Should the subjective be the objective?
On studying mental processes, coping behavior, and actual exposures in organizational stress research

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Summary
Emphasis on measuring actual ('objective') job exposures has increased in recent organizational behavior/human resource management research. I argue that this approach has greater potential for increasing knowledge about how to make work environments more healthy than the alternative approach of focusing on mental processes and individual coping behaviors suggested by Perrewe and Zellars. Incorporating psychological knowledge about attributions and emotions can enhance theory building in the organizational sciences. However, given that health outcomes are more strongly related to continuous exposures it may be better to focus on modal job content and general tendencies of individuals than to emphasize discrete events and specific, transitory states. Copyright © 1999 John Wiley & Sons, Ltd.

Introduction
Researchers in organizational behavior and human resource management (OB/HR) have long recognized the critical role of cognitions in how people respond to work demands. Perrewe and Zellars (this issue) draw our attention to the work of attribution theorists (e.g., Weiner, 1979) and Lazarus and his colleagues (e.g. Folkman and Lazarus, 1985) who provide insights about how and why different persons respond in seemingly unique ways to the same types of actual exposures. Despite OB/HR researchers' frequent references to the role of cognitive appraisal in work stress, a relatively well-accepted working model of the different types of appraisals, coping processes, and resulting symptoms has not emerged in our literature. Perrewe and Zellars draw on a broad spectrum of psychological research in their encouragement of efforts to fill this apparent gap. This note responds to assertions in their paper about the potential role of studying actual ('objective') exposures in work stress research. Contrary to Perrewe and Zellars, I do not believe that actual stress exposures have been over-emphasized in the literature. Further, this article

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asserts that examining factors that may moderate the effects of actual exposures on health outcomes is a more profitable programme for OB/HR researchers than the alternative that is suggested in their paper. The mental process–behavior linkages on which Perrewe and Zellars would have us focus are more complex than is depicted in their paper, to the point of making such processes virtually intractable for field researchers of conventional training. Finally, I offer some suggestions about how to make research models of appraisals and coping more relevant to organizational stress problems.

The Need to Study Actual Exposures

Perrewe and Zellars observe that ‘Some of the recent research on job stress has focused on the importance of objective stressors (Bischoff and Terborg, 1995; Ganster and Duffy, 1995) . . . Although the examination of objective work stressors may be useful to broadly predict employee strain, the focus is entirely too limiting. In order to truly understand the components of the stress process, the primary focus should be on how individuals interpret objective conditions rather than simply relating stressors to strains’ (p. 3). They advocate ‘…a research agenda for the study of the organizational stress process that focuses on the appraisal of objective stressors, attributions regarding the felt stress, and the subsequent affective emotions’ (p. 3). I should first note that the implied premise of their thesis is not an entirely accurate reflection of the current work stress literature. The better work stress studies that have examined either actual exposures or self-reports (or both) have not simply correlated them with ‘strains’. Rather, theoretically derived mediators and moderators of the effects of stressors on actual health outcomes are of increasing interest and attention. For example, many published studies have tested Karasek’s (1979) job demands–control model (also known as the decision latitude model) which examines the moderating effects of job control. These studies most often assess non-perceptual health outcomes (e.g., Fox, Dwyer, and Ganster, 1993). Whereas the results of testing this model have been mixed, we have nevertheless learned that job control plays a fundamental role in work-related stress just as control has been shown to be pivotal in numerous other human and animal populations. Nevertheless, the mental processes that Perrewe and Zellars promote have indeed received little attention in the OB/HR stress literature. Below I argue that there are valid reasons for not placing a priority on them, and the ‘trend’ towards assessing exposures, which they find worrisome, is rather a more promising avenue for research.

Limitations on Mental Modelling and ‘Coping’

The trend toward measuring actual job exposures (usually in conjunction with subjective reports) reflects concerns about validity and relevance. First, there are concerns about common method issues (e.g., trait affect, priming, consistency) that stem from frequent reliance on self-reports to measure both the independent and the dependent variables, thereby inflating observed relationships. The occurrence of various appraisals, affective responses, and coping actions described by Perrewe and Zellars are known only to the subject, and thus they present great challenges to the field researchers because they must rely on self-reports to measure them. Retrospective data on
what one perceives, how one appraises it, the attributions made, emotions that followed, and how one ‘coped’ may better reflect a fixed, available response set than they are separate elements of a true etiological process (see Brief and Atieh, 1987).

An additional reason for the increased interest in objective stressors is the valid concern about whether self-report stressors are grounded in actual exposures that are amendable to intervention, such as by lowering levels of the exposure (e.g., reducing role ambiguity; see Schaubroeck, Ganster, Sime and Ditman, 1993) or altering conditions that may moderate their effects on health outcomes (e.g., increasing or decreasing job control). Finally, based on research with both human and animal subjects, it is clear that continuous exposures more reliably predict actual health than do short-term exposures. Owing to reappraisal, individual role revision, and changing role conditions, self-reports may less accurately reflect chronic, immutable (for the worker) demands. Thus, concerns about internal validity and managerial relevance underlie any recent trends toward measuring actual work exposures.

Perrewe and Zellar’s focus on mental processes that lead up to coping processes may provide a lens to understand the individual. But experiences with individual-focused interventions suggest that attempts to change the individual are not the most profitable or perhaps even ethical (see Ganster et al., 1982) means to address the human, economic, and social costs of stress in organizations. Even if they were, organizational behavior/psychology and human resource management are not arms of clinical or counselling psychology or any other therapeutic field. Rather, we would do better to utilize the strengths in our training by seeking to determine the organizational and social causes of stress that may be affected by individual differences.

Given organizational researchers’ particular niche in the study of health, the focus on individual coping behavior suggested by Perrewe and Zellars is misplaced. The research examining the outcomes of different coping styles is less than impressive in its conclusions, and it is not clear how organizations can utilize knowledge about coping behaviors to address workplace health concerns except, perhaps, through the targeting of employee assistance programmes. On the other hand, where critical differences in coping behavior (such as the active versus passive coping distinction) can be reliably related to actual exposures (e.g., as predicted within the demands–control model), a better understanding of these relationships may demystify the mediating role of coping. This would help researchers more clearly identify the combinations of exposures that most influence health in the workplace and their moderators. Thus individual coping behavior represents a practical focus of analysis only insofar as it sheds light on the effects of health exposures. Linkages among attributions, specific emotions, and coping behaviors form an interesting puzzle that challenges our psychological training. But OB/HR advances that determine the conditions under which work stress exposures result in health outcomes can proceed apace while we wait for better-equipped social and personality psychologists to unravel the mental mysteries.

Bearing in mind what little we have learned about work stress in proportion to the number of studies conducted and pages published, I am puzzled by Perrewe and Zellars’s concerns about the recent studies that have addressed such issues as internal validity and organizational relevance by measuring actual stress exposures, especially when these are accompanied by subjective self-reports. In fact, the studies cited by Perrewe and Zellars are not published at this time. If a surfeit of such studies soon materializes in the OB/HR literature, it will do so despite the added challenges encountered in identifying and measuring actual exposures and tangible health outcomes. Collecting such data often requires a significant material investment, and organizations are legitimately determined to avoid any hint of threat or compromise to employee privacy. These issues make researcher access to such data quite difficult, whereas questionnaire studies and laboratory experiments are more readily implemented. It seems that any long-term trend toward
objective stressor (and stress outcome) research data will most likely be based on findings that suggest practical means for organizations to enhance the health of employees rather than researcher expedience.

Thus I disagree with three premises of the Perrewe and Zellars article; namely, that (1) less attention on the objective elements of work stress is warranted; (2) individual coping behaviors are viable outcomes for research in OB/HR; and (3) the intervening mental processes should be the major focus of research attention. However, attributions and emotions are indeed potentially critical elements needed to refine our practical work stress models. Thus below I offer a few suggestions toward addressing their roles in the stress process so that we can learn more about developing healthy workplaces, rather than attempting to extend knowledge of the mind–behavior linkage, an endeavour that would likely be unsuccessful for OB/HR researchers in any case.

Studying Coping and the Emotions

Perrewe and Zellars properly recommend to our attention the wealth of psychological literature on the specific emotions. Organizational researchers have largely ignored these findings in developing research models despite the prominent role they may be expected to play in work stress and other topics within OB/HR (Weiss and Cropanzano, 1996). But Perrewe and Zellars suggest that in work stress research we should be more interested in within-person, phasic variation in emotional states, as they see these as being related to individual coping behavior. For example, within their model guilt, and only guilt, results in problem-focused coping. As I will briefly review below, the literature on emotions does not suggest such a straightforward relationship between emotions and behavior as is suggested by these authors.

Relationships between behavior and specific emotions depend on specific contextual factors and individual differences. Memory, for example, significantly affects the relationship between information processing about the environment and specific emotions (Lang, 1984). In addition as suggested by classic studies of the self-attribution of emotion, often coping behavior is antecedent to the emotion rather than the reverse (e.g., Laird, 1974). The emotion of fear may be prototypical of the complexities involved. Fear is viewed as an emotional response associated with avoidance and escape. Consistent with Perrewe and Zellars’s model, the initiation of fear supports vigorous action to change one’s exposure such as through the coping response of escape. However, when such responses are precluded, fear becomes anxiety (Epstein, 1972).

Perrewe and Zellars also stipulate that information processing causes emotions in a straightforward manner. While an effect of emotions is not in dispute, there is also evidence that emotions are determinants of information processing (e.g., attributional reasoning) about demands rather than just the reverse. An example of this is the ‘functional’ view of emotions proffered by Mathews and his colleagues (see the review by Mathews, 1990). This view suggests that an experienced emotion draws attention to state-congruent cognitions. For example, anxiety activates memories that focus on threats, which in turn facilitate processing environmental information in terms of threatening cues and threat schemata.

Mood states, which are not part of the Perrewe and Zellars formulation, also play a significant role in emotions and coping behavior. Moods are different from emotions in that moods are more generalized and tend to be of much longer duration. Research shows that moods alter the threshold at which particular emotions are initiated (Morris, 1989). Some emotions may occur
only in the context of a particular mood (Panksepp, 1982). Given a particular mood, an
experienced emotion is likelier to be prolonged, shortened, or made more or less intense (Frijda,
1993). To further complicate matters, it appears that emotions also affect mood (Ekman, 1994;
Panksepp, 1982). Mood also influences what is encoded in memory, how this information is
retrieved, and then processed (Morris, 1989). Thus the appraisal of demands, as well as the
choice of coping response, will be influenced by mood. Since the omission of variables that have
significant relationships with the independent and dependent variables will bias tests of a model,
mood certainly bears consideration in any model in which emotions serve a mediating role.
Moreover, it would appear that the complex dynamics of emotion make the specification and
testing of valid causal models from field data (a methodology to which OB/HR researchers are
somewhat constrained) a great challenge.

Significant health outcomes rarely result from the brief, isolated events which Perrewe and
Zellars would have us study. Chronic exposures are the greater cause for concern. Weiss and
Cropanzano (1996) aptly suggest that more attention should be paid to cumulations of events
that result from particular work environment conditions. Perhaps a practical approach to the
study of emotions in organizations (again, for the OB/HRM researcher and not necessarily the
social psychologist or counselling psychologist) is to identify exposures such as job content that
tend to elicit particular emotions on a chronic basis. As suggested by a burgeoning theoretical
literature on ‘emotional labor’ (Hochschild, 1983), certain work roles, particularly those that
involve high levels of human interface, demand particular emotional displays and often even
particular felt emotions (see Ashford and Humphrey, 1993; Morris and Feldman, 1996; Wharton
and Erickson, 1993). The effects of such emotional content on health can be expected to depend
on individual and contextual factors. Ashforth and Humphrey (1993) identified a number of
suitable moderator candidates. For example, such traits as positive and negative affect intensity
and trait affect could alternately amplify or inhibit reactions to such job content. Thus I suggest
that the modal emotional experiences within particular work roles are more germane to
understanding why organizational life takes a physical and psychological toll on employees than
are the brief emotional states that are of more interest to Perrewe and Zellars. On the other hand,
diminished health may not be the only consequence of emotional labor. Whereas the sociologists
have taken a dim view of emotion work, research in the psychological literature suggests that it
may enhance positive emotional states. For example, when a person smiles this provides positive
self-feedback which often elevates mood (Adelman and Zajonc, 1989). It is therefore possible
that ‘face work’, which often requires the presentation of a cheerful disposition, may lead to
genuinely positive, healthy emotions. Indeed, if jobs have emotional display rules that
significantly influence experienced emotions, either positively or negatively (which is plausible
but for which there is as yet no direct evidence, as this line of research is just underway), then
given the complex effects of emotions on judgements and perceptions we need to take such
display rules seriously as possible confounds in organizational stress research as well as other
organizational research areas that require the measurement of perceptions and judgments.

As noted by Perrewe and Zellars, how an individual approaches a task and how he or she
responds emotionally depends on whether he or she labels the task as being challenging or
threatening. As they note, such labelling is relatively well explained by Lazarus’s (1966) model
and its more recent refinements (see Lazarus, 1991). However, the existence of ‘challenge’ labels
which may presage positive emotional and physical consequences suggests that actual demands
can often have salutary health consequences as well. Dienstbier (1989) observed from a broad
ranging review of stress studies that demands combined with substantial behavioral choice can
elicit challenge appraisals, and these trigger anabolic processes that enhance immune function
and cardiovascular health. Thus not all the health effects of work demands are negative, nor are
they always mediated by attributions, negative emotions, and ‘coping’ processes. The challenge to organizations in enhancing worker health is not just to provide palliative intervention, buffering the employee from his or her environment. As stress researchers we can also help organizations identify means to turn perceived threats into perceived challenges (such as by enhancing employee resources and control) in efforts to maximize the health-enhancing potential of demands.

**Incorporating Attributional Processes**

The types of attributions people make about experienced demands or arousal can be expected to affect how they respond, and thus Perrewe and Zellars justifiably draw our attention to them. But my concerns about their treatment of attributions parallels those above about coping behavior and emotions. The relationship between attributional reasoning and emotional states is not as straightforward as it is depicted by Perrewe and Zellars. First, just as behavior often precedes emotions rather than the reverse, attributions may be expected to precede or moderate primary appraisals such as threat assessment (rather than the reverse as depicted by Perrewe and Zellars). For example, Fisher (1984) described how attributional processes can moderate individual reactions to control. From either perspective, however, if we are to focus on specific attributions about ‘felt stress’ it should be recognized that not all types of physiological arousal follow from cognitive appraisals. Perrewe and Zellars focus on the controlled attentional and information processing determinants of emotions, whereas often emotional states are based on automatic, preattentive sensory determinants (Ohman, Dimberg, and Esteves, 1989). Schacter and Singer (1962) fostered a stream of research which has shown that people often make inaccurate attributions in their attempts to explain their arousal to themselves. For example, high levels of noise, temperature variation, and spatial density may directly promote certain kinds of arousal, and persons can misattribute this arousal as reflecting their own anger or anxiety (see Marshall and Zimbardo, 1979). Inasmuch as they can lead to intense individual and social dysfunctions (e.g., workplace violence and other social pathologies), these arousal misattributions may be particularly worthy of research attention. Of course, even when environment-based arousal is not misattributed, it can still have serious health consequences if it is of the degenerative variety (e.g., adrenocortical arousal; see Schaubroeck and Ganster, 1993) and it is chronic. Thus environment-based arousal (unmediated by cognitions) is one more reason why the objective environment bears consideration in work stress studies.

Second, just as transitory emotions and coping behaviors are not in themselves strong precursors of physical and psychological health, within-subject assessments of attributions across time and situations provide significant research challenges with little potential profit. The modal attributions of individuals may be more suitable constructs for determining whether (and if so, how) attributions can help to explain differences among individuals in their responses to actual exposures. Martin Seligman started a stream of research demonstrating that individuals have particular attributional tendencies (see Seligman, 1991). These tendencies, called attributional styles (or explanatory styles), have significant implications for physical and psychological health (Buchanan, 1995; Mineka, Pury, and Luten, 1995; Peterson, Seligman, and Vaillant, 1988). Organizational measures of attributional style have shown promise in recent studies (Furnham, Sadka, and Brewin, 1992; Kent and Martinko, 1995). There is of course predictable within-person variation in attributions, but attributional traits may have more potential for
organizational stress research because they reflect the more continuous, modal experiences of persons as they interact with actual exposures. Following Fisher (1984), for example, it can be surmised that persons who tend to impute high personal controllability to the negative outcomes that befall them at work will find that higher control over job processes is stressful rather than salutary. As job control increases, these persons may suffer more self-denigration when they have difficulties in performing the job.

**Conclusion**

Perrewe and Zellars have done a service in calling our attention to mental processes that represent a significant portion of the etiology of health disorder. Organizational stress researchers can enhance their model building by reflecting more carefully on how such processes follow when individuals are exposed to different stressors in their environments. We can even test the roles of such mechanisms by examining traits such as attributional style, affect intensity, and trait negative and positive affect as well as job content such as ‘face work’. There is no necessary conflict between addressing these factors and examining the actual work environment exposures that instigate them. Such exposures hold greater promise for organizational intervention, and identifying principles for designing and redesigning work and social processes is a better utilization of our training than are efforts focused on the less tractable individual mental processes.

**References**


