.

**COPING AND ADAPTATION**

The model depicted in Figure 1 does not stop at coping, but depicts a continuous process in which coping activities influence the person's subsequent appraisals and emotions (cf. Lazarus, 1968, in press-a). This last step is very important because it emphasizes and clarifies the adaptive nature of the emotion-system. A major theme throughout this chapter has been that the emotion system evolved in the service of adaptation. Its purpose is to alert the person when he or she faces adaptationally relevant circumstances, and to motivate the person to react to those circumstances in an adaptationally beneficial manner. For instance, when the appraisal of the encounter reveals a significant incongruence, or mismatch, between the perceived circumstances and what the person needs or wants—be it a potential benefit that is not currently present, or a potential or actual harm that is—the resulting emotional response offers the person compelling motivation to attempt to bring the circumstances and his or her wants or needs into better alignment. The two types of coping depicted in the model reflect the two major avenues of change available to the person, and the effects of attempts for change along either will influence subsequent appraisals and emotions (cf. Folkman & Lazarus, 1988a, 1988b).

First, **problem-focused coping** consists of active attempts to alert the circumstances to bring them more in line with the person's wants and needs (Lazarus & Folkman, 1984). If the coping attempts are effective, and the harm or threat is alleviated or removed, or the potential benefit is achieved, the change is likely to be reflected in subsequent appraisal with consequent changes in emotion away from distress or challenge to more benefit-related emotions such as happiness or relief (see Folkman & Lazarus, 1988a). Ineffective attempts at problem-focused coping can influence subsequent appraisal as well. A nonresponsive environment will often alter the person's beliefs and expectations about both the nature of the encounter and his or her efficacy in it. Encounters originally appraised as subject to beneficial change can be reappraised as irremedial harms, producing the corresponding emotional changes from hope or challenge to sadness or resignation.

**Emotion-focused coping** reflects the second major avenue for realignment of the person and environment—change within the person. Some forms of emotion-focused coping alter the emotional response directly without changing the meaning of what is happening (e.g., by affecting autonomic arousal through relaxation or exercise, or by avoiding thinking about the appraisal, etc.). But other forms, which are probably more significant for long-term adaptation, alter the appraised meaning of the encounter in one of several possible ways. Many of these emotion-focused coping strategies overlap those identified in a long tradition of research into cognitive dissonance (e.g., Festinger, 1957; Wicklund & Brehm, 1976), even though cognitive dissonance encompasses a much more restricted type of motivational incongruence than is relevant to emotion. For example, one can reconstrue the nature of the situation, such as by deciding that a perceived offense was really unintentional or unavoidable, or that an inferred event did not actually occur. Or one can alter personal beliefs and attitudes relevant to the meaning of the encounter, and hence the encounter's appraised implications for well-being. In the face of a seemingly intractable unpleasant person-environment relationship, one also can alter personal goals and values so that the encounter is no longer appraised as relevant to well-being, and no longer has the power to evoke strong emotion (cf. Klinger, 1975).

The fact that emotion-focused coping reduces motivational incongruence by altering the person instead of the environment, and often does so by distorting reality, does not imply that emotion-focused coping is inherently less adaptive than problem-focused coping, despite Western biases to the contrary. Even when considerable distortion of reality is involved, the illusions produced through emotion-focused coping can often provide the extra motivation, not available through a more realistic assessment, that might be needed to persevere through dire circumstances, to comply with difficult treatment regimens, or to buy the time necessary to accept and adapt to tragic losses (cf. Collins, Baum, & Singer, 1983; Janoff-

Further, it is important not to overemphasize the role of distortions or illusions, adaptive or not, in emotion-focused coping. Often emotion-focused coping reflects realistic adjustments to a situation that was originally misperceived or is actually unchangeable. If one's circumstances are truly impervious to change, it is much more realistic to attempt to let go of any commitments that have been destroyed than it is to continue to fight for their recovery (cf. Janoff-Bulman & Brickman, 1982). By the same token, there is strong appreciation within both the clinical and social psychological literatures that one's objective social reality is often so ambiguous and complex that the individual has considerable power to define and shape it through his or her construals and appraisals of it, as is conveyed through the notions of "reality negotiation" (C. R. Snyder, 1989; Snyder & Higgins, 1988) and "self-fulfilling prophecies" (e.g., Jones, 1986; Snyder, 1984). For instance, it has been well documented that a person's expectations for success, and his or her beliefs about the likely effectiveness of their actions, strongly influence how much effort the person will expend in a given situation, which, in turn, strongly influences the ultimate probability of success (e.g., Bandura, 1977, 1982; Dweck, 1975; Dweck & Leggett, 1988; Weiner, 1985). Thus, much emotion-focused coping might, indeed, be better thought of as an active negotiation or construction of reality rather than as a distortion of it.

Both of the major forms of coping serve important functions in the service of human adaptation, and in the long term, adaptive functioning requires maintaining a delicate balance between the two (Lazarus, in press-a; Smith & Lazarus, in press). Consistent with the idea of balance, it is important to realize that the two basic coping strategies are not mutually exclusive. As previously noted, most people react to stressful conditions with complex combinations of both problem-focused and emotion-focused coping activities (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984). The major point, however, is that a consideration of coping is fundamental to understanding emotion and its role in adaptation, just as a consideration of emotion is fundamental to understanding coping (cf. Folkman & Lazarus, 1988a, 1988b).

CONCLUDING THOUGHT

With the consideration of the role of coping in adaptation, the examination of emotion and coping has come full circle, and the benefits that might accrue to students of both emotion and coping from an integrated perspective should be evident. Consideration of emotion lends the study of coping a degree of specificity and guidance that is extremely difficult to derive from a consideration of stress. In return, consideration of coping places the study of emotion in context, and provides a coherent theoretical framework for interpreting the diverse, complex, and often puzzling phenomena encompassed by emotion. In short, emotion and coping are different sides of the same coin. They are both integral aspects of a single process that is of central importance to human health and adaptation—a process that combines consideration of the individual's needs, concerns, and abilities with consideration of the environmental realities confronting the individual in order to promote the individual's survival and personal growth. To consider one of these aspects without reference to the other is folly.

REFERENCES


Kilpatrick, D. G. (1972). Differential responsive-


