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The Sociological Study of Stress*

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This paper presents a critical overview of current concepts and analytic practices in stress research and considers how they can be changed to make the research more consistent with core sociological interests. An overarching concern of the paper is the analytic use of basic information about people's social and institutional affiliations and statuses. It is important that such information be treated not simply as data that need to be controlled statistically; we must examine the bearing of these data on each domain of the stress process: the exposure to and meaning of stressors, access to stress mediators, and the psychological, physical, and behavioral manifestations of stress. The conceptualization and measurement of stressors should move away from their focus on particular events or chronic strains and should seek instead to observe and assess over time constellations of stressors made up of both events and strains. Moreover, the effects of the mediators—coping and social support—are evaluated most fruitfully in terms of their effects in limiting the number, severity, and diffusion of stressors in these constellations. Finally, sociological stress researchers should not be bound to outcomes that better serve the intellectual interests of those who work with biomedical and epidemiological models of stress, nor should the research be committed exclusively to a single outcome.

Sociologists have an intellectual stake in the study of stress. It presents an excellent opportunity to observe how deeply well-being is affected by the structured arrangements of people's lives and by the repeated experiences that stem from these arrangements. Social research into stress is entirely consistent with a present-day social psychology that seeks to establish the unities between social structure and the inner functioning of individuals (House 1981a). Yet stress is not generally seen as part of a sociological mainstream, partly, I believe, because those of us who are engaged in stress research are not consistently attentive to the sociological character of the

field. In this paper I attempt to identify what I regard as some of the conceptual and analytic issues that should be considered in bringing the study of stress closer to sociology.

Much of the paper is organized around what have come to be recognized as the domains of the stress process: stressors, stress mediators, and stress outcomes. There is considerable accumulated evidence that this process and its components largely arise from and are influenced by various structural arrangements in which individuals are embedded. To a large extent these arrangements determine the stressors to which people are exposed, the mediators they are able to mobilize, and the manner in which they experience stress. In view of its importance, the structural background of the stress process deserves a closer examination than it usually receives.

THE STRUCTURAL CONTEXTS OF THE STRESS PROCESS

Most research into stress starts with an experience—an exigency that people confront

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and their perceptions of that exigency as threatening or burdensome. Many stressful experiences, it should be recognized, don't spring out of a vacuum but typically can be traced back to surrounding social structures and people's locations within them. The most encompassing of these structures are the various systems of stratification that cut across societies, such as those based on social and economic class, race and ethnicity, gender, and age. To the extent that these systems embody the unequal distribution of resources, opportunities, and self-regard, a low status within them may itself be a source of stressful life conditions. Thus it is quite understandable that the community studies conducted in the 1950s and 1960s consistently revealed powerful associations between people's statuses in stratified systems and indicators of their well-being (e.g., Gurin, Veroff, and Feld 1960; Hollingshead and Redlich 1958; Srole, Langner, Opler, and Rennie 1960). Interest in these statuses continues today, particularly as evidenced by the explosion of literature examining gender and stress (e.g., Gore and Mangione 1983; Kessler and McRae 1981; Thoits 1986).

Another important structural context is found in social institutions and their arrangements of statuses and roles. Incumbency in a major institutionalized role necessarily entails persistent encounters with a host of conditions and expectations that exert a structuring force on experience. Because the roles themselves persist in time, experiences within them tend to become a repeated feature of their incumbents' lives. When these experiences are threatening and problematic, they may result in stress. There are abundant indications that such experience is common among incumbents of occupational (e.g., Kahn 1973) and of family roles (see e.g., Pearlin 1983). Moreover, one does not act alone as an incumbent of a role. Instead, one role is part of a larger role set or of a constellation of complementary roles around which important interpersonal relations are structured. Thus one cannot be a husband without a wife, a parent without a child, a colleague without a fellow worker. Relationships formed by role sets are relatively enduring and stable, and typically are of considerable importance to the parties involved. Consequently, when such relationships are problematic and filled with conflict, they can produce considerable stress.

The importance of roles and role sets as sources of stress are elaborated in a later discussion of chronic strains. Here I wish to emphasize that interrelated levels of social structure—social stratification, social institutions, interpersonal relationships—mold and structure the experiences of individuals; these experiences, in turn, may result in stress. Therefore the structural contexts of people's lives are not extraneous to the stress process but are fundamental to that process. They are the sources of hardship and privilege, threat and security, conflict and harmony. In searching for the origins of stress, we may begin fruitfully by scrutinizing the social arrangements of society and the structuring of experience within these arrangements. This search, I believe, will reveal how ordinary people can be caught up in the disjunctures and discontinuities of societies, how they can be motivated to adopt socially valued dreams and yet can find their dreams thwarted by socially erected barriers, and how as engaged members of society they come into conflict with others and with themselves.

Certainly not all stress researchers are interested in the structural contexts of the stress process. As I noted above, most begin their work by looking directly at potential stressors that reside in individuals' experience without regard to the possible structural origins of the stressors. Sociological inquiry, however, does not have the option of ignoring these origins. The distinguishing mark of sociological inquiry is its effort to uncover patterns and regularities shared by people whose social characteristics and circumstances are similar. The essential element of the sociological study of stress is the presence of similar types and levels of stress among people who are exposed to similar social and economic conditions, who are incumbents in similar roles, and who come from similar situational contexts. There can be little, if any, sociological interest in randomly distributed problems or randomly distributed responses to the problems. Such random or idiosyncratic stress is of legitimate interest to clinicians or biologists, but not to sociologists. Therefore a salient feature of sociological stress research is its concern with the socially patterned distribution of components of the stress process: stressors, mediators, and outcomes. Such patterns provide a cue that individuals' potentially stressful experiences and the ways in which they are affected by

these experiences may originate in the social orders of which they are a part.

Much of this discussion might appear to belabor the self-evident, particularly because virtually all social inquiry into stress collects information about people's backgrounds and situational circumstances that enables these social patterns to be detected analytically. Certainly current research cannot be faulted for its failure to assemble basic sociological data, but it can be faulted for failing to subject the data to sociological scrutiny. All too often, people's background and circumstantial attributes are either overlooked in analyses or receive only scant attention. Thus data that should be at the heart of sociological inquiry are frequently treated only as analytic noise that needs to be controlled statistically. Of course there is nothing wrong with the logic of controlling for the effects of social background characteristics; such controls can reveal whether a statistical relationship between other factors is spurious or independent of the possible effects of the social characteristics (Rosenberg 1968). Yet when social structural and contextual data are collected *only* so that they may be controlled, that treatment precludes the examination of their potentially important roles in the study of stress.

Information about structural contexts and people's links to those contexts should be analyzed at virtually every step of the stress process. Gender can be taken as an illustration because, as I noted earlier, this is a status on which a large and burgeoning research literature exists (see e.g., Pearlin and Aneshensel 1986). First, gender is a characteristic that influences the stressors to which people are exposed: women and men often experience different stressful circumstances (Pearlin and Lieberman 1978). In addition, even where exposure to stressors is similar for women and for men, the effects of these stressors on the outcomes may be conditioned by gender. Perhaps, for example, equivalent occupational hardships have different impacts on men and on women because of differences in the conditions that men and women face in other roles (Pearlin 1975a). Third, the personal and social mediating resources that can be mobilized to deal with hardships also may vary with gender (Pearlin and Schooler 1978). Finally, gender is a characteristic that can affect the ways in which stress outcomes are manifested. Thus, as I shall describe later,

depressive symptomatology may be a more typical expression of stress among women, whereas drinking and other behaviors may be more typical among men (Aneshensel 1988).

The general point to be drawn from these examples is that the structural contexts of people's lives can affect each major phase of the stress process. When analytically we slight people's social and economic backgrounds, we necessarily neglect the sociological exploration of links that join broader dimensions of social organization to personal stress.

SOCIAL STRESSORS

Historically, stress research has been guided by two modal concerns: one having a primary interest in naturalistic stressors and the other in the mediation and outcomes of stress. As the preceding discussion suggests, sociologists have been and should be interested in the former. For other scientists, who are more concerned with stress outcomes and their psychological and biological dimensions, the nature and origins of the stressors are less important. To those researchers it makes little difference whether stress is controlled experimentally in the laboratory, is unique to individuals, or is anchored in highly unusual circumstances. From their viewpoint, the response of the organism to stress is legitimately of greater interest than the cause of the stress (Pearlin 1982). Sociological attention, by contrast, is more fixed on the stressors and their naturalistic sources.

Stressors, of course, refer to the experiential circumstances that give rise to stress. Although virtually all *social* scientists engaged in stress research are interested in stressors, they differ considerably as to how they conceptualize stressors and as to the importance they attach to different types of stressors. In recent years, attention generally has been divided between *life events*, on the one hand, and more enduring or recurrent life problems, sometimes referred to as *chronic strains*, on the other.

Life Events as Stressors

Life events have occupied by far the most research attention in the past 20 years. Indeed, in some circles life events inappropri-

ately have become a metaphor for stress research. There are at least three reasons for the impressive surge of life events research in the past two decades. First, the pioneering work of Hans Selye (1982) provided an important theoretical foundation for events research. Second, in response to Selye's theoretical inspiration, a method was developed to assess in seemingly simple and objective fashion the magnitude of eventful change experienced by individuals. Third, interest in research into life events was spurred by its early success in showing relationships between the scope of eventful change and various indicators of health. All in all, stress researchers who attempted to identify and measure stressors found a theory to stimulate their work, a method by which to carry it out, and empirical results to reward their efforts.

Since the launching of life events research, however, its theory, its methods, and its findings have been called into question. It is not my purpose here to provide a review of life events research; others (e.g., Dohrenwend and Pearlin 1982; Thoits 1983) have done so. Instead I shall focus on a few of the more salient problems of this research.

With regard to underlying theory, it is now clear that a key assumption about life events as stressors is untenable. Following from the implications of Selye's observations of laboratory animals' responses to environmental changes, the theory held that *all* change is potentially harmful because all change requires readjustment. Sociologists should find this notion difficult to accept because change is a normal and inexorable feature of every level of social life and of aging. At any rate, the weight of current evidence shows that not change *per se* but the quality of change is potentially damaging to people. Specifically, changes that are undesired, unscheduled, nonnormative, and uncontrolled are most harmful (Fairbank and Hough 1979; Gersten, Langner, Eisenberg, and Simcha-Hogan 1977; Thoits 1981; Vinokur and Seltzer 1975). I believe that researchers no longer accept unquestioningly the assumption that change is categorically bad for people or that the magnitude of change is harmful independent of its quality.

Next, the instruments used to identify life events are misleading in crucial respects. Many events that typically appear on inventories such as the Holmes and Rahe Social

Readjustment Rating Scale (1967) are simply markers or surrogate indicators of ongoing conditions; they do not represent free-standing or discrete life change. The loss of a home through foreclosure or a jail sentence, for example, is not an event that erupts unexpectedly. More likely, the event is merely an episodic segment of continuing problems. Because the event inventory allows us to see only the segment and not its history, we ignore the more extended life circumstances of which the event may be a part. Thus questions that presumably are asked about events may in fact elicit information about nonevents. Therefore the tools used to assess eventful change tend to confuse events with more enduring stressors.

This confusion, in turn, brings into question the meaning of past research findings showing relationships between events and health, relationships that have provided much of the empirical support for the interest in life events as stressors. To the extent that events are surrogate indicators of noneventful, ongoing circumstances, empirical relationships between events and health may be explained more accurately by the continuing circumstances in which the event is embedded. Thus in interpreting events-health relationships we are susceptible to exaggerating the importance of eventful change and to minimizing—or overlooking altogether—the problematic continuities of people's lives. The confusion between an event and a more chronic life strain, I submit, impedes a clear understanding of the social etiology of ill health and emotional distress.

In general, the theoretical assumptions, the methods, and the findings that gave life events research its early impetus have each come under critical scrutiny. It is encouraging that current sociological stress research is moving away from some of the early assumptions and confusions regarding events and their stressful impact. It is now common practice to distinguish events by their qualities, such as their desirability or their normative character. Even more promising and innovative is the work of Avison and Turner (1988), which seeks to separate events from the more enduring stressful circumstances in which the event may be embedded.

Earlier I emphasized that as sociologists we are interested in stress as it reveals patterned differences among groups and collectivities differentiated by their social and economic

circumstances. Life events research generally has lacked this sociological character, although the reasons seem to lie more in the analytic treatment of events than in the inherent nature of the events. Past research tended to treat events as though they occurred willy-nilly, with no consideration of the social and economic situations of the people who experienced the event. Some events, of course, create havoc in a contextual vacuum, such as when one's house is destroyed by lightning (although even this random event may have nonrandom social and economic consequences). From a sociological perspective, events that are experienced idiosyncratically can be ignored. Often, however, events that in fact are rooted in people's social and economic circumstances are treated as though they are unrelated to these circumstances. To avoid treating these kinds of events as though they are capricious happenings, we must reveal their links to people's relevant social and economic characteristics. Some events under some conditions are powerful stressors that affect people's lives directly and indirectly; research into these stressors should not be abandoned, only rethought. The research needs to establish that events in fact are events and not proxy indicators of chronic hardships. Research also needs to be more selective in the events it studies, focusing particularly on those that illuminate the connections between social forces and individual well-being. This approach requires a sensitivity to events whose occurrence varies with people's key social and economic statuses, such as age and life stage, gender, race and ethnicity, occupational status, and economic class. The presence of relationships between these kinds of master statuses and potentially stressful events would bespeak the social character of eventful stressors.

Chronic Strains as Stressors

The second major type of stressor involves the relatively enduring problems, conflicts, and threats that many people face in their daily lives. The very number and diversity of this type of stressor and the formidable measurement problems that they entail are among the reasons why life event inventories, by comparison, are so inviting a research tool. One way in which sociologists can gain some conceptual control over the extensive

array of potential chronic stressors is to focus their attention on problems that arise within the boundaries of major social roles and role sets. As I argued above, problems rooted in institutionalized social roles are often enduring, for the activities and the interpersonal relationships they entail are enduring. Moreover, when problems—or strains, as I refer to them—occur within roles, they are likely to affect their incumbents, because typically we attach considerable importance to our major roles. Difficulties in job, marriage, or parenthood have important effects because the roles themselves are important. Furthermore, the focus on role strains can reinforce the links between the contexts that largely structure people's activities, relationships, and experiences, and their well-being.

Several types of role strain were assessed in our earlier work (Pearlin 1983; Pearlin and Schooler 1978); only a brief review of those types is presented here. One type is *role overload*, a condition that exists when demands on energy and stamina exceed the individual's capacities. Role overload is found most commonly in occupational and homemaker roles as well as in specialized roles, such as among informal caregivers to seriously impaired relatives. *Interpersonal conflicts within role sets* are the type of chronic strain reported most often. This type of strain assumes many forms, but they all entail problems and difficulties that arise among those who interact with each other in sets of complementary roles, such as wife-husband, parent-child, or worker-supervisor. Still another type of strain, *inter-role conflict*, is found at the juncture of different roles. It entails the incompatible demands of multiple roles, especially demands of work and family. Commonly individuals cannot satisfy the demands and expectations of one of these roles without forsaking those of the other. A different strain involves *role captivity*, which exists when one is an unwilling incumbent of a role. People experiencing this type of strain include housewives or retirees who would prefer outside employment or employed workers who would prefer to be at home with young children. The roles that these people occupy might not be onerous or filled with conflict; the people simply prefer to be and to do things outside the confines of the unwanted role.

Finally, *role restructuring* is an important but overlooked type of strain that certainly

deserves more attention. It is virtually inevitable that relationships in role sets undergo change. Although the actors and the role sets remain the same, either the aging process or extraneous exigencies force alterations in long-established patterns of expectation and interaction. This phenomenon can be observed in a variety of situations, such as the rebellious adolescent who complains that he is treated as a baby, the apprentice who grows restless with his mentor as he masters his craft, or adult children who must assume increasing responsibility for the care of aged parents. Often the restructuring of entrenched relationships is not easy; it can result in a sense of betrayal, status loss, and the violation of expectations. These kinds of strains may develop insidiously and may persist until people readjust to the new expectations and norms governing the relationships.

Not all severe strains are found within major roles. Living in or close to poverty, residing in neighborhoods where there is reason to fear crime or violence, and having a serious chronic illness are among the *ambient strains* that cut across roles and envelop people. Still other strains may arise in more informal and elective roles, such as in voluntary activities and associations or in dealing with friends and acquaintances. Thus the strains that people experience in their institutionalized roles by no means represent all chronic stressors.

Two methodological problems underlie the identification of chronic strains. One problem is that the chronicity of these strains is often inferred rather than established empirically. In my own work I have treated certain problems as chronic simply because they exist within a continuing relationship and are not of a sort that is likely to vary appreciably within a relatively short time. The absence of marital reciprocity is a case in point (e.g., Pearlin, 1975b). This problem is reflected in situations where one member of the marital pair feels that the other is not contributing equally to the relationship. Ideally, the chronicity of this kind of strain should be evaluated on the basis of information about the length of time for which the problem has been experienced. Yet because problems of this type can have insidious onsets, it may be difficult, if not impossible, to determine duration with reasonable confidence.

The second methodological difficulty concerns the possibility that measures of role

strains are confounded with outcomes. That is, answers to questions about role strains and answers to questions about outcomes, such as depression, may be guided by the same underlying state of disaffection. Thus we must confront the nagging possibility that the robust correlations between measures of strain and measures of psychological distress reflect a lack of independence between the indicators of these constructs. There is no quick fix to this difficulty; obviously one must exercise care in wording the questions about strain so that they contain no language of distress, but to a large extent the independence of the measures must be established analytically. This can be done first by identifying people who are equivalent with regard to strain but who differ in the level of distress they express, and then by determining whether these differences can be explained systematically. For example, we might find that differences in the amount of distress experienced among people who report the same strains may be explained by variations in coping and social support. When uniform levels of strain joined to varying levels of distress can be explained in a theoretically meaningful way, the explanation bolsters our confidence in the independence of our measures of strain and of distress and in the significance of the relationships between them.

The Convergence of Events and Chronic Strains

Even if it were possible to overcome the difficulties in measuring and assessing both life events and chronic strains, our research still would be encumbered by conceptual blinders. A serious limitation of inquiry into stressors is the tendency toward "either-or" thinking. In searching for stressors, we usually focus either on life events or on chronic strains. As a result of this unwitting tendency we have missed opportunities to observe the ways in which events and strains converge in people's lives. There are at least three ways in which events and strains come together in stressful experience: 1) events lead to chronic strains; 2) chronic strains lead to events; and 3) strains and events provide meaning contexts for each other.

Consider first the capability of events to cause strains. Studies of events typically

examine the events as direct causes of stress in individuals. Yet events also cause stress in an indirect manner by altering adversely the more enveloping and enduring life conditions. These conditions, in turn, become potent sources of stress in their own right—perhaps more potent than the precipitating event. This process, in which events adversely restructure social and economic conditions of life, has been demonstrated empirically for at least three events: involuntary job loss (Pearlin, Lieberman, Menaghan, and Mullan 1981), divorce (Pearlin and Johnson 1977), and death of spouse (Pearlin and Lieberman 1978). These events commonly result in such circumstances as increased economic hardship, heightened interpersonal conflict, or greater social isolation. These kinds of circumstances, in turn, may be stronger antecedents of stress than the events that helped to create the circumstances.

Just as stressful chronic problems may be created by events, stressful events can be triggered by persisting problems. As I argued earlier, research into events usually does not separate the events from the strains that might have preceded them. Consequently there has been little study examining how enduring strains give rise to events. Some scattered evidence, however, suggests that this situation occurs. We know, for example, that continued marital conflict can result in separation and divorce (Menaghan 1982). Indeed, it is reasonable to speculate that in general, prolonged interpersonal conflict can precipitate events which mark the disruption of or withdrawal from the troubled relationships.

In the third way in which events and strains converge in stressful experience, each provides the meaning context for the other. Thus the nature of relevant conditions preceding the event may influence whether or not an event is experienced as stressful. It would be a mistake, for example, to assume that divorce is uniformly stressful without considering whether the couple's prior marital life was characterized solely by strife and frustration or whether it also contained fulfillment and satisfaction. Indeed, Wheaton (1988) shows that the intensity of the strains experienced in roles tends to govern the levels of stress that follow transitions out of the roles. Depending on prior circumstances, the same transitional events might be experienced either as liberating or as depriving. Moreover,

just as *preceding* conditions color the meaning and the impact of the event, *consequent* conditions also may regulate the impact of the event. Retirement, for example, might have a negative effect on well-being if the retirement results in a loss of status or the atrophying of prized skills; it might have a positive effect if one finds in retirement the opportunity to pursue self-fulfilling passions that previously had been held in abeyance.

Events, then, typically do not stand as stressors separate from the durable stains that people experience, nor do the strains necessarily persist apart from the events they may precipitate. Events and strains often flow together in people's experiences, although researchers might see them as separate and unrelated. Events can create stressful strains; strains can precipitate stressful events; and events and strains each constitute the contexts that shape the meanings and the stressful effects of the other. Merely correlating events or strains with health outcomes fails to capture an accurate picture of an antecedent process that often involves a dynamic connection between events and relatively durable strains.

Primary and Secondary Stressors

Underlying the above discussion is the assumption that significant stressors rarely, if ever, occur singly. If people are exposed to one serious stressor, it is very likely that they will be exposed to others as well. One event leads to another event or triggers chronic strains; strains, for their part, beget other strains or events. Thus clusters of stressors may develop, each cluster made up of a variety of events and strains. Furthermore, the clustered stressors may be formed by problems that originated in different institutionalized roles (Wheaton in press): job loss may engender economic strains, occupational strains may create marital strains, and so on. It is reasonable that stressors should proliferate and diffuse within and across institutional lines, because the multiple sectors of people's lives are interrelated such that disruptions in one sector are likely to cause disruptions in others. Moreover, the stressors experienced by one individual often become problems for others who share the same role sets. Thus a married person who is in a difficult work situation probably has a spouse who is under

stress as a consequence (Pearlin and McCall in press).

For the sociological stress researcher, the multiplication and the contagion of stressors means that studies must cast a wide net to capture the full array of stressors that are present in an individual's life. If we fail to discern all the appreciable stressors that are contemporaneous, we also will fail to interpret correctly the outcomes that we observe. Suppose, for example, we wished to study the relationship between serious physical injury and depression. Our inquiry would be incomplete, if not misleading, if we assumed that the injury was the only stressor present; in such a case we would ignore possible concomitant economic, occupational, family, and social problems. Variations in depression thus reflect not only the seriousness of the injury itself but also variations in the clustering of stressors. It is not an event or a strain that merits the sociologist's attention, but how the *organization of people's lives* may be disrupted in the stress process.

One step toward bringing this organization into view is to distinguish *primary* and *secondary* stressors. Primary stressors are those which are likely to occur first in people's experience. The stressor may be an event, especially one that is undesired and eruptive, such as the untimely death of a loved one, involuntary job loss, or injury; or it could be a more enduring or repeated stressor, such as those experienced in marriage or occupation. Whereas primary stressors can be conceptualized as occurring first in experience, secondary stressors come about as a consequence of the primary stressors. I do not refer to them as secondary because they are less potent than the primary stressors. On the contrary, once established, secondary stressors independently may become capable of producing even more intense stress than those we consider to be primary. They are secondary only on the basis of their presumed order in the stress process, not on the basis of their importance to the process.

Examples of secondary stressors resulting from more primary stressors may be drawn from our current studies of specialized caregiving roles, those involving the care of impaired relatives or friends (Pearlin, Semple, and Turner 1988; Pearlin, Turner, and Semple 1989). Informal caregiving to impaired people is an extreme instance of role restructuring: usually it occurs within estab-

lished relationships, and when impairment is severe, prolonged, and progressive, the caregiving comes to dominate the interactions between actors whose previous relationships were organized in a very different way. A number of primary stressors, those involved directly in providing care to the impaired person, can be observed. They include the vigilance that may be required to monitor and control the patient, the psychological losses that accumulate with the patient's continued deterioration, and exhaustion and overload. Several secondary stressors stem from these primary problems. For example, increased conflict with others is quite common, as when the caregiver feels abandoned by family members. Caregivers holding outside jobs may find themselves unable to devote themselves fully to one activity without neglecting the requirements of the other. Economic strain arising from diminished income or increased expenditure is another frequently observed secondary stressor, as are the losses of desired social relationships and activities outside the caregiving situation. Once set in motion, these secondary stressors produce their own stressful outcomes.

These examples are intended to illuminate pivotal point: important life problems, whether in the form of events or of durable strains, do not exist in isolation from other problems. The very integration of individuals' activities and relationships means that disruptions in one area of their lives serve to create other disruptions. Therefore sociological stress researchers cannot confine their attention to a single event or to groups of events, nor can they examine only one role strain on the assumption that it is the only problem or the most important problem faced by the individual. Instead, the presence and the organization of constellations of stressors need to be discerned and measured independently. The discernment of this organization, in turn, may be enhanced by distinguishing primary and secondary stressors. This distinction will help to discriminate between people who may be similar with regard to their exposure to one stressor but who differ appreciably with regard to the array of stressors to which they are exposed. Such discrimination can go far in explaining why people who seem to be alike with regard to the problems that they face differ sharply with regard to the intensity and range of the stress outcomes that they

manifest. People who are treated analytically as similar may, in fact, be different.

I would like to raise a final issue with regard to the identification and specification of stressors; this issue concerns values. As I have emphasized, a central task of research into stress is to explain why individuals exposed to stressor conditions that appear to be similar do not necessarily suffer the same outcomes. Part of this explanation lies in social values. By values I refer to what is defined socially as good, desirable, and prized or as something to be eschewed (Williams 1960, pp. 397–470). Although the importance of values to stress research has been recognized (Lazarus and Folkman 1984, pp. 77–81), their part in the stress process has not yet been examined systematically. Values, I believe, regulate the effects of experience by regulating the meaning and the importance of the experience (Pearlin 1988).

To understand the role of values in regulating the impact of stressors, one must understand that conditions are stressful when they are threatening. I use “threat” in the broadest sense to include reactions to such disparate constructs as loss, unfulfilled needs, violation of self-image, and blocked aspirations. Some conditions may be intrinsically threatening, as when one’s life is at stake. More often, however, the threat that people experience from the circumstances they face depends to some degree on the values they hold—that is, on what they define as important, desirable, or to be cherished. An example can be provided from a study that showed that marital partners from unequal status backgrounds also tended to have higher levels of marital stress (Pearlin 1975b). Further analytic probing revealed that these inequalities were related to stress primarily among people who held certain status values. Specifically, hypogamous people—those who “married down”—were particularly vulnerable to marital stress, but only when they valued status enhancement and upward mobility. Others who also had married down but who were not status strivers were unaffected by their hypogamous marriage. Thus the cause of stress was neither a structural arrangement alone nor a value alone but a particular combination of the two.

Although other illustrations also could be mobilized, at this time we possess only scant evidence that certain values, when combined with certain social conditions, are especially

productive of stress. We do not yet know, however, how to look systematically for these combinations. We can only assume that the kinds of values which will produce stressful effects must have relevance to the social conditions under study. At this stage of our work, however, sociological researchers must rely on their intuition to identify the stressful mix of circumstances and values, for there is no established theoretical guide to identification. At least this much is known: the relationships of social stressors to individual stress may be seen most clearly when we take into account social values that help to shape the meaning of the stressors. This line of inquiry is worth following by sociologists.

The careful study of stressors, then, should provide the researcher with an opportunity to learn something about social life as it bears on individual functioning. The sociological study of stressors can reveal the connections between social organization and the organization of lives. To find these connections, however, we cannot treat stress as stemming from unconnected happenings. Instead the antecedents of stress need to be understood in terms of process, whereby broad structured and institutional forces, constellations of primary and secondary stressors, and widely shared values converge over time to affect people’s well-being. Most certainly, the sociological study of social stress does not rely on predictive models. We must guide our effort not simply by identifying and adding together all factors that might contribute to the variance of an outcome but also by asking how and why these contributions come about. Prediction alone does not make us wiser sociologists; for that purpose we need also to be good explainers and interpreters.

THE MEDIATORS AND THEIR INTERVENTIONS

I have already suggested two explanations for the fact that the same stressors do not necessarily lead to the same stressful outcomes: different configurations of unobserved stressors may surround the observed stressor, or different values may endow the same stressor with different meanings. Yet by far the largest responsibility for explaining outcome differences has been placed on constructs that I refer to collectively as mediators. They are mediators in the sense that they have been

shown to govern (or mediate) the effects of stressors on stress outcomes. Coping and social support have received the most attention in the research literature; for this reason I shall confine my attention to these mediators. Other constructs, however, also have been cast analytically as mediators; in particular these include the self-concepts of self-esteem and mastery (Pearlin and Schooler 1978). These aspects of self represent personal resources and appear to serve as appreciable barriers to the stressful effects of difficult life conditions. In addition, personality constructs such as Type A, hardiness, and invulnerability are treated implicitly as mediators. Although such constructs possibly are useful in explaining differences among individuals in the effects of stressors, their utility in explaining differences among socially and economically demarcated groups has not yet been demonstrated. For this reason they have not attracted the attention of sociologists to the same extent as other types of mediators.

Although coping and social support certainly intersect, they are quite distinct; each has its own conceptual problems. Briefly and selectively I shall point out some of these problems. Then I shall consider strategies for evaluating mediating effects within the stress process.

Coping

Coping refers to the actions that people take in their own behalf as they attempt to avoid or lessen the impact of life problems (Pearlin and Schooler 1978). Although coping refers to individuals' actions and perceptions, it is of sociological interest because important elements of coping may be learned from one's membership and reference groups in the same ways as other behaviors are learned and internalized. Because interest in coping was rooted initially in clinical concerns, researchers tend to think of a person's coping repertoire as representing a clinical profile unique to the individual and to ignore the shared, normative basis of individual coping. Although aspects of one's coping indeed may be unique, it is likely that people who interact with each other and who share important life circumstances will also share coping behaviors. Consequently part of the sociologists' research agenda should be aimed at identifying the associations between people's social

and economic circumstances and their coping repertoires.

Is coping a set of general dispositions activated when one is faced with threatening problems, or does it consist of more specific responses invoked selectively in dealing with specific kinds of problems? From a personality perspective, coping may be seen as a tendency to react in characteristic ways to threat, regardless of the nature of the threat or the context in which it arises. It is distinctly possible that there are general coping dispositions which cut across different situations. Perhaps, for example, people who engage in denial in one situation will do the same in a very different situation. Yet the sociologist finds it difficult to accept the notion that people cope with retirement from the job, for example, in the same way as with being fired from the job, or with conflict with one's boss in the same way as with conflict with one's child. There is simply no reason to assume that coping will be the same regardless of the nature of the impinging stressors, the institutional contexts in which they occur, or the relationships they might involve. Individuals have personalities that retain their integrity from one situation to another. Yet the coping responses that mediate the stressful impact of one situation may be entirely inappropriate to another. Therefore the researcher who is sensitive to the social and contextual origins of stressors also must be sensitive to the situation-specific character of coping.

Even so, the *functions* of coping are essentially the same in all situations, although the *forms* of coping might vary from one situation to another. As we described in detail elsewhere (Pearlin and Schooler 1978), all coping—regardless of the nature of the stressors—serves either to *change the situation* from which the stressors arise, to *manage the meaning* of the situation in a manner that reduces its threat, or to *keep the symptoms of stress within manageable bounds*. Therefore we possess a conceptual framework for the study of coping that has general application, even though the behavioral elements of coping are more specific to the particular stressor that is being experienced and vary with that stressor (Pearlin and Aneshensel 1986).

Social Support

It would appear that among the major

mediating constructs, social support should have the clearest and best established theoretical links to social theory. Somewhat surprisingly, however, this is not the case. Perhaps one reason is that sociologists who are interested in social networks tend not to be the same as those working in stress and social support. Networks refer more directly than supports to the structure of people's social attachments. These attachments, of course, differ in extensiveness and composition for different groups in the society. As Lin and his colleagues describe (Lin, Dean, and Ensel 1986, pp. 17–30, 53–70), most people's attachments include some mix of formal and informal, primary and secondary, and strong and weak ties; some attachments exist with friends and others with relatives; some involve frequent face-to-face interaction and others do not. The organization of one's social network mirrors the organization of one's engagement with the larger society.

Whereas the social network can be regarded as the totality of the social resources on which one potentially may draw, social support represents the resources that one actually uses in dealing with life problems (Pearlin 1985). In most instances, of course, one's sources of support in dealing with any given stressor will be much more restricted than one's total network. Consequently stress researchers tend to ignore network and its structure and to deal only with support as it is perceived by the individual. Certainly there is nothing wrong with data that bear on perceived support; studies indicate that perceived support indeed has a mediating function in the stress process (Turner 1983). Yet, when the study of perceived support is separated from the study of networks, we are unable to see how individuals' support is associated with their integration into various social institutions and contexts. The identification of the connections between individuals' social life and their inner well-being could be enhanced, I submit, by joining the study of social support more closely to the study of social networks.

Aside from its separation from network, the study of support lacks sociological substance for still another reason: typically it considers only the recipient of support and ignores the donors of support and their interactions with the recipient (Pearlin 1985; Pearlin and McCall in press). A construct that is inherently interactional is treated instead as

an individual attribute. When the social and interactional nature of social support is ignored, we are left with an incomplete, if not distorted, picture of how it functions. The forms of support, its reciprocity, the connections between seeking and receiving support, its stability, and even whether or not it is welcomed depend not on the recipient alone but on the donor-recipient relationship.

Supporting relationships are found in virtually all institutional and social contexts: religion, occupation, family, neighborhood, voluntary associations, the medical care system, and elsewhere. Just as the forms and functions of support may vary with the nature of the relationship from which support is drawn, there is some evidence (House 1981b, 59–85) that the effect of support is constrained or enhanced by the context in which the relationships exist. Thus we need to learn more both about the interactional aspects of support and about the effects of social contexts on its forms, functions, and efficacy. Sociologists should be foremost among the contributors to this research.

How Do Mediators Mediate?

The very words "coping" and "social support" contain implicit consequences. Once a behavior is labeled as coping, we assume that it succeeds in relieving stress; if someone is labeled as the recipient of support, he is perforce supported. These assumed beneficial consequences, inherent in the very language we use to refer to stress mediators, inadvertently may have diverted us from asking whether in fact the mediators do mediate, and, if so, how. At any rate, insufficient effort has been devoted to evaluating the efficacy of the mediators, especially in the case of coping.

In raising this issue here, I am concerned less with the methodology of determining how much difference the mediators make than with where to look for these differences. In this regard it is useful to recall that stressful situations may contain constellations of primary and secondary stressors. Moreover, each type of stressor may contain multiple subtypes of stressors. This conceptualization of the stress process suggests ways to search for the effects of coping and social support that currently are not recognized. Specifically, we should expand our assessments of

efficacy to include the ability of the mediators to inhibit the scope and severity both of the primary stressors and of the secondary stressors that follow. To whatever extent the mediators succeed in constraining the intensity, number, and diffusion of stressors, they also must succeed eventually in constraining the extent and intensity of stress outcomes. These *indirect* effects of the mediators may be every bit as instrumental in minimizing stress outcomes as the *direct* effects to which attention usually is limited.

The evaluation of indirect effects of mediators should help further to illuminate the question that now has been raised at several points of this paper: What accounts for variations in the outcomes of stressful life conditions? Our understanding of the variability of stress outcomes will be enhanced by observing how coping and social support affect each step of the process that precedes the outcomes. If we confine our assessment of the mediators solely to their direct effects on outcomes, we will not be able to detect their important indirect effects, those which are exercised through their regulation of antecedent conditions.

OUTCOMES

Outcomes refer to the manifestations of organismic stress. Many manifestations exist, and they are found at multiple levels of organismic functioning. Indeed, the multiplicity of stress indicators has led some researchers to question whether the very notion of stress is useful (Elliott and Eisdorfer 1982). A construct that subsumes such diverse (although presumably related) phenomena as the immunological and endocrine systems, the digestive and cardiovascular systems, anxiety, depression, and mental health—to name just a few—is bound to create confusion. The confusion is compounded understandably by the fact that several disciplines have developed their own distinctive approaches to the study of stress and its indicators. Yet despite its ambiguity, the notion of stress provides a framework sufficiently flexible to encompass the broad and diverse range of constructs found in sociological studies of stress and health. Thus for sociologists, an attractive feature of the stress concept is its ability to absorb the far-reaching notion of inseparabil-

ity between the circumstances of social life and individual functioning.

In looking for indicators of individual stress that are sensitive to social circumstances, one is drawn inevitably to phenomena that traditionally have been the domain of biology and medicine. Thus sociologists must attain some usable knowledge of the research concerns that lie outside their own discipline. Although this knowledge is both necessary and desirable, preoccupation with the medical and biological markers of outcomes can come at the expense of attention to the social antecedents of the outcomes. Indeed, there are institutional pressures toward such preoccupation. Because these pressures arise out of prevailing economic and institutional conditions, I discuss them largely from a perspective of the sociology of knowledge.

In selecting the outcomes they will study, sociologists and others may be influenced subtly by the sources of funding for stress research. Most agencies that fund research in this area are organized around diseases—heart, cancer, mental, and so on—and the experts enlisted by these agencies to judge the merits of proposed research are typically oriented to biomedical models. Understandably these models place less importance on the social origins of stress than on the organismic manifestations. Thus in evaluating the merits of proposed research, the agencies may give more weight to the theoretical and methodological command of the biomedical outcomes than to that of the antecedent processes. In attempting to satisfy evaluative criteria, the sociologist may be drawn unwittingly into clinical, diagnostic, and epidemiological issues beyond the depth necessary to identify the social circumstances that affect well-being. I do not argue that limits should be placed on sociologists' expertise with regard to stress outcomes, but I do believe that this expertise should serve primarily to illuminate the organization of social life, the structure of experience, and the effects of these phenomena on individual health and functioning. Sociologists properly may be health researchers, but they also must be social researchers.

As Mirowsky and Ross (1989) have cogently discussed, sociological stress researchers who are interested primarily in mental health outcomes are currently encountering a special set of institutional constraints on the selection of outcome criteria. In psychiatry,

attention is focused increasingly on pathologies likely to have a powerful genetic etiology, such as schizophrenia and bipolar depression. The study of these disorders fits comfortably within the medical model, its orientations to disease, and the identification of cases needing treatment. By contrast, the social scientist is more likely to be interested in dysfunctions that have a powerful social and experiential etiology, such as anxiety and subclinical depressive disorders. Moreover, these different orientations to outcomes require different tools. The medical researchers and the psychiatric epidemiologist need elaborate diagnostic instruments that can yield an accurate count of the prevalence and incidence of various disorders and that can identify cases in need of treatment. The social scientist, by contrast, needs symptom scales to rank people according to the intensity of their distress. Whereas the medical researcher and the epidemiologist are concerned with diagnostic tools that will help reliably in case identification, the sociologist is concerned with measures of distress that are reliably sensitive to antecedent processes.

These differences are reasonable and legitimate, and they should be maintained. Sociologists should avoid immersion in the medical and epidemiological models that emphasize diagnosis and case finding. Such immersion not only fails to serve the goals of social research; it may even hinder the achievement of those goals by diverting time and resources to issues that are extraneous to social inquiry.

What outcomes should be considered in sociological research into stress? Understandably, the answer to this query is based on the kinds of data to which sociologists have ready access as well as on their theoretical perspectives. For example, sociologists typically do not look at endocrine secretions or at the immunological system because they possess neither the skills nor the facilities to do so without the costly collaboration of others. Instead we usually examine outcomes that can be assessed through direct observation, medical records, or self-evaluations and reports. Examples of stress indicators found in sociological studies include health histories, symptoms of physical health, symptom scales measuring a variety of dimensions of mental health, the abuse of alcohol or of mind-altering drugs, inability to fulfill role obligations, and the disruption of social relation-

ships. None of these outcomes has a compelling theoretical priority over the others, but there may be a theoretically compelling reason to avoid reliance on a single outcome in assessing the stressfulness of social conditions.

The observation of multiple outcomes is highly desirable because people having different social and economic characteristics also may have different modes of manifesting stress. As a result, we run the risk of seriously misjudging the effects of difficult life circumstances if we judge effect only on the basis of a single outcome. Gender differences again provide a telling illustration. It has been shown repeatedly that women more than men are host to depressive symptoms and emotional distress. In turn, this finding has led to speculation that women may be more vulnerable than men to certain stressful circumstances, such as network losses (e.g., Kessler and McLeod 1984). Yet before we can accept the assumption of vulnerability, we must be sure that we have considered a full range of relevant outcomes. Perhaps men and women do not differ in their overall vulnerability to stressors, but differ instead with regard to the particular outcomes to which they are vulnerable. This warning emerges from the work of Aneshensel (1988), who showed that apparent gender differences in vulnerability to the impact of events disappear when excessive drinking and other outcomes are considered along with depression. That is, the stressful events are no less harmful for men than for women, a fact that was obscured when only depression was examined. We must keep in mind that structurally demarcated groups may manifest stress in different ways. Unless multiple outcomes are considered, we can mistakenly exaggerate the vulnerability of some groups while underestimating at the same time the general impact of the stressors under examination.

SUMMARY AND DISCUSSION

In this paper I have not sought to lay out steps to be followed; rather, I have attempted to raise issues to be considered in the sociological study of stress. The overarching strategy of social research into stress is the identification of the many links that join forms of social organization to individual stress. I have suggested a number of concep-

tual and analytic perspectives that I believe will enable us to advance this agenda. One crucial element is the examination of statuses and other background circumstances at each step of the stress process. We need to know how these social factors bear on the kinds of stressors to which people are exposed, the personal and social resources to which people have access, and the emotional, behavioral, and physical disorders through which stress is manifested. This proposal contains nothing new; it deserves emphasis only because researchers tend either to limit the analyses of social background factors or to relegate them to serving as controls through which the independent effects of other conditions are established. Yet the sociological stake in stress research requires the careful and comprehensive analysis of information about the structural contexts of people's lives.

Many important life experiences, some of them stressful, are rooted in these contexts. Stressful experiences may take on different forms and configurations and it is unlikely that they can be fully captured by examining either life events or life strains separately and apart from each other. Over time, stressors typically surface as groups or constellations of stressors, some primary and others secondary, that blend events with more durable strains. This is a useful way to look at the antecedent process, and is consistent with available empirical evidence. It seeks stressors in the organization of lives and in the structure of experience rather than among unrelated "risk factors."

One of the analytic tasks of the stress researcher is to explain variations in stress outcomes. First, some of the variation in outcomes is to be found in the constellations of stressors. When we observe events and strains singly while ignoring broader clusters of primary and secondary stressors, we may incorrectly assume more similarity in exposure to stressful experience than actually exists. In other words, part of the unexplained variations in outcomes may be due to relevant stressors that are not being observed and whose effects therefore cannot be assessed.

Second, even though we have probably relied too heavily on the explanatory power of coping and support, nevertheless we may systematically have underestimated their mediating effects. We cannot appreciate the full capacity of these mediators until we examine their effects in limiting the number and

severity of primary and secondary stressors. These are the indirect effects which soften stress outcomes but which are not in view when we concern ourselves only with the direct effects of the mediators on outcomes.

Finally, some of the difficulty encountered in analytically explaining variations in outcomes lies with the range of outcomes selected for study. Focusing exclusively on a single outcome, such as depression, may lead to the mistaken conclusion that some groups of people are affected adversely by stressors that leave others unaffected. These putative variations in vulnerability, however, may be an artifact of the ways in which different social and economic groups channel and manifest stress. Consequently the inclusion of a reasonable range of outcomes should prevent us from making inappropriate assumptions of differential vulnerability to common stressors.

However one thinks of the stress process, it obviously consists of multiple conceptual components; each component potentially has multiple aspects or dimensions. The richness and the complexity of the process invite us to phrase research questions in very different ways. One study, for example, may be concerned mainly with the epidemiological distribution of depression; another may have as its central question the buffering effects of social support on depression; a third might seek to evaluate the effects of a particular event or role strain on depression. Each question places a somewhat different set of issues at the center of its interests. Although the questions may generate overlapping data, the data essentially serve different research goals.

When studies start with questions about the parts played across the stress process by the social and economic arrangements in which people's lives are embedded, they produce knowledge that has a distinctive emphasis. Although studies of this type share with other approaches an interest in individuals' well-being, they also help to illuminate those aspects of social organization which pertain particularly to the differential exposure to and meaning of stressors, to differences in the various kinds of resources that people can mobilize in responding to stressful circumstances, and, finally, to differences in the manifestation of stress. The sociological study of stress, I believe, can contribute uniquely both to an understanding of social

life and to an understanding of how the fates of individuals come to be bound to it.

In emphasizing some of the conceptual ingredients and analytic strategies of a sociology of stress, I do not wish to wave a banner of disciplinary parochialism. Yet it is of considerable importance to study social structures and their effects on individual well-being. If sociologists don't do this and do it well, who will?

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