

WAYS OF COPING  
REVIEW

## Coping Theory and Research: Past, Present, and Future

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### INTRODUCTION

In this essay in honor of Donald Oken, I emphasize coping as a key concept for theory and research on adaptation and health. My focus will be the contrasts between two approaches to coping, one that emphasizes style—that is, it treats coping as a personality characteristic—and another that emphasizes process—that is, efforts to manage stress that change over time and are shaped by the adaptational context out of which it is generated.

I begin with an account of the style and process approaches, discuss their history briefly, set forth the principles of a process approach, describe my own efforts at measurement, and define coping and its functions from a process standpoint. This is followed by a digest of major generalizations that resulted from coping process research. The essay concludes with a discussion of special issues of coping measurement, in particular, the limitations of both coping style and process approaches and how these limitations might be dealt with.

There has been a prodigious volume of coping research in the last decade or two, which I can only touch on very selectively. In this essay, I also ignore a host of important developmental issues that have to do with the emergence of coping and its cognitive and motivational bases in infants, as well as a growing literature on whether, how, and why the coping process changes with aging.

### APPROACHES TO COPING: STYLE VERSUS PROCESS

In one form or another the concept of coping has been with us for a long time, though it began to come into its own formally during the 1960s and 1970s, along with the burgeoning interest in stress.

If we think of coping as a generic concept that includes ego-defenses, which deal with threats to one's psychological integrity, then the psychoanal-

ytic interest in defense was clearly its forerunner. The earliest psychoanalytic interest in defense centered on its role in psychopathology as a characteristic style for managing threat. A powerful psychoanalytic concept, which greatly influenced personality and clinical psychology, was that each form of psychopathology was associated with a particular *defensive style*. For example, hysterical neuroses were linked to repression, obsessive-compulsive neuroses to intellectualization and undoing, paranoia to projection, and so forth.

This view flowed from the theoretical convergence postulated in Freudian theory between three developmental variables: (a) the psychosexual stage of childhood development at which trauma occurs; (b) the primary impulses and conflicts of each particular stage—for example, oral dependency, anal-centered struggles over the social control of instinctual drives, and phallic and oedipal conflicts; and (c) the child's cognitive characteristics at each stage, which presumably shape the defensive style.

Despite the elegance and potential power of this formulation, the close association between developmental stage, the content of impulses, and cognitive characteristics does not show up clearly enough in observation to provide adequate support for it. The link between forms of psychopathology and specific defenses is also a bit too neat to be generally applicable—it is more a conceptual ideal rather than a clinical reality. In many quarters, psychosexual theory has given way to a greater emphasis on other cognitive-motivational processes—an outlook articulated in psychoanalytic ego-psychology—such as the development of competence and control and, of course, defense. In any case, the psychosexual formulation has lost influence in clinical research and practice.

Some of the familiar writers who were actively pursuing variants of this psychoanalytic thesis included Rapaport et al. (1) with their influential monograph, *Diagnostic Psychological Testing*, Schafer (2), Holzman and Gardner (3), Witkin et al. (4), Klein (5), Shapiro (6), and their many ego-psychology and developmental mentors (see also Ref. 7 for a detailed historical account). These are classic works that were greatly admired by many of us of an earlier generation.

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### Coping as Hierarchical Styles

The work of Menninger (8), and more recently Haan (9) and Vaillant (10), drew on a hierarchical approach to coping derived from the developmental psychoanalytic formulation. Some defenses were said to be more healthy or less regressed than others—presumably as a result of stress or trauma. For example, Haan proposed a tripartite hierarchy with *coping* as the most healthy and developmentally advanced process of adaptation, *defense* as a neurotic process, and *ego-failure* as the most severely regressed and perhaps psychotic adaptive process.

A Chicago research group, headed by Roy Grinker, Sr., at Michael Reese Hospital (e.g., Ref. 11)—which, incidentally, included Donald Oken—focused less on the strictly Freudian developmental formulations with its emphasis on early childhood and more on the contemporary scene of the patient's life. For this group, too, coping and defense were also central concepts.

Hierarchical, developmental approaches tended to spawn trait measures of coping, such as the contrast between repression (avoidance or denial in some versions)—sensitization (vigilance, isolation, or intellectualization in some versions). In a review of coping theory and assessment, Cohen (12) cites a number of questionnaire measures of this contrast, treated either as a single dichotomy or a continuous dimension. Her list includes a questionnaire published by Byrne (13), another by Epstein and Fenz (14), and a non-questionnaire measure developed by Goldstein (15), named the Coping-Avoidance Sentence Completion Test. She also cites two Rorschach indexes, one by Gardner et al. (16), the other by Levine and Spivack (17), which employ the related language of repression-isolation. Finally, two multidimensional sets of measures, The Defense Mechanism Inventory of Gleser and Ihilevich (18), and the Coping-Defense Measure of Joffe and Naditch (19), are also mentioned.

Not all research on coping style draws on standardized measures, such as those cited above. Many are ad hoc procedures using in-depth clinical interviews (20–22). Still others have employed Grounded Theory (23), which does not employ interpretive criteria in advance but generates models and hypotheses about what is happening from spoken or written products (e.g., Ref. 24).

### Coping as Process

In the late 1970s a major new development in coping theory and research occurred in which the

hierarchical view of coping, with its trait or style emphasis, was abandoned in favor of a contrasting approach, which treated *coping as a process*. From a process perspective, coping changes over time and in accordance with the situational contexts in which it occurs.

A hierarchy of coping strategies based on preconceived notions about their inherent health or pathology runs the danger of confounding process and outcome, which is particularly evident in Vaillant's otherwise impressive longitudinal research. Diagnoses of the type of defense employed by his subjects depended to some unknown extent on prior notions about how healthy they are as coping strategies, which may well have influenced later evaluations of the quality of adaptation. As we shall see, a tenet of process approaches is that process and outcome should be measured independently.

My own approach to the study of the coping process had its origins in stress film and sound track research at Berkeley in the 1960s (see Refs. 25–29, 76). In the late 1970s, and within a few years of each other, a number of researchers including myself (e.g., Refs. 30, 31; see also a review of 10 years of research by Lazarus and Folkman (32); also Refs. 33–35) developed measurement approaches bearing the same metatheoretical stamp. These pioneering efforts were followed by additional questionnaire versions designed also to measure and study coping as a process and examine its consequences for adaptation. These additional versions overlapped heavily with earlier ones (e.g., Refs. 36, 37).

### Principles of the Process Approach

Below is a set of the metatheoretical principles my colleagues and I have enunciated over the years that, I believe, is reasonably representative of most current approaches to coping as a process:

1. Coping thoughts and actions under stress must be measured *separately from their outcomes* in order to examine, independently, their adaptiveness or maladaptiveness. I make the contextualist assumption—with considerable empirical support—that whether a coping process is good or bad, adaptationally speaking, depends on the particular person, the specific type of encounter, in the short or long run, and the outcome modality being studied, for example, morale, social functioning, or somatic health. There may be no universally good or bad coping processes, though some might more often be better or worse than others.

Thus, denial, which was once regarded by ego-

psychologists as pathogenic, may be useful for adaptation under certain definable circumstances, as I proposed some years ago in discussing its costs and benefits (38). Although a full analysis of definitional and measurement problems with respect to denial has not been made—for example, to what extent denial is different from avoidance and illusion—much interest in the consequences of denial for somatic and mental health has been generated in recent years. Health-related targets of this interest include heart attacks, surgery, asthma, and other illnesses.

In this vein, observations of the course of a heart attack suggest that denial has different consequences, a) when symptoms first arise and must be interpreted by the victim to decide what to do, b) during the post-coronary period in the hospital, and c) after discharge from the hospital. Denial appears to be counterproductive and dangerous when the person is interpreting symptoms—it commonly results in delays in getting help at a most dangerous time—however, it is useful in the post-coronary hospital care period, but again becomes increasingly counterproductive and dangerous if it continues as a strategy of coping too long after discharge from the hospital (e.g., Refs. 39, 40). A full current review of this kind of research would, I think, be a very worthwhile enterprise.

Research has also suggested that denial has favorable consequences for several adaptational outcomes of surgery, for example, rate of healing, presence of minor complications, and the duration of hospitalization (41). The story is different for asthma, however. Although denial leads to lower levels of apprehension when symptoms of an upcoming asthmatic attack begin to appear, it is also associated with a greater likelihood of hospitalization for an acute asthmatic attack. Vigilant coping, on the other hand, may lead to effective efforts to abort the attack by, say, using an inhaler or taking other medication, so that patients who cope in this way are rarely hospitalized (42).

2. If one asks patients how they cope post-surgically with, say, breast cancer, the answer is apt to be misleading because the coping strategy depends on whether, at any given time, they are dealing with one or another of the diverse threats engendered by the disease. Thus, what a person does to cope depends on the context in which the disease occurs, and this will change over time because what is attended to, and the threats themselves, also change (43–45).

The threat focused on by the patient at any moment might be the likelihood of recurrence of the

malignancy—depending, of course, on whether it is near the time at which a post-surgical diagnostic examination is scheduled. If it is, then the danger of recurrence will probably be at the center of attention. However, at other times thoughts about recurrence may be avoided. Alternatively, the focus of threat may be having to tell a spouse, friends, parents, or children about what is happening. The stage of the illness, that is, whether the cancer is early or well-advanced, strongly influences the patient's state of mind. An advanced cancer may create the need in a patient to think about whether to continue or discontinue debilitating treatment, to deal with the growing imminence of death (46), and so forth.

The principle here is that the process of coping employed for the different threats produced by cancer, or any other complex source of psychological stress, whether disease-based or not, varies with the diverse adaptational significance and requirements of these threats. Therefore, when studying how the patient copes with this illness, it is necessary to specify the particular threats of immediate concern to the patient and to treat them separately rather than broadening the focus of attention to the overall illness.

3. What is most needed in coping measurement is to describe what a person is *thinking and doing* in the effort to cope with stressful encounters. The inference about how the person is coping is then made not by the person being studied but by the professional observer.

This sort of measurement should also be employed repeatedly over time and across diverse stressful encounters in research designs that are *intraindividual as well as interindividual*. This would enable the researcher to examine both consistencies and inconsistencies in the way individuals cope over time and across stressful encounters.

A combined intra- and interindividual research design allows us to view coping in both its state and trait aspects, state representing instability (flux) or change, trait representing stability or consistency across diverse conditions. If we emphasize coping consistency over time and across encounters, we are dealing with the trait concept; if we emphasize contextual influences and coping inconsistency over time and across encounters, we are dealing with the state concept or process. They are two sides of the same coin, and both sides are usually relevant. The more consistency, the more the trait side stands out; the more inconsistency, the more the state (or process) side stands out. The trait-process (state) issue cannot be studied empirically unless coping strate-

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gies are examined in the same persons over time or across stressful encounters.

These considerations, in part, led the Berkeley Stress and Coping Project to develop the *Ways of Coping Questionnaire* (47), which is currently the most widely used technique of its kind, whether it is used in the form of an interview or self-administered. This approach was designed to make possible a process, contextually oriented approach to coping rather than to study coping as a stable disposition. Our process coping scales—and others like them—invite the subject to endorse whatever thoughts and actions, presented as a list, were employed to cope with a particular stressful encounter. The most sophisticated versions are factor-analyzed to generate a set of different strategies, constructed on the basis of both theory and the way the items behave psychometrically.

There are eight factors in the *Ways of Coping Questionnaire*. Table 1 presents sample items from each scale. The scales developed by other researchers contain overlapping, though not identical, items

and are defined by overlapping, though not identical, conceptual labels.

4. From a process standpoint, *coping is defined as ongoing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person*. The definition can be simplified—though with a loss of some information—by saying merely that coping consists of cognitive and behavioral efforts to manage psychological stress. From a measurement and research standpoint, this type of formulation emphasizes that the coping *effort* is independent of the *outcome* so that its role in influencing adaptational outcomes can be independently assessed.

Notice that the term coping is used whether the process is adaptive or nonadaptive, successful or unsuccessful, consolidated or fluid and unstable. *Adaptive* refers to the effectiveness of coping in improving the adaptational outcome, for example, morale, physical health, and social functioning. *Success* refers to the extent a coping-related (or defen-

TABLE 1. Sample Items from the Ways of Coping Questionnaire

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Factor
1. Confrontive coping
46 Stood my ground and fought for what I wanted.
7. Tried to get the person responsible to change his or her mind.
17 I expressed anger to the person(s) who caused the problem.
2. Distancing
44. Made light of the situation; refused to get too serious about it
41. Didn't let it get to me; refused to think about it too much.
21. Tried to forget the whole thing.
3. Self-controlling
14. I tried to keep my feelings to myself.
43. Kept others from knowing how bad things were.
35. I tried not to act too hastily or follow my first hunch.
4. Seeking social support
8. Talked to someone to find out more about the situation.
31. Talked to someone who could do something concrete about the problem.
42 I asked a relative or friend I respected for advice.
5. Accepting responsibility
9. Criticized or lectured myself.
29. Realized I brought the problem on myself.
51. I made a promise to myself that things would be different next time.
6. Escape-avoidance
58. Wished that the situation would go away or somehow be over with.
11. Hoped a miracle would happen.
40 Avoided being with people in general.
7. Planful problem solving
49 I knew what had to be done, so I doubled my efforts to make things work.
26. I made a plan of action and followed it.
39. Changed something so things would turn out all right.
8. Positive reappraisal
23. Changed or grew as a person in a good way.
30. I came out of the experience better than when I went in.
36. Found new faith.

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From Folkman and Lazarus, 1988 (Ref. 47).

sive) reappraisal is believed by the person. *Consolidated* means that the person has achieved a stable way of coping or defending under a variety of circumstances; most coping processes, including defenses, are probably the result of a fluid, contextually sensitive struggle to appraise what is happening in a way that is responsive to the realities of a situation yet is also hopeful or even optimistic about how things are going. For example, a person might try unsuccessfully to deny a threat saying, as in an internal dialogue, "I tried to tell myself I was not dying, but I couldn't make it stick."

5. The theory of coping as a process emphasizes that there are at least two major functions of coping, problem-focused and emotion-focused. The distinction is subscribed to widely by coping researchers. The function of *problem-focused coping* is to change the troubled person-environment relationship by acting on the environment or oneself. The function of *emotion-focused coping* is to change either a) the way the stressful relationship with the environment is attended to (as in vigilance or avoidance) or b) the relational meaning of what is happening, which mitigates the stress even though the actual conditions of the relationship have not changed (48). The latter involves a more benign or less threatening reappraisal, as illustrated, for example, in denial and distancing.

Changing the *relational meaning* of what is happening is a very powerful—and widely employed—device for regulating stress and emotion. For example, a loved one makes a disparaging comment, which is taken as demeaning. Now suppose the recipient of the provocation wishes very much to avoid feeling and displaying the resulting anger with its potentially negative consequences. If that recipient is capable of making excuses for the loved one, for example, that he or she is ill, worn out, or besieged by work stress—which calls for empathy and forbearance rather than anger—the provocation can be overlooked and the anger need not then be felt or expressed.

In passing, I have long been tempted to think that this strategy of coping is a healthy form of repression or denial. It is not that a recurrent, threatening impulse is blocked from consciousness, but that a reappraisal of what is happening has been made, which eliminates the threat. That the threatening impulse is no longer relevant, and does not have to be blocked from consciousness or from being acted out, makes this change of meaning a healthy and powerful approach to coping. Perhaps some of what we call repression and denial is of this sort.

Of the two functions of coping, problem-focused

and emotion-focused, there is a strong tendency in western values to venerate the former and distrust the latter. Taking action against problems rather than reappraising the relational meaning seems more desirable. Nevertheless, there is ample evidence that under certain conditions—particularly, those in which nothing useful can be done to change the situation—rational problem-solving efforts can be counterproductive, even likely to result in chronic distress when they fail; then emotion-focused efforts would offer the best coping choice (49).

### MAJOR GENERALIZATIONS FROM RESEARCH ON COPING AS A PROCESS

Our research using the Ways of Coping, and by others using scales with a similar outlook and methodology, has produced a number of important and widely replicated generalizations that can be summarized as follows:

1. People use most of the factor analytic strategies of coping in every stressful encounter (31). Why should this be so? Because stressful encounters are complex and take time. However, it is difficult to say to what extent coping strategies are linked either to particular facets of the encounter—say, the threat contents, the goal that is at stake, prior beliefs—or to temporal factors; for example, people might try one strategy but change to another on the basis of feedback about its consequences. This profound question about whether coping strategies depend on particular threat contents or trial and error over time has not yet been addressed in research. To find the answers requires a microgenetic type of research design.

2. Some strategies of coping are more stable or consistent across stressful encounters than others. For example, in one study we explored five major stressful encounters in the same persons, one per month over 5 months (44, 45). Autocorrelations were used to evaluate the degree of consistency in the same persons across encounters.

We found that some coping strategies were somewhat consistent and others very inconsistent across stressful encounters. For example, seeking social support was very inconsistent, whereas positive reappraisal was modestly—but significant statistically—consistent. In effect, if given persons sought social support in one encounter, there was little likelihood that they would seek it in another. However, if given persons employed positive reappraisal in one encounter, they were also likely to employ it in other encounters. Thus, one could reasonably say

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that seeking social support is highly dependent on the social context while positive reappraisal can be viewed to some extent as a stable coping disposition.

In a similar vein, Scheier et al. (37) have shown that the tendency to be optimistic or pessimistic influences the way the person copes with stressful encounters, thus implicating a personality trait in the coping process. Much more research of this sort is needed to reveal the degree to which diverse coping strategies are influenced by the social context, personality variables, or both.

3. *Coping also changes from one time to another* in any given stressful encounter. This is an empirical statement of what it means to talk about coping as process. A college examination is not a unitary event but involves a complex series of stages related to the formal testing arrangements specified by the instructor. The stages consist of a period of warning of the imminence of the examination, a waiting period after the examination has been taken but before grades are announced, and a period after the grades are announced. There is also a confrontation stage when the students are actually taking the examination, but it is not practical to try to study this stage directly during the examination because students would not cooperate with research that would interfere with their performance when their grade depended on it.

The adaptational demands and information available are quite different in these separate stages. In a quasi-experimental study that separated each of the other stages for observation, Folkman and Lazarus (43) demonstrated that the emotion and coping patterns of students changed dramatically across these stages. With respect to coping, seeking information and social support occurred quite frequently in the anticipatory stage, but dropped sharply in later stages; distancing was the most frequently employed coping strategy during the waiting period but was infrequently employed during other stages.

Thus, if the examination had been treated as a single stressful encounter, and coping had been summated across stages, there would have been great distortion in what might have been learned. To collapse what is happening over time is apt to produce findings that are at best uninterpretable and at worst misleading. Smith and Ellsworth (50) have made similar observations about appraisal, coping and emotion in a college examination, with comparable findings.

It troubles me that in spite of the popularity of our method of coping measurement, the consistent theoretical logic that lies behind it, and the substantial evidence that coping changes with the context and

over time as the status of a problem changes, few studies on coping pay more than lip service to the basic idea, even when they use these scales or ones that are comparable.

4. When stressful conditions are viewed by a person as *refractory to change*, emotion-focused coping predominates; when they are appraised as *controllable by action*, problem-focused coping predominates (see, for example, Refs. 31, 32). This frequently replicated finding links secondary appraisal, which has to do with the options for coping, with the coping strategy employed, and is reminiscent of the sensible, epigrammatic motto of Alcoholics Anonymous, which goes: "God grant me the courage to try to change what can be changed, the serenity to accept what cannot be changed, and the wisdom to know the difference."

5. Coping is capable of mediating the emotional outcome, that is, it changes the emotional state from the beginning to the end of the encounter. Folkman and Lazarus (51) assessed subjects' emotional states at the beginning and end of a number of stressful encounters, focusing on the amount and direction of change as a function of the coping strategy reported. We found that some coping strategies, such as planful problem solving and positive reappraisal, were associated with changes in emotion from negative to less negative or positive, while other coping strategies, such as confrontive coping and distancing, correlated with emotional changes in the opposite direction, that is, toward more distress.

In another study (44) subjects reported on a multiple choice scale that the stress had either been a) unresolved or made worse, b) not changed, c) resolved but not to their satisfaction, d) resolved but improved, or e) resolved to their satisfaction. Satisfactory outcomes were defined as those rated as unresolved but improved (d above) or resolved to their satisfaction (e above).

The relationships between each coping scale and outcome are shown in Table 2. Inspection shows that some coping strategies, such as planful problem solving and positive reappraisal, were significantly associated with satisfactory outcomes, whereas others, such as confrontive coping and distancing, were associated with unsatisfactory outcomes, though these latter two only approached statistical significance.

Since the research design employed in this study required subjects to reconstruct stressful encounters and coping strategies after the stressful encounter had ended, these findings cannot prove the causal role of coping, though they are consistent with theoretical expectations. However, in a prospective

TABLE 2. Relation between Coping and Encounter Outcomes: Intraindividual Analysis

Univariate Tests	Unsatisfactory Outcomes (M)	Satisfactory Outcomes (M)	F	p
Coping scale				
1. Confrontive coping	3.98	3.31	3.34	0.071
2. Distancing	3.35	2.78	3.38	0.069
3. Self-controlling	5.98	5.36	2.53	0.115
4. Seeking social support	4.71	5.16	1.22	0.281
5. Accepting responsibility	1.92	1.65	1.10	0.298
6. Escape-avoidance	2.86	2.64	0.50	0.482
7. Planful problem-solving	6.33	7.59	8.67	0.004
8. Positive reappraisal	2.70	3.90	9.67	0.003

Note. Multivariate  $F(8,76) = 4.64, p < 0.001$ .

From Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen, 1986, (Ref. 44).

study in which coping was measured after the start of the stressful encounter but before the outcome, Bolger (52) obtained findings that strongly supported the proposition that coping plays a causal, mediational role in the emotional outcome.

With respect to the coping mediators of emotion, I might add in passing that under conditions different from those above, for example, in the examination stress study already discussed, when students had nothing to do but wait for word about their grades (43), *distancing* was a very useful coping strategy, which illustrates the point about the dangers of generalizing about the adaptational value of coping strategies without considering the context in which they occur. Again and again we have found that a coping strategy that produces positive outcomes in one context, or in one person, may not in another. We need research to develop rules about the circumstances in which particular coping strategies may have good or bad outcomes.

Another illustration of this applies to *wishful thinking*, which consists of a subset of items falling within the broader coping factor of escape-avoidance. We have noted that escape-avoidance may have positive adaptational value, but this seems never to have been the case in our research thus far for the wishful thinking subset of the escape-avoidance scale. It is tempting to think that we have, at last, found a universally bad coping strategy. After all, one will normally not try to do anything about a negative person-environment relationship if one's coping strategy is to dream or wish that it will go away by itself.

I am reluctant to make this generalization, however, because, like denial, if there is nothing to be done, then wishing should not be harmful. The contextual principle should still be that only when denial or wishful thinking prevents a person from

trying more productive strategies in a situation that can be ameliorated should these strategies have negative consequences. We need more observation to resolve this question.

6. Coping research tends to be directed at two separate but related issues, namely, a) the variables influencing choice of coping strategies and b) the effects of these strategies on adaptational outcomes. With respect to outcomes, the theory of coping links efficacy to the quality of the fit between the coping strategy, its execution, and the adaptational requirements of the encounter. This fit will surely depend on the appraisal that is made, as well as on the extent to which the encounter provides viable coping options.

Although there are many reports of significant effects on adaptational outcomes using process coping scales, the weakest set of generalizations about coping has to do with empirical evidence of its adaptational effects. In much of the research in this area, these outcomes have tended to be based on self-reports of emotional distress or psychological symptoms (for a small sample, see Refs. 22, 44, 53, 54).

Heavy dependence on *self-report criteria* of adaptational outcomes in coping research, illustrated by my own cited above (51), increases the possibility that the correlations are, in some unknown degree, confounded by overlapping antecedent and consequent measures. This is a perennial problem that has plagued research in stress and health, as evidenced by the debate between Dohrenwend et al. (55) and Lazarus et al. (56); see also Lazarus (57), for further discussion of this.

There are, however, some notable exceptions. The most impressive prospective study I have found—using independent observer judgments of adaptational outcomes—is an unpublished dissertation (20)

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in which an effort was made to predict individual differences among cancer-induced laryngectomy patients in how rapidly and effectively they learned to talk with a prosthesis. This is—for many—a very difficult, discouraging, and stressful process, but it is accomplished quite well by some and badly by others. Neither the objective severity of the surgical damage nor the personality traits that were measured beforehand predicted these individual differences. Yet how the subjects appraised and coped with the learning task were strongly predictive of later rehabilitative success, which was reliably evaluated by clinical judgment.

It is very difficult to mount multimethod research in which behavioral and physiological criteria are employed, which is one reason for the extensive dependence on self-reports. Nor would I want to venerate other methods, which have serious problems of their own, by denigrating the value of self-reports. However, multimethod research could demonstrate whether obtained relationships between coping and adaptational outcomes, such as self-reported emotional distress and dysfunction, are capable of being replicated across different research methods or are merely instances of method variance. A general review of research on coping and adaptational outcomes would be valuable, since it would address a major reason for the study of coping, namely, its role in these outcomes.

### SOME SPECIAL ISSUES OF COPING MEASUREMENT

The two approaches to coping measurement, those of style and process, ask different questions and provide different types of answers about coping. Coping style emphasize personality dispositions or traits, which to some extent transcend the influence of situational context and time on the choice of coping strategy. Coping process emphasizes temporal and contextual influences on coping, and the changes associated with them.

A number of important limitations inhere in both the style and process approaches. These limitations have important implications that I would like now to address. I shall not take up purely psychometric issues here because they are tactical or methodological rather than strategic or theoretical, and being somewhat parochial, they are of less interest to the general reader. A few writers have been concerned with the psychometric issues that apply to process measures (58, 59).

### Limitations of the Coping Style Approach

The emphasis on coping style emerged out of an ego-psychology theoretical perspective, which was centered on inner psychodynamics rather than on external environmental forces. In the 1970s, the emphasis shifted for a time to the environment, especially environmental change or life events. However, because the current emphasis is on both sets of factors, the person and the environment which are said to interact, person-environment relationships and especially relational meanings about them are an even more appropriate focus than the simple contrast between intrapsychic and environmental.

If, for example, one is concerned with emotional and coping traits, which are dysfunctional in particular clients in treatment, the main interest lies in the consistent ways these clients interpret self and the world and, therefore, how they cope with stress. Presumably the appraisal and coping processes these clients draw on recurrently are what get them into adaptational trouble. The pathogenic dispositions that lead to dysfunctional appraisals and coping processes are, therefore, at the center of treatment designed to lead to changed ways of relating to the world (see Refs. 60, 61, for discussions of emotion traits and processes in psychotherapy). Then one would want to examine coping dispositions or styles in clinical assessment.

The most serious problem with this emphasis is that one ends up assessing overbroad styles of relating to the world, often as a single continuum or dichotomy, such as repression-sensitization. Styles do not provide us with a description of the detailed, specific strategies of coping employed in particular stress contexts. For example, what do different people think and do when self-esteem has been threatened, when they feel unequal to a task on which social- and self-esteem depends, when there is a threat to health, functioning, and survival, when there has been an irrevocable loss, when another person whose acceptance or affection is an important goal has given signs of rejection or lack of affection, and so on?

To sum up, broad coping styles do not adequately explain or predict intraindividual variations in the way given sources of stress are dealt with in specific contexts. The unidimensional typologies are, perhaps, too restricted in what they say about complex adaptational struggles to have much utility in explaining and predicting what people do when confronted with the many forms of harm, threat, and challenge to which all persons are exposed. Even when multidimensional measures are employed, as



is the case of certain defense mechanism assessments (18), environmental conditions eliciting the coping process tend to be ignored because the focus is centered on consistent coping styles.

Are process approaches capable of identifying coping styles? Two valid methods are available for this. In the first, if we study the same persons repeatedly over time and in different stressful contexts, it is possible to develop a superficial picture of the more consistent strategies of coping the person selects for dealing with diverse and recurrent sources of stress. This kind of picture can be obtained for stresses associated with illnesses such as cancer, for example, as health status deteriorates, in the process-centered methodology employed by Mendelsohn (46), which I cited earlier.

However, there has been little process research generalizing about strategies of coping across different kinds of stressful encounters, using a bottom-up or inductive approach, as it were, an exception being (44). The approach synthesizes coping styles from many specific coping thoughts and acts, which are measured in process terms in a number of particular stressful encounters. The lack of research makes it impossible at present to know whether this kind of approach is a viable alternative to the more traditional methods of measuring coping styles based on a single assessment occasion. The bottom-up approach also permits cluster analyses of patterns of coping in different persons, thereby making it possible to group people on coping patterns, as well as to test the stability of these patterns over time and across stressful encounters.

A second method, which has been used extensively because it is easy to manage, consists of altering the wording of the coping measure by asking how the person usually copes rather than how that person copes with specific threats or stressful encounters. By changing the wording in this way, the process measure of coping is converted into a style measure, on the assumption that the coping pattern reported as "usual" actually took place some of the time, rather than being a construction designed to make sense but which is more fantasy than reality. Our original research purpose of sampling a number of actual, specific stressful encounters was to avoid a fictive answer by the subject. We reasoned that if subjects must remember or relive an actual incident and the coping thoughts and actions employed, there is a good chance that they actually thought or did what they reported.

I think it may be a bad assumption that a subject actually copes in any specific encounter in the way indicated when the word "usually" is used in the

measurement, which is the typical trait or style assessment procedure. Subjects may be giving nothing more than a vague impression about how they would prefer to cope, perhaps influenced by what they believe is socially desirable or ideal, rather than what they actually have thought or done. This problem is also inherent in measures of subjective well-being, which are usually made for an extended time frame rather than a specific moment or circumstance, resulting in a subjective calculus for estimating overall well-being whose mode of operation remains more or less unclear (62, 75).

Large numbers of researchers have used the *Ways of Coping Questionnaire* in a trait-centered way, sometimes by changing the wording to make it a trait measure, and sometimes without even making the wording change, but following the even more questionable assumption that what is thought or done in any single encounter is characteristic of the person across encounters. To verify this assumption one would have to try the method repeatedly over time or across encounters, something that is rarely done.

I also have found an interesting example of research in which the authors (63) converted a process scale, *The Ways of Coping Questionnaire*, into a trait scale by arranging the response format so that subjects rated each of the endorsed thoughts or actions on the basis of how "characteristic" it was of the person. In still other instances, researchers seem to have misunderstood the difference between a dispositional or trait approach and a process approach to coping measurement (see, for example, Ref. 64, in which process measures are criticized for not being trait measures, which they were never intended to be).

#### Limitations of the Coping Process Approach

Although process approaches are better able to encompass specific coping thoughts and actions in diverse stressful contexts that call for coping, they have their own limitations. The most important one is that the measures are not usually formulated to link up with a whole person, who has a particular goal hierarchy and situational intentions, belief systems, and a life pattern of plans and social connections. Coping process measures would be far more meaningful and useful if we knew more about the persons whose coping thoughts and actions in specific contexts are being studied. Now they tend to be disembodied, as it were, from that person.

The above is a complaint that has also been made

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against the most common approaches to research in personality, both experimental and correlational, which generate separate scores on a number of variables of personality rather than synthesizing a functional portrait of a whole person. The complaint was enunciated many years ago by Carlson (65), but it did not succeed in turning modern personality assessment away from a pattern in which the person is fractionated into a number of separate traits. Such traits do not add up to, or get synthesized into, a living, breathing person struggling in certain ways to adapt to the world and to life (see also Ref. 57 for arguments about this, pro and con).

What I have said above about the whole person has also been pointed up eloquently by Block (66), in criticizing the Mischel (67) position that there are no broad consistencies in personality traits over and above situations. Allow me to quote from Block (Ref. 66, pp 9-10) about this:

"... we believed there was indeed an essential coherence, a deep structure to personality functioning and in personality development. Sure, it was critical to recognize the ways in which the immediate environmental context influenced behavior, as personality psychologists Henry Murray (68), Kurt Lewin (69), Robert White (70), and others had observed. But stimulus situations alone could not provide, we believed, a sufficient basis for understanding behavior. Human beings are not simply linear response systems effectively at the mercy of the situations they encounter.

What I am urging, in effect, is not an extreme contextualism in the study of coping but an effort to examine contextually influenced as well as stable relationships between a person and the environments, which that person pays attention to and chooses, where possible, or must deal with when there is no possibility of choice. I believe we must try to place process measures of coping within the larger framework of a person's life and ways of relating to the world. An approach that doesn't supplement contextual measurement of coping with an attempt at synthesis into a whole person is bound to be too limited. This is, I believe, the most serious weakness of a process approach to coping.

The aspect of personality that is most apt to be missed in such an approach is motivational, that is, it consists of general goals and situational intentions that mobilize and direct the choice of the coping

strategies employed. The motivation of the coping process in general and in specific stressful encounters is an interesting and important issue that has been almost totally ignored in theory and research. I shall have more to say about this in the next section.

## CONCLUSIONS ABOUT RESEARCH ON COPING

Approaches to coping as style and as process are both essential in that they each address different aspects of the problem. These perspectives supplement each other, just as the trait and state perspectives constitute two sides of the same coin, as I said earlier. In coping measurement, neither perspective, by itself, has progressed far enough to provide the rich understanding of emotion and adaptation that we seek, or to facilitate the clinical study of effective and ineffective coping or copers. Combining the approaches without sacrificing what is unique in each might be a worthwhile enterprise.

To study coping over time and across diverse sources of stress in the same persons in sufficient numbers to address both its process and trait aspects, and to do this with an appreciation of the whole person, calls for complex, long-term research designs. The current institutional and research funding climate discourages researchers from following their own leads and addressing the exciting challenges offered by our brave theories and metatheories of stress, coping, and the emotions. This makes our empirical efforts seem pale shadows of what we believe to be true of the most complex living creature in the world, a person, in the most complex set of adaptational circumstances any living creature ever faced.

I close the discussion of coping with an attempt to indicate from my perspective some possibilities for further research on coping. Although fruitful possibilities abound, two seem particularly important and promising to me. These have to do with a) the specific, threatening personal meanings with which people must cope in major life stresses and crises, and b) the connection between stress and the emotions, and the utility of measuring the latter.

### A. Threatening Personal Meanings

An appraisal-centered approach to stress directs our attention not merely to environmental stressors but to how these stressors are construed by a person.

I am confident that personal meanings are the most important aspects of psychological stress with which the person must cope, and they direct the choice of coping strategy (71). To truly understand coping requires that we zero in on the main threat meanings of a particular stress situation and how they change over time and across situational contexts, regardless of whether the approach to the measurement of coping is an in-depth interview or a standardized inventory. For the skeptic, I need only phrase this as a question—rather than an assumption—about the link between personal meaning and coping.

As just one of many potential illustrations that clarify this question, consider the awesome tasks of caretakers of declining AIDS patients, a problem that Folkman and Chesney (72) are currently studying. They note that often the most obvious sources of stress, for example, the onerous task of having to clean up the vomit or the bloody mess of incontinence made by a patient nearing death is not the most serious stresses that must be dealt with. Besides, doing this with grace and cheer may not only ease the distress of the patient but also reinforces the caretaker's sense of control—which he badly needs—in an otherwise out of control situation. Nor are these and other stressors necessarily the ones with which the caretaker is most heavily preoccupied. Looking at the deteriorating loved one and coming to terms with the prospect of his loss is apt to be much more threatening.

Yet there may be a far more terrible personal significance in this scenario for the caretaker, namely, that which is happening to the loved one provides a depressing model for the caretaker's own eventual fate. If, for example, the caretaker is HIV positive, then the miserable scene that he is watching day in and day out communicates loudly what will soon happen to him as he grows sick and progresses irrevocably toward his own miserable death. This, of course, is likely to be much less of a threat for HIV negative caretakers, though even they are not assured of being free of the disease indefinitely.

Our penchant for defining threats in terms of evident environmental pressures defeats the more important task of obtaining a proper perspective on the threats that the person is facing and must somehow manage. These threats—though sometimes shared with others—may also be quite individual. They arise out of the total psychological situation, which includes the person's social and work role in the world and the status of important life goals and beliefs. The issue is how to identify the threatening meanings with which the person must cope, and to consider their individual and collective role in the

coping process. The same point applies to coping with any personal life crisis, which will usually be complex and changing.

What I have been saying points to the crucial need for a full scale assessment of threat, since we always cope with something in particular—as I said much earlier in discussing the contexts of coping as process—and the way we cope is apt to differ from one thing to another. If more than lip service is to be given to coping as a process, then much more attention has to be given to the task of assessing threat in order to make sense of the way a person is coping.

In the AIDS caretaker example, a related issue is the often unspoken question of how it is that most caretakers who continue loyally to minister to their partner's needs hold together rather than fall apart from the severe and unrelenting stress. Those who remain through the worst as caretakers are the loyal ones, perhaps a select group. What enables them to retain their psychological integrity? It would be very useful to know.

To answer this question it is not enough merely to look at given, mostly unchangeable social and personality characteristics—such as a supportive family, friends, financial support, ego-strength, intelligence, and skills—which mitigate personal vulnerability and help people through crises. Because we can usually do nothing about these characteristics, if we want to learn how to help people to cope better, we must also examine what they are actually doing and telling themselves in an effort to cope.

Most important of all, we should examine which coping patterns succeed or fail in the short and long run—and in what ways. We also should examine how these strategies come together and are synthesized into an overarching coping style, if one can be discerned. It is my guess that being able to sustain serviceable meanings—whatever they may be—about what is happening is the most important key to this synthesis which, it has been suggested, also applies to successful grieving (73).

#### B. Stress, Emotion, and Coping

I recently proposed (74, 75) that psychological stress is best regarded as a subset of emotion. In fact, anger, anxiety, guilt, shame, sadness, envy, jealousy, and disgust, which arise out of conflict, are commonly referred to as the *stress emotions*. The emotions are a much richer source of information about how people are faring in adaptational encounters, and in their lives overall, than the unidimensional concept of stress. Knowing that a person in a partic-

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ular adaptational encounter reacts with anger, say, rather than anxiety, guilt rather than shame, pride rather than envy, and so forth, is more informative than knowing merely that this person is under stress.

This is because stress theory usually provides only two analytic categories with which to consider psychodynamics, high and low; and even if we take into account the distinctions I have made (29) between harm, threat, and challenge, there are still only three categories for analysis of coping psychodynamics. On the other hand, there are 15 or so emotions, each with its own script or story line, its own relational theme, which provides a far richer potential for understanding people and their situations. We learn different things from each emotion about a person's transaction with the environment, the environment itself and—if we have information about numerous emotional encounters—about the kind of person we are dealing with. I am, in effect, suggesting that emotions always be measured in the context of research on coping and the psychological stresses that require it.

There are good grounds in theory and research for believing that the coping process is linked specifically to the kind of emotion experienced in an adaptational encounter, and the conditions that elicit it. For example, in arguments between spouses (76), husbands and wives are likely to cope by attacking the other marital partner in an effort to repair their wounded self-esteem. Escalation of anger serves the purpose of self-promotion and defensiveness (protecting one's self-image). However, in shared situations of anxiety, husbands and wives more often cope by suppressing their anger in the interests of dealing with their joint threat. Mutual support and reassurances are far more likely to be given by husband and wife in anxiety compared with anger encounters.

Such coping differences also occur when the general goals and situational intentions of the individual marriage partners vary. Partners who are concerned primarily with repairing damage to their self-esteem are apt to escalate anger by attacking and defending; partners concerned primarily with preserving the

relationship, in contrast, are apt to conceal their anger or find excuses for the provocation by the partner, thereby reappraising the encounter as not calling for anger.

Aside from these pioneering observations about the emotions and coping, we know next to nothing about the other emotions and how coping is shaped by them. The odds are very good that each of the emotions and the situations that provoke it results in quite distinctive patterns of coping. I cannot think of any area of coping research that is more promising for advancing our understanding than the study of the functional connections between emotions and coping.

In the past, coping has been treated as belonging within the rubric of decision-making, with its emphasis solely on cognitive processes. However, it belongs equally within the realm of motivation and emotion. One could just as easily treat coping as a kind of goal, accomplished by certain strategies in a vertical means-ends relationship to each other in which there are broader, overriding ends and narrower means of accomplishing them. Taking into account the specific emotions, general goals (or ends), and situational intentions (or means) to attain goals in stressful encounters would, I believe, facilitate our understanding of the basis on which coping strategies are selected and acted on.

It distresses me that so much that is being published on coping deals with trivial issues in oversimplified, one-session research designs when so much needs to be done. As a result of the present climate of research, I am not optimistic that the challenging agendas that arise in the field of coping research—and which call for relatively expensive, longitudinal research—will be adequately addressed.

Fads and fashions also come and go without important problems being studied in full scope and depth, only to surface again with a repeat of the whole, inadequate process. I hope I am wrong about this and that such a promising field of theoretical and research endeavor—one that is so important for the study of adaptational success and failure—does not languish or get abandoned.

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