
Psychological Stress and Coping in Aging

Richard S. Lazarus *University of California, Berkeley*
Anita DeLongis *University of California, Berkeley*

ABSTRACT: The central question of this article is how the dynamics of stress and coping change with the circumstances of living and the processes of aging. The answer has remained obscure for three main reasons. First, the state of the art in the measurement of stress and coping is still primitive. Second, personal beliefs, values, and commitments, which develop from a person's unique history, shape the appraisal of stress and the manner in which stress is coped with and therefore have profound consequences for morale, social and work functioning, and somatic health. Third, most of the observations relevant to the central question have been obtained cross-sectionally; however, because the significance of any given event is embedded in the individual's personal, lifelong drama, it is important to examine stress and coping longitudinally as well.

How do the dynamics of stress and coping change with the circumstances of living and the processes of aging? To date, most of the research on this question has been cross-sectional and has addressed the slightly different question of whether people of different chronological ages vary in sources of stress, degree of stress, and patterns of coping. The evidence of age effects produced by this research is relatively meager and difficult to interpret. Aging is a highly individualized process, and the cross-sectional approach, when not adequately supplemented by longitudinal strategies, can obscure what happens as people age. In this article we employ a particular conceptual framework to examine some of the difficulties involved in exploring stress and coping in aging and discuss how a longitudinal perspective can add to our understanding.

A few weak trends are evident in cross-sectional data on stress and aging. Pearlin and Lieberman (1977) note, for example, that younger workers are more likely than older ones to experience disruptions in employment, excluding, of course, age-based retirement. Younger people are more often involved in the formation and dissolution of marriages, whereas older persons are more apt to be confronted with illness and mortality. Lowenthal, Thurnher, and Chiriboga (1975) report stronger differences across gender than across age; in comments on their follow-up studies, Fiske (1982) reinforces

this impression. Longitudinal studies (Birren, Butler, Greenhouse, Sokoloff, & Yarrow, 1971; Granick & Patterson, 1971) suggest that variability, rather than clear central tendencies, is the rule in both the sources of stress and the types of coping engaged in among the elderly.

Much of the research in the area of stress and coping in aging is concerned with life satisfaction among the elderly. In reviewing these studies, Lohmann (1980) has concluded that 40 years of research on five prime variables—marital status, retirement, health, social activity, and housing and the physical environment—has “not resulted in any clear-cut answers with regard to the causes or correlates of satisfaction” (p. 35). In Larson's (1978) review of the gerontological literature, only self-reported health consistently correlated as high as .40 with measures of subjective well-being. Some old people manage poorly, some manage well—this variation exists even among those who are institutionalized. Lieberman (1975) has argued that the extent of actual deterioration of their life circumstances is the major factor in this variation. Pearlin (1980a) has suggested that change alone does not influence emotional well-being, even when such change is brought about voluntarily, except when it leads to hardships in key conditions of living.

The central principle in our investigation of stress and coping in aging is that there is great variability in personal agendas and the conditions of life. Hence, it is essential to examine both longitudinally and cross-sectionally the stresses of living and how people cope with them if we are to grasp the dynamic changes that take place in individuals or groups over time.

Our subsequent discussion of stress and coping in aging is based on three method-related and substantive arguments. First, we must be far more thoughtful and systematic than we have been in measuring stress and coping processes. For example, we must abandon the simplistic notion that stress is adequately described by life events, however psychometrically sophisticated, and that it is sufficient to treat coping as a stable, overarching style with which people address the myriad sources of stress in their lives.

Second, stress and coping theory must take into account that variability in processes of aging, sources

of stress, and patterns of coping arises not only from the environmental conditions of living but also from the personal agendas and characteristics that shape stressful encounters and are shaped by them.

Third, throughout life people struggle to make sense out of what happens to them and to provide themselves with a sense of order and continuity (Butler, 1975). This struggle is centered in divergent personal beliefs and commitments, shapes cognitive appraisals of stressful transactions and coping, and therefore has profound consequences for morale, social and work functioning, and somatic health. It is thus not age alone, but the significance of stressful events viewed within the continuity of a person's life that must be taken into account.

Our own research findings are based on a sample described in detail elsewhere (Coyne, Aldwin, & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Schaefer, Coyne, & Lazarus, 1982) that consisted of 48 men and 52 women (26 were aged 45–49, 27 were aged 50–54, 22 were aged 55–59, and 25 were aged 60–64). Data on stress, coping, and adaptation were obtained over the course of one year through monthly interviews and self-administered questionnaires. The participants were white, middle-class, mostly Protestant and Catholic, married (86%), and fairly well educated (with an average of 13.7 years of schooling). They ranged from being seriously disabled (9.22%) to being free from health problems (10.3%). These variations in health status, however, were not related to age—probably because of the restricted age range in this sample—nor to gender.

Obviously, this sample is in no way representative of the population at large within this age range. A deliberate attempt was made to restrict its sociodemographic characteristics because, in ipsative-normative research (e.g., see Coyne & Lazarus, 1980; Lazarus, 1981; Lazarus, Cohen, Folkman, Kanner, & Schaefer, 1980; Lazarus & Launier, 1978), which involves repeated measures on the same people, one must work with smaller samples. In such research, there is no suitable way to obtain a truly representative sample without making the analysis of psychological characteristics statistically impossible; therefore, one must await later opportunities for replication and extension to other groups. Clearly, our own findings are subject to many of the criticisms we have raised concerning other cross-sectional research.

How Psychological Stress and Coping Should Be Measured

Our first argument concerns measurement. Although our theory views psychological stress and coping as interdependent, they must be considered

separately because each is measured by different procedures.

Stress

Two different models of life stress are found in current research and thought, and they have produced divergent approaches to measurement. The dominant approach treats stress as life events that create change and require adaptation. One of the striking features of modern stress research is its preoccupation with dramatic events and severely taxing situations (see Kanner, Coyne, Schaefer, & Lazarus, 1981).

There is no need to detail the many difficulties connected with the life events approach, especially as it has been applied in recent research; this has already been done well by Rabkin and Struening (1976) and others (e.g., Dohrenwend & Dohrenwend, 1978; Sarason, De Monchaux, & Hunt, 1975; Wershaw & Reinhart, 1974). The more important issues are conceptual rather than technical, and include, for example, the exclusive emphasis on change and the failure to consider mediating processes such as the personal significance of an event and the varying coping resources and practices of the people facing it.

In our sample of 45–64-year-olds, we found an inverse relationship between life events scores and age. This is consistent with other research (Dekker & Webb, 1974; Goldberg & Comstock, 1980; Holmes & Masuda, 1974; Lowenthal et al., 1975; Uhlenhuth, Lipman, Balter, & Stern, 1974), which suggests that the frequency of major life changes decreases with age. To conclude from these findings that older people experience less stress is not warranted, however, because lists of life events omit many events of importance in aging. No account is taken of meaning-centered or existential sources of stress, for example, or of the chronic problems of infirmity, limited energy, loneliness, and a hostile or unresponsive environment.

A few searching theoretical examinations of life events from a life course perspective have also questioned the adequacy of the life events approach to stress measurement. Brim and Ryff (1980) have sug-

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Correspondence concerning this article should be sent to Richard S. Lazarus, Department of Psychology, Stress and Coping Project, University of California, Berkeley, California 94720. Reprints will not be available.

gested, for example, that not only are life events lists severely limited in the range of events they cover, but many events of great importance are unnamed by and perhaps even unperceived as such by the persons affected. Some of these might be called "nonevents," for example, reaching the plateau of one's career, being passed over for promotion, male menopause, and hostility in one's children. Others may be obscured by culturally imposed values and constraints and hence be considered unimportant or even go unacknowledged by the person experiencing them.

Of special interest is the connection made by Brim and Ryff (1980) among age or life stage, the probability of certain events taking place, and the power of the event as a stressor. For example, some events, such as an accident or disfigurement, are not particularly age related and have a low chance of occurring. Therefore, one is seldom prepared for them psychologically. Other events, such as menopause, the "empty nest," and retirement, are strongly age related; these permit anticipatory coping that may mitigate their potentially stressful impact, a point emphasized by Neugarten (1970) and Pearlin and Lieberman (1977). Hultsch and Plemons (1979) have also applied a life course perspective to life events, proposing variations with age in the probability of certain events, their timing and sequencing, the motivational factors engaged by them, the coping resources available for their management, the cognitive appraisals of their significance, and their adaptational outcomes. However, there are as yet too few hard data with which to evaluate these promising ideas.

An alternative approach to conceptualizing and measuring stress, one that supplements the life events strategy, focuses on *daily hassles*, our term for the irritating, frustrating, distressing demands and troubled relationships that plague us day in and day out. Some of these hassles are transient, others are repeated or even chronic. These hassles should be distinguished from dramatic, change-centered life events. The Hassles Scale, which we designed to assess both the frequency and the severity of these stresses, includes items such as misplacing or losing things, not having enough time for one's family, filling out forms, planning meals, concern about weight, and unchallenging work.

We have found this strategy of measuring stress to be more useful than that of life events in predicting adaptational outcomes such as morale, psychological symptoms (Kanner et al., 1981), and somatic illness (DeLongis et al., 1982). In multiple regression analyses, scores on the Hassles Scale were more strongly associated with these measures of adaptational outcome than were life events scores. Hassles shared most of the predicted outcome vari-

ance with life events, and when the effects of life events were statistically removed, hassles and health remained significantly related, with hassles adding unique variance of their own.

DeLongis et al. (1982) argue that daily hassles should have a stronger relationship to health outcomes than do major life events, in part, because the former are *proximal* measures of stress whereas the latter are *distal* measures. Jessor (Note 1) has recently revived this Lewinian distinction between a person's immediate perception or experience of the social environment (a proximal variable) and environmental characteristics and macrosocial factors that may or may not carry a common meaning for people. Life events can be considered distal because their mere occurrence may not reveal the divergent significance of these events for the individuals experiencing them.

We expected life events to be causally related to daily hassles, in that major changes such as divorce, loss, and retirement are certain to bring about new hassles. However, many hassles have little to do with life events; the correlation between life events and daily hassles is relatively weak. Hassles, therefore, make a distinct contribution to adaptational consequences such as health status (DeLongis et al., 1982). The two approaches serve supplementary roles in the measurement of psychological stress.

Differences have been found between college-aged students and our middle-aged sample in the pattern of hassles reported (Kanner et al., 1981). With respect to the 10 most frequent hassles, the middle-aged participants commonly reported economic concerns (e.g., rising prices, property, investments, or taxes), whereas the students mentioned academic and social problems associated with their time of life and attending school (e.g., wasting time, meeting high standards, or being lonely). These data are consistent with Pearlin and Lieberman's (1977) observations of age-related sources of role strain.

In addition to measuring hassles, we also measured their counterpart, namely, positive experiences, or *daily uplifts*. Kanner et al. (1981) found group differences in everyday positive experiences that are similar to those we found for hassles. For the middle-aged group, the most frequent uplifts were health or family related, whereas for the college population, the most frequent uplifts had a hedonic quality (having fun, laughing, and so on). These differences could reflect a cohort as well as an age effect.

Hassles and uplifts are likely to be associated with a person's current concerns and commitments (Klinger, 1975, 1977). Since these concerns and commitments tend to shift across the life span (Lowenthal et al., 1975; Ryff & Baltes, 1976), we expected and found a shift in the salient sources of stress and

positive feelings with age. Thus, although the rising price of common goods remained a concern of both groups, in the data noted above it was more a source of stress for the middle-aged group than for the college group. Likewise, as noted above, we found good health more frequently cited as an uplift by the middle-aged respondents than by the college group. Obviously, the endorsement of health-related items is not a reflection of health per se; the middle-aged group is probably less healthy than the college group. Rather, as one would expect, health was of greater current concern for the former than for the latter.

Mages and Mendelsohn (1979) have described some age-related trends in people's reaction to cancer that take into account the varying significance of the illness at each age. Their clinical assessments suggest that in older persons the discovery of cancer often leads to an acceleration of the psychosocial aspects of aging, such as premature disengagement from external commitments, increased dependency, and the need to review and integrate the past. Older patients, however, seem to face cancer with less anger than younger patients, perhaps because the latter feel they have not had a chance to live a full life. Cohen (1980) notes that older women facing breast biopsy were less anxious and upset at the discovery of the malignancy than were younger women. These observations underline the value of looking at the personal significance that diverse stressful events might have at different developmental periods. Hultsch and Plemons (1979) make a similar point with respect to life events.

What is being suggested above is consistent with a cognitive approach to the study of stress, specifically, that many of the age-related changes in sources of stress and positive feelings result, in part, from a shift in how events are appraised by a person rather than solely from changing circumstances. One reason cognitive appraisal of the same stimuli may change with age is that, in addition to their values, beliefs, and commitments, people's expectations probably change as well. A theory of relative deprivation (Crosby, 1976) argues that individuals feel distressed over their failure to possess something only when they see that similar others possess it. Brickman and Campbell (1971) suggest that an upward spiral of comparison can occur in which, for example, a person's expectation for this year might be the highest salary in his or her unit, but for next year it might be the highest salary in the entire plant.

As Costa and McCrae (1980) suggest, health expectations decline with age, regardless of health status: "Conditions like fatigue after exercise, considered medically significant by younger people, may be regarded as a normal part of aging by the elderly, . . . [who] may show a realistic concern for their health without a greater number of complaints" (p.

254). Since aging individuals expect their health to decline, positive health-related experiences should take on the same psychological significance for the aging as they do for the ill, even if the aging person is in good health.

Our findings are consistent with the reasoning offered above. Older and more symptomatic respondents reported more health-related hassles as well as uplifts. However, when age and illness were entered into a multiple regression analysis as predictors of health-related uplifts, age was found to be positively and significantly related to these uplifts, whereas illness was not an independent contributor (DeLongis & Lazarus, Note 2). Thus, in the context of negative health expectations, positive health experiences take on more salience as uplifts. This finding supports the observation that without background data on a person or group, the psychological significance of an endorsement of a hassle or uplift will remain obscure (Helson, 1959).

It is ill-advised, therefore, to think that hassles and uplifts scales provide a simple measurement of stress or satisfaction on the basis of objective events of living; this thinking follows the atheoretical input-output tradition of much life events research. To some extent the endorsement of a hassle reflects how a person experiences and appraises the encounters of living, which explains the fundamental meaning of *proximal* as opposed to *distal*. When people say they are hassled or uplifted by this or that, they may indeed be referring to an actual experience such as being caught in a traffic jam, but their endorsement also reflects the personalized significance of the encounter that makes it salient, and this significance may vary greatly from person to person and over periods of a person's life.

Coping

Coping is a crucial variable influencing the adaptational outcomes of a person's struggle to get along or live well; research on psychological stress and functioning that does not account for its influence is limited or distorted. People are rarely passive in the face of what happens to them; they seek to change things if they can, and when they cannot, they use cognitive modes of coping by which they may change the meaning of the situation.

The measurement of coping has been one of the weak links in our efforts to study human adaptation. One key defect is that researchers have, by and large, attempted to assess coping as a trait or style; but such one-shot measures have failed to help us predict how people will react over time or across a variety of stressful transactions. What is needed is an approach to coping that assesses how a person manages a variety of specific stressful encounters and contexts of living and that explores how and to

what extent this process changes. Only if we observe a person over time and in diverse contexts can we confidently take the next steps of integrating our observations about coping into generalized concepts of trait or style and of identifying stable individual differences in coping competence (cf. Allen & Potkay, 1981).

In assessing coping processes in our middle-aged sample (e.g., Folkman & Lazarus, 1980), we used the Ways of Coping Checklist that inquires about what an individual thought, felt, and did in several specific stressful encounters. We found it useful to distinguish, in a preliminary way, between two fundamental functions of coping—problem solving and the regulation of emotion. As we had anticipated, almost never did our subjects use only one or the other type of coping; most encounters generated multiple coping activities of both sorts. Moreover, when stability of coping pattern was defined as the relative emphasis on problem- or emotion-focused modes, there was only modest stability across stressful encounters (see also Folkman & Lazarus, 1981). The type of encounter—for example, work related or health related—was preeminent in influencing the pattern. There were no age effects on coping pattern, which is not surprising considering that even our oldest subjects, only 64 years of age, were still fully active and, with few exceptions, were not suffering from significant infirmities. Although some investigators (e.g., Gutmann, 1974; Jung, 1933, 1953) have argued that there are normative changes in coping as a function of age, the evidence is not strong and there is always substantial variability.

McCrae (1982) has reported data on a large sample obtained with a greatly expanded version of our ways of coping checklist. Few differences in coping as a function of age were found. McCrae writes in summary:

In most respects older people in these studies cope in much the same way as younger people; where they employ different mechanisms, it appears largely to be a function of the different types of stress they face; and in the two cases that showed consistent evidence of age differences unrelated to type of stress, middle-aged and older individuals were less inclined than younger men and women to rely on the theoretically immature mechanisms of hostile reaction and escapist fantasy. (p. 459)

Certain major sources of stress are probably more common in older people than in younger ones, as suggested by Brim and Ryff (1980) and Hultsch and Plemons (1979), but this does not mean that different age groups will handle the stressors with distinctive patterns of coping. There were major differences in coping with these common stressors, however, within the age group we studied. In a dissertation by Golden (1982) that utilized our data on

middle-aged men and women, attention was directed toward one of these sources and the coping processes it elicited. Out of 100 subjects, 15 had experienced the problem of caring for an ill elderly parent. For all, the experience of providing care to an ailing parent created an intense sense of obligation, recurrent guilt and resentment, and an impending or actual sense of loss of the relationship.

Analyzing multiple interviews obtained over many months, Golden distinguished three coping styles—confrontation, denial, and avoidance—that appeared to have important implications for adaptation. The confrontational style involved the investment of major effort to cope with the expression of anger, guilt, and sadness; turning to intimate confidants; the use of strategies that magnified or extended the experience of valued positive emotions; and determined efforts to bring stressful episodes with the parent to closure. The denial style involved initial suppression and what seemed like eventual repression of negative emotions, frequent use of what psychoanalytic theorists call “undoing,” and the persistent seeking of the experience of elation, perhaps as a buffer to distress. The avoidant style involved consistent suppression (rather than denial or repression) of negative emotions, the frequent experience of somatic symptoms such as headaches and indigestion directly following the suppression of negative emotions, a pervasive concern with blame, and the infrequent achievement of psychological closure in stressful episodes.

Golden (1982) also found that the experience of caring for an elderly parent evoked a distinctive set of fears regarding the subjects' own aging, including fear of living to be very old, of having the same or similar illnesses as the ill parent, and of becoming dependent on one's own children. Which fear was most prominent seemed to be connected with which of the three coping styles and which forms of anticipatory coping they used to deal with their own aging.

Cognitive Appraisal and Coping as Sources of Variability

Our second argument concerns the need to take into account variability in the processes of aging and in psychological stress under similar environmental conditions. This argument involves a core concept of our theoretical formulation, *cognitive appraisal*. Appraisal refers to the way a person construes the significance of an encounter for his or her well-being, that is, as irrelevant, benign, harmful, threatening, or challenging, the latter three being forms of stress appraisal.

Coping is also a key mediating process in this model. How a person copes with any stressful encounter determines his or her emotional response:

Problem-focused coping changes the troubled person-environment relationship, whereas emotion-focused coping changes, through realistic or defensive reappraisal, the way an encounter is construed or attended to and therefore the emotional reaction to it. Emotion-focused coping operates through a variety of cognitive acts, such as attentional avoidance, intellectualized detachment, denial, reinterpretation of the past, humor, magical or wishful thinking, and religious faith. If one resolves the trouble through problem-focused efforts, there is no longer any reason to be threatened; if one engages in emotion-focused coping, the objective situation remains the same, although a more benign emotional reaction is still created.

Not only does appraisal of a situation change constantly as a result of changes in the person-environment relationship, or of a defensive tour de force, but coping too changes constantly. However, if a person remains for a long time in the same situation (e.g., a marriage, job, or illness), or if he or she continues to appraise or cope in the same way and repeatedly fails to resolve the difficulty, a specific stressful encounter may occur again and again.

The concepts of cognitive appraisal and coping are essential features of a complete analysis of the response of persons to stressful conditions of life, including response to the stresses of aging. Rosow (1963, 1976) observes that in coping with actual or threatened role and status losses, older people find alternatives to previous patterns of social participation, seek new associations, prevent or overcome excessive restrictions on their participation and activities, and look upon their condition with some degree of philosophical detachment in order to continue to regard themselves with dignity. Rosow (1963) writes that the negative impact of retirement, widowhood, declining health and income, and loss of fulfilling roles must be "further qualified by the subjective meaning or impact of the change or lack of change observed" (p. 217). Thus, it is not merely the objective change associated with age but its subjective meaning or significance that affects adaptation.

In emphasizing that aging is an individual matter requiring an intraindividual or intragroup longitudinal strategy of research, we are not implying the need for as many principles, concepts, or descriptions of life trajectories as there are people. As Lewin (1946) put it:

A law is expressed in an equation which relates certain variables. Individual differences have to be conceived of as various specific values which these variables have in a particular case. In other words, general laws and individual differences are merely two aspects of one problem: they are mutually dependent on each other and the study of the one cannot proceed without the study of the other. (p. 794)

There are two main reasons why grouping people by age alone can obscure the changes that occur with age in psychological stress and coping. First, differential rates of biological aging in varying life contexts mean that the need for aging persons to change activities, commitments, and patterns of coping, as well as to change how they view themselves in the world, will occur at different points in life, if they occur at all. Second, as will be seen in the following section, throughout adulthood, people differ in the baseline personal agendas, resources, and environmental conditions from which they direct their lives (Lawton, 1980). From these divergent starting points, changes during aging will generate different meanings and ways of coping in different people or groups. Therefore, comparisons on the basis of age without regard to the continuities in peoples' lives run the risk of missing the central point of stress and coping in aging.

Sources of Personal Meaning Underlying Stress and Coping Over the Life Course

Our third argument is based on the premise that people need to invest their lives with useful personal meanings and that these meanings are liable to be threatened at any point. Theorists and researchers should therefore examine stress and coping over the life course from the standpoint of a person or group's central story line. Within our theoretical perspective there are two main mechanisms whereby appraisal and coping processes, with their consequences for morale, functioning, and health, may differ not only among persons but also within any particular person at various points in the life course.

First, social and physical environments change. The young child faces, for the first time, separations from family, competition in school, new neighborhoods, changing peers and authority figures, troubles between parents that sometimes eventuate in divorce, and even the death of a parent. And at each later period of life, similar events, some scheduled and some nonscheduled, take place, and new social role demands and opportunities, provocative of role strains, emerge and must be dealt with. Daily hassles, reflective of the pattern of living into which a person has entered, also vary with changing neighborhoods, changing social relationships, losses, and social changes that are a part of local and world history.

Second, whatever happens is given meaning and personal significance by the more or less stable features of personality. The stressful impact of life changes (or even the lack of changes) and their requirements for coping can be understood only by reference to the features of personality that make them important and salient. Two such personality variables, *patterns of commitment* and *beliefs about self and world*, are especially worthy of attention

because they shape stress and coping over the life course. They are not only suggested by our own conceptualization but are also implicit in many discussions of the life course and are part of the current social science zeitgeist.

To choose antecedent personality variables that provide the story lines or plots by which to group people for the longitudinal study of stress and coping in aging, three criteria must be met. First, they must be capable of shaping stress and coping processes; second, they must vary from person to person or with sociodemographic grouping; and third, they must have the potential of changing with age and circumstances of living. Personal commitments and beliefs meet all three of these criteria. They affect the way various encounters of living are appraised with respect to implications for well-being and how these encounters are managed. They also vary greatly from person to person. Finally, they are apt to change over the life course (Lowenthal et al., 1975; Ryff & Baltes, 1976), bringing with them new patterns and dynamics of stress and coping.

Patterns of Commitment

Commitments express people's valued ideals and goals and the choices they make or are prepared to make in order to bring them to fruition. When commitments are active and aroused, as opposed to latent, they are reflected in current concerns and in investment of energy and persistence of effort. As such they are what many psychologists have placed under the rubric of motivation, not so much in the traditional sense of drive, but as fused with cognitive and emotional processes that encompass plans, wishes, fears, routes, priorities, expectations, and choices.

Although we all share some commitments because of our common social and biological heritage, we nevertheless vary greatly in our patterns of commitment and hence in our overall vulnerability to stress and the contexts in which we experience vulnerability. Encounters that threaten important commitments are most likely to lead to appraisals of threat, and the stronger the commitment, the greater the potential for threat. This is a double-edged formulation, since vulnerability can also impel a person toward a course of action that reduces threat and sustains coping in the face of obstacles. Moreover, the absence of commitments probably underlies a pervasive sense of meaninglessness, the existential malaise that can be found in any period of adulthood and especially in later life (see Wrubel, Benner, & Lazarus, 1981).

One of the major modes of coping, one presumably employed also in aging, is to renounce or relegate to the periphery of importance those roles and commitments that are no longer serviceable and

to invest in others more in tune with current conditions of living (cf. Pearlin, 1980b). Changes in commitments are often products of major efforts over an extended time period to cope with loss or the threat of loss. In childhood and youth, as well as in later life, the failure of ambitions and dreams, changes in the climate of endeavor, or changes in the energy and resources available to a person may require major shifts in long-standing commitments. If these shifts, including the reordering of priorities, are not accomplished when they are required, the aging person may continue to struggle without the rewards of success, and thereby with defeated morale and perhaps endangered health produced by the rearguard action against change.

We are not espousing a disengagement theory of aging. Rather, we argue that disengagement and reengagement are normal responses when a person finds it counterproductive to hold to a failing commitment. Disengagement in such a context is a healthy coping process, and it is usually temporary and selective. Since aging is such a variable process, the appropriate moment for disengagement must be highly variable among individuals; and since commitment patterns also vary widely, as do the environments people face, we must know the "commitment baselines" on which a person's personality reorganization is predicated.

Although systematic studies of this issue are scanty, we believe it is sound to assume that commitments change over the life course, which means that sources of stress will too. When Erikson (1963) speaks of the identity struggle in adolescence and young adulthood, he is implying an earlier developmental search for a workable set of commitments for living and functioning within society, for a work and relational role to which one can be committed and that can become an integral feature of one's identity. Erikson's later stage, generativity, betokens a shift from the career- or achievement-centered commitments of adulthood to those centered on providing for the upcoming generation, for example, one's children or one's students. The aging person's struggle at this time of life is to prevent the loss of all commitments.

If shifts in beliefs, values, and commitments do occur across the life span, there is little reason to believe that it is a simple process. Indeed, as suggested by work on "mid-life crises," there is reason to believe it is a very difficult one (Levinson, 1978; Rubin, 1979; Vaillant, 1977). It is doubtful that people can deliberately revise their commitments merely because it seems advantageous to do so. As William James (1890/1950) argued long ago, a requirement of being able to hold a conviction is that we believe it has some real existence outside of our thought and not simply that we wish it to be true.

Beliefs About Self and World

Beliefs are personally formed or culturally shared notions about reality that organize, often at a tacit level, our perceptions and appraisals of situations, especially under ambiguous circumstances. At least two broad types of beliefs seem relevant to stress and coping, namely, beliefs about personal control over events and existential beliefs such as faith in God, fate, or some higher natural order. These beliefs arise as part of the effort to create meaning out of life and to maintain hope. There is a strong tendency among theorists today to break down the overbroad and amorphous concept of personal control into two components: the conviction that one can perform the acts necessary for effective coping and the conviction that the environment will be responsive to those efforts. Bandura (1977) speaks of the former as efficacy expectations and of the latter as outcome expectations. Research on the locus of control, based on Rotter's (1966) early work, tends to confound the two components (Peterson, Note 3). Others, such as Averill (1973) and Folkman (in press), have broken down the concept of control still further, for example, into behavioral control, decisional control, and what has come to be called "the illusion of control" (Langer, 1975; Lefcourt, 1976).

Beliefs about control influence stress appraisal as well as coping. Appraisal is influenced by the person's belief that he or she does or does not have effective resources for handling difficult situations. Coping is influenced by whether such beliefs are applicable in any particular encounter and thus whether the person can act and in what ways. More concretely, psychological stress will ensue if a person believes a given course of action will produce a desired outcome but nonetheless doubts his or her capabilities to act effectively. Likewise, stress occurs even when a person is confident about doing what has to be done but doubts that the environment will respond favorably. The coping strategy will reflect such appraisals, being shaped by both the nature of the situation and beliefs about personal control.

There are reasons for thinking that beliefs about personal control change over the life course and that such change, in turn, influences a person's degree of vulnerability to threat and his or her pattern of coping. On the basis of his own and others' observations, Brim (Note 4) reports that the sense of personal control over events increases steadily during childhood, remains fairly stable through much of adulthood, and then declines after age 50. As Wolk (1976) suggests, however, the decrease in the sense of personal control among the aging does not necessarily reflect a decrease in personal well-being, as might be the case among the young. Further, Felton and Kahana's (1974) observations of older persons who were in institutions suggest that

having an external locus of control is more strongly associated with adjustment than is having an internal locus. The complexity of this question is indicated by Bulman and Wortman's (1977) and Rodin and Langer's (1977) contrary findings with aged inmates of nursing homes who were given some measure of control over their activities (see Taylor, 1979, for a review). These contradictory conclusions underscore the specificity of these relationships, that is, how both the type of control and the situational context influence whether loss of the sense of control has a positive or negative impact.

Conclusion

In our view, neither our own data nor those of others provide a satisfactory answer to the question with which we began, namely, How do the dynamics of stress and coping change with the circumstances of living and the processes of aging? Obscuring any age effects are the ubiquitous individual and group differences in the way people manage their lives within any age span.

Limitations in the measurement of stress and coping represent one obstacle to understanding. The current emphasis on major life events as the sole measure of stress and the treatment of coping as a static trait or style, which also entails the assumption of an extremely limited range of coping thoughts and acts, exemplify the primitive state of the art.

However, the main gap in knowledge stems, in our view, from the absence of systematic research on the process of aging as it relates to stress and coping. Whether one observes stress or distress at any arbitrarily chosen point in the life course depends on the momentary state of the person's adaptation. If we stop the action at any point in time, or fail to examine it at several other points, we lose any sense of continuity and change. A similar difficulty is manifested in efforts to define and study stress as a failure of the person-environment fit, as in the work at the University of Michigan (e.g., French, Rodgers, & Cobb, 1974). Although this model of stress and coping in the work setting is a major advance in that it acknowledges both sides of the equation—environment and person—it is centered on a static conception of each. We also need to examine how people, appraising a misfit, struggle to harmonize their relationship to changing environmental conditions, an ongoing process that continues to alter that relationship in important ways.

If we limit ourselves to averaging what people face and do in age-related steps, as in the cross-sectional research strategy, we are in danger of missing the very stress and coping processes in which we are interested. This is a danger that applies at any moment over the entire life course, since living and adapting are always characterized by transactions

and changes whose potential significance depends on the personal meanings that beliefs and commitments generate. The importance of a process perspective may be even greater in the study of aging than in the study of mid-life because of the presence or imminence of widespread losses of roles and relationships. But whether we view people in the context of the entire life course or more narrowly in the context of aging, we must see them as engaged in a life drama with a continuous story line that is best grasped not as a still photo but as a moving picture with a beginning, middle, and end.

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