

Social Stress: Theory and Research Author(s): Carol S. Aneshensel

Reviewed work(s):

Source: Annual Review of Sociology, Vol. 18 (1992), pp. 15-38

Published by: Annual Reviews

Stable URL: http://www.jstor.org/stable/2083444

Accessed: 13/12/2012 02:19

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Annual Reviews is collaborating with JSTOR to digitize, preserve and extend access to Annual Review of Sociology.

http://www.jstor.org

SOCIAL STRESS: THEORY AND RESEARCH

Carol S. Aneshensel

Department of Community Health Sciences, School of Public Health, University of California, Los Angeles, California 90024-1772

KEY WORDS: stress-reactivity, social support, coping, mental health

Abstract

This chapter differentiates the stressful consequences of social organization from the stressful antecedents of psychological disorder. The pivotal distinction concerns whether the occurrence of stressors is viewed as socially determined, or as independent of social placement. Recent research is evaluated concerning both the social distribution of stress and social variation in response to stress. Two particularly productive areas of inquiry are also reviewed: self-efficacy as a mediator between social position and stress; and the intersection of macro- and micro-stress processes in economic and occupational spheres, with emphasis upon gender stratification. This review concludes that the occurrence of systemic stressors is not necessarily an indication of a social system run amok but may reflect instead the system functioning precisely as it is supposed to function.

INTRODUCTION

Stress research typically is viewed as a subspecialty within medical sociology, a perspective that obscures commonalities with more traditional sociological areas of inquiry, especially social stratification. This situation has arisen, at least in part, because stress researchers have adopted ways of organizing

15

theory and research more relevant to medicine than sociology. For example, stress research tends to be concerned less with the origins of stressful life experience than with the consequences of such experiences for outcomes of illness, especially psychological disorder (Pearlin 1989). Matters of structure, organizations, roles, and other social constructs often are superimposed upon such disease-oriented models.

A pivotal distinction between sociological and clinical orientations is whether stressors are conceptualized as socially patterned or as independent of location in the social system. In crude analytic terms, whether stressors are treated as intervening or independent variables. I use these analytic labels to distinguish models of the stressful consequences of social organization from models of the social antecedents of psychological disorder (Aneshensel et al 1991).

This essay clarifies how social organization matters to the origins and consequences of stressful life experience. First, an overview of the current status of the field is presented as a framework for examining selected issues in stress research. The next two sections contrast twin themes concerning the social distribution of stress versus social variation in response to stress. Two particularly productive areas of inquiry are then reviewed: self-efficacy as a mediator between social position and stress; and the intersection of macroand micro-stress processes in the economic and occupational spheres, with emphasis upon gender stratification. This review advances the perspective that stress is an inevitable consequence of social organization.

OVERVIEW

Conceptualizations of stress usually emphasize the following elements: a state of arousal resulting either from the presence of socioenvironmental demands that tax the ordinary adaptive capacity of the individual or from the absence of the means to attain sought-after ends (Lazarus 1966, Pearlin 1983, Menaghan 1983). External circumstances that challenge or obstruct are labeled stressors; stress refers to internal arousal. Thus, stress is not an inherent attribute of external conditions, but emanates from discrepancies between those conditions and characteristics of the individual—his or her needs, values, perceptions, resources, and skills. In an analogy to engineering physics, Smith (1987) maintained that stress should be assessed not merely as load, but as load relative to the supporting surface.

Socioenvironmental conditions differ in the capacity to evoke stress, however; some conditions threaten virtually everyone, whereas others are uniformly navigated with ease. This principle is illustrated by the various strategies developed to weight life events according to the average amount of readjustment required (e.g. Dohrenwend et al 1978). Events differ from one

another in average ratings, due to characteristics of the event, and ratings of a single event differ across raters, due to characteristics of the rater. The presence of both inter-event and intra-event variation mirrors the interplay of person and environment.

Stress research continues to emphasize one particular type of stressor, life-event change. This emphasis has persisted despite long-standing, cogent criticism that enduring problems of ordinary social life have been neglected, a theme elaborated below. B.S. Dohrenwend and associates (1978) defined life-event stressors as objective occurrences of sufficient magnitude to change the usual activities of most persons. The initial conceptualization of any change as stress-provoking has given way to agreement that undesirable events are most psychologically distressing; other dimensions such as whether events can be controlled or predicted are of secondary importance (Ross & Mirowsky 1979, Thoits 1983).

The deleterious health effects of life change are of consistently modest magnitude; few who encounter life events suffer ill health as a result. Kessler and associates (1985) described several strategies used to address an assumed problem of measurement-error attenuation: specifying especially stress-provoking events, assessing duration and recency of exposure, and specifying context. Improved measures, however, have not increased noticeably the association between events and psychological distress (Thoits 1983). Consequently, attention has shifted to social psychological factors regulating the impact of stress (Kessler et al 1985).

Most prominent is the concept of social support. Definitions of support abound, but most include whether a person's basic social needs—affection, esteem, approval, belonging, identity and security—are satisfied through interaction with others (Cobb 1976, Thoits 1982). House & Kahn (1985) have identified three distinct dimensions: integration, the existence of relations; networks, their structure; and support systems, their socioemotional, instrumental, informational, and appraisal dimensions.

Social support, especially socioemotional support, is related inversely to diverse forms of psychological disorder, physical morbidity, and mortality (e.g. Turner 1981, Aneshensel & Stone 1982, Turner 1983, Kessler & McLeod 1985, Wethington & Kessler 1986, House et al 1988, Moen et al 1989, Ross & Mirowsky 1989). Longitudinal studies demonstrate reciprocal relationships: causal influence goes from support to mental health and vice versa (Turner 1981, Aneshensel & Huba 1984). A major emphasis concerns whether social support acts as a stress-buffer, ameliorating the deleterious effects of stress (Dean & Lin 1977). In reviewing this contradictory literature, Kessler & McLeod (1985) concluded that the mental health impact of stress is buffered by emotional and perceived social support, but not by membership in social networks.

Research concerning the nature and effectiveness of coping also has proliferated over the past decade. Folkman & Lazarus (1980) defined coping as cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts. Coping behavior differs from coping resources, that is, from preexisting assets such as self-esteem called upon when stress does arise. Functions of coping include avoiding or eliminating the stressor, containing the proliferation of secondary stressors, altering the meaning of the situation, and managing states of arousal (Pearlin & Schooler 1978, Pearlin & Aneshensel 1986). Folkman & Lazarus (1980) categorized coping as problem-focused versus emotion-focused.

Coping and social support are functionally isomorphic concepts. For example, Thoits (1984) conceptualized social support as coping assistance. Coping refers to actions taken in one's own behalf, whereas support refers to actions undertaken by another person. Coping and social support perform parallel functions, influencing the occurrence and impact of stressful life experience (Pearlin & Aneshensel 1986).

THE SOCIAL DISTRIBUTION OF STRESS

Conceptual Issues

A core issue is whether distributions of stressors vary across social strata as a result of some causal link between social location and stressors. Sociological interest in stress was fueled by findings of an inverse relationship between mental disorder and social class. Proponents of early social causation perspectives reasoned that low-status social groups showed high rates of disorder because members of these groups disproportionally encountered difficult, harsh, or traumatic life conditions. Elevated rates of disorder also were attributed to restricted group access to social, economic, or personal resources—assets used to combat difficult life circumstances (e.g. Dohrenwend & Dohrenwend 1969). The major alternatives are social drift and social selection hypotheses: psychological disorder produces downward social mobility or selection out of social roles. With the possible exception of severe disorders such as schizophrenia, the empirical evidence supports the hypothesis of social causation (Mechanic 1972, Liem & Liem 1978, Wheaton 1978, Eaton 1986, Fox 1990).

The structural perspective on social causation understands stress both as a consequence of location in the social system and as a determinant of some outcome, most typically psychological distress. The focal relationships are between social position and psychological distress; stressful life experience is but one pathway linking structure to emotional well-being. This research agenda emphasizes specification of these pathways, including the conditions under which relationships occur. Also, these relationships may be universal or

apply to only some subgroups of the population. In sum, location in the social system influences the probability of encountering stressors, which in turn increase the probability of becoming emotionally distressed; these relationships may occur only among some groups, or only under certain conditions.

When stress is conceptualized as an independent variable, however, the focal relationships are between stress and psychological distress. Social attributes are controlled to eliminate spurious relationships between stress and health. This approach assumes that social attributes do not directly or indirectly cause psychological distress (cf Rosenberg 1968). For example, covariation may reflect common causation. In this approach, the oftunrecognized assumption is that variation in the distribution of stressors across social strata is happenstance.

Life Events

Do distributions of stressors vary meaningfully across strata? The response to this query depends quite simply upon how stressors are conceptualized and operationalized. Dohrenwend & Dohrenwend (1969) proposed that social class differences in rates of life-event change generate corresponding class differences in rates of psychological impairment. They found instead class differences in the psychological impact of similar levels of life change. B.S. Dohrenwend (1970, 1973, 1977, 1978) found that group differences in events are limited to select categories of events and specific social attributes. Many recent inquiries have adopted Kessler's (1979a) technique for decomposing group differences in distress into components due to differential exposure to stress, differential vulnerability to stress, both, or neither. In an early application, Kessler (1979b) concluded that differential exposure contributes little to social class, gender, and marital status differences, except in the case of nonwhites compared to whites. Two recent reviews have concluded that social group differences in overall exposure to life change are minimal (Thoits 1987, Kessler et al 1985).

The most critical issue concerning the validity of these conclusions is whether events have been selected properly from the universe of all possible events. Life-event checklists have suffered from a number of methodological deficiencies enumerated comprehensively elsewhere (e.g. Dohrenwend et al 1978, Thoits 1983). For present purposes, the most important concern is whether event inventories represent adequately the entire spectrum of life events, given that no finite measure can count all possible events (Tausig 1982). Dohrenwend and associates (1978) stated this problem as defining the "population" of events from which a "sample" of events is selected. Events should be selected with probabilities proportional to a meaningful criterion. In practice, events usually are selected in an arbitrary manner.

The pool of selected events may disproportionally represent events more likely to occur to some social groups than others. This problem is analogous to bias in academic ability tests: content validity is suspect unless the pool of test items constitutes a representative sample of the performance domain shared in common by various subgroups of the population (American Psychological Association 1974). Thoits (1983) reviewed the content validity of event inventories and concluded that the universe of events has not been sampled uniformly. Specifically, events occurring to young adults have been oversampled, while those occurring to women, minorities, and the poor have been undersampled. Golding and associates (1991) found that conclusions about ethnic variation in exposure are contingent primarily upon which events are counted. The strategy used to select events predetermines the observed social distribution. This conclusion applies to counts of all events or specific types of events, e.g. social network events. Consequently, the arbitrary "sampling" of events impinges substantially upon inferences regarding differences among social groups in exposure to life events.

Chronic Stressors

Life-event change illuminates only one tiny corner of the universe of social stressors; omitted are problematic life circumstances that recur or persist. According to Pearlin (1975a, 1983, 1989), the major precursors of distress are more likely to occur in the conflicts and frustrations experienced by ordinary people doing ordinary things than in exotic, ephemeral, or once-in-a-lifetime events. Liem & Liem (1978) criticized conclusions about social class for failing to consider the chronicity of stressors among lower social classes, such as lengthy unemployment among working-class men. Reliance upon the deceptively simple measurement strategy of event inventories has been described as a methodological expedient: chronic stressors are more difficult to assess because such problems often are subjective in nature (Eckenrode 1984, Kessler et al 1985, Pearlin 1989).

Nonetheless, a considerable accumulation of evidence links persistent and recurrent stressors to psychological distress, physical morbidity, and mortality (Liem & Liem 1978, Pearlin et al 1981, Wheaton 1983, Ross & Huber 1985, House et al 1986). Also, life events produce persistent elevations in psychological distress only when the events themselves are persistent or recurrent (Aneshensel 1985, Lin & Ensel 1984, Norris & Murrell 1987). According to Avison & Turner (1988), chronic strains, event-related stressors, and time-ambiguous events all contribute independently to depressive symptomatology, but chronic strains are most potent. The relative impact of stressors may vary across the life course, however, with chronic stress most important among the elderly, and acute stress most important at younger ages (Turner & Noh 1988).

Several distinct sources of chronic stress have been identified. Wheaton (1983) delineated the following: barriers in the achievement of life goals; inequity in the form of inadequate rewards relative to invested effort or qualifications; excessive or inadequate environmental demand; frustration of role expectations; and resource deprivation. Chronic stressors also include difficulties associated with participation in institutionalized roles (Pearlin 1983); enduring interpersonal difficulties (Avison & Turner 1988); status inconsistency, goal-striving stress, and life-style incongruity (Dressler 1988); disjunction of economic goals and educational means (Farnworth & Lieber 1989); social and economic hardship including poverty, crime, violence, overcrowding, and noise (Pearlin & Lieberman 1979, Eckenrode 1984), homelessness (La Gory et al 1990), and chronic physical disability (Turner & Noh 1988).

Role occupancy is a necessary but not sufficient condition of role strain. Instead, stress arises as a consequence of the experiences entailed in the enactment of a role. For example, Pearlin (1975a) argued that men and women may occupy the same role, such as worker, but be exposed to different constraints and imperatives as a consequence of gender stratification. The dimensions of ongoing role strain include difficulty in satisfying role demands, interpersonal conflict with others in the role set, incompatible demands across roles, role captivity, gains or losses of roles, and restructuring of continuing roles (Pearlin 1983). Women, the young, and those of low socioeconomic status encounter the most severe role strains (Pearlin & Lieberman 1979).

Economic strains—particularly potent contributors to psychological distress—bear an obvious relationship to structure via dependency upon income. Ross & Huber (1985) found that family income is not the sole determinant of economic hardship among married couples. Being young, having young children, and having little education increase economic strains, as does being nonwhite, at least among husbands. Poverty and lack of education have a synergistic effect on economic hardship, especially among women: compared to the better educated, the poorly educated need more money to fend off economic hardship.

Inconsistency of social standing can be a structural source of stress in itself. Dressler (1988) distinguished three forms of inconsistency involving disparate dimensions of status: status inconsistency (discrepancy between occupation and income), goal-striving stress (discrepancy between aspirations and achievements), and life-style incongruity (consumption patterns and cosmopolitan behaviors inconsistent with social class). The latter is the best predictor of depression among southern blacks, although there are life-course differences: the effects of life-style incongruity and goal-striving stress are most pronounced among young persons, while status inconsistency has a greater effect among older persons. Dressler maintained that any social group

with limited access to socially valued goals will seek social status through conspicuous consumption: life-style incongruity arises whenever upward mobility is prevented.

Pearlin (1975b) demonstrated that status inconsistency among spouses is problematic only for those who value upward social mobility. People to whom status advancement is important and who have married mates of lower social status origins are apt to experience disruptions of reciprocity, expressiveness, affection, and value sharing within the marital exchange. Neither status heterogamy by itself nor status striving by itself produces marital stress; rather, it is the confluence of these two conditions. The effects of status inequality persist over lengthy marriages, even among those who have experienced mobility after marriage.

Duration Versus Structure

The categorization of stressors as chronic or acute is artificial, often inaccurate, and generally counterproductive. The distinction refers solely to the duration of exposure to the stressor, not to the length of its effect (Wheaton 1983). Duration of exposure is more often assumed than assessed: numerous events are not "eventful" at all, but unfold over long periods of time (Avison & Turner 1988). Also, life events tend to be stable over time, reflecting ongoing social, economic, and psychological determinants (Aneshensel & Frerichs 1982, Norris & Murrell 1987, Turner & Noh 1988, McFarlane et al 1983). Moreover, acute and chronic stressors often are related. Pearlin and associates (1981), for example, found that ongoing difficulties in social role enactment are both a product of eventful change and a pathway through which events damage emotional well-being. Similarly, Eckenrode (1984) found events alter patterns of daily living.

Acute events and chronic strains have come to stand as proxies for several attributes of stressors other than duration, and it is these other attributes that warrant attention. Acute stressors usually are equated with objective, discrete events that are not the result of the individual's psychological functioning. Chronic stressors, in contrast, are seen as subjective, influenced by emotional functioning, and lacking a clear origin in time (Kessler et al 1985).

The pivotal issue concerns the treatment of occurrences partially or wholly the responsibility of the person affected. These occurrences usually are excluded from event inventories for purposes of measurement purity. This set of events, however, overlaps substantially with the set of socially caused events. This exclusionary strategy, therefore, has had the unintended consequence of removing the concept of stress from social structure and processes (Wheaton 1990, Aneshensel et al 1991). The very nature of most chronic stressors as on-going social, economic, and personal circumstances usually means that the individual is an active participant in the origin or maintenance

of the problem. The inclusion of such circumstances introduces possible measurement contamination by other constructs, such as psychological disorder. The expedient solution of restricting measures of stress to fateful events appears methodologically rigorous, but sacrifices many of the most theoretically meaningful social elements within the universe of stress.

This universe encompasses a spectrum of causal possibilities ranging from random misfortune through systemic adversity. This universe is cross-cut by the duration of exposure dimension, but both acute and chronic stressors may be random or systemic. Descriptions of the social distribution of stress remain equivocal because random and systemic stressors have been merged indiscriminately. The core task, I submit, is to identify those types of stressors that arise as a consequence of social organization.

SOCIAL VARIATION IN RESPONSE TO STRESS

Group Differences in Vulnerability

The failure of life events to account for group differences in psychological distress, the exposure hypothesis, focused attention on stress-reactivity, the vulnerability hypothesis (Kessler et al 1985). Kessler's (1979a) analytic technique ignited interest in intergroup variation in vulnerability. Mixed results have been reported for gender, race, social class, and marital status (e.g. Myers et al 1975, Pearlin & Johnson 1977, Kessler 1979b, Kessler & Essex 1982, Wheaton 1982, Kessler & McLeod 1984, Kessler & Neighbors 1986, Neff 1985, Newmann 1986, Thoits 1987, Turner & Avison 1989, Turner & Noh 1983, McLeod & Kessler 1990). Vulnerability typically is operationalized, in essence, as group differences in the coefficient for psychological distress regressed upon a stressor. Equating differential vulnerability with differences in the impact of stress upon a single outcome is problematic because the effects of stress are nonspecific (Aneshensel et al 1991). The central difficulty with vulnerability research is not the restricted range of stressors considered, as in the previous section, but rather the restricted range of outcomes.

In an influential study, Kessler & McLeod (1984) reported a female preponderance of psychological distress resulting from a greater exposure and vulnerability of women to social network events, often referred to as the "high cost of caring." Turner & Avison (1989) replicated these findings for chronically disabled adults, but rejected the conclusion that women generally are less capable of dealing with stress because events occurring to oneself are more depressive to men than women. Newmann (1986) found that chronic stressors do not have a greater depressive impact on women than men. She maintained that the relative impact of life events on women has been overestimated because important risk factors for women have been omitted from analysis.

Kessler & Neighbors (1986) found a negative interaction between race and class: racial differences in psychological distress are most pronounced at the lowest socioeconomic levels. Alternatively, poverty is more damaging to blacks than whites. Stress-by-race interactions, however, were not examined. In a separate analysis restricted to whites, McLeod & Kessler (1990) found that socioeconomic status is associated negatively with the distressing effects of life events, a class vulnerability spanning different components of socioeconomic status and several life crises. In contrast, Neff (1985) found no significant interactions of stress with class, race, or race-class combinations with regard to psychological distress.

Thus, group variation in stress-reactivity is itself variable. Several conditions contribute to these inconsistencies.

Conditions Influencing Vulnerability

The type of stressor considered is critical to the assessment of differential vulnerability. For example, some studies have demonstrated a greater depressive impact among women than men for social network events, but others have found a greater depressive impact among men than women for other stressors, including negative controllable events (Thoits 1987), occupational strain (Pearlin 1975a), and events to oneself (Turner & Avison 1989). Stressreactivity also may depend upon constellations of social statuses, a possibility receiving scant attention. An exception is the finding of Turner & Avison (1989) that gender differences in vulnerability are contingent upon employment status.

Vulnerability effects are quite sensitive to the type of outcome examined as well. Dohrenwend & Dohrenwend (1976) discredited theories arguing that women are under greater stress and hence more prone to psychiatric disorder because the female preponderance of disorder is limited to select types of disorder. Aneshensel and colleagues (1991) extended this argument to explanations invoking differential vulnerability. The impact of stress was compared for outcomes of affective or anxiety disorder, substance abuse or dependence, and any psychiatric disorder. Gender differences in stress-reactivity were found to be disorder-specific, not indicative of global differences in stress-reactivity. Bias in estimates of stress-reactivity result from implicitly treating a single disorder as a proxy for all disorder, or indeed for all possible stress outcomes.

For example, some social groups may be more prone to stress-induced physical illness than to psychological distress (Lin & Ensel 1989). Yet Thoits (1983) concluded that total change is most important in the etiology of physical disorder, not undesirable change as in the etiology of psychological disorder. Similar sensitivity is demonstrated for the stress-buffering role of moderate alcohol consumption, which emerges only with regard to somatic symptoms and not to affective symptoms (Neff 1984).

An overlooked factor in differential vulnerability is the interaction of acute and chronic stressors. This potential is demonstrated by findings that chronic stress (neighborhood overcrowding) exacerbates cardiovascular reactivity to a challenging task and lengthens recovery time (Fleming et al 1987). According to Eaton (1978), life events have the greatest depressive impact among persons who have not previously experienced similar stressors. Also, Wheaton (1982) suggested that extensive exposure may provide immunity. In his engineering analogy, Smith (1987) described how the elastic limit of a metal can be increased by the successive application of escalating strains, until the fracture point of the material is reached. Social processes are unlikely to mirror material physics, but the interactive effects of stressors over time merit further investigation. Prior social circumstances, especially the presence of role-related stress, determine whether life transitions (such as divorce) are even experienced as stressful, or function instead as stress-relief (Wheaton 1990).

The Influence of Social Support and Coping

Group differences in average stress-reactivity often are equated implicitly with deficits in coping resources without direct assessment of coping deficits, or more importantly, whether coping deficits account for group differences in average regression coefficients. Vulnerability interaction terms, however, merely stand as proxies for other, unspecified attributes. These interaction terms should be accounted for analytically by the direct modeling of the factors regulating vulnerability. This analytic strategy is analogous to explaining mean differences in psychological distress through the specification of other attributes that differ among groups, generate psychological distress, and thereby produce group differences in distress.

One notable exception is the work by Menaghan regarding the interaction of social placement and coping in three social roles: marriage, parenthood, and occupation (Menaghan 1982, 1983, Menaghan & Merves 1984). This research revealed that neither lower social status nor female gender is associated consistently with less adaptive coping efforts. Groups differ in their behavioral responses to stress, but these differences do not reflect the consistent selection of effective or ineffective strategies. Thoits reported similar negative findings for coping resources including mastery, self-esteem, structural supports, and support from a confidant (Thoits 1982, 1984, 1987). The effects of certain stressful events are exacerbated by deficits in coping resources, but this intensification does not account consistently for differences between social groups in responsiveness to negative life events.

A closely related issue concerns the functional meaning of stress-buffering. According to Wheaton (1985), stress-buffering occurs when a resource reduces the harmful effect of exposure to stress. Many researchers equate buffering exclusively with a conditional relationship: the psychological effect

of stress varies inversely with the resource. Wheaton (1985) identified an additional model of buffering and three illusory buffering models on the basis of the relationship between resources and stress. In stress-suppression models, stress exposure mobilizes a resource, which then alleviates distress. Stress is "buffered" because indirect effects via the resource are oppositional to direct effects: the total causal effect is reduced. In the first illusory buffering model, stress depletes the resource. The direct causal effect of stress is reduced, but the total causal effect of stress is unchanged, albeit explicated. Second, stress-deterrent models portray resources as causally antecedent to stress: resources reduce exposure to stress, not its impact. In the third illusory buffering model, stress and resources have separate and opposite effects but are completely independent of one another. Resources counterbalance the stressor, but do not buffer stress because support operates even in the absence of stress.

In this context, stress-buffering can be seen as a necessary component of effective coping behavior, given that coping behavior is elicited by the occurrence of a stressor. On the other hand, coping resources such as social support may be unchanged by exposure to stress, or they may be depleted or enhanced. Stress and social support exert mutual causal effects, but the precise nature of these effects is complex (Aneshensel & Frerichs 1982, Aneshensel & Huba 1984, Lin etal 1985). For example, life events often alter social support, even when the event itself is not a loss of support (Atkinson et al 1986). Evidence concerning the extent to which social support influences the occurrence of stress is equivocal (e.g. McFarlane et al 1983, Mitchell & Moos 1984, Norris & Murrell 1987).

Coping techniques are situation-specific with regard to both use and effectiveness, i.e. contingent upon the nature of the problem confronted. Strategies successful with one problem may not be used with another, or if used, may exacerbate the situation (Pearlin & Schooler 1978, Menaghan 1983, Pearlin 1989, Mattlin et al 1990). Folkman & Lazarus (1980), for example, found that the context and appraisal of the event are the most potent determinants of coping behavior. According to Pearlin & Schooler (1978), those who are under the greatest strain, the poor and less educated, utilize the least effective coping repertoires.

Menaghan (1983) has observed that conclusions about coping effectiveness are determined by the choice of the criteria for evaluating effectiveness. The criteria she specified are isomorphic to the functions of coping: reduction in the presenting problems, avoidance of distress, and maintenance of sense of self (Pearlin & Schooler 1978). Menaghan and her colleagues have concluded that coping efforts are more effective in reducing or containing distress than in avoiding or eliminating problematic conditions, at least for problems in work, marriage, and parenthood (Menaghan 1982, 1983, Menaghan & Merves

1984). For example, the coping strategies most often used in response to marital problems—selective ignoring and becoming resigned—intensify distress and have no impact on future marital problems. In contrast, negotiation and optimism decrease subsequent problems but are under-utilized by those with the most severe initial problems (Menaghan 1982).

Menaghan & Merves (1984) demonstrated that individual coping efforts are less important determinants of subsequent role problems than are structural constraints. For occupations, these constraints are job prestige, full-time employment, youth, and negative job changes. In parenting, family composition emerges as the key influence. In marriage, duration is most salient. They attributed these patterns to life-course variations in role demands and to societal stratification of resources.

In summary, while group differences in the average psychological impact of stress have been described, these differences do not necessarily equate with generalized group differences in responsiveness to stress. Coping deficits often are invoked post hoc to account for group variation in stress-responsiveness, but direct assessment of coping resources and behaviors does not account consistently for differential vulnerability. These kinds of results prompted Thoits (1987) to conclude that stress-reactivity is highly specific in nature—unique to certain kinds of events experienced by particular social groups. I concur but add that vulnerability effects also are unique to select outcomes.

SOCIAL CLASS, SELF-EFFICACY, AND STRESS

Class and Efficacy

Perhaps the most thoroughly developed linkage between social standing and stress is the concept of self-efficacy, a cognitive orientation attributing outcomes such as success and failure to personal attributes, such as ability and effort. As noted by Mirowsky & Ross (1984), the concepts of self-efficacy, mastery, internal locus of control, personal control, perceived control of the environment, and instrumentalism are virtually synonymous, and are opposite in meaning to fatalism, external locus of control, powerlessness, and learned helplessness. They described these orientations as socially transmitted conceptions of reality arising from exigencies of life that are not uniformly distributed within or across societies.

Although self-efficacy is a personal characteristic, the emergence of this cognitive orientation is connected to social stratification. Mastery varies inversely with socioeconomic status (Pearlin & Radabaugh 1976, Thoits 1987, Ross & Mirowsky 1989; Mirowsky & Ross 1990a). Pearlin & Rada-

baugh (1976) credited mastery to class-based opportunities and achievements, while Ross & Mirowsky (1989) ascribed powerlessness to such lower social class conditions as the inability to achieve one's ends, inadequate resources and opportunities, restricted alternatives, and jobs that limit autonomy. The elements of a lower-class orientation include rigidity and fatalism, authoritarian conservatism, personal rigidity, mistrust, external conformity, fatalism, and an emphasis on rules and organization (Kohn 1972, Wheaton 1983).

If social placement influences self-concept, then the self-concept of members of minority groups should reflect their disadvantaged social status, but in fact blacks have a relatively high sense of self-esteem. Hughes & Demo (1989) analyzed this seeming paradox by distinguishing the determinants of a belief in one's own value (esteem) from a sense of competence and personal control (efficacy) for adult American blacks. Personal efficacy is strongly affected by location in the stratification system, but social placement has at best a weak and indirect relationship to self-esteem: education enhances efficacy, which in turn elevates self-esteem. According to Hughes & Demo, self-efficacy is affected more than self-concept by inequality in the macrosocial system.

Efficacy and Stress Processes

Mastery is inversely related to psychological distress and ameliorates the psychological impact of stress. For example, Kaplan and associates (1983) found that attitudes of self-derogation moderate the impact of life events on psychological distress assessed ten years later. Kaplan and associates also related self-derogation to the subsequent occurrence of life-events, suggesting that coping deficits fail to prevent stress. Wheaton (1980) found that fatalism mediates the relationship between socioeconomic status and psychological distress: low-status persons are fatalistic and hence distressed.

Self-efficacy affects psychological distress via its impact on coping behavior. According to Wheaton (1980), fatalism undermines persistence and effort. In contrast, coping ability is diminished by inflexibility rather than fatalism (Wheaton 1983). Seeman and colleagues (1988) found that mastery encourages social learning and flexibility, which make effective, instrumental behavior more likely, and escape behavior such as problem drinking less likely. Active, problem-focused coping is most likely to occur among persons who feel a sense of subjective control (Thoits 1987, Ross & Mirowsky 1989). Exposure to stress, however, may wear away self-efficacy (Seeman et al 1988). For example, Pearlin and colleagues (1981) found stressful life experience becomes psychologically distressing to the extent that self-concept is eroded.

The Situational Context of Efficacy

The efficacy of coping behavior is situation-specific, as described previously, suggesting that a belief in personal control may be counterproductive at times, especially when stressors cannot in fact be controlled. Wheaton (1980) maintained that a continuing emphasis on external attributions is pervasively harmful, even though such attributions may be beneficial in some specific circumstances. Such attributions make the goals of social action seem less attainable, undermining motivation. Thoits (1987) advanced a related argument: a sense of control should lessen the psychological impact of even fateful events by encouraging active problem-solving in the aftermath. Mirowsky & Ross (1990b) found that depression is associated with feeling control over good and bad outcomes; no measurable benefit accrues by claiming responsibility for good outcomes and denying responsibility for bad ones, as predicted by defense theory. Thus, the impact of personal efficacy spans various types of stressful encounters, not merely those that could be prevented or reversed by personal skill or effort.

According to Mirowsky & Ross (1990a), the relationship between psychological distress and personal control depends upon whether a sense of control is derived from one's social standing. They found no limits to the psychological benefits of greater control when control is based on social status. There are diminishing returns to control, however, when control is not based on status. Also, there is no single optimum level of control: instead, the optimum increases as social status increases. These findings do not support the notion that fatalism decreases distress among low-status persons, the so-called "consolation prize" theory.

The findings of Hughes & Demo (1989) illuminate the dynamics surrounding causal attributions for success and failure among blacks. Attributing low achievement to racial discrimination as opposed to individual failure is irrelevant to personal self-esteem and personal efficacy. The interaction of social class and attributions on self-esteem is nonsignificant as well. These investigators concluded that social class is not central to self-esteem among blacks, not even among those who believe achievement is due to individual effort.

The problem of considering solitary outcomes in stress research is demonstrated by Wheaton's (1983) findings that fatalism and inflexibility exacerbate the impact of stress on depressive and schizophrenia-like symptoms, but not symptoms of anxiety. In general, schizophrenic symptoms are less affected by stress-related factors than are symptoms of depression and anxiety. Similarly, Mirowsky & Ross (1984) found that a belief in external control is related to depression, but not to anxiety. They conclude that external beliefs may have undesirable consequences in some domains but are not inherently pathological or pathogenic.

The limits of mastery are demonstrated by a recent study of the homeless. La Gory and co-workers (1990) found psychological resourcefulness has a much stronger impact on distress than any objective condition, including social support, life events, health, environmental use, sex or age. Nonetheless, mastery is insufficient to compensate for the harmful effects of homelessness, nor does mastery mediate the damaging effects of impoverished life circumstances.

ECONOMIC CHANGE, UNEMPLOYMENT, AND WORK-RELATED STRESS

The pervasive influence of socioenvironmental factors upon individual stress processes is revealed perhaps most graphically with regard to the economic and occupational spheres. Economic stress plays a major role connecting social class with psychological impairment. Yet, these individual-level relationships are embedded within macrolevel economic dynamics.

Macroeconomic Change and Individual Stress

The cumulative work of Dooley & Catalano provides persuasive evidence that macrolevel economic processes influence individual-level stress processes. Their theoretical model includes several direct linkages: environmental economic change produces individually experienced life-event change, life events produce symptoms of psychological disorder, and symptoms create a demand for services (Dooley & Catalano 1980). For example, economic contractions generate undesirable job and financial events, which in turn increase illness and injury (Catalano & Dooley 1983) and the use of mental health services (Dooley & Catalano 1984), at least among those of middle socioeconomic status. Persons working in industries with contracting employment opportunities are more likely to seek help than those working in stable or expanding industries; these relationships are independent of person-centered characteristics, such as symptomatology (Catalano et al 1986). Gortmaker and colleagues (1982) found that the relationship between stress and the utilization of health services may be most pronounced in the absence of illness. Associations among economic change, stressors, and mood may be specific to metropolitan areas (Dooley et al 1981), but relationships between economic change and admissions to mental health facilities appear comparable across areas (Catalano et al 1981).

Catalano and colleagues (1986) offered a striking illustration of the problems inherent in equating the impact of stress with a single outcome. They found that desirable job events are related positively to considering seeking help, albeit not to actual help-seeking. This finding runs counter to the widely held belief that only undesirable events are stressful, a belief based almost exclusively upon findings pertaining to psychological distress; the earlier notion, however, is supported, that change per se is stressful.

Unemployment and Work-Related Stress

One essential link between macrolevel economic change and individual stress processes is the occurrence of unemployment and other work-related events. Unemployment exerts a substantial negative effect on emotional functioning and physical health status (Kessler et al 1987, 1989). Job disruptions are psychologically distressing, at least in part because these changes generate personal economic strain (Pearlinet al 1981). The psychological impact of involuntary job loss is exacerbated by a lack of socioemotional support (Gore 1978). Poorly educated blacks are most adversely affected psychologically by unemployment, a differential not accounted for by socioeconomic considerations (Hamilton et al 1990). In contrast, Ensminger & Celentano (1990) found that unemployment distresses men and women similarly. Their findings are important because they considered the factors most likely to contribute to gender differences: family circumstances, worries about children and family, and centrality of the work role.

Unemployment is stressful and exerts deleterious effects upon well-being, but being employed is not always beneficial. Perceived occupational stress is related to various physical and psychological disorders (House et al 1979), and chronic job pressures are related to increased mortality (House et al 1986). These associations are not due to a simple tension reduction model of substance use (Mensch & Kandel 1988, Cooper 1990).

As with unemployment, social support exerts some ameliorative effect upon job stress. LaRocco and associates (1980) found job-related stress is buffered more pervasively by support from coworkers than support from supervisors or family. An overlooked finding is that buffering is confined to the impact of job-related stress on mental and physical health. Buffering does not occur for the relationship between job-stress and job-related strains. Conclusions regarding whether the impact of support is contingent upon the level of job stress therefore depend upon the criteria used to operationalize the impact of stress.

The coping behaviors of individuals bear little relationship to the development of occupational stress. Menaghan & Merves (1984) found that occupational distress is increased by efforts to restrict expectations and decreased by use of optimistic comparisons. These coping efforts do not affect subsequent occupational problems, however, nor were these problems affected by the other two coping behaviors examined—direct action and selective ignoring. Characteristics of work life, however, did influence the evolution of problems, including occupational prestige, full-time employment, and income. These investigators inferred that occupational problems embedded in struc-

tural conditions often are impervious to the coping actions of individual workers (cf Mechanic 1974).

Gender Stratification and Work-Related Stress

The intersection of occupational, family, and gender roles continues to generate a substantial body of stress-related research. Work concerning the impact of employment per se on women's well-being has yielded equivocal results, although an overall beneficial impact of employment seems likely (e.g. Aneshensel et al 1981, Gore & Mangione 1983, Krause & Markides 1985, Rosenfeld 1989). Kandel and associates (1985) found that the aggregate benefit of complex role configurations results from opposing processes: certain role constellations exacerbate stress experienced in other roles, while other constellations have the reverse impact. The impact of work and homemaker roles is not universally positive or negative, but depends upon role-related experiences (Pearlin 1975a, Aneshensel 1986).

Any gender comparison of work-related stress must consider the gender stratification of the occupational system (Aneshensel & Pearlin 1987). Lennon (1987) noted that such stratification means women and men typically encounter work environments imposing different demands and constraints, conditions with disparate mental health consequences. She found a lack of substantive complexity is detrimental to both men and women, but emerges as sex-typical types of disorder: women respond with demoralization, whereas men react with drinking. Loscocco & Spitze (1990) focused upon gender differences in how work is structured, noting that women and men seldom work together in the same job. They described a "gender model" which predicts that gender moderates the relationship between aspects of the job and well-being. They found instead that women and men are influenced similarly by factors indicative of job-stress—job demands, job deprivations and rewards, and the physical and social work environment—findings supporting a "job model" of gender and work.

Ross & Mirowsky (1988) asserted that stress among employed mothers is generated by temporary disjunctures in the internal organization of family roles and the integration of the family with other institutions. Specifically, they reasoned that one facet of family roles has changed (employment of mothers), but other family roles (e.g. husband's participation in childcare) and the family's links to other institutions (e.g. formal childcare) have not kept pace. Thus, difficulty obtaining childcare and lack of paternal participation in childcare generate stress and emotional distress among employed wives, but not fathers. Ross & Mirowsky (1988) attributed these conditions to macrolevel economic and demographic trends (e.g. increased demand for female labor).

In sum, unemployment and work-related stress are harmful to both gen-

ders, although the manner in which stress is manifested by women and men may differ. Working outside of the home or working as a homemaker both may generate stress for women, contingent upon experiences within these roles and the social, economic, and historical context within which these roles are enacted.

CONCLUSIONS

Chance adversity intrudes on the lives of most persons, but stress also arises as a predictable outcome of ordinary social organization. The psychiatric view of disorder as abnormal generates an implicit assumption that the social antecedents of disorder also are abnormal. This orientation contrasts sharply with Merton's (1938) theoretical account of anomie and nonconforming behavior: social orders permitting normal emotional functioning also generate circumstances in which emotional disorder constitutes a normal or predictable response. The occurrence of social stress, therefore, can be seen as an inevitable consequence of social organization.

Only some systemic sources of stress stem from the failure of the social system to function as it should, stressors that could be eliminated. The occurrence of systemic stressors is not necessarily an indication of a social system run amok but may reflect instead the system functioning precisely as it is supposed to function. For example, a capitalist free-enterprise system inevitably produces business failure and unemployment; the sole questions are which industries falter and what occupations encounter contracting employment opportunities. The imperatives associated with maintenance of the social system inevitably create tension between the individual and the collectivity. These systemic sources of tension can be shifted from one location in the system to another but cannot be eliminated entirely. Thus, stressful life circumstances and their emotional consequences may be and often are experienced by perfectly ordinary people integrated into the normative structures of society.

Systemic conditions of tension are more prevalent among some social groups than others, largely as a consequence of inequality in the distributive system (Pearlin 1989). At an individual level, stress can be understood in terms of a person's unique characteristics, experiences, and history. Group differences in exposure to stress, by contrast, point inexorably toward social structural origins. Two major pathways linking structure with stress are exclusion from full participation in the social system and participation that fails to provide the expected returns. Individuals occupy social roles, especially major social roles, to satisfy needs and attain goals; often these needs are essential to the survival or self-actualization of the individual and entail important life goals. Violation of role proscriptions, by the individual or by

other members of the role set, renders social interactions unreliable. Likewise, exclusion from role occupancy and institutional participation, voluntary or involuntary, means social interactions occur outside of the normative system and are therefore likely to be unreliable. The lack of reliable social interaction jeopardizes need-satisfaction, goal-attainment, and the effective functioning of the social system.

These points are illustrated quite clearly with regard to marriage. First, the unmarried generally encounter more chronic stressors than do the married, including greater social isolation (Pearlin & Johnson 1977). Some married couples experience marked marital discord, of course, often as a consequence of the failure of one or both partners to adhere to normative standards for how a spouse gua spouse is supposed to act (Pearlin 1983, Aneshensel 1986). Indeed, marital stress emerges as an inevitable aspect of marriage. Mirowsky (1985) found shared decision-making power is psychologically beneficial for both spouses: complete domination and total subservience generate more depression for both spouses. The critical finding, however, is that no one level of shared power minimizes depression for both partners. Husbands and wives cannot both maximize their psychological well-being: the husband, the wife, or both spouses necessarily experience a suboptimal level of well-being. The typical power distribution favors husbands more often than wives. The power distribution within a given marriage, however, varies as a function of the social location of the couple. Nonetheless, the married are less psychologically distressed on average than the unmarried.

Stress has demonstrated adverse effects upon psychological and physical health, but these outcomes capture only part of the cost associated with social stress. When discrete health outcomes are investigated, many of those damaged by stress are counted as undamaged because they manifest stress-reactions as other outcomes (Aneshensel et al 1991). The total social, psychological, and economic costs of stress have not yet been assessed, therefore, because only some manifestations have been counted. These costs may well include outcomes of relevance to areas of sociological interest other than medical sociology, including crime and delinquency, diminished educational and occupational achievement, lost productivity, and downward social mobility.

ACKNOWLEDGMENTS

Preparation of this review was supported in part by grants from the National Institute of Mental Health (RO 1 MH42816 and RO1 MH40831). I wish to thank Vicki Ebin for her precise abstracts of a voluminous amount of bibliographic material and Gloria Krauss for her editorial improvements. My interpretation of this body of literature benefitted from discussions with fellow participants in the Consortium for Research Involving Stress Processes, funded by the W.T. Grant Foundation.

Literature Cited

- Am. Psychol. Assoc., Am. Educ. Res. Assoc., Natl. Counc. Measurement Educ. 1974. Standards for Educational and Psychological Tests. Washington, DC: Am. Psychol. Assoc.
- Aneshensel, C. S. 1985. The natural history of depressive symptoms: Implications for psychiatric epidemiology. Res. Commun. Ment. Health 5:45-75
- Aneshensel, C. S. 1986. Marital and employment role-strain, social support, and depression among adult women. In *Stress, Social Support, and Women*, ed. S. E. Hobfoll, pp. 99-114. New York: Hemisphere
- Aneshensel, C. S., Frerichs, R. R. 1982. Stress, support, and depression: A longitudinal causal model. J. Commun. Psychol. 10:363-76
- Aneshensel, C. S., Frerichs, R. R., Clark, V. A. 1981. Family roles and sex differences in depression. J. Health Soc. Behav. 22(4): 379–93
- Aneshensel, C. S., Huba, G. J. 1984. An integrative causal model of the antecedents and consequences of depression over one year. Res. Commun. Ment. Health 4:35-72
- Aneshensel, C. S., Pearlin, L. I. 1987. Structural contexts of sex differences in stress. In *Gender and Stress*, ed. R. C. Barnett, L. Biener, G. K. Baruch, pp. 75– 95. New York: Free
- Aneshensel, C. S., Rutter, C. M., Lachenbruch, P. A. 1991. Social structure, stress, and mental health: Competing conceptual and analytic models. *Am. Sociol. Rev.* 56: 166–78
- Aneshensel, C. S., Stone, J. D. 1982. Stress and depression: A test of the buffering model of social support. Arch. Gen. Psychiatry 39:1392–96
- Atkinson, T., Liem, R., Liem, J. H. 1986. The social costs of unemployment: Implications for social support. J. Health Soc. Behav. 27(4):317–31
- Avison, W. R., Turner, R. J. 1988. Stressful life events and depressive symptoms: Disaggregating the effects of acute stressors and chronic strains. J. Health Soc. Behav. 29(3):253-64
- Catalano, R., Dooley, D. 1983. Health effects of economic instability: A test of economic stress hypothesis. *J. Health Soc. Behav.* 24(1):46-60
- Catalano, R., Dooley, D., Jackson, R. 1981. Economic predictors of admissions to mental health facilities in a nonmetropolitan community. J. Health Soc. Behav. 22(3): 284–97
- Catalano, R., Rook, K., Dooley, D. 1986. Labor markets and help-seeking: A test of the employment security hypothesis. *J. Health Soc. Behav.* 27(3):277-87

- Cobb, S. 1976. Social support as a moderator of life stress. *Psychosom. Med.* 38(5):300–
- Cohen, S., Syme, S. L., ed. 1985. Social Support and Health. Orlando, Fla: Academic
- Cooper, M. L., Russell, M., Frone, M. R. 1990. Work stress and alcohol effects: A test of stress-induced drinking. *J. Health Soc. Behav.* 31(3):260-76
- Soc. Behav. 31(3):260-76
 Dean, A., Lin, N. 1977. The stress-buffering role of social support: Problems and prospects for systematic investigation. J. Nerv. Ment. Dis. 165(6):403-17
- Dohrenwend, B. P., Dohrenwend, B. S. 1969. Social Status and Psychological Disorder: A Causal Inquiry. New York: Wiley-Intersci.
- Dohrenwend, B. P., Dohrenwend, B. S. 1976. Sex differences and psychiatric disorders. *Am. J. Sociol.* 81(6):1447–54
- Dohrenwend, B. S. 1970. Social class and stressful events. In *Psychiatric Epidemiology: Proc. Int. Symp., Aberdeen Univ. 22–25 July 1969*, ed. E. H. Hare, J. K. Wing, pp. 313–19. London: Oxford Univ. Press
- Dohrenwend, B. S. 1973. Social status and stressful life events. J. Pers. Soc. Psychol. 28(2):225–35
- Dohrenwend, B. S. 1977. Anticipation and control of stressful life events: An exploratory analysis. In *The Origins and Course of Psychopathology: Methods of Longitudinal Research*, ed. J. S. Strauss, H. M. Babigian, M. Roff, pp. 135–86. New York: Plenum
- Dohrenwend, B. S. 1978. Social status and responsibility for stressful life events. In *Stress and Anxiety*, ed. C. D. Spielberger, I. G. Sarason, 5:25–42. Washington, DC: Hemisphere
- Dohrenwend, B. S., Krasnoff, L., Askenasy, A. R., Dohrenwend, B. P. 1978. Exemplification of a method for scaling life events: The PERI Life Events Scale. J. Health Soc. Behav. 19(2):205-29
- Dooley, D., Catalano, R. 1980. Economic change as a cause of behavioral disorder. *Psychol. Bull.* 87(3):450-68
- Dooley, D., Catalano, R. 1984. Why the economy predicts help-seeking: A test of competing explanations. *J. Health Soc. Behav.* 25(2):160–76
- Dooley, D., Catalano, R., Jackson, R., Brownell, A. 1981. Economic, life, and symptom changes in a nonmetropolitan community. J. Health Soc. Behav. 22(2):144-54
- Dressler, W. W. 1988. Social consistency and psychological distress. J. Health Soc. Behav. 29(1):79-91
- Eaton, W. W. 1978. Life events, social supports, and psychiatric symptoms: A re-

- analysis of the New Haven data. J. Health Soc. Behav. 19(2):230-34
- Eaton, W. W. 1986. The Sociology of Mental Disorders. New York: Praeger. 2nd ed
- Eckenrode, J. 1984. Impact of chronic and acute stressors on daily reports of mood. *J. Pers. Soc. Psychol.* 46(4):907–18
- Pers. Soc. Psychol. 46(4):907-18 Ensminger, M. E., Celentano, D. D. 1990. Gender differences in the effect of unemployment on psychological distress. Soc. Sci. Med. 30(4):469-77
- Farnworth, M., Leiber, M. J. 1989. Strain theory revisited: Economic goals, educational means, and delinquency. *Am. Sociol. Rev.* 54(2):263-74
- Fleming, I., Baum, A., Davidson, L. M., Rectanus, E., McArdle, S. 1987. Chronic stress as a factor in physiologic reactivity to challenge. *Health Psychol*. 6(3):221-37
- Folkman, S., Lazarus, R. S. 1980. An analysis of coping in a middle-aged community sample. J. Health Soc. Behav. 21(3):219–39
- Fox, J. W. 1990. Social class, mental illness, and social mobility: The social selection-drift hypothesis for serious mental illness. *J. Health Soc. Behav.* 31(4):344–53
- Golding, J. M., Potts, M. K., Aneshensel, C.
 S. 1991. Stress exposure among Mexican Americans and non-Hispanic whites. J. Commun. Psychol. 19(1):37-59
- Gore, S. 1978. The effect of social support in moderating the health consequences of unemployment. J. Health Soc. Behav. 19(2): 157-65
- Gore, S., Mangione, T. W. 1983. Social roles, sex roles and psychological distress: Additive and interactive models of sex differences. J. Health Soc. Behav. 24(4):300– 12
- Gortmaker, S. L., Eckenrode, J., Gore, S. 1982. Stress and the utilization of health services: A time series and cross-sectional analysis. J. Health Soc. Behav. 23(1):25–38
- Hamilton, V. L., Broman, C. L., Hoffman, W. S., Renner, D. S. 1990. Hard times and vulnerable people: Initial effects of plant closing on autoworkers' mental health. *J. Health Soc. Behav.* 31(2):123–40 House, J. S., Kahn, R. L. 1985. Measures and
- House, J. S., Kahn, R. L. 1985. Measures and concepts of social support. See Cohen & Syme 1985, pp. 83–108
- House, J. S., Landis, K. R., Umberson, D. 1988. Social relationships and health. *Science* 241:540–45
- House, J. S., Strecher, V., Metzner, H. L., Robbins, C. A. 1986. Occupational stress and health among men and women in the Tecumseh community health study. J. Health Soc. Behav. 27(1):62–77
- House, J. S., McMichael, A. J., Wells, J. A., Kaplan, B. H., Landerman, L. R. 1979. Occupational stress and health among fac-

- tory workers. J. Health Soc. Behav. 20(2):139-60
- Hughes, M., Demo, D. H. 1989. Self-perceptions of Black Americans: Self-esteem and personal efficacy. Am. J. Sociol. 95(1):132-59
- Kandel, D. B., Davies, M., Raveis, V. H. 1985. The stressfulness of daily social roles for women: Marital, occupational and household roles. J. Health Soc. Behav. 26(1):64-78
- Kaplan, H. B., ed. 1983. Psychosocial Stress: Trends in Theory and Research. New York: Academic
- Kaplan, H. B., Robbins, C., Martin, S. S. 1983. Antecedents of psychological distress in young adults: self-rejection, deprivation of social support, and life events. *J. Health Soc. Behav.* 24(3):230–44
 Kessler, R. C. 1979a. A strategy for studying
- Kessler, R. C. 1979a. A strategy for studying differential vulnerability to the psychological consequences of stress. J. Health Soc. Behav. 20(2):100–8
- Kessler, R. C. 1979b. Stress, social status, and psychological distress. J. Health Soc. Behav. 20(3):259-72
- Kessler, R. C., Essex, M. 1982. Marital status and depression: The importance of coping resources. *Soc. Forces* 61(2):484–507
- Kessler, R. C., House, J. S., Turner, J. B. 1987. Unemployment and health in a community sample. J. Health Soc. Behav. 28(1):51-59
- Kessler, R. C., McLeod, J. D. 1984. Sex differences in vulnerability to undesirable life events. Am. Sociol. Rev. 49(5):620-31
- Kessler, R. C., McLeod, J. D. 1985. Social support and mental health in community samples. See Cohen & Syme 1985, pp. 219-40
- Kessler, R. C., Neighbors, H. W. 1986. A new perspective on the relationships among race, social class, and psychological distress. J. Health Soc. Behav. 27(2):107-15
- Kessler, R. C., Price, R. H., Wortman, C. B. 1985. Social factors in psychopathology: Stress, social support, and coping processes. *Annu. Rev. Psychol.* 36:531-72
- Stress, social support, and coping processes. *Annu. Rev. Psychol.* 36:531–72 Kessler, R. C., Turner, J. B., House, J. S. 1989. Unemployment, reemployment, and emotional functioning in a community sample. *Am. Sociol. Rev.* 54(4):648–57
- Kohn, M. L. 1972. Class, family, and schizophrenia: A reformulation. *Soc. Forces* 50:295-313
- Krause, N., Markides, K. S. 1985. Employment and psychological well-being in Mexican American women. J. Health Soc. Behav. 26(1):15–26
- La Gory, M., Ritchey, F. J., Mullis, J. 1990. Depression among the homeless. *J. Health Soc. Behav.* 31(1):87–101
- LaRocco, J. M., House, J. S., French, J. R.

- P. Jr. 1980. Social support, occupational stress, and health. *J. Health Soc. Behav.* 21(3):202–18
- Lazarus, R. S. 1966. Psychological Stress and the Coping Process. New York: McGraw-Hill
- Lennon, M. C. 1987. Sex differences in distress: The impact of gender and work roles. J. Health Soc. Behav. 28(3):290–305
- Liem, R., Liem, J. 1978. Social class and mental illness reconsidered: The role of economic stress and social support. J. Health Soc. Behav. 19(2):139-56
 Lin, N., Ensel, W. M. 1984. Depression-
- Lin, N., Ensel, W. M. 1984. Depression-mobility and its social etiology: The role of life events and social support. J. Health Soc. Behav. 25(2):176–88
- Lin, N., Ensel, W. M. 1989. Life stress and health: Stressors and resources. *Am. Sociol. Rev.* 54(3):382–99
- Lin, N., Woelfel, M. W., Light, S. C. 1985. The buffering effect of social support subsequent to an important life event. *J. Health Soc. Behav.* 26(3):247–63
- Loscocco, K. A., Spitze, G. 1990. Working conditions, social support, and the well-being of female and male factory workers. *J. Health Soc. Behav.* 31(4):313–27
- Mattlin, J. A., Wethington, E., Kessler, R. C. 1990. Situational determinants of coping and coping effectiveness. J. Health Soc. Behav. 31(1):103-22
- McFarlane, A. H., Norman, G. R., Streiner, D. L., Roy, R. G. 1983. The process of social stress: Stable, reciprocal, and mediating relationships. *J. Health Soc. Behav.* 24(2):160–73
- McLeod, J. D., Kessler, R. C. 1990. Socioeconomic status differences in vulnerability to undesirable life events. J. Health Soc. Behav. 31(2):162-72
- Mechanic, D. 1972. Social class and schizophrenia: Some requirements for a plausible theory of social influence. *Soc. Forces* 50:305-13
- Mechanic, D. 1974. Social structure and personal adaptation: Some neglected dimensions. In Coping and Adaptation, ed. E. V. Coehlo, D. A. Hamburg, J. E. Adans, pp. 32–44. New York: Basic
 Menaghan, E. G. 1982. Measuring coping
- Menaghan, E. G. 1982. Measuring coping effectiveness: A panel analysis of marital problems and coping efforts. J. Health Soc. Behav. 23(3):220–34
- Menaghan, E. G. 1983. Individual coping efforts: Moderators of the relationship between life stress and mental health outcomes. See Kaplan 1983, pp. 157-91
 Menaghan, E. G., Meryes, E. S. 1984. Cop-
- Menaghan, E. G., Merves, E. S. 1984. Coping with occupational problems: The limits of individual efforts. *J. Health Soc. Behav.* 25(4):406–23
- Mensch, B. S., Kandel, D. B. 1988. Do job

- conditions influence the use of drugs? J. Health Soc. Behav. 29(2):169-84
- Merton, R. K. 1938. Social structure and anomie. Am. Sociol. Rev. 3:672-82
- Mirowsky, J. 1985. Depression and marital power: An equity model. *Am. J. Sociol*. 91(3):557–92
- Mirowsky, J., Ross, C. E. 1984. Mexican culture and its emotional contradictions. *J. Health Soc. Behav.* 25(1):2–13
- Mirowsky, J., Ross, C. E. 1990a. The consolation-prize theory of alienation. *Am. J. Sociol.* 95(6):1505–35
- Mirowsky, J., Ross, C. E. 1990b. Control or defense? Depression and the sense of control over good and bad outcomes. *J. Health Soc. Behav.* 31(1):71–86
- Mitchell, R. E., Moos, R. H. 1984. Deficiencies in social support among depressed patients: Antecedents or consequences of stress? J. Health Soc. Behav. 25(4):438-52
- Moen, P., Dempster-McClain, D., Williams, R. M. Jr. 1989. Social integration and longevity: An event history analysis of women's roles and resilience. *Am. Sociol. Rev.* 54(4):635-47
- Myers, J. K., Lindenthal, J. J., Pepper, M. P. 1975. Life events, social integration and psychiatric symptomatology. *J. Health Soc. Behav.* 16(4):421–27
- Neff, J. A. 1985. Race and vulnerability to stress: An examination of differential vulnerability. *J. Pers. Soc. Psychol.* 49(2): 481–91
- Neff, J. A. 1984. The stress-buffering role of alcohol consumption: The importance of symptom dimension. *J. Hum. Stress* Spring:35-42
- Newmann, J. P. 1986. Gender, life strains, and depression. J. Health Soc. Behav. 27(2):161-78
- Norris, F. H., Murrell, S. A. 1987. Transitory impact of life-event stress on psychological symptoms in older adults. *J. Health Soc. Behav.* 28(2):197–211
- Pearlin, L. I. 1975a. Sex roles and depression. In Life-Span Developmental Psychology: Normative Life Crises, ed. N. Datan, L. Ginsberg, pp. 191–207. New York: Academic
- Pearlin, L. I. 1975b. Status inequality and stress in marriage. *Am. Sociol. Rev.* 40: 344–57
- Pearlin, L. I. 1983. Role strains and personal stress. See Kaplan 1983, pp. 3-32
- Pearlin, L. I. 1989. The sociological study of stress. J. Health Soc. Behav. 30(3):241-56
- Pearlin, L. I., Aneshensel, C. S. 1986. Coping and social supports: Their functions and applications. In Applications of Social Science to Clinical Medicine and Health Policy, ed. L. H. Aiken, D. Mechanic, pp.

- 417-37. New Brunswick, NJ: Rutgers Univ. Press
- Pearlin, L. I., Johnson, J. S. 1977. Marital status, life-strains and depression. *Am. Sociol. Rev.* 42:704–15
- Pearlin, L. I., Lieberman, M. A. 1979. Social sources of emotional distress. *Res. Commun. Ment. Health* 1:217-48
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., Mullan, J. T. 1981. The stress process. J. Health Soc. Behav. 22(4):337-56
- Pearlin, L. I., Radabaugh, C. W. 1976. Economic strains and the coping functions of alcohol. Am. J. Sociol. 82(3):652-63
- Pearlin, L. I., Schooler, C. 1978. The structure of coping. *J. Health Soc. Behav.* 19(1):2–21
- Rosenberg, M. 1968. The Logic of Survey Analysis. New York: Basic
- Rosenfield, S. 1989. The effects of women's employment: Personal control and sex differences in mental health. *J. Health Soc. Behav.* 30(1):77–91
- Ross, C. E., Huber, J. 1985. Hardship and depression. J. Health Soc. Behav. 26(4): 312-27
- Ross, C. E., Mirowsky, J. 1979. A comparison of life-event weighting schemes: Change, undesirability, and effect-proportional indices. J. Health Soc. Behav. 20(2):166-77
- Ross, C. E., Mirowsky, J. 1988. Child care and emotional adjustment to wives' employment. J. Health Soc. Rehay, 29(2):177–38.
- ment. J. Health Soc. Behav. 29(2):127–38 Ross, C. E., Mirowsky, J. 1989. Explaining the social patterns of depression: Control and problem solving—or support and talking? J. Health Soc. Behav. 30(2):206– 19
- Seeman, M., Seeman, A. Z., Budros, A. 1988. Powerlessness, work, and community: A longitudinal study of alienation and alcohol use. J. Health Soc. Behav. 29(3):185-98
- Smith, W. K. 1987. The stress analogy. *Schizophr. Bull.* 13(2):215–20
- Tausig, M. 1982. Measuring life events. J. Health Soc. Behav. 23:52-64
- Thoits, P. A. 1982. Life stress, social support, and psychological vulnerability: Epidemiological considerations. J. Commun. Psychol. 10:341-62
- Thoits, P. A. 1983. Dimensions of life events that influence psychological distress: An

- evaluation and synthesis of the literature. See Kaplan 1983, pp. 33-103
- Thoits, P. A. 1984. Explaining distributions of psychological vulnerability: Lack of social support in the face of life stress. *Soc. Forces* 63(2):453–81
- Thoits, P. A. 1987. Gender and marital status differences in control and distress: Common stress versus unique stress explanations. *J. Health Soc. Behav.* 28(1):7–22
- Turner, R. J. 1981. Social support as a contingency in psychological well-being. *J. Health Soc. Behav.* 22(4):357–67
- Turner, R. J. 1983. Direct, indirect, and moderating effects of social support on psychological distress and associated conditions. See Kaplan 1983. pp. 105-55
- See Kaplan 1983, pp. 105-55
 Turner, R. J., Avison, W. R. 1989. Gender and depression: Assessing exposure and vulnerability to life events in a chronically strained population. J. Nerv. Ment. Dis. 177(8):443-55
- Turner, R. J., Noh, S. 1983. Class and psychological vulnerability among women: The significance of social support and personal control. J. Health Soc. Behav. 24(1):2-15
- Turner, R. J., Noh, S. 1988. Physical disability and depression: A longitudinal analysis. J. Health Soc. Behav. 29(1):23-37
- J. Health Soc. Behav. 29(1):23-37 Wethington, E., Kessler, R. C. 1986. Perceived support, received support, and adjustment to stressful life events. J. Health Soc. Behav. 27(1):78-89
- Wheaton, B. 1978. The sociogenesis of psychological disorder: Reexamining the causal issues with longitudinal data. *Am. Sociol. Rev.* 43:383–403
- Wheaton, B. 1980. The sociogenesis of psychological disorder: An attributional theory. J. Health Soc. Behav. 21(2):100–24
- Wheaton, B. 1982. A comparison of the moderating effects of personal coping resources on the impact of exposure to stress in two groups. *J. Commun. Psychol.* 10:293–311
- Wheaton, B. 1983. Stress, personal coping resources, and psychiatric symptoms: An investigation of interactive models. *J. Health Soc. Behav.* 24(3):208-29
- Health Soc. Behav. 24(3):208–29
 Wheaton, B. 1985. Models for the stress-buffering functions of coping resources. J. Health Soc. Behav. 26(4):352–64
- Wheaton, B. 1990. Life transitions, role histories, and mental health. *Am. Sociol. Rev.* 55:209-23