CHAPTER 15

HOPE AND HEALTH

C. R. Snyder
Lori M. Irving
John R. Anderson

"Modo liceat vivere, est spes (While there's life, there's hope)"
—Terence (190–159 BC), Andria [The Lady of Andros], line 981

HOPE ACROSS TIME

Historical viewpoints on hope are best collectively characterized as being strongly ambivalent. These views are "strong" in that writers agree that hope is important, but the ambivalence stems from disagreement about whether hope is good or bad. Perhaps the most famous historical touchstone involves the myth of Pandora. Zeus, who was angry with Prometheus for stealing fire from the Gods, sent Pandora to earth with a box filled mostly with evil creatures. Knowing that Pandora would ignore his instructions to keep the box unopened, Zeus extracted his revenge as Pandora unleashed all but one of the creatures before she replaced the lid. That creature was hope. The myth of Pandora proclaims hope to be the great consolation that makes human cares and troubles seem bearable (Smith, 1983).

Spanning the centuries, Pandora's consolatory creature has been treated as both a blessing and a curse. Writers such as Sophocles and Nietzsche denounced hope as an evil force responsible for prolonging human torment. Saint Paul and Martin Luther, on the other hand, felt that hope should be placed alongside love as the essence of what is good and truthful in life. Rather than advocating either of these positions, Tillich (1965) more recently attempted to reconcile them, stating, "Hope is easy for the foolish, but hard for the wise. Everybody can lose himself into foolish hope, but genuine hope is something rare and great" (p. 17). Modern writers have shared this view of foolish hope as bad and genuine hope as good, but remain uncertain as to how one distinguishes between the two. Actually, no one is quite sure whether such a distinction can be made. Part of the problem has to do with the possibility that even hope that appears foolish has the potential for bringing about positive outcomes. For example, many would label hope associated with the healings of snake oil salesmen and revivalist preachers as "false hope"; yet, the occasional suc-
cess of such cures is documented (see Frank, 1973, for a review).

Proponents of holistic medicine have no trouble accepting “hope cures” as genuine because they do not make a distinction between mental and bodily states. The traditional medical community, however, is rooted in Cartesian dualism, and tends to regard all nonphysical cures as the stock-in-trade of the quack. Large segments of the medical community still refer to hope cures as placebos, implying that they are ingenuine and as such must be distinguished from the effects of legitimate forms of treatment. A growing list of physicians (e.g., Ader, 1981; Frank, 1968, 1973, 1975; Locke & Colligan, 1986; Menninger, 1959; Pelletier, 1979; Siegel, 1986; Simonton, Matthews-Simonton, & Creighton 1978), however, have argued that hope and positive emotions are integral to all forms of healing and therefore should be enhanced to facilitate more traditional forms of treatment.

From the late 1950s to the 1960s, a number of psychiatrists (e.g., Frank, 1968; Frankl, 1963; Melges & Bowlby, 1969; Menninger 1959; Schachtel, 1959) and psychologists (e.g., Cantril, 1964; Farber, 1968; Mowrer, 1960; Stotland, 1969) addressed the topic of hope in a more formal, scientific manner. While the emphases of these authors differed, they all agreed that hope was a psychological construct worthy of investigation; moreover, these writers shared a definitional perspective in which hope was described as a positive expectation for goal attainment. Although the efforts of these early authors seemed promising, their work did not capture the interest of the wider scientific community. This disinterest may have stemmed from investigators’ concerns about operationalization, credibility, and the impact that acceptance of psychological processes such as hope might have on the status of their own, unique methods of treatment (Frank, 1968).

Interest in hope, as well as positive emotions, was renewed in the mid-1970s as a result of psychological research and writings related to stress, coping, and illness. Research in this area suggested that negative thoughts and emotions contribute to the development of illness, stifle efforts to cope, interfere with social support, and generally impede medical recovery (see Cohen, 1979; Cohen & Lazarus, 1979, for reviews). Several writers (Cousins, 1976; Frank, 1975; Mason, Clark, Reeves, & Wagner, 1969; Simonton et al., 1978) reasoned that if negative thoughts and emotions could impede recovery, then positive processes such as hope might promote it. Such reasoning has been supported by empirical work suggesting that enhanced positive self-evaluations and perceptions of control or mastery promote psychological and physical well-being (see Snyder, 1989; Taylor, 1989; Taylor & Brown, 1988, for reviews). (The writings of Norman Vincent Peale [e.g., Peale, 1956] since the 1950s have received widespread popular attention. It was Peale who put the phrase “the power of positive thinking” into the public consciousness.)

The increasing attention paid to positive cognitive and emotional motivational states has led several investigators to develop specific theoretical viewpoints. This chapter reviews theory and research related to a particular positive process—hope—as it relates to health-relevant outcomes. Particular attention is paid to a recent definition of hope posited by Snyder and his colleagues (Snyder, 1989; Snyder et al., 1989), including a discussion of how it differs from other similar conceptualizations. Mechanisms through which hope and other related positive processes may confer their beneficial effects, as well as suggestions for future research, also are presented.

**DEFINING HOPE**

How is hope defined? And how does the present view of hope differ from previous definitions? Beginning answers to these questions emerge in a story illustrating hope's import in matters of life and death.

Mr. Wright, one of psychologist Bruno Klopfer's clients, was diagnosed with an untreatable cancer that had spread throughout his body. Despite his state of health, Mr. Wright's will to live was strong. He begged to be administered a promising experimental drug named Krebiozen that was currently being given to patients with prognoses more favorable than his own. In response to Mr. Wright's pleas, doctors agreed to give him one injection of the drug. Mr. Wright evidenced fantastic improvement within several days. After 10 days of continued treatment, practically all signs of his disease were gone. Two months later, when conflicting reports of Krebiozen's efficacy began to appear, Mr. Wright's health deteriorated and he relapsed to his original state. Observing his client's timely recovery and relapse, Klopfer decided to see if he could, through the use of a placebo, induce another recovery. After reassuring him that Krebiozen was an effective treatment but that
early shipments of the drug had been made ineffective by improper storage, Mr. Wright was administered a “new” shipment of the drug (actually water). To Klopfer’s amazement, Mr. Wright responded more dramatically to the placebo than he had to his initial treatment. After 2 symptom-free months, the American Medical Association announced that Krebiozen was indeed worthless in the treatment of cancer. “... Within a few days of this report Mr. Wright was readmitted to the hospital in extremis; his faith was now gone, his last hope vanished, and he succumbed in less than two days” (Klopfer, 1957, p. 339). Although there were objective indices taken of the actual progression of the cancer (e.g., radiographs), one obviously cannot infer causality from the apparent correlation between Mr. Wright’s states of inflated or deflated hope and his cancer. With this caveat in mind, however, we nevertheless will return to this example later in order to illustrate the components of the hoping process.

Most writers (Cantril, 1964; Erickson, Post, & Paige, 1975; Farber, 1968; Frank, 1968; Frankl, 1963; French, 1952; Gottschalk, 1974; Lewin, 1938; Melges & Bowlby, 1969; Menninger, 1959; Mowrer, 1960; Schachtel, 1959; Stotland, 1969) who have speculated about the composition of the hope process have postulated that it is a unidimensional construct involving an overall perception that goals can be met. According to this view, individuals’ behavior can be explained by looking at their expectancies for goal attainment. Individuals exhibiting favorable expectancies are likely to be mentally and physically healthy. Somatic disturbance and psychopathology, on the other hand, are portrayed as being the mark of exceptionally low expectancies for goal attainment (Erickson et al., 1975; Gottschalk, 1974; Melges & Bowlby, 1969).

While these earlier conceptualizations of hope assumed that human beings were goal-directed creatures, they generally did not attempt to explain the means by which goals were pursued. Rather, these earlier views of hope reflected expectancy or value-based theories of behavior, which focus on “... what an individual wants or desires rather than what he or she necessarily needs to survive or be healthy” (Lee, Locke, & Latham, 1989, p. 294). While value-based theories are empirically superior to their need-based predecessors in that goals related to the values are generally specified, the predictive power of these theories is weakened by a lack of attention to the strategies individuals use to meet goals (Lee et al., 1989). As such, value-based definitions of hope may tap positive expectations that are based on the somewhat magical belief that “wishing can make it so.” In Mr. Wright’s case, this perspective suggests that his “will to live,” or positive expectation for survival alone, should have succeeded in keeping him alive.

In an expansion of earlier views, Snyder et al.’s (1989) recent analysis of hope draws on goal-setting theory (Lee et al., 1989; Pervin, 1989) in order to emphasize both the individual’s desires and the strategies by which those desires are met. In accord with the tenets of goal-setting theory, Snyder and his colleagues (Snyder, 1989; Snyder et al., 1989) propose that there are two major, interrelated ingredients to the hope process. First, it is hypothesized that the hope process is fueled by a sense of successful goal-directed determination (the agency component); second, hope involves a successful sense of planning to meet one's goals (the pathways component). More specifically, hope is defined as a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy), and (b) pathways (planning to meet goals).

Although this overall definition of hope emphasizes cognitive factors pertaining to goal-related behaviors, the agency component captures a sense of personal energy and determination and as such may have more emotional manifestations than the pathways component.

Applied to the case of Mr. Wright, this view distinguishes Mr. Wright’s will to live (agency) from the ways through which he remained alive (pathways). Mr. Wright’s will to live was strong enough to send him searching for possible viable treatment strategies (even in the context of the initial feedback that his cancer was untreatable). The discovery of Krebiozen provided a pathway for Mr. Wright in his goal to fight cancer; in turn, his will to live was enhanced. Thus, one can see how hope’s agency and pathways components interacted for Mr. Wright; moreover, this interplay of the components of hope was correlated with improvement in the reported symptoms of Mr. Wright’s disease. When his chosen pathway was questioned, however, Mr. Wright’s hope withered, and he died shortly thereafter.

Discussion of the present definition of hope would be incomplete without mention of two other recent conceptualizations of this process. In this vein, the most recognized previous measure
was developed by Beck and his colleagues (Beck, Weissman, Lester, & Trexler, 1974). Following Stotland’s (1969) view of hope as generalized positive expectations about oneself and future outcomes, Beck et al. (1974) theorized a mirrored motive of hopelessness, comprised of negative generalized expectancies about oneself and future outcomes. This Beck et al. conceptualization obviously taps the more negative side of this construct, and as such it has been employed to predict pathological sequelae of hopelessness (e.g., suicide; Beck, Steer, Kovacs, & Garrison, 1985). Generally, the Hopelessness Scale appears to be derived from a medical model (i.e., emphasis on deficiencies or problems in people) rather than a health psychology framework. In comparing the Hopelessness Scale with the Hope Scale, therefore, it should be noted that the latter measurement device evolved out of a health psychology tradition. A second distinction is that the Hopelessness Scale emphasizes a loss of motivation (a giving up response) and the emotional state of the respondent, whereas the Hope Scale emphasizes a cognitive set involving goal-directed behavior with less reference to emotionality.

More recently, Staats and her colleague (Staats, 1987, 1989; Staats & Stassen, 1986) presented hope as a multidimensional construct consisting of cognitive and affective components. These authors have developed individual difference measures of both the affective and cognitive components of hope, based on their belief that “hope refers to future referenced events that are wished for, have positive affect and have some cognitively perceived probability of occurrence” (Staats, 1989, p. 366). Staats’ (1987) Expected Balance Scale (EBS) stresses the affective component of hope, which is the difference between expected positive and expected negative affect. The Hope Index stresses the cognitive component of hope, which is defined as the interaction between wishes and expectations (Staats & Stassen, 1986); it taps specific desired circumstances (e.g., “To have good health,” or “Understanding by my family”).

While Staats and her colleague and Snyder et al. (1989) both view hope as a multidimensional construct, the dimensions described by these authors are different. Hope as defined by Snyder et al. is related to positive affect, but is not synonymous with happiness or contentment. Rather, Snyder et al.’s construct of hope is centered around goal-directed agency and planning. The EBS (Staats, 1987) is a measure of expected positive affect or happiness, without reference to goal-directed behavior. With its emphasis on expectations, Staats and Stassen’s (1986) Hope Index seems to bear greater resemblance to hope as defined by Snyder et al. (1989). However, the Hope Index focuses on wishes and expectations, and ignores strategies by which they are met, hearkening back to earlier, value-based definitions of hope. Thus, Staats and Stassen’s construct of hope is similar in name but not in content to the model and measure presented by Snyder et al.

**HOPE AND RELATED INDIVIDUAL DIFFERENCES CONSTRUCTS**

Hope as defined by Snyder and his colleagues is conceptually related to other constructs emphasizing the importance of individuals’ expectancies in mediating goal-directed behavior. In this vein, hope is related to optimism as defined by Scheier and Carver (1985), self-efficacy as outlined by Bandura (1977, 1982, 1986), helplessness as described by Abramson, Seligman, and Teasdale’s (1978) attributional revised model, and resourcefulness as developed by Rosenbaum (1980a, 1980b). The construct of psychological hardness as developed by Kobasa (1979; Kobasi, Maddi, & Kahn, 1982) will not be addressed in this section because it does not lend itself readily to an expectancy analysis; moreover, the conceptualization, components, and underlying explanatory mechanisms of hardness have been questioned in recent critical analyses (see Carver, 1989; Funk & Houston, 1987; Hull, Van Treuren, & Virnelli, 1987).

While these constructs share an emphasis on expectancies in explaining goal-directed behavior, their interpretations of the processes by which such expectancies operate differ. Similarities and distinctions between hope and these related constructs are outlined in the following discussion.

**Optimism**

According to Scheier and Carver, optimism refers to a generalized expectancy that good things will happen (1985).

This definition bears a strong similarity to one employed earlier. In this regard, Fibel and Hale (1978) developed the Generalized Expectancy for Success Scale, which they defined as “the expectancy held by an individual that in most situations
he/she will be able to attain desired goals” (p. 924). It should be noted that Fibel and Hale evolved their scale from the more general context of Rotter’s social learning theory (Rotter, 1954), which emphasized the importance of generalized expectancies (see Lefcourt chapter in this volume for a discussion of another measure—locus of control—that is derived from Rotter’s generalized expectancies notion).

This construct is similar to Snyder et al.’s in a number of respects. Both hope and optimism focus on general rather than specific expectancies, and thus have their greatest applicability to problems that are general, novel, ongoing, or multiply determined. When explaining behavior involving specific outcome expectancies, authors of both constructs agree that addressing those specific outcomes may be of greater relevance (e.g., using an index of test anxiety to identify potentially test-anxious student). With their emphasis on general expectancies, hope and optimism are both construed as stable personality traits rather than situation-specific states. Finally, both of these constructs were designed as part of an effort to understand individual differences in goal-directed behavior.

While hope and optimism share an emphasis on the importance of generalized expectancies in predicting goal-directed behavior, they differ in their understanding of how these expectancies operate in this prediction. Scheier and Carver (1985) argued that outcome expectancies (generalized beliefs about the likelihood that a desired outcome will occur) are the most important predictors of goal-directed behavior. Scheier and Carver place little importance, however, on the bases from which these outcome expectancies are derived. In other words, an optimist’s anticipation of success could be based on an expectation with little basis in reality (i.e., possessing a rabbit’s foot, wishing on a star). Hope, on the other hand, is conceptualized as an iterative process between an efficacy expectancy (a self-belief based on past experience that one can achieve one’s goals [i.e., agency]), and an outcome expectancy (the perception of one or more strategies that can be implemented in order to achieve one’s goals [i.e., pathways]). In this latter vein, a high-hope person would not be likely to rely exclusively on luck or superstition as a means by which to achieve a goal.

Comparing the models of hope and optimism, we are reminded of the previous discussion of value-based versus goal-setting approaches to hope. Proponents of value-based theories conceptualized hope as a unidimensional construct involving an overall perception that goals will be met. This is strikingly similar to Scheier and Carver’s (1985) view of optimism as a generalized expectancy that good things will happen. Thus, while both hope and optimism are attempts at predicting goal-directed behavior, Carver and Scheier’s construct of optimism bears greater resemblance to earlier, value-based views of hope (Cantril, 1964; Erickson et al., 1975; Farber, 1968; Frank, 1968; Frankl, 1963; French, 1952; Gottschalk, 1974; Lewin, 1938; Melges & Bowby, 1969; Menninger, 1959; Mower, 1960; Schachetel, 1959; Rotter, 1954) than to the goal-directed view on which Snyder et al.’s construct is based. As with these earlier views, Scheier and Carver’s emphasis on optimists’ expectation for good outcome without reference to strategies for achieving such outcomes may limit their model’s predictive power.

In fairness to the work of Scheier and Carver, it has been reported in two studies (Scheier, Weintraub, & Carver, 1986) that optimism has correlated positively ($r = .17, p < .01$; $r = .14, p < .05$) with problem-focused coping as measured by the Ways of Coping Checklist (Folkman & Lazarus, 1980). In this vein, the generalized positive outcome expectancies that are tapped by optimism should at times be accompanied by a sense that one has the appropriate pathways. The magnitudes of the aforementioned correlations suggest, however, that the problem-solving pathways often do not accompany the optimism.

**Self-Efficacy**

Bandura’s theory of self-efficacy (1977, 1982, 1986; see Maddux in this volume), like those of hope and optimism, distinguishes (self-) efficacy expectancies from outcome expectancies in understanding goal-directed behavior. Bandura defines outcome expectancy as a belief that a particular behavior will produce a particular outcome, and efficacy expectancy as the degree of confidence that an individual has in his or her ability to perform a given behavior that will lead to the desired outcome. Unlike theories of hope and optimism, self-efficacy theory views expectancies based on personal efficacy as the most powerful predictors of behavior.
According to Bandura, judgments of self-efficacy are derived from assessments of how well one will perform a particular task in a particular setting. This differs from both Scheier and Carver (1985) and Snyder et al.'s (1989) view that expectancies can operate at many different levels of specificity (ranging from very specific to very general). Specific expectancy models such as self-efficacy theory should be most effective in predicting behavior in distinctive situations. In situations involving generalized expectancies, however, generalized expectancy models such as hope and optimism are likely to be better predictors of behavior.

Both Scheier and Carver (1987) and Snyder et al. are critical of Bandura's reliance on self-efficacy expectancies in understanding goal-directed behavior. According to Scheier and Carver (1987), Bandura's reliance on efficacy rather than outcome expectancies excludes outcomes based on forces beyond the control of the individual (religious faith, luck, interventions from powerful others, etc.), thus ignoring an entire class of goal-directed behavior. Snyder et al. believe that Bandura's focus on efficacy expectancies, as with Scheier and Carver's focus on outcome expectancies, fails to acknowledge that goal-directed behavior is typically a sum of their reciprocal interactions.

Helplessness

The revised attributional model of helplessness also relies on the use of expectancies in explaining human behavior (Abramson et al., 1978; Miller & Norman, 1979; Roth, 1980; Weiner & Litman-Adizes, 1980; see also Burns & Seligman, in this volume). According to Abramson et al. (1978), attributions for good and bad outcomes have an effect on outcome expectancies, which, in turn, affect the decision to engage in behavior. Outcome expectancies can be described in terms of three attributional dimensions: locus of control (internal or external), stability (stable or variable), and generality (specific or global). Within this model, a style of attributing bad outcomes to internal, stable, global factors manifests itself in feelings of helplessness, thereby making an individual more likely to refrain from engaging in behaviors.

An underlying emphasis on outcome expectancies as the final determinants of behavior makes Abramson et al.'s view of helplessness similar to Scheier and Carver's concept of optimism. Despite their emphasis on outcome expectancies, however, Abramson et al. focus on attributions in their discussions. Thus, while helplessness theory relies heavily on outcome expectancies, Abramson et al. generally do not measure or discuss them (Scheier & Carver, 1987).

Resourcefulness

Within the general framework of understanding the self-regulatory behaviors whereby people generate and sustain goal-directed behavior (see Kanfer, 1980; Kanfer & Hagerman, 1981), Rosenbaum (1980a) developed an individual differences measure of resourcefulness. The Self-Control Schedule (Rosenbaum, 1980a) assesses "tendencies to apply self-control methods to the solution of behavioral problems" (Rosenbaum & Palmon, 1984, p. 246). In particular, this scale taps four content areas related to the individual's self-regulatory skills: (a) belief in one's ability to self-regulate cognition and feelings, (b) use of cognition to cope with physical and emotional responses, (c) delaying of immediate gratification, and (d) application of problem-solving strategies.

Although Rosenbaum and his colleagues have not conceptualized their construct in terms of expectancies, their discussion of problem-solving and coping strategies (e.g., content areas b and d above) appears similar to the concept of outcome expectancy; moreover, belief in one's ability to self-regulate cognition and feelings (which Rosenbaum initially described as "perceived self-efficacy" [1980a]), is similar to the concept of efficacy expectancy. Given the emphasis on tapping "tendencies to apply self-control methods to the solution of behavioral problems," however, the resourcefulness construct appears to stress outcome over self-efficacy expectancies. Nevertheless, self-efficacy expectancies are part of this construct and, as such, relative to the previously described optimism, efficacy, and helplessness models, it bears greater similarity to the present model of hope. Likewise, the resourcefulness and hope constructs were both developed from the underlying premise that goal-directed cognitions are important in understanding human motivation. The measure of resourcefulness, however, includes concepts other than those related to goal-directed behavior (e.g., delay of gratification). Furthermore, there is no explicit of how the various components of resourcefulness interact or contribute to the overall motivational state.
HOPE SCALE DEVELOPMENT

On the basis of the theoretical model of hope described in this chapter, Harris (1988) constructed an initial version of an individual differences measure of hope. In the first stage of scale development, 45 hope-relevant items were condensed into a reasonably concise and psychologically sound 14-item index. The original 45 items were reduced by discarding those items that did not evidence high item-remainder coefficients. Seven items tapping goal-directed agency (e.g., “I energetically pursue my goals”) and seven items tapping pathways to meet goals (e.g., “I can think of many ways to get out of a jam”) were retained in this version of the scale. Four filler items were then added. This initial 14-item version (18 items including the fillers) of the Hope Scale had individual item-remainder coefficients ranging from .31 to .53, and an overall alpha of .71. The 3-week test-retest coefficient for the initial version of the Hope Scale was .86.

In a subsequent stage of scale development, Snyder et al. (1989) shortened the original version of the Hope Scale while retaining both the agency and pathways subcomponents. This later version of the Hope Scale contains eight hope items (four agency and four pathways) and four filler items. Item-remainder coefficients for this version of the scale have ranged from .29 to .53, and the alpha has ranged from .74 to .78 across four separate samples. The test-retest coefficients (8 to 10 weeks) for this version of the scale have ranged from .73 to .82 in three separate samples. In factor analyses (with oblique rotations) of the revised version of the Hope Scale, the four agency items were found to load on one factor, while the four pathways items loaded on a second factor. Thus, the Hope Scale appears to meet the psychometric standards for internal reliability, while also tapping the theorized agency and pathways components.

In an interview study with Lawrence, Kansas, residents, Langelle (1989) explored whether Hope Scale scores were predictive of actual agency and pathways cognitions and behaviors in six life arenas. Results provided strong support for the initial hypothesis that higher hope persons would report more agency and a greater number of pathways in the goal-directed activities of their lives. In order to provide a further test of whether Hope Scale scores predicted actual goal-directed behavior, high- and low-hope college students were asked to imagine themselves in a situation in which they either did or did not face an obstacle to reaching their goal of obtaining a particular course grade (Yoshinobu, 1989). As predicted, the high-hope students produced more responses related to agency and pathways behaviors than the low-hope students. More interestingly, these effects were greatest when an obstacle was introduced. That is, the agency and pathways manifestations of hope were most apparent for the higher hope persons when they faced a problematic situation. A similar point has emerged in research with Rosenbaum’s (1980a) measure of resourcefulness in that the hypothesized problem-solving responses are especially elicited under stressful circumstances (Rosenbaum & Ben-Ari, 1985; Rosenbaum & Jaffe, 1983).

To examine the convergent and discriminant validity of the Hope Scale, both the original 14-item and revised 8-item versions were correlated with other individual difference scales. The results reported in the next three paragraphs for the 14- and 8-item versions of the Hope Scale are taken from studies by Harris (1988) and Gibb (1989). With regard to convergent validity, the original 14-item and the revised 8-item scales correlated in the predicted negative direction with the Hopelessness Scale of Beck et al. (1974) \((r_s = -.29\) and \(-.51\), respectively), and in the predicted positive direction with Scheier and Carver’s (1985) measure of optimism \((r_s = .65\) and .60, respectively). As an index of a positive cognitive set, the Hope Scale was expected to exhibit positive correlations with scales designed to measure positive emotions or attitudes, and negative correlations with scales designed to measure negative emotions or attitudes. As predicted, both the 14- and 8-item Hope Scales were positively correlated with Rosenberg’s Self-Esteem Scale (Rosenberg, 1965) \((r_s = .56\) and .58, respectively). Conversely, the 14- and 8-item versions of the Hope Scale were negatively correlated with trait anxiety \((r_s = -.46\) and \(-.56\) as measured by the trait form of the State-Trait Anxiety Inventory (STAI: Spielberger, Gorsuch, & Lu- chene, 1970).

Further convergent validation correlational studies were conducted in order to examine theoretically predicted relationships between hope and (a) desire for control, and (b) problem-solving. The importance of goals and goal-directed behavior in the present definition of hope suggests that it would be related to individuals’ perception of their ability to control various outcomes. Therefore, people with higher hope would be expected
to evidence greater desire to control the events in their lives and to believe that they have the ability to successfully solve problems they encounter. Consistent with this reasoning, both the 14- and 8-item versions of the Hope Scales were positively correlated with the Desirability of Control Scale (Burger & Cooper, 1979) \( (rs = .45 \text{ and } .54, \text{ respectively}) \), and with enhanced perceptions of problem-solving ability \( (rs = .51 \text{ and } .62) \) as measured by the Problem-Solving Inventory (Heppner & Petersen, 1982).

In order to establish the discriminant validity of the Hope Scale, it was predicted that scores should not exhibit strong relationships with selected self-report measures. For example, there is no theoretical reason to predict a relationship between self-consciousness and hope. In this vein, self-consciousness as measured by the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975) did not correlate strongly with the 14- and 8-item versions of the Hope Scale \( (rs = -.11 \text{ and } -.18, \text{ respectively}) \). The more usual indexes against which a new individual differences measure must demonstrate discriminate validity involve social desirability or unrealistically positive self-presentation. In other words, a traditional viewpoint has been that responses on a new self-report scale should not be explicable in terms of favorable self-presentational response styles. Related to this point, higher scores on both the 14- and 8-item versions of the Hope Scale have exhibited small, positive correlations with tendencies to endorse unrealistically positive statements about oneself as measured by the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) \( (rs = .20 \text{ and } .30, \text{ respectively}) \), and the Self-Presentation Scale (Roth, Harris, & Snyder, 1988; Roth, Snyder, & Pace, 1986) \( (rs = .26 \text{ and } .28, \text{ respectively}) \).

Because recent work has suggested that negative affect is an underlying variable that explains other motivational variables \( \text{e.g., Costa & McCrae, 1987; Clark & Watson, in this volume; Holroyd & Coyne, 1987; Watson & Pennebaker, 1989} \), and because a recent empirical test of this rival hypothesis revealed that Scheier and Carver’s Life Orientation Test of optimism was indistinguishable from measures of neuroticism/negative affectivity (Smith, Pope, Rhodewalt, & Poulton, 1989), one additional study was performed to test the discriminant validity of the Hope Scale relative to measures of negative affectivity. In this latter vein, the relationships of Hope Scale responses to particular coping responses were examined by partialling out the shared variance related to negative affect. Results showed that the predicted positive correlations of Hope Scale scores with the problem-focused coping, seeking of social support, and focusing on the positive subscales of the Ways of Coping Scale (Folkman & Lazarus, 1980, 1985) remained significant and basically unaltered when the shared variance as related to negative affect (see the STAI in Spielberger et al., 1970, and the Taylor Manifest Anxiety Scale in Taylor, 1953) was removed. Thus, even though hope is theoretically and practically related to less negative affectivity, Hope Scale scores are distinguishable from negative affect.

Data regarding the Hope Scale’s convergent validity suggest that, as predicted, the scale is related to the presence of adaptive, positive emotions and attitudes and the relative absence of potentially maladaptive, negative emotions and attitudes. In addition, Hope Scale scores evidence discriminant validity relative to selected other individual differences measures.

**HOPE AND HEALTH-RELEVANT OUTCOMES**

Hope’s relationship to health-relevant outcomes can be studied on a number of levels, including (a) the appraisal process related to hope level and goal-setting, (b) problem-solving, (c) health symptom reporting, and (d) objective health status. This section reviews research focusing on these various levels of analysis in investigating the relationship between hope and health.

**Hope, Appraisal, and Goal-Setting**

In the 1960s, many researchers (see Lazarus, 1966, 1968; Lazarus, Avenue, & Optron, 1970, for reviews) studied the relationship between cognition and stress. They found that the degree of stress associated with any particular event was a function of how that event was perceived by the individual \( \text{i.e., appraised}\). For example, faced with identical situations, one person may respond with anger, another with depression, another with anxiety, and another with the excitement of feeling challenged. According to Lazarus and Aunier (1978), person-based factors and situation-based factors affect the appraisal process by influencing whether particular events signal threat, challenge,
loss, or pain. As an individual difference variable, hope and its relationship to health-relevant outcomes can be conceptualized as a person-based factor in the process of appraisal.

Properties of stressors that appear to be related to the appraisal of situations as stressful include novelty, predictability, probability of occurrence, imminence, duration, uncertainty about the timing of occurrence, and the timing in relation to the life cycle of the stressor (see Lazarus & Folkman, 1984, for a review). Person factors, such as dispositional differences in hopefulness, are likely to have their greatest influence on the appraisal process when environmental conditions are not clearly defined (Archer, 1979; Lazarus, Erikson, & Fonda, 1951). Conversely, if a group of individuals are aware of the type of stressful event that is going to occur, the likelihood of its occurrence, when it will happen, and how long it will last, the role of individual differences in appraisal and subsequent coping should be minimized.

An individual's belief system appears to play a prominent role in the process of appraisal of ambiguous situations (Lazarus & Folkman, 1984). Beliefs in this sense refer to cognitive configurations or schemas about reality. They serve as a perceptual set. In appraisal, beliefs determine what is considered to be the fact of how things are in the environment. They also shape the meaning of such "facts." Beliefs about hope seem particularly relevant to appraisals of stress because they pertain to whether things will eventually work out in the end. Such beliefs also are likely to affect the perception of a potentially stressful encounter as a challenge or a threat (Folkman & Lazarus, 1985).

Bem's (1970) work provides a useful framework for understanding the role of beliefs in the appraisal process. Bem distinguishes between primitive and higher order beliefs. Primitive beliefs are based on widely held premises about the nature of the universe. They generally are not open to question (e.g., object permanence, object constancy, belief in the Piagetian principle of conservation, etc.). Higher order beliefs come about as a result of inductive reasoning based on specific experiences. With repeated experience of a particular kind, higher order beliefs can develop into primitive beliefs that are generally sustained without reference to specific evidence. In ambiguous situations, such beliefs hold sway.

Stotland (1969) argued that many people develop higher order beliefs that their goals will be achieved. For certain hopeful individuals who encounter repeated success, these higher order beliefs about goal attainment come to have an increasingly wider range of applicability. Eventually, separate higher order beliefs related to hope may merge into a primitive belief system about goal attainment. When faced with ambiguous situations, hopeful people are thought to invoke broad-based, primitive beliefs that their goals will be achieved. These beliefs are likely to influence them to appraise the ongoing flow of events in generally positive terms.

High hope individuals' appraisal of situations in generally positive terms may be related to their assessment of stressful situations as challenging rather than threatening. Hopeful people may be more likely to engage in what Lazarus and his colleagues refer to as "challenge" appraisal. According to Lazarus and Launier (1978), some individuals can be characterized by a style of thinking that disposes them to view potentially stressful situations in terms of challenge rather than threat (Folkman & Lazarus, 1985; Lazarus & Folkman, 1984; Lazarus & Launier, 1978; McCrae, 1984). The distinction between challenge and threat appraisals was summarized by Lazarus and Launier (1978) as follows: "The difference seems to be a matter of positive versus negative tone, that is whether one emphasizes in the appraisal the potential harm in the transaction (threat), or the difficult-to-attain, possibly risky, but positive mastery or gain (challenge)" (p. 304).

Lazarus and Launier (1978) argue that challenge and threat appraisal lead to different kinds of coping behavior. This argument was supported by McCrae (1984), who found that appraisals of threat were associated with the use of faith, fatalism, and wishful thinking—all mechanisms of coping designed to reduce anxiety by reconstruing the event or its likely outcome. Challenge appraisals, on the other hand, were associated with more vigorous and diverse coping strategies such as rational action, perseverance, positive thinking, intellectual denial, restraint, self-adaptation, drawing strength from adversity, and humor.

A subsequent study by Folkman and Lazarus (1985) investigated the relationship between appraisal and coping with a prospective design in which appraisals were assessed before an upcoming stressful event (i.e., a midterm exam). They found that threat appraisals were associated with wishful thinking and attempts to garner social support. Challenge appraisals, on the other hand, were associated with problem-focused coping and
self-isolation (e.g., "avoid being with people"). Results suggest that those who view situations as challenging tend to focus on rational planning and action.

In a 1988 dissertation, Anderson hypothesized that individuals with high compared with lower levels of hope as measured by the Hope Scale would be more likely to view personal goals in positive and challenging terms, focusing on the potential for gain. Hypotheses were tested by assessing threat and challenge cognitions and emotions pertaining to 1-month and 6-month goals formulated by subjects who were classified in terms of their level of hope (high, medium, and low). Goals were set by subjects in each of four life domains (work and school, primary family life, intimate relationships, and personal changes and development).

High hope subjects were found to focus more of their attention on the consequences of success and to estimate a greater probability of success than subjects in the low hope group. These findings occurred for both 1-month and 6-month goals. By expecting success and focusing on its consequences, individuals with high hope may actually improve their chances of success by promoting positive affective states that are associated with a greater degree of behavioral persistence and organized action (French, 1952; Greenwald, 1980; Lewinsohn, Mischel, Chaplin, & Barton, 1980; Stotland, 1969; Taylor, 1983).

Support for the relationship between affective states, dispositional hopefulness, and goal-striving also has been provided by Anderson (1988). The author assessed positive and negative feelings in subjects as they visualized striving toward 1-month and 6-month goals. Higher levels of dispositional hopefulness as measured by the Hope Scale were associated with more positive feelings about goals. At the same time, hopefulness was largely unrelated to negative feelings about goals.

Cognitive theory of emotion asserts that the quality and intensity of any emotion is generated by its own particular appraisal (Beck, 1971; Ellis, 1962; Lazarus, Kanner, & Folkman, 1980; Lazarus & Launier, 1978; Weiner, Graham, & Chandler, 1982). For example, an appraisal of challenge might evoke eagerness or excitement whereas an appraisal of threat might evoke foreboding or worry. Based on these cognitive assumptions, the findings of Anderson (1988) suggest that appraisals made by individuals who differ in level of dispositional hopefulness do not fall along a simple continuum with positive appraisals of high-hope individuals at one end and negative appraisals of low-hope individuals at the other. As far as the present construct of hope as it relates to goal-setting is concerned, what appears to matter most is the amount of positive rather than negative feelings connected with appraisals. This distinction has significant implications for how hope is conceptualized.

Hope's association with appraisals producing positive feelings and its lack of association with appraisals producing negative feelings suggests an orientation of energy, eagerness, and vibrancy that should not be defined solely in terms of a lack of negativism. Thus, one cannot fully appreciate the concept of hope by speaking in terms of an "absence of negativism." Obviously, many previous researchers have focused on constructs involving pathological rather than healthy processes. As such, scales measuring depression (Beck, 1967) and hopelessness (Beck et al., 1974) may have a restricted or different range of measurement because of their emphasis on negative or pathological conditions. According to Beck and his colleagues, for example, hopelessness is derived from the activation of specific cognitive schemas that produce intensely negative feelings. However, the findings of Anderson (1988) indicate that negative feelings do not fully capture the present conceptualization of hope as it relates to goal-setting. Rather, hopefulness may refer to cognitive style that cannot be explained only in terms of the absence of depression or negative affect.

Hope and Problem-Solving

The tendency of individuals with high hope to experience positive affect when considering their goals has potential implications for the manner in which they approach problem-solving. Isen, Daubman, and Norwicki (1987) conducted four experiments in which positive affect improved performance on tasks that are generally regarded as requiring creative ingenuity: Duncker's (1945) candle task, and Mednick, Mednick, and Mednick's (1964) Remote Associates Test. The authors argue that positive appraisals may promote creative problem-solving by fostering a complex cognitive context. That is, positive appraisals may facilitate either seeing more aspects of objects or concepts, or seeing objects or concepts more fully, including their potential for combination with
other objects or concepts related to the problem at hand.

Given the findings of Isen et al. (1987), it follows that hopeful people may be more successful in accomplishing their goals because of their tendency to make appraisals that produce positive affect, which, in turn, creates a complex cognitive context. A complex context in hopeful people might arise from the fact that positive feelings facilitate access to positive material in memory (e.g., Isen, Shalker, Clark, & Karp, 1978; Teasdale & Fogarty, 1979), and positive material in memory is more extensive and diverse than other material (e.g., Boucher & Osgood, 1969). Complexity of context has been specifically related to originality of word associations (Cramer, 1968) and to a relaxing or broadening of focus of attention (Martindale, 1981). Furthermore, Isen et al. (1987) argue that the presence of a complex cognitive context may cause many features of items and problems to become salient, so that more possibilities for solution can be seen. Thus, the fact that higher hope persons perceive themselves as being better at problem-solving, as we have discussed previously in this chapter (e.g., Gibb, 1989), may be related to an affectively positive and cognitively complex appraisal process.

Hope, Life Stress, and Reported Health Symptoms

Until now, we have been discussing mediators (e.g., challenge appraisals and problem-solving) of the relationship between hope and health-relevant outcomes. This relationship also can be addressed in studies of hope, life stress, and symptom reporting.

The impact of common stressors on health has been documented in a substantial body of research that demonstrates that events such as loss of work, divorce, or birth of a child affect the incidence of physical illness (e.g., Dohrenwend & Dohrenwend, 1974; Mechanic, 1974; Sarason, Johnson, & Siegel, 1978) and emotional disturbance (e.g., Dekker & Webb, 1974; Markush & Favero, 1974; Warheit, 1979). Although numerous clinical studies have found that lack of more extreme variations in health might produce similar effects. The onset of major health problems might induce changes in one’s level of optimism, whereas variations in minor physical symptoms may not.

In a similar prospective design, Anderson (1988) investigated the ability of hope and optimism to moderate the impact of stressful life events on mental and physical symptom reports. Initially, subjects completed questionnaires assessing individual differences in hope, optimism and stressful life events. Ten weeks later, subjects completed mental and physical health symptom checklists. In a stepwise multiple regression analysis, mental and physical symptoms were regressed on stressful life events followed by the variables of hope and optimism. The unique contributions of hope and optimism were assessed by altering their order of entry in the regression equation.

As expected, life stress was positively related to
increasing reports of physical symptoms. Hope and optimism, however, were negligibly related to physical symptom-reporting, contributing little beyond that of life stress alone. The author speculated that the college sample may have been too young and healthy for hope or optimism to play a coping role in physical health. Anderson argued that hope and optimism may play greater roles in older samples exhibiting greater variation in physical health symptoms in response to stress.

Hope and optimism evidenced stronger relationships with reports of mental than physical health symptoms. Both hope and optimism accounted for a significant amount of the variation in mental health symptoms above and beyond life stress alone. Contrary to predictions, however, neither hope nor optimism were found to serve as moderators between life stress and mental health symptoms. In other words, subjects with higher levels of stress experienced more mental health symptoms regardless of their level of dispositional hope or optimism. The author suggested that hope and optimism may operate as moderators only in cases where an individual experiences relatively high levels of negative life stress.

In additional multiple regression analyses, Anderson (1988) attempted to determine the significance of the relative contributions of hope, optimism, and locus of control in predicting mental health symptoms. Results revealed that neither optimism nor locus of control (Rotter, 1966) scores significantly enhanced the prediction of mental health symptoms beyond the level of prediction obtained by life stress and hope scores. Results also showed that hope scores significantly enhanced the prediction of mental health symptoms beyond the level of prediction obtained by life stress and optimism or life stress and locus of control scores. Additionally, Anderson found that hope scores significantly enhanced prediction of mental health symptoms beyond the level of prediction achieved by optimism scores, locus of control scores, and the combination of optimism and locus of control scores. Thus, hope as measured by the Hope Scale appears to explain variance in mental health symptoms that cannot be explained by life stress, optimism, or locus of control.

**Hope and Objective Health**

Most studies addressing the relationship between positive emotional states and health have relied on subjective symptom reports and relatively "well" college populations. Subjective symptom reports have been criticized, however, on the grounds that they exhibit negligible correlations with indices of objective health status (Costa & McCrae, 1985, 1987). The minimal variation observed in college populations' symptom reports, as well as the restricted generalizability of their data, also limit their utility. The more valid, direct way of assessing hope's relationship to health-relevant outcomes is through studies of the objective health status of mentally or physically ill populations.

**Objective Mental Health**

In 1969, Melges and Bowlby suggested that hopelessness, "a feeling that the future holds little promise," plays an important role in many psychopathological conditions. Melges and Bowlby went on to describe distinct types of hopelessness associated with depressive and sociopathic disturbances. While not backed by empirical data, their theoretical argument did provide a valuable source of hypotheses for others' research in this area (Gottschalk, 1974; Obayuwana, Collins, Carter, Rao, Mathur, & Wilson, 1982).

In studies comparing nonpatient adults with acute schizophrenics (Gottschalk, 1974), general psychiatric populations (Erickson et al., 1975; Obayuwana et al., 1982), and outpatient crisis center clients (Gottschalk, 1974), hope (measured in various ways) was found to be inversely related to psychiatric morbidity. While Erickson et al. (1975) did not find hopelessness to significantly distinguish patients with different diagnoses, Obayuwana et al. (1982) did find patients attempting suicide to evidence lower levels of hope than nonsuicidal depressed patients. These latter authors concluded that hopelessness may be more important than depression in determining the severity of a patient's suicidal intent (see also Beck et al., 1985).

Two of these studies (Erickson et al., 1975; Gottschalk, 1974) examined the relationship between hope and treatment for psychiatric disturbance. Among crisis center clients, pretreatment levels of hope were found to be significant predictors of patient improvement, as well as being inversely related to psychiatric morbidity among clients receiving treatment (Gottschalk, 1974). Among acute schizophrenics, levels of hope improved significantly after receiving the drug thiordiazine. In addition, the greater schizophrenics' predrug hope scores, the greater the drop in their postthiorida-
zine depression scores. Erickson et al. (1975) found that the pretreatment levels of hope among psychiatric patients at a Veterans' Administration hospital improved following treatment. Patients' posttreatment levels of hope were similar to those found in a college student population.

These studies provide important evidence of hope's facilitative role in mental health, but are limited by their often ambiguous definitions and measurements of hope (e.g., Gottschalk measures hope via a content analysis of a 5-minute speech sample, and defines hope as "measure of optimism that a favorable outcome is likely to occur, not only in one's personal earthly activities but also in cosmic phenomena and even in spiritual or imaginary events" [p. 779]; Obayuwana et al. define hope as "... the state of mind which results from the positive outcome of ego strength, perceived family support, religion, education, and economic assets" [p. 761]). These studies also suffer from a lack of statistical and methodological rigor. The use of a reliable, valid index of hope in these populations will increase our understanding of the beneficial effects of hope as it relates to psychological health.

Work with Scheier and Carver's optimism measure has already yielded useful results in this regard. First, optimism scores during pregnancy were related to less postpartum depression (controlling for initial levels of depression) (Carver & Gaines, 1987). Second, Strack, Carver, and Blaney (1987) found that optimism scores predicted completion of an alcohol treatment program. It also should be noted that work with Rosenbaum's (1980a) measure of resourcefulness has produced results related to indices of psychological health. For example, higher resourcefulness scores have been found to be related to (a) tolerance of laboratory-produced pain (Rosenbaum, 1980b) and actual clinical pain (Coury, Feuerstein, & Bush, 1982); (b) coping with seasickness (Rosenbaum & Rolnick, 1983); (c) success at weight reduction (Smith, 1979); (d) control of nail biting (Frankel & Merbaum, 1982); and (e) improvement following cognitive behavior therapy as compared with pharmacotherapy (Simons, Lustman, Wetzal, & Murphy, 1985).

Objective Physical Health

Although the potential health benefits of positive emotions are often discussed in the health psychology literature (e.g., Cohen & Lazarus, 1979; Lazarus & Folkman, 1984), the available research on the relationship of hope-related variables to physical health is sparse.

Scheier et al. (1990) examined the beneficial effects of dispositional optimism on the physical and psychological well-being of middle-aged men undergoing coronary artery bypass surgery. Dispositional optimism was associated with a faster rate of physical recovery during hospitalization, a faster rate of return to normal life activities after discharge, and reports of better quality of life 6 months after surgery. While this study provides support for the beneficial impact that dispositional positive motivational states can have on health, in the future it will also be important to assess the interaction between individual differences in motivation (e.g., hope, optimism) and treatment interventions. Such person-by-treatment interactions may yield useful benefits for various physical problems.

HOPE FOR THE FUTURE

Individual differences in hope may operate in a variety of arenas related to physical and psychological well-being. In this section, we briefly explore one example from each of these arenas. In regard to a physical issue, the role of hope in cancer will be examined; in regard to a psychological issue, the role of hope in psychotherapy will be discussed.

Hope and Cancer

Cancer is perceived by the population at large to be a "hopeless" disease. For many, cancer is synonymous with death. This ominous reputation stems in part from the public's lack of knowledge about the nature of cancer. Seen as a uniform, fatal disease, cancer is in reality a host of diseases, each with a somewhat different etiology, course, treatment, and prognosis. Improvements in cancer detection and treatment have increased the odds of surviving it, and current statistics suggest that approximately 50% of all serious cancers can be cured (Bloch & Bloch, 1985). Cancer's frightening reputation persists, however, despite such statistics.

Researchers' tendency to focus on pathological emotional aspects of cancer may be another reason for its continued unsavory reputation. Investigators steeped in medical or psychoanalytic traditions have relied on negative constructs in understanding how individuals cope with and re-
spond to their disease. References to constructs such as hopelessness, repression, and denial are much more common in the cancer literature than are references to positive motivational states such as hope.

Dissatisfied with the negative bias of existing literature, a number of individuals have written books and instigated treatment and support programs that focus on the role of positive motives and emotions in cancer recovery and prevention (Bloch & Bloch, 1981, 1985; Siegel, 1986; Simon- ton et al., 1978). While research scientists have criticized these writers for going beyond the available data in describing the facilitative role of positive mental states in cancer, their impact on research and writing in this field cannot be denied.

According to Levy (1983), emotional factors such as hope may play one of two roles in the process of carcinogenesis: the role of an independent variable contributing to the progression of tumor growth, or the role of a dependent variable resulting from the disease of cancer or from aggressive cancer treatment. To date, the focus of research generally has been on emotions rather than hope per se. In this vein, emotion’s role as an independent variable has been addressed in longitudinal and other prospective studies linking certain personality characteristics or types with the occurrence of cancer (Eysenck, 1988; Grossarth-Maticek, Bastiaans, & Kanazir, 1985; Kissen, 1967; LeShan, 1961; Persky, Kemptthorne-Rawson, & Shekelle, 1987; Shaffer, Graves, Swank, & Pearson, 1987). Emotional states have been assessed as dependent, postdiagnostic variables in studies of emotional reactions and coping strategies of emotional reactions and coping strategies of cancer patients (Dergatios, Abeloff, Melisaratos, 1979; Eysenck, 1988; Jensen, 1987; Marks, Richardson, Graham, & Levine, 1986; Meyerowitz, 1983; Orr, 1986; Pettingale, 1984; Taylor, Lichtman, & Wood, 1984; Timko & Janoff-Bulman, 1985; Zemore & Shepel, 1987). In turn, these postdiagnostic variables have been used as predictors of patients’ psychological and physical adjustment to cancer.

Longitudinal and other prospective studies suggest that suppression of emotion (Eysenck, 1986; Grossarth-Maticek et al., 1985; Kissen, 1967; Shaffer et al., 1987), inability to cope with stress (Eysenck, 1988), and feelings of hopelessness or helplessness (Grossarth-Maticek et al., 1985; Schmale & Iker, 1966, 1971; Eysenck, 1988) are associated with later diagnoses of cancer. While the psychometric rigor of these studies has been challenged (see Stam & Stegglefs, 1987, for a review), the consistency of their findings should be acknowledged.

Investigations of emotional reactions among individuals who have been diagnosed with cancer also have produced consistent results. A highly emotional, “acting out” response to a diagnosis of cancer has been associated with increased rates of survival among breast cancer patients (Dergatios et al., 1979; Pettingale, 1984). Conversely, hopelessness/helplessness, stoicism, and negative affect have been associated with continued neoplastic spread after the initial diagnosis (Jensen, 1987; Pettingale, 1984). Personality descriptions of individuals evidencing poorer rates of survival thus appear to be similar to those of individuals at greater risk for initial development of cancer (Eysenck, 1988).

Postdiagnostic coping strategies have been explored through attributional (Taylor et al., 1984; Timko & Janoff-Bulman, 1985), control (Marks et al., 1986), denial (Meyerowitz, 1983), and information seeking (Orr, 1986; Zemore & Shepel, 1987) paradigms. Taken together, these studies suggest that a realistic, hopeful assessment of the threat of disease, and a belief in one’s ability to cope with the disease with the help of external sources (medical professionals, significant others, or appropriate information) are related to better social and emotional adjustment among cancer patients. Characterological self-blame, and the belief the future outcomes are out of one’s control, are related to poorer adjustment.

Just as cancer is perceived as a hopeless disease, it appears that its onset and progression have become associated with a hopeless personality profile. While the findings of authors studying emotional precursors to and consequences of cancer are fascinating, their focus on psychopathological factors serves to perpetuate cancer’s dark, hopeless image. Critics of these studies argue that the inclusion of personality as a risk factor will result in “victim blaming,” or placing more responsibility on the shoulders of cancer patients who are already suffering a great deal (Stam & Stegglefs, 1987).

But the findings of these authors need not be interpreted in a psychopathological light. While currently framed in negative terms, they can be reframed positively. If hopelessness is hurtful, perhaps the inclusion of hopefulness in discussion of detection, prevention, and treatment of cancer
can be helpful. The research reviewed in this chapter suggests that high hope individuals exhibit some of the same cognitive, emotional, and attitudinal attributes as do people who are successful in avoiding cancer, or who evidence greater emotional and social adjustment following a diagnosis of cancer. Finding cancer patients "guilty" of hopelessness may appropriately be labeled as victim-blaming. Encouraging them to mobilize their resources in order to identify strategies for improving the quantity or quality of their life, however, is empowering. Individual differences measures such as the Hope Scale may help in the unraveling of the person-based forces that operate in the etiology and treatment of cancer. In a similar vein, the Hope Scale may contribute to our understanding of person-based forces involved in the development and treatment of other physical illnesses.

**Hope and Psychotherapy**

Studies of the effectiveness of psychological treatment have focused on two components of this process: a nonspecific treatment factor (sometimes called placebo) and a specific treatment factor. Through meta-analysis, researchers have attempted to examine the relative effectiveness of nonspecific and specific treatments to no treatment control groups, as well as to each other (i.e., nonspecific vs. specific treatments) (see Landman & Dawes, 1982; Prioleau, Murdock, & Brody, 1983; Shapiro & Shapiro, 1982; Smith & Glass, 1977). Results of these meta-analyses are consistent in their finding that specific treatment produces a more favorable outcome than participation in either no treatment control or nonspecific factors groups. These results have been interpreted to mean that both the presence of generalized positive expectations for improvement (in the form of specific or nonspecific treatment) (Frank, 1973; Frank, Hoehn-Saric, Imber, Liberman, & Stone, 1978; Kazdin, 1980), and provision of a strategy for improvement (specific treatment alone) are necessary in order for psychotherapy to have its intended effect. In the context of this chapter, the parallels between this interpretation of the psychotherapy process and hope's agency and pathways components are obvious.

While appealing in its efficiency and applicability to the hope model, this interpretation of results is not without problems. Previous meta-analyses of psychotherapy's effectiveness have failed to ascertain that the nonspecific factors groups exhibited levels of positive expectations for improvement comparable with those evidenced by specific treatment groups. This failure to verify what is assumed to be a central or defining characteristic of nonspecific factors groups (i.e., a positive expectation for improvement in the absence of a treatment strategy) makes the unequivocal interpretation of results tenuous.

Responding to this criticism, Barker, Funk, and Houston (1988) conducted a meta-analysis evaluating treatment studies in which expectations for improvement between specific and nonspecific factors conditions had been shown to be comparable. Consistent with previous meta-analyses, Barker et al. found that the nonspecific factors group exhibited a significantly improved psychotherapy outcome relative to the no treatment control group; and that the treatment group exhibited significant improvement relative to the nonspecific factors group. Additionally, the magnitude of the improvement for the treatment group relative to the no treatment group was twice that exhibited by the nonspecific factors group. Using the hope model as a framework through which to interpret these results, the nonspecific factors group can be seen as reflecting hope's agency component, and the treatment group can be seen to reflect the reciprocal workings of hope's agency and pathways components. The results suggest that a sense of agency improves psychological functioning, and that the additional sense of pathways doubles this improvement.

Our point in using the hope construct to understand the psychotherapy process is not to suggest that there is only one way to engender a sense of agency or pathways in helping people. On the contrary, we believe that there are innumerable ways through which to help clients build their sense of personal efficacy (agency) and arsenal of strategies (pathways) for coping with problems. The enormous literature on psychological treatment provides a plethora of approaches, each of which may work for certain people. As such, an individual differences measure such as the Hope Scale may facilitate answers to important applied questions. For example, do high- as compared with low-hope persons handle their stressors differently? Would low-hope persons evidence particular benefits as a result of interventions aimed at both agency and pathways? How do the person variable of hope and the situation variable of treatment interact?
CONCLUSION

According to the old maxim, “Where there’s a will, there’s a way.” Sometimes this is true, but the underlying premise of the theory and individual differences measure described in this chapter is that both components must be studied in order to discover the full meaning of the hope concept. Neither component alone may be sufficient. For example, has the reader ever experienced a strong sense of goal-directed determination (agency), only to find that a strategy (pathway) for pursuing the goal seemed lacking? Or, the pathway may be evident, but the agency may be nonexistent. Having made this case for the necessity of both components, however, it should be acknowledged that the most effective way to ignite hope may be to concentrate on one of the components. How long, for example, can the goal-energized person refrain from not finding a pathway? Similarly, a person who suddenly finds a pathway to a goal may then feel a surge of determination and energy. It is this reciprocal relationship of the will and the way that defines the essence of hope. As such, hope is one important wellspring by which we nourish our psychological and physical health. To turn a twist on Terence’s line cited at the beginning of this chapter, “While there’s hope, there’s life.”

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