The ultimate goal of occupational therapy is to minimize the handicapping effect of physical or psychological impairment or both. This is achieved through restoration of the clients' functional skills, with the goal of enabling them to return to their normal life roles. To this end, occupational therapists concentrate on the development or enhancement of the skills required to perform these roles successfully (Reed & Sanderson, 1980). It is often assumed that skill development alone will result in performance accomplishments. Why, then, do patients of equal physical impairment and rehabilitation potential not progress at the same pace? Why do these same patients attain different levels of independent function even when their goals are quite similar? One possible explanation is that any two patients differ in their ability to cope with the effects of the disease process (Mechanic, 1980). Therefore, it is important for occupational therapists to explore the influence of coping on performance and to develop intervention models to maximize functioning.

Lazarus and Folkman (1984) defined coping as the process through which a person manages the demands of and emotions generated by the person-environment relationship. The relationship between the person and his or her environment is drastically affected by the onset of a disease process as the patient struggles to adapt to the changes in his or her life. Occupational therapists assist with this adjustment process by teaching the patient new performance methods and by facilitating restoration of independent function. However, many other factors are involved in determining whether a patient adapts well. If occupational therapists are to improve rehabilitation outcomes, they must fully understand these factors and design intervention strategies accordingly.

The purpose of this paper is to present the Appraisal Model of Coping, which was developed after a review, analysis, and synthesis of the coping literature. The model is presented as a means of guiding occupational therapists as they assess and treat patients who are experiencing difficulty coping with stressful situations.

Definitions of Coping

The concepts of coping and adaptation are sometimes used synonymously in the literature. White (1974) differentiated between these terms in the following way. Adaptation is seen as the master concept, which is superordinate to three other terms: coping, mastery, and defense. Coping is seen as “adaptation under relatively difficult conditions” (p. 49). The automatic adaptations that we make on a daily basis to meet the demands of a changing environment are thereby not included as coping strategies.

Lazarus and Folkman (1984) defined coping as the process through which the individual manages the demands of and emotions generated by the person—
environment relationship. They defined stressful situations as particular relationships between people and their environment that are appraised by the people as taxing or exceeding their resources, thereby endangering their well-being. Such situations create a need to activate coping mechanisms to ensure a positive outcome.

Lazarus and Folkman's (1984) definition allows for individual variability in defining which situations will result in a need to cope. It recognizes that the same situation will be interpreted as stressful by some and non-stressful by others. Their definition is the most widely used in the coping literature.

The Appraisal Model of Coping

Gergen (1982) stated, "Rather than viewing the search for universals as a process of factual discovery, an objective assaying of 'what there is,' we must view it as the attempt to sustain a conceptual template while scanning immense variations in human activity" (p. 55). He used as an example the vast array of individual words that our language consists of, which can be put together in an infinite number of ways. However, there are still rules of grammar that provide a template to guide the use of these words. What is needed to better understand coping is just such a template: a set of rules that allows for individual variability but at the same time guides the understanding of the coping process. The Appraisal Model of Coping provides the required template.

Primary and Secondary Appraisal Processes

Figure 1 represents the Appraisal Model of Coping. It uses the cognitive relational theory of emotion and coping (Lazarus & Folkman, 1987) as a starting point and adds information from other authors to complete it.

The cognitive relational theory of emotion and coping identifies two interacting cognitive appraisal processes that determine the reaction of an individual to the stressor that he or she is facing (Lazarus & Folkman, 1987). Cognitive appraisal is defined as the process of individual interpretation of what is happening in the environment. Lazarus and Folkman (1984, 1987) discussed two kinds of cognitive appraisal. Primary appraisal determines whether what is happening could be harmful, threatening, challenging, beneficial, or of no importance to the individual. An occurrence (a person-environment interaction) will not be a source of harm unless the people who encounter it have motivational and cognitive characteristics that make them vulnerable to the occurrence. The quality and intensity of the emotion evoked by the occurrence will vary depending on the interpretation made during primary appraisal. Lazarus and Folkman (1987) now view this appraisal as an evaluation of whether the person has anything at stake.

Secondary appraisal (Lazarus & Folkman, 1984, 1987) evaluates the physical, psychological, social, and material resources available to cope with the event. If all other factors are equal, the person who has a strong belief that he or she can handle an event is less likely to interpret it as a threat.

Primary and secondary appraisal are seen to influence one another but do not occur in any particular temporal order (Lazarus & Folkman, 1987). Both appraisal processes are equally important (Lazarus & Folkman, 1984). For this reason, the two appraisal processes are represented in the Appraisal Model of Coping by two intersecting circles.

The "Influencing Factors" are all factors that affect the appraisal processes. These factors were identified through a review of the literature. In many cases, a single factor may affect both primary and secondary appraisal processes in different ways. The following is a synopsis of each factor and its likely effect on the primary and secondary appraisal processes.

Influencing Factors

Temporal Factors

Temporal factors relevant to coping include the time of life and the length of incubation of the threat. Lazarus and Folkman (1984) stated that people have a sense of the normal life cycle (social clock theory) and that events are interpreted within this temporal context. Young widows are, according to these authors, typically more stressed than older widows, and old mothers are more stressed than young mothers, largely due to the absence of a support network of friends facing similar stressors. However, differentiation between desirable and undesirable, as well as controllable and uncontrollable, life events must be made (Rook, Catalano, & Dooley, 1989). Rook et al. surveyed 500 randomly selected households and found little
support for social clock theory. Although they found differences in adjustment based on the age at which events occurred, the differences did not follow the patterns predicted by social clock theory. For example, young widows adjusted more easily than older widows. It is clear that timing of the event influences the reaction. What is not yet clear is the nature of this influence.

The concept of incubation of threat was proposed by Breznitz (1967) as the length of time between learning of the threat and the occurrence of the threatening event. Breznitz found that heart rate increased immediately after learning of a threat, but then subsided with another, more gradual, increase as the length of incubation period (i.e., the time until the event occurred) increased. He also found that when given a choice of the length of incubation period, a significant number of subjects chose the shortest incubation period.

Folkins (1970) questioned whether the incubation period increased or decreased the stress response. Folkins hypothesized that if enough time elapsed, people would be able to activate effective coping strategies, thus decreasing stress responses. In a study to test this hypothesis, the length of incubation prior to receipt of a shock was varied. The subjects’ physiological responses were found to increase with a 1-min wait, decrease with a 3- to 5-min wait, and increase again with a 20-min wait. Folkins concluded that incubation time plays an important role in the determination of the degree of stress reaction and that, to a point, longer incubation periods were related to more effective coping.

The data regarding incubation of threat should be interpreted with caution, as the studies relate to incubation of threat with respect to shocks. Whether the coping mechanisms for more personal types of life stressors create the same reactions is not known.

Both time of life and incubation of threat appear to affect the interpretation of the degree of threat, that is, the primary appraisal process. However, the ability to draw on additional coping strategies is implicated by Folkins (1970) as a possible explanation for the decreased physiological stress reaction with longer incubation periods. Therefore, an effect on the secondary appraisal process is also possible.

**Values and Beliefs**

Personal values and beliefs affect the interpretation of how threatening the event is (Lazarus & Folkman, 1984). Included in this category are religious beliefs, beliefs of personal control, and cultural beliefs (Lazarus & Folkman, 1984).

Religious beliefs are seen to influence both the primary and secondary appraisal processes (Park, Cohen, & Herb, 1990). The same event may take on different meaning for persons of different religious backgrounds. For example, the same serious illness may be interpreted as a punishment or as a means of strengthening one’s inner resources, depending on the religious beliefs of ill persons and their families. Park and colleagues studied a sample of 83 undergraduates (44 Catholics and 39 Protestants). They anticipated that intrinsic religiousness would be a buffer when confronting uncontrollable life events. An unanticipated finding was that there were differences between the two religious categories with respect to the effect of intrinsic religiousness on coping, anxiety, and depression. Although this study must be interpreted with caution due to design limitations, it points out the value of exploring the effect of a person’s religious background on his or her ability to cope with a stressor.

Maton (1989) found that bereaved parents who had reported high levels of spiritual support also reported more favorable well-being. The same effect was found in a subsequent study for high-stress college students. The hypothesis that intrinsic religion acts as a buffer in stressful situations was supported.

People who have an internal locus of control believe that events are contingent upon their own behavior, whereas those with an external locus of control feel that the same events are contingent upon luck, fate, chance, or powerful others (Rotter, 1966). Persons with an internal locus of control are more likely to interpret ambiguous situations as being within their control. Therefore, persons with an internal locus of control would be more likely to believe that there were things they could do to alter the situation and decrease the threat. A sense of personal control is, therefore, likely to affect both the primary and secondary appraisal processes (Folkman, 1984). However, Folkman (1984) believed that the issue of internal versus external control is not as straightforward as Rotter postulated. She stated that there are situations in which perceived control increases the threat felt by the person rather than causing it to decrease. For example, consider a patient who is told he can control his malignancy by subjecting himself to chemotherapy. Exercising the control mechanism, that is, taking the chemotherapy, may control the malignancy but increase the stress to the patient’s body.

Diaz-Guerrero (1979) postulated that there is enough evidence to accept the existence of culture-based differences in coping styles. His analysis of American and Mexican coping styles showed that Americans cope with life stressors by actively modifying the physical, interpersonal, and social environments. On the other hand, Mexicans passively endure stressors with a strong bent toward self-modification rather than changing the situation. He stated that little is known about how these differences evolve but that mothers do reinforce different behaviors. Regardless of the process of acquisition, the style differences are ingrained, according to Diaz-Guerrero, by the age of 6 years.

Copings with disability has also been found to vary according to the cultural background of the disabled per-
son and his or her family members (Ingstad, 1988). Ingstad analyzed data from studies of Norwegian and Botswana parents with disabled children. There were many differences in the interpretation of the meaning of the event to the parents. For example, in both groups, some parents cited God’s will as the reason for the birth of a disabled child. However, the connotation in which this explanation was used was quite different between the two cultures. The Norwegian parents viewed it as a punishment from God, whereas the Botswanan parents saw it as a positive expression of God’s faith in their ability to handle the event.

It can be seen that cultural differences may affect both the primary and secondary appraisal processes. That is, culture can influence the perceived level of threat as well as limit or broaden the choice of coping strategies.

Physiological Arousal

In a study of active and passive coping techniques (i.e., a reaction time test vs. tolerance of a cold pressor cloth), Light (1981) found that active coping led to large sympathetically mediated heart rate and blood pressure increases. Active coping techniques include those that allow the subjects to actively do something to reduce their feelings of stress, whereas passive techniques only allow people to control their reaction to the stressor. Light speculated that the observed increase in sympathetic activity is due to inappropriate mobilization of adaptive mechanisms. The purpose of these mechanisms is to respond rapidly in order to prepare the body for fight or flight. As mankind has evolved, the fight-or-flight response is no longer always appropriate in stressful situations. In modern society, coping with a stressor tends to require mental rather than physical effort.

Obrist (1981) corroborated this finding. He reported a similar study that showed that passive coping leads to activation of the parasympathetic system, which helps to relax the person, and active coping leads to activation of the sympathetic system, thereby increasing cardiovascular output.

Bandura (1977) stated that the physiological arousal that occurs in stressful situations has an informative value concerning the person’s ability to handle a stressful situation. He stated that high states of arousal tend to debilitate performance, whereas low states of arousal allow the person to take action to handle the stressor. Physiological processes therefore affect the person’s interpretation of the level of threat and the selection of coping strategies.

Age

Folkman and Lazarus (1980) originally concluded that there were no age-related differences in coping style. This finding has, however, been refuted by a subsequent, more in-depth study (Folkman, Lazarus, Pimley, & Nova-

cek, 1987). Older people were found to use more passive techniques that are intended to control the emotions created by the stressor (i.e., emotion-focused coping strategies), whereas younger people used more active techniques intended to alter the stressful situation (i.e., problem-focused coping strategies). It is important to point out that the authors also found significant differences between the old and young samples with respect to the sources of stressors. The younger group reported a preponderance of stress coming from the areas of finances and work. The older group’s major stressors came under the categories of health, social issues, and home maintenance. However, the differences in coping styles did not disappear when the differences in sources of stressor were controlled. The authors hypothesized that the differences may be due to a difference in appraisal of changeability. That is, older persons may perceive the situation to be unchangeable and therefore react differently than young people, who perceive that they can alter the situation. This would mean that the primary appraisal process had been affected. However, because there were also differences with respect to passive versus active coping strategies, one could also hypothesize that age affects the secondary appraisal process.

Social Support

Exactly how the availability of social support enhances coping ability is as yet unknown (Gore, 1978; Pearlin & Schooler, 1978; Thoits, 1986). A better understanding of how social support reduces symptoms of anxiety and despair must be developed to create effective intervention models (Thoits, 1986). Thoits defined social support as the functions performed for a distressed person by significant others, such as family members, friends, coworkers, relatives, and neighbors.

Gore (1978), in a classic study of social support, looked at the effects of social support on rural and urban men who became unemployed when two plants shut down. She found the following stages of adjustment: anticipation, termination, and readjustment. The rural dwellers had, on average, more social support available to them. The results demonstrated that those who had good social support systems reported fewer illness symptoms and suffered from fewer depressive symptoms than those with poor social support systems. Interestingly, the availability of social support had more of an effect on depression than did the unemployment.

Thoits (1986), through a literature review, identified three categories of coping: emotion-focused, problem-focused, and perception-focused. Emotion-focused coping strategies are seen to help control the emotional reaction to the stressor (Lazarus & Folkman, 1984). Problem-focused coping strategies intervene to change the person–environment relationship in a way that will reduce the perceived threat (Lazarus & Folkman, 1984).
Perception-focused strategies attempt to change the person's interpretation of the event. Pearlin and Schooler (1978) identified this classification of strategies that were later named by Thoits (1986). For example, if employees are ordered to do something that contravenes their ethical standards, they may rationalize that the boss is really the person who is being unethical. This effectively reduces the threat and manages the situation.

Thoits (1986) conceptualized social support as coping assistance, because a comparison of social support strategies and coping strategies revealed that there were similar strategies in each category with similar objectives. However, in the case of the social support strategies, the objective is reached with assistance of a support person.

For example, the social support strategy of instrumental support parallels problem-focused coping in that both are aimed at changing or managing the troubled person-environment relationship. In the case of instrumental support, assistance is given in the change or management process, whereas with problem-focused coping, the person is independently responsible for managing the stressor. The conclusion that social support is really coping assistance leads to the assumption that research into the kinds of coping strategies that are effective will also be fruitful in determining what kind of social support will be most effective. Conceptualization of social support as coping assistance leads to the prediction that social support has a major effect on the primary appraisal process. Having someone available to assist with the coping process would surely be a reassuring factor and may in fact decrease the level of perceived threat.

If the person receiving the social support is similar in sociocultural experience and has experience with the same stressor, the efficacy of social support is enhanced (Thoits, 1986). This is evident in the proliferation of self-help groups, where persons who are experiencing the same life stressors share ideas and provide moral support (i.e., Parents Without Partners; Stroke Recovery Association).

The data regarding the positive influence of social support on coping ability are not conclusive. There is some indication that social support may not be as beneficial as is widely assumed. Social support does not always buffer the effect of uncontrollable factors, such as poverty, on coping ability (Singh & Pandey, 1990). We need more research and analysis of the way in which social support and coping ability interact.

Empowerment

Rappaport (1984) defined empowerment as "the mechanism by which people, organizations, and communities gain mastery over their lives" (p. 3). According to Durst (1988), empowerment necessitates facilitation of access and control of needed resources, gaining of decision-making and problem-solving abilities, and acquisition of the instrumental behaviors needed to interact effectively with others to procure resources.

Persons with disabilities must often overcome feelings of dependency and powerlessness and gain, a sense of control and accomplishment. How this happens is not well understood or documented in the literature (Lord & Farlow, 1990). In an attempt to fill this void, Lord and Farlow interviewed persons who had been dependent and powerless. The kind of interventions that these subjects found most helpful were personalized, interactive, and focused on reduction of dependency. Seemingly simple accomplishments, such as being able to open a can, were symbolically empowering events in the lives of many of the subjects of this study.

If a person does not feel empowered, then he or she will not even attempt to engage in coping behavior (Strong, 1989). He or she will instead wait for someone else to intervene. Therefore, empowerment of the client is predicted to affect the secondary appraisal process.

If clients are to be empowered through the treatment process, then the system must become client-driven, with the focus on the client's needs and abilities (Strong, 1989). This concept is certainly not foreign to occupational therapists; it represents a value that has long been held by the profession (Yerxa, 1983), although it has not typically been called empowerment.

Efficacy

Efficacy refers both to Bandura's (1977) concept of perceived self-efficacy and to Rogers's (1983) concept of response efficacy. Rogers (1983) believed that whether or not a person acts to protect himself or herself from a possible threat depends on the perceived magnitude of noxiousness of the event, the conditional probability that the event will occur provided that no adaptive activity is performed, and the perceived effectiveness of a coping response that might avert the noxious event. This last concept is referred to as response efficacy. If the person did not believe that a specific coping strategy would be effective, then it is unlikely that he or she would implement the strategy. For example, if a smoker does not believe that smoking negatively affects his or her health, then he or she will not quit smoking.

The concept of perceived self-efficacy has its roots in social cognitive theory that explains human behavior in terms of triadic reciprocity (Bandura, 1986). That is, behavioral, cognitive, and other personal factors and environmental events are interacting determinants of each other. Professionals who develop programs within this framework do not focus solely on behavior. Instead, changes in the environment, the person, and his or her behavior are all facilitated with an expectation that a change in one will produce a change in the others (Perry, Baranowski, & Parcel, 1990).

Self-efficacy refers to the person's judgment of
whether he or she is capable of performing a given task (Bandura, 1977). It is postulated that people are influenced more by their perceptions of previous success than by success itself. Bandura (1982, 1986), working with people suffering from snake phobias and with cardiac patients, found that increasing perceived efficacy led to higher performance accomplishments. To the extent that this is true, the concept of perceived self-efficacy is particularly salient to the practice of occupational therapy. It is highly possible that enhancement of perceived self-efficacy may lead to improved occupational therapy outcomes.

One must differentiate between outcome and efficacy. Persons may believe that a specific behavior will lead to a certain outcome, however, they will perform the behavior only if they believe that they can perform the behavior (Bandura, 1977). A desirable outcome may, therefore, fail to elicit performance attempts if the person does not feel capable of performing the required behavior. In the smoking example, if the person does not perceive himself or herself to be capable of adhering to the program, then he or she may not even attempt the behavior. Thus, having a repertoire of coping strategies that the person believes he or she is able to perform contributes to his or her sense of self-efficacy.

Efficacy, therefore, encompasses both the person’s perception of his or her ability to carry out the activity and his or her belief that the recommended response will bring the desired results. It follows that a coping response that persons feel unable to perform or that they believe to be ineffective if performed would not be considered in the secondary appraisal process as an available resource.

Novelty

Experience with an event generally decreases the perceived level of threat (Lazarus & Folkman, 1984). The amount of decrease in perceived threat depends on the person’s assessment of his or her historical success in dealing with the event, that is, with his or her perceived self-efficacy (Bandura, 1982).

The anticipatory increase in heart rate is greater when the subject has had no experience with the aversive event (Obrist, 1981). Thus, even at a physiological level, novelty enhances the stress reaction.

Sex

In a study of 100 subjects, Folkman and Lazarus (1980) found that women reported more health and family stressors than men, whereas men reported more work stressors than women. Men also reported the use of more problem-focused coping strategies in situations that had to be accepted. Men and women varied little with respect to their interpretation of events (primary appraisal), and there were no sex differences with respect to the use of emotion-focused coping. Women reported more health-related threats than men, and health-related threats resulted in the use of emotion-focused coping. However, within the category of health threats, men and women used emotion-focused coping equally. Had the sources of stress not been adjusted, the authors may have erroneously concluded that there were sex-based coping styles. Therefore, it is necessary when studying sex differences to look at the differences in sources of stress before drawing conclusions about coping styles.

In a subsequent study, sex differences were found to be minimal (Folkman et al., 1987). Men used more self-control strategies, and women used more positive reappraisal.

In a study of 40 male and 37 female college students, Houtman (1990) found few differences in coping style. Men had higher aerobic fitness levels, and women sought more support than men. When confronted with health problems, women took action at an earlier stage than men.

Sex is a significant correlate of psychological well-being (Borden & Berlin, 1990). Women were found to be more susceptible to psychological stress when confronted with the same stressor as men (i.e., being caregivers of spouses with dementia), even though there was little evidence of differences in the types of coping strategies used. The question of why women are more susceptible to psychological distress remains unanswered.

The effect of sex on the appraisal process is therefore likely a minimal one. However, because the difference in psychological well-being is unexplained, we must continue to explore the effect of sex on the outcome of coping efforts.

Mood

Salovey and Birnbaum (1989) induced different moods to an ill population of university students. They found that the number of aches and pains experienced was significantly affected by negative mood states. Subjects who were experiencing positive moods felt more able to carry out health-promoting and illness-alleviating behaviors. However, this finding was not statistically significant. As this relates to perceived self-efficacy, mood is expected to affect secondary appraisal.

Information

Sufficient information is necessary if people are to choose an effective strategy to deal with the stressor or to assess the level of threat accurately. A person facing financial crisis needs to know about all the community resources available to assist him or her. If he or she is, for example, unaware of available financial counseling services, then he or she would be unable to choose financial counseling as an alternative; yet, it may be the alternative that would be most successful.
Some studies evaluated by Suls and Fletcher (1985) looked at the effect of information about the forthcoming stressor versus no information. They found that subjects who received information coped significantly better than subjects who received no information.

**Skills**

If a person is to cope effectively with a situation, then he or she must have the skills required to carry out the coping plan (Bandura, 1977; Kennett, Bleasdale, Pitt, & Blom, 1990). Identification of the most effective means of coping with a stressor is the first step in effective coping. However, the ability to plan a coping strategy is consequential if the person does not possess the skills necessary to carry out the plan successfully. In addition, coping strategies that require skills that the person does not possess will not be identified during the secondary appraisal process. This may result in an increase in the level of threat appraised during the primary appraisal process. Occupational therapy is "concerned with providing functional experiences which enhance self-worth in a way which assists individuals to reach their potential" (Health and Welfare Canada, 1983, p. 8). As such, occupational therapists are in a position to teach effective coping skills.

**The Coping Plan**

The intersection of the primary and secondary coping circles represents the formulation of the coping plan. Coping, within the framework of this model, is viewed as having two primary functions (Lazarus & Folkman, 1987). Coping can intervene to alter the emotional reaction (emotion-focused coping) or to change the situation (problem-focused coping). Strategies that alter the meaning of the event (perception-focused coping) are not specifically named by Lazarus and Folkman but appear to be considered emotion-focused strategies.

Both problem-focused and emotion-focused coping strategies are used in virtually every situation (Folkman & Lazarus, 1980). Subjects used an average of 6.5 coping strategies per stressful situation (Folkman, Lazarus, Gruen, & DeLongis, 1986). The amount of each category of coping technique that subjects used varied with the appraisal of what was at stake and how changeable it was. Positive reappraisal of the situation was the most stable coping strategy, that is, it was the strategy that appeared to be used regardless of the nature of the stressor. Pearlin and Schooler (1978) found definite patterns to people's choices of strategies in each of the four life roles. In marriage and parenthood, self-reliance was more effective than the seeking of assistance. In vocational endeavors, avoidant strategies were more predominant. Stress was virtually eliminated when between five and six different strategies were used concurrently to cope with the same stressor. Except in the vocational category, increased coping efforts decreased the resultant stress reaction. The authors hypothesized that vocational stressors may be more outside of the person's control, thus coping efforts were ineffective. Singh and Pandey (1990) also found that people use multiple, complementary strategies when dealing with a stressor.

Smith, Patterson, and Grant (1990) defined avoidant coping strategies as self-blame, wishful thinking, and avoidance. They found that within a geriatric sample, the use of these avoidant strategies was associated with a higher level of psychological stress 4 months later. However, the type of event being coped with was not controlled and may explain this effect. As noted earlier, when the source of the stressor is controlled, differences in coping techniques are eliminated (Folkman & Lazarus, 1980).

Bombardier, D'Amico, and Jordan (1990) studied a group of 101 admitted patients with combined medical and psychiatric conditions. An admission criterion was that the patient's level of dysfunction must be out of proportion to observable physiological or structural abnormalities. The subjects filled in questionnaires regarding their ways of coping, their functional status, level of depression, and symptom severity. The admitting physician rated the physiological or structural abnormalities on a 6-point scale. An emotion-focused style of coping, consisting of wishful thinking, self-blame, and avoidance, predicted poorer adjustment to the illness. These three coping styles together explained 33% of the variance in psychosocial functioning. It was also found that the belief that one could change the condition or that one must accept the condition both lead to more problem-focused coping. Patients who believe that they must avoid doing things that they wish to do are prone to more emotion-focused ways of coping, greater depression, and poorer psychosocial adjustment. This study is correlational in nature, and the results must not be interpreted as a cause-and-effect relationship. However, this information can be used to assist in the design of remediation programs that will test the effect of altering a person's coping style on his or her adjustment to their disease.

The combination of actions that are believed to be most appropriate to the situation form a coping plan. This plan appears to be affected by both the emotional reactions and the specific situation with which the person must cope. The Appraisal Model of Coping, therefore, views the plan as a product of the interaction of the primary and secondary appraisal processes, which is represented by the intersection of the two appraisal circles (see Figure 1).

**Outcome Appraisal**

Outcome appraisal is the process by which the person coping with the stressor evaluates the effectiveness of the initial coping plan. I added the outcome appraisal process
to the Appraisal Model of Coping in response to Bandura's (1986) theory that posits that behavior, personal factors, and environmental events are interacting determinants of one another. This is referred to by Perry et al. (1990) as reciprocal determinism. The cognitive relational theory of coping (Lazarus & Folkman, 1987) alludes to, but does not address, the influence of the initial coping efforts on subsequent behavior. Bandura (1977) stated that a change in behavior, personal factors, or the environment will result in a change or changes in each of the other two factors. It follows that the implementation of the initial coping plan may alter the primary or secondary appraisal processes either directly or by altering one of the influencing factors.

The concept of outcome appraisal in the Appraisal Model of Coping generates the two performance feedback loops. As shown in Figure 1, there are two proposed paths along which performance feedback travels. The first path directly links outcome appraisal to the primary and secondary appraisal circles. This indicates that the perceived efficacy of the coping plan directly affects the perception of threat and the assessment of the coping strategies available to deal with the altered level of perceived threat. The second path provides performance feedback to all of the factors that influence the primary and secondary appraisal processes. For example, if the coping plan is working well, the performance feedback will increase the person's perceived level of self-efficacy because the person is now reassured that he or she is capable of effectively managing the stress. This in turn affects the primary and secondary appraisal processes by decreasing the perceived threat and lessening the need to generate alternative coping strategies. This feedback loop cannot, of course, alter all of the factors affecting the appraisal process, in that the factors of age and sex are biologically determined.

**Final Outcome**

The appraisal and reappraisal processes continue until the stressor has been effectively dealt with or the stressful event is over. The cycle begins again whenever a stressful event is anticipated or being dealt with. The same cycle may be ongoing for several stressors concurrently.

**Application to Occupational Therapy Intervention**

A review of occupational therapy literature confirms that there has been a long-standing interest in assessment and treatment of patients who need to cope more effectively (Burke, 1984; Courtney & Escobedo, 1990; Klein, 1988; Oakley, Kiellhoffner, & Barris, 1985; Skinner, 1987; Trombly & Scott, 1977). This literature concentrates on the development of coping skills with the expectation that once a skill is learned it will be used. The Appraisal Model of Coping provides a basis for understanding other factors that interfere with skill use. It also provides a conceptual basis for the development and subsequent evaluation of holistic programs that mitigate these factors. Although skill development is an important focus of occupational therapy practice, we must concentrate not only on the development of the components of the skill, but also on removing barriers to the use of the skill once it has been attained.

When an occupational therapist is treating a client who is coping with a major life event, it is important for him or her to understand the forces affecting the patient’s choice of coping plan. This is particularly true if the selected coping strategy is negatively affecting the patient’s progress in occupational therapy or his or her ability to cope with daily life stressors. Coping that results in an inability to handle the stresses of daily life will henceforth be referred to as maladaptive coping.

The Appraisal Model of Coping can be used to identify the rationale for selection of the coping plan. The client could be evaluated to determine whether one of the three appraisal processes or any of the influencing factors are responsible for the maladaptive coping behavior. The therapist could explore with the client whether he or she believes that he or she has a stake in the event (primary appraisal) and all of the reasons for that belief. For example, the therapist could question whether it is a cultural or existential belief that is creating the intense fear reaction. The therapist can then explore what the client sees as his or her coping resources (secondary appraisal), including how all the factors influencing the delineation of coping resources are influencing the decision process. Finally, the therapist can explore the person’s experience to date with the stressor and whether he or she perceives his or her coping plan to be effective (outcome appraisal).

This exploratory process should lead to a better understanding of the client’s interpretation of the situation. The therapist can then assist in the reappraisal process by targeting the affected areas. For example, if belief in the efficacy of the prescribed treatment is a problem, then the therapist can provide more credible sources of information. The sources would have to be credible to the client, not the therapist. If the major issue were incubation of threat, perhaps strategies for ensuring that the event occurs sooner could be explored.

Intervention could involve facilitation of change to any one of the three appraisal processes or to any of the factors that influence the appraisal processes. Research would then revolve around identifying the best methods of assessment and alteration of the factors responsible for the patient’s maladaptive coping.

There also will be a need to acknowledge and accept unchangeable factors, such as dearly held beliefs and the patient’s age. The emphasis then would be on how to work around the beliefs to facilitate adaptive coping strategies. It is worthy of note that the term facilitation is
frequently used in this paper when referring to occupational therapy intervention. This is due to the belief that the client is ultimately responsible for the change. The therapist simply provides the additional information or experience needed to enhance the client’s awareness of what is possible and to support the change process.

Future Development

The Appraisal Model of Coping is a new synthesis of the literature and as such requires further development with respect to its application to the assessment and treatment of clients seen by occupational therapists. An extensive review of the literature on each of the influencing factors is recommended. The objective of this intensive review would be to gain an understanding of each of the influencing factors from a broad literature base and to identify ways of intervening to change the effect they have on coping. For example, by researching the influencing factor of physiological arousal, one would find a wealth of information about relaxation training and biofeedback (Blumenthal, 1985). This information would assist with the development of evaluation tools and effective intervention processes. The influencing factors that can be changed (i.e., physiological arousal, social support, empowerment, efficacy, information, and skills) should be the subject of the most intensive review. To this end, the concept of perceived self-efficacy is currently being reviewed, and a measurement tool that will be used in future occupational therapy outcome research is being developed.

Summary

The Appraisal Model of Coping is a tool that shows a great deal of promise in the practice of occupational therapy. Its emphasis on person-environment interaction is a concept that is congruent with the values of the profession, as stated by Yerxa (1983). Occupational therapists value the uniqueness and strengths of the person and, therefore, the ability to look at coping as an individual appraisal process has a goodness of fit to the occupational therapy process.

Bandura (1977) stated, “On the one hand, the mechanisms by which human behaviour is acquired and regulated are increasingly formulated in terms of cognitive processes. On the other hand, it is performance-based procedures that are proving to be most powerful for affecting psychological changes” (p. 191). The occupational therapy process, which emphasizes the use of activity as a method of treatment, is therefore likely to be very effective in altering people’s coping mechanisms. Guidance by an occupational therapist to ensure that patients experience success with new behavioral techniques will be instrumental in enhancing coping success. 

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