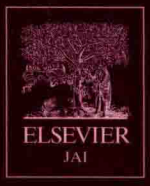

RESEARCH IN OCCUPATIONAL STRESS AND WELL BEING
VOLUME 3

EMOTIONAL AND PHYSIOLOGICAL PROCESSES AND POSITIVE INTERVENTION STRATEGIES

PAMELA L. PERREWÉ
DANIEL C. GANSTER
Editors

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EMOTIONAL AND PHYSIOLOGICAL PROCESSES AND POSITIVE INTERVENTION STRATEGIES

RESEARCH IN OCCUPATIONAL STRESS AND WELL BEING

Series Editors: Pamela L. Perrewé and Daniel C. Ganster

Volume 1: Exploring Theoretical Mechanisms and Perspectives

Volume 2: Historical and Current Perspectives on Stress and Health

OVERVIEW

The quest to understand the experience of stress and how it affects our mental and physical well being continues to fill volumes of journals and books. Despite this fecundity we seem to be no closer to a comprehensive theory of the stress process, or even a common definition of what it is, than we were twenty years ago. This is true for the subfield of occupational stress as well. Thus arises the inchoate suspicion that all is not well in our field. Our view is more sanguine than some, however. We are quick to concede that there is not a useful comprehensive theory of work stress, but we also hasten to add that this is not a critical lack. We prefer to think of the study of work stress and well being as defining a constellation of theories and models that each attacks a meaningful process or phenomenon. In this sense, the term stress serves as a general rubric for a diverse set of research questions (and their associated theories) concerning workplace experiences, individuals' reactions to those experiences, and workers' well being in all its various manifestations. The field of work stress excites many of us because of the incredible diversity of disciplines that have entered the fray, each of them attacking the question of how our work lives determine our health, and using the unique theoretical perspectives and methods of their discipline. In this sense, we are all united in our interest in trying to understand how what happens in the workplace affects our mental and physical health, in spite of the range of specific questions, theories, and methodologies that characterize our research programs.

In this, our third volume of the annual series *Research in Occupational Stress and Well Being*, we offer a selection of papers that reflects the diversity of the field in terms of both independent and dependent variables. The theme for this volume is *Emotional and physiological processes and positive intervention strategies.* Several of the papers zero in on the central role that affective processes play in the etiology of well being. Finally, work stress first commanded our attention because of its putative negative impact on well being, with early studies noting the association of stressful work with such outcomes as deaths from coronary heart disease, hypertension, and depression. Several of the chapters in this volume reflect the opposite concern – namely, processes that promote positive experiences and mental and physical well being.

In the first paper, Neal Ashkanasy, Claire Ashton-James and Peter Jordan discuss their model of how emotional responses mediate the effects of exposure to workplace stressors on well being outcomes. In so doing they examine the relatively new – and somewhat controversial – construct of emotional intelligence, and propose that it moderates the effects of stressors on individual reactions.

In the next chapter, Russell Cropanzano, Howard Weiss and Steven Elias examine how the informal and formal norms in organizations regulate the display of emotions, the functions that these norms serve, and the consequences in terms of emotional labor. In their view, the operation of such *display rules* can have deleterious effects on employee well being, but they also argue that they can lead to positive outcomes. Whereas Ashkanasy et al. explore the mediating impact of emotions, Cropanzano et al. shift the focus to the management of emotions. Their paper provides an excellent discussion of different conceptual models of emotional labor and a critical assessment of different causal mechanisms linking emotional labor to both positive and negative outcomes.

Michael Leiter and Christina Maslach continue the focus on the role of emotions in the experience of work stress when they present a new model of burnout. In their model, they describe six areas of work life and propose that one's level of person-job fit with respect to these dimensions will lead to the different burnout stages. Burnout, in turn, mediates the effects of fit between the work characteristics and subsequent outcomes such as individuals' commitment to their jobs and their evaluation of organizational change. In their paper, they present new scales for the job dimensions and tests of their mediation model.

In the next paper, Arie Shirom turns the focus to what is, essentially, the opposite of burnout. In his paper, he reviews the existing literature on the affective response of vigor, which encompasses individuals' feelings that they possess physical strength, emotional energy and cognitive liveliness. After reviewing the basic behavioral science literature on vigor, Shirom proposes a new model of vigor in the context of the workplace, articulating its antecedents and its impact on mental and physical health. He also presents a new scale for measuring a three-dimensional model of vigor along with data assessing its validity. In contrast to much of the research on work stress, Shirom's vigor model adopts the positive psychology perspective.

Departing from the theme of affect and emotions, Wayne Hochwarter's chapter addresses the role of social influence processes in affecting stress at work. Specifically, he looks at how the use of upward influence tactics might help the influencer better cope with organizational and workplace conditions. Hochwarter reviews his recent work that has moved beyond the examination of the direct effects of influence tactics on stress and explores a host of more complex pathways involving multiple mediating and moderating variables. His

paper raises many research questions that should inspire greater attention to this fertile area.

In the next paper, Norbert Semmer, Simone Grebner and Achim Elfering give us a thorough and critical evaluation of alternative approaches for the measurement of both stressors and strains. In this paper, they help us navigate the complexities of the measurement challenges inherent in stress research, using the common self-report approach as a comparison standard. Using their own recent studies that compare different measurement methods, they demonstrate how each of the alternative methods (including physiological markers, direct observations, and event-based measures) entails its own sources of error and substantive variance, and in the end, that none can simply serve as a substitute for self-reports. They provide an excellent discussion of how the different methods can be used to complement one another, which should serve as an invaluable guide to job stress researchers.

Debra Nelson's and Bret Simmons' chapter complements the positive psychology perspective of Arie Shirom's chapter by tackling the construct of eustress. Their review of the eustress construct exposes its general lack of empirical development, despite the common reference to the term. They present their own model of eustress in the workplace and report a preliminary test of its factor structure and relationship to general health. They introduce the notion of "savoring" to distinguish the pursuit of positive emotional outcomes from the traditional emphasis on "coping" as a means of mitigating distress. Their paper offers myriad suggestions for both research and the practice of management.

In his chapter on *Democracy at Work*, Tores Theorell reviews the extensive literature on workplace democracy in its various forms and its relationship to health. In particular, he recounts the rise and fall of workplace democracy over the last two decades in Sweden and concomitant shifts in indicators of worker well being. Beginning in the late 1990s, especially, he notes a loss of worker decision latitude and a corresponding increase in work-related psychological problems. He concludes with a discussion of various strategies for implementing workplace democratic structures and the promise they hold for improving the well being of workers.

In the last chapter, Jim Quick, David Mack, Joanne Gavin, Cary Cooper and Jonathon Quick expand Theorell's implementation theme into a full treatise on practical applications for improving the healthfulness of workplaces. In their promotion of the idea of *humane work*, Quick et al. continue the positive psychology theme of the earlier chapters by Shirom, Nelson and Simmons, and Theorell. Their recommendations cover principles that managers can use to promote positive, or eustress, workplaces for their employees as well as methods for promoting such outcomes for themselves.

We think the chapters in this year's volume bring forth a wealth of new theoretical ideas that should inspire exciting new programs of research. They truly represent an interdisciplinary panoply of constructs, methodologies, and practices that mirrors the diverse and growing field of work stress and well being. We look forward to continue charting the progress of this important field of study in future volumes of this series.

Pamela L. Perrewé and Daniel C. Ganster
Series Editors

CONTENTS

PERFORMANCE IMPACTS OF APPRAISAL AND COPING WITH STRESS IN WORKPLACE SETTINGS: THE ROLE OF AFFECT AND EMOTIONAL INTELLIGENCE

Neal M. Ashkanasy, Claire E. Ashton-James and Peter J. Jordan

ABSTRACT

We review the literature on stress in organizational settings and, based on a model of job insecurity and emotional intelligence by Jordan, Ashkanasy and Härtel (2002), present a new model where affective responses associated with stress mediate the impact of workplace stressors on individual and organizational performance outcomes. Consistent with Jordan et al., emotional intelligence is a key moderating variable. In our model, however, the components of emotional intelligence are incorporated into the process of stress appraisal and coping. The chapter concludes with a discussion of the implications of these theoretical developments for understanding emotional and behavioral responses to workplace.

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INTRODUCTION

Stress is a common feature of organizational life, across all occupational domains (Cooper, 1998; Hancock & Desmond, 2001). Attributed to workplace stressors such as job insecurity (Jordan, Ashkanasy & Härtel, 2002), role ambiguity (Beehr, 1987; Yousef, 2002), time pressures (Salas & Klein, 2001), and interpersonal conflicts (Narayanan, Menon & Spector, 1999), stress is nonetheless a psychological phenomenon that has generated much controversy with regard to its effect on individual and organizational outcomes (Koslowsky, 1997). While some studies have reported the deleterious effects of work stress on job performance (Reilley, Grasher & Schafer, 2002), other research has provided evidence to suggest a positive relationship between stress and productivity (Riley & Zaccaro, 1987). According to Cooper (1998), occupational stress is operationalized as a state of cognitive or physiological arousal or "readiness for action" and as such, variability in the performance in individuals under stress has been attributed to differential mental and physical workload capacities. Capacity theory (Woods & Patterson, 2001) provides an explanation of inter-individual differences in performance under stress based on differences in cognitive and attentional capacities. It does not, however, explain intra-individual differences in behavioral responses to stress. For example, why is it that an individual's coping capacity fluctuates, such that an event or task in one situation is accepted as a challenge while, in another situation, the same event or task is seen as a threat?

In this chapter, we offer an explanation of intra-individual (or within-person) differences in behavioral responses to workplace stress based on recent theoretical developments by Weiss and Cropanzano (1996) and Jordan et al. (2002). Specifically, we argue that behavioral responses to workplace stressors are contingent upon the nature of the individuals' affective response to the stressor. As such, workplace stressors affect workplace performance depending on the individuals' transitory emotional states.

An important foundation of our theory is Weiss and Cropanzano's Affective Events Theory (AET), which provides a detailed model of the way in which environmental conditions (daily "hassles and uplifts") affect individuals' emotional states and, in turn, their affective and behavioral responses to work stress. In particular, AET highlights the existence and significance of emotionality in the workplace. While emotions can enhance certain work-related tasks (Averill, 1999), however, it may also impinge upon an individual's ability to meet other workplace demands (Baumeister & Heatherton, 1996). Thus, an important question, both for researchers and managers of emotions in the workplace, is how can individuals moderate the impact of emotional states on their performance at work?

In a recent development upon AET, moreover, Jordan, Ashkanasy and Härtel (2002) proposed that emotional intelligence, a dispositional variable, moderates the way in which individual employees' cope with the experience of stress. Much controversy, however, surrounds the validity of emotional intelligence as a psychological construct that is distinct from general intelligence (see Becker, 2003; Jordan, Ashkanasy & Härtel, 2003). In addition, emotional intelligence has only recently begun to be developed theoretically and empirically, so that there is still little understanding of the nature of the unique cognitive processes that are mediated by this construct. In this respect, Jordan et al. (2002) articulated that their model was based on a theoretically sound content model of emotional intelligence developed by Mayer and Salovey (1997). Jordan et al. (2002), however, focused specifically on the moderating impact of emotional intelligence on employees' emotional and behavioral responses to work-related stress (job insecurity). Hence, the impact of emotional intelligence on the psychological processes underlying the generation and modulation of emotions is yet to be addressed.

In this chapter, therefore, we develop and integrate AET (Weiss & Cropanzano, 1996) and emotional intelligence (Jordan et al., 2002; Mayer & Salovey, 1997) by proposing a process model of affective response formation and modulation, which explains the cognitive-affective processes that underlie emotional intelligence. The model provides a systematic explanation of emotional intelligence as a mediator of the way in which workplace stressors trigger emotional responses in employees, and whether these emotional responses have a positive or negative impact on workplace performance.

Intra-individual differences in behavioral responses to workplace stressors have been attributed to task differences (Salas, Driskell & Hughs, 1996), audience characteristics (Schmitt, Gilovich, Goore & Joseph, 1986), and differential environmental conditions (Edwards, Caplan & Van Harrison, 1998). In each case, however, exogenous variables were used to explain intra-individual differences in task performance. As Weiss and Cropanzano (1996) pointed out in AET, however, differences in an individual's performance of the same task at work under similar workplace conditions cannot be explained by exogenous variables alone. Weiss and Cropanzano suggest further that it is the individual's affective response to the stressor that determines the quality of behavioral response. Furthermore, consistent with Lazarus and Folkman (1984), AET emphasizes that an individual's affective stress response may vary from moment to moment. In this respect, stress is not wholly contingent upon stable environmental and personality variables, but upon the individual's perception of affective events, or daily hassles and uplifts, that create transitory emotional states that may impact upon the individual's performance (see Lazarus, 1991).

According to Jordan et al. (2002), the generation of emotions in response to workplace stressors and the impact of these emotions on behavioral performance is moderated by emotional intelligence. Emotional intelligence is therefore seen to moderate the relationships between affective events, affective responses, and behavioral responses described in AET, based on individual differences in the cognition of emotional information. In order to moderate these processes, they argue, emotional intelligence functions to mediate the perception of emotional cues in workplace events, the experience of emotion in response to these cues, and the way in which emotions are reduced, or coped with. Consequently, emotional intelligence in their model moderates the perceived significance of an affective event, the intensity of emotional stress associated with the affective response to the event, and the way in which the affective response mediates the behavioral response to the affective event.

The Jordan et al. (2002) model represents a substantial advance on the existing literature on coping with workplace stress, which has not, until recently, considered the role emotional reactions as mediators of the effects of workplace stress on performance. Furthermore, the integration of emotional intelligence as a cognitive construct that facilitates the processing of emotional information is pivotal in the development of a critical understanding of the way in which emotion affects social cognition, and social cognition affects emotion.

As noted above, however, an important and unresolved issue concerns the way in which emotional intelligence actually functions to moderate the affective response process; that is, the cognitive and affective structures underlying emotional intelligence. While Jordan et al. (2002) proposed emotional intelligence as the process that moderates the affective event – affective response – behavioral response linkages proposed in AET, the actual processes involved in emotional intelligence, have not yet been addressed. In this chapter, therefore, we attempt to provide insight into the processes underlying emotional intelligence, that moderate the affective impact of workplace stressors, the generation of emotion and the effect of emotional responses on coping efficacy.

The chapter opens with a review of traditional approaches to the study of workplace stress and performance outcomes, highlighting the importance and neglect of emotions associated with stress in organizational research. In the following section, we outline recent research developments pertaining to the role of emotions in organizational behavior, including AET and emotional intelligence. Upon these conceptual foundations, the Jordan et al. (2002) model of emotional intelligence as a moderator of emotional and behavioral responses in the workplace will be discussed. Following this, interpretive developments upon the Jordan et al. model will be proposed, and the structures and processes underlying affective responses and emotional intelligence explained. Finally, the implications

of this research for the development of theory, research and practice pertaining to the management of stress and performance in the workplace will be considered.

STRESS AND ITS WORKPLACE EFFECTS

Research suggests that the question of whether work stress has a positive or negative impact on workplace behavior has two answers: work-related stress increases motivation and performance (Driskell & Salas, 1996), and work-related stress is associated with decreased job satisfaction and work commitment (Yousef, 2002). Each of these results is equally valid and supported by a convincing line of empirical research (Cooper, 1998; Hockey, 2002; Salas & Klein, 2001). The nature of work stress, thus, is that it is neither definitively positive nor negative; the impact of stress on performance depends on the nature, intensity, duration, and resources available to the employee to respond adaptively (Riley & Zaccaro, 1987). While the nature of emotional stress responses varies between individuals depending on dispositional stress vulnerabilities (Lazarus, 1966), the intensity and duration of the emotion experienced may fluctuate within individuals depending on emotion-coping resource capabilities between situations and task demands (Hancock & Desmond, 2001). Thus, the impact of emotional responses to stress on performance varies not only between and within emotions (the nature vs. intensity of the emotion), but also between and within individuals (the disposition vs. situation of the individual). The purpose of this section is to provide an overview of the complex and multidimensional effects of stress on workplace behavior. A conceptual framework for understanding the various manifestations of stress is proposed to provide the conceptual basis for development of a model of the emotional stress response process, which is outlined in the following section.

The Nature of Stress

Lazarus (1966) suggested that stress be treated as an organizing concept for understanding a wide range of processes involved in social adaptation. Stress, then, is not a unidimensional variable, but a construct or syndrome consisting of many variables and processes. As such, stress is a response process characterized by physiological, cognitive, behavioral, and emotional changes that function to alert the individual to the need to adapt to environmental demands in the interests of personal wellbeing. Personal well being is a mark of adaptive success, or a person-environment relationship that functions to promote the attainment of personal goals. Environmental demands, when perceived to exceed the person's

adaptive resources, represent obstacles to that person's ability to function adaptively in their environment, and hence present a potential threat to goal attainment. As obstacles to adaptive success, excessive environmental demands, which may be cognitive, behavioral, physical, or emotional, represent a source of strain, and are hence referred to as stressors.

In response to a stressor, an individual may experience physiological, cognitive, behavioral, or emotional changes that function to mobilize the individual to respond to environmental demands in the interests of adaptive success. Seyle (1976) originally described this stress response (which he termed the "general adaptation syndrome") as a three-stage process involving an initial alarm reaction, a second stage of coping (that Seyle, 1976, referred to as "resistance"), and a third stage involving physical or psychological burnout or exhaustion. Certainly, this theory had some validity, with research demonstrating that there are strong links between stress and illness, and stress and decreased performance outcomes (Siegrist, 1998). Unfortunately, however, as an explanation of the stress response process, this model has proved less useful. More recent research has revealed that the stress response is a more complex, multilevel process (Lazarus, 1999), and that there are positive as well as negative behavioral effects of stress (see Brockner, Grover, Reed & Dewitt, 1992).

There are various physiological reactions to stress, each associated with an increase in activation or levels of arousal in a state of "readiness for action" (Hancock & Desmond, 2001). As such, the physiological stress response is indicated by increased skin conductance, heart rate, salivation, hormone output, respiration rate, and sweat gland activity, to name a few. Furthermore, individuals under stress may have heightened sensitivity to sensory stimulus, evidenced by increased reaction time, and awareness of novel bodily sensations (see also Seyle, 1976).

Cognitive effects of the stress response may include distraction, narrowing of attention, tunnel vision, decreased search activity, response rigidity, longer reaction time to peripheral stimuli, increased information-processing errors, and memory deficits (Salas, Driskell & Hughs, 1996). In this respect, one of the better-established findings in the stress literature is that, as stress or arousal increases, the individual's breadth of attention narrows (Combs & Taylor, 1952). For complex tasks in which the individual must attend to a relatively large number of task salient cues, this narrowing of attention may result in the elimination of relevant task information and task performance will suffer. Thus, stress may result in degraded overall performance on complex tasks because attention is narrowed in response to cognitive overload. Furthermore, with regard to decision making under-stress, Cohen (1952) found that stressful conditions lead to greater problem-solving rigidity – a tendency to persist with a set method of problem solving – when it ceases to provide a direct task solution. This process has more recently been