



Theoretical article

OCCUPATIONAL STRESS AND BURNOUT: PSYCHOLOGICAL MODELS, INTERRELATIONS, AND ORGANIZATIONAL IMPLICATIONS

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Abstract:

This article examines the relationship between workplace stress and burnout as key phenomena in the psychology of work and organizational health. The evolution of the concept of "burnout" is examined – from its original definition by Freudenberg to the three-dimensional model of Maslach et al., including emotional exhaustion, depersonalization and reduced personal achievement. The distinctions between stress and burnout are highlighted and leading theoretical models of their relationship are analyzed. In conclusion, the need for an integrative approach to the prevention of burnout is argued, which includes organizational policies, a supportive work environment and interventions aimed at both the resources and coping skills of the individual.

Key words: occupational stress; burnout; theoretical models of the stress–burnout relationship.

Introduction

In the contemporary socio-economic and cultural context, the concept of stress and its manifestations in the professional environment are gaining particular importance. The dynamics of labor relations, increasing demands for work efficiency, and continuous structural transformations in organizations create conditions for the formation of chronic tension that far exceeds the framework of the usual professional workload (Schaufeli & Taris, 2014). As a result, the phenomenon of professional burnout has emerged in the focus of work psychology and organizational behavior, viewed as a possible final phase of prolonged, ineffectively managed professional stress (Maslach, Schaufeli, & Leiter, 2001).

The significance of the problem is determined by its high social and economic cost. Professional burnout is associated not only with a decrease in the individual's work capacity and productivity, but also with an increase in sick leave, staff turnover, and the risk of psychosomatic diseases (Shirom, 2003; Salvagioni et al., 2017). In 2019, the World Health Organization (WHO) included burnout in the International Diagnostic and Statistical Manual of Mental Disorders (ICD 11) as an "occupational phenomenon" (not a disease).

Workplace stress is a psychological and physiological response that occurs when the demands of the work environment exceed the adaptive resources of the individual (Lazarus & Folkman, 1984). The relationship between workplace stress and burnout is a complex, bidirectional process in which acute or chronic stressors lead to the depletion of personal and

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professional resources, which in turn reinforces the perception of new stressors as more significant and more difficult to cope with (Hakanen & Bakker, 2017).

Academic interest in this relationship is also based on the need to integrate physiological and psychological models of stress, as well as their application in different professional contexts.

Definition and evolution of the concept of “professional burnout”

Although the term “burnout” has become key in occupational psychology in recent decades, its conceptual roots can be traced back to the early 1970s. The American psychiatrist Herbert J. Freudenberger is considered the first to introduce the term into scientific discourse. In his 1974 publication in the *Journal of Social Issues*, he described the phenomenon observed among volunteers working in an addiction clinic in New York: “Burn-out is a state of mental and physical exhaustion caused by one's professional life” (Freudenberger, 1974, p. 159). This initial definition emphasizes emotional and physical exhaustion as a result of intense, prolonged work, especially in contexts with high emotional demands. Freudenberger described people who “burn out” as highly motivated, dedicated to their profession, but ultimately reaching a state of deep fatigue, cynicism, and reduced effectiveness.

In the following years, Christina Maslach and Susan E. Jackson systematized the concept and expanded it by developing a three-dimensional model that is still leading in research today. Maslach defined burnout as: “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity” (Maslach & Jackson, 1981, p. 99).

This model identifies three interrelated dimensions: (1) Emotional Exhaustion – a feeling of emotional and physical exhaustion that makes the individual unable to continue to effectively perform his professional duties; (2) Depersonalization – the development of a cynical and distant attitude towards service recipients or customers; (3) Reduced Personal Accomplishment – a subjective feeling of reduced effectiveness and competence at work.

In subsequent studies, Maslach emphasized that burnout is the result of chronic professional stress that has not been effectively managed. As a result of the research, it is emphasized that this is a phenomenon specific to the work environment, and it is wrong to assume it is depression, despite the presence of similar symptoms.

Meta-analyses from the last two decades (Shirom, 2003) confirm that burnout is associated with a wide range of negative consequences – from poor mental health and reduced work motivation, to an increased risk of leaving work and the occurrence of physical illnesses. Salvagioni and associates in a systematic review concluded: “Burnout is associated with a wide range of physical consequences, such as cardiovascular diseases, musculoskeletal pain, prolonged fatigue, headaches, gastrointestinal issues, and respiratory problems” (Salvagioni et al., 2017, p. 125). The relationship between stress and burnout is particularly emphasized in the Job Demands–Resources (JD–R) model of Demerouti, Bakker, and associates (Demerouti et al., 2001), which suggests that high job demands in combination with insufficient job resources accelerate energy depletion and increase the risk of burnout. This model effectively unites physiological theories of stress (Cannon, Selye) and psychological approaches (Lazarus & Folkman) in an organizational context.

The academic literature is gradually establishing the notion that professional burnout is not simply a result of accumulated stress, but represents a distinct, complex syndrome with unique developmental dynamics and specific organizational and personal predictors.

Stress and burnout: distinctions and relationships

Although in everyday language the terms “stress” and “burnout” are often used synonymously, an important distinction is made in the scientific literature based on their definitions, development dynamics, and consequences. Classical theories of stress (Cannon, 1932; Selye, 1956) define it as a nonspecific response of the organism to any demand placed on it, regardless of the nature of the stressor. Lazarus and Folkman (1984) expand this understanding by introducing the cognitive-evaluative perspective, in which stress is experienced when the individual assesses that the demands of the situation exceed his or her coping resources.

In this sense, stress can be acute or chronic, positive (eustress) or negative (distress), and is a dynamic process that varies over time and depending on the context. In contrast, burnout is seen as the end result of prolonged, chronic exposure to stress in the work environment, especially when this stress is associated with high emotional demands and insufficient opportunities for recovery (Maslach, Schaufeli, & Leiter, 2001). Maslach and Leiter emphasize that burnout develops gradually, passing through phases in which emotional exhaustion increases, detachment and cynicism increase, and the feeling of personal efficacy decreases. One of the key differences between stress and burnout lies in the reversibility of the condition. As Schaufeli notes: “Stress is a normal adaptive response and, when managed, its effects can subside relatively quickly, whereas burnout is a maladaptive end-state of chronic stress, often requiring significant time and intervention to recover” (Schaufeli, 2017, p. 30).

In other words, while stress is a process that can be interrupted by reducing the workload or improving resources, burnout is a stabilized, negative mental state that is more difficult to reverse and is associated with profound emotional and cognitive changes.

Meta-analyses show that prolonged professional stress is a significant predictor of burnout (Alarcon, 2011), and the JD–R model (Demerouti et al., 2001) explains this relationship through the mechanism of energy depletion: high demands without sufficient resources lead to constant activation of stress responses, which ultimately turn into symptoms of burnout. Empirical evidence from educational research (Kyriacou, 2001; Skaalvik & Skaalvik, 2018) shows that teachers with high levels of chronic stress, caused by disciplinary problems, administrative demands, and a high workload, are significantly more likely to develop symptoms of emotional exhaustion and depersonalization – central characteristics of burnout.

Thus, stress and burnout are not identical, but they are closely related: Stress is the process of responding to the workload; Burnout is the result of this process when it is prolonged over time and not adequately managed. As summarized by Maslach and Leiter: “Burnout can be seen as the cumulative result of chronic work stress that has not been successfully managed, manifesting as exhaustion, cynicism, and reduced professional efficacy” (Maslach & Leiter 2016, p. 103).

Within contemporary psychology and organizational health, the study of the relationship between stress, workplace stress, and burnout has emerged as a key area of research due to the increasing impact of these phenomena on individual well-being and work performance.

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While stress – in its etymology and conceptual development – is viewed as a response to perceived threats or challenges, burnout is a chronic condition that often results from prolonged stress exposure, especially in occupations with high emotional and cognitive demands. Maslach and Leiter emphasize that “burnout is not simply a result of occasional stressful moments at work, but the outcome of a prolonged mismatch between the person and the job” (Maslach & Leiter, 2016, p. 103). This definition clarifies that the relationship between stress and burnout is not linear, but cumulative and mediated by factors such as organizational culture, social support, and personal resources.

Models explaining the stress–burnout relationship

The understanding of the relationship between stress and burnout has gone through several key theoretical stages, each of which has added a specific perspective to the explanation of this complex phenomenon. The classical biological framework (allostatic load) postulates that prolonged stress activates the HPA axis and the sympathoadrenal system; over time, allostatic load (“wear and tear”) accumulates, associated with metabolic, immune, and cardiovascular risks - a key physiological mechanism for distress and health consequences in burnout. B. McEwan describes allostatic load - cumulative “wear and tear” from chronic stress mediators; short-term - adaptive, long-term - damaging. Thus, he summarizes the protective and harmful effects of stress mediators. (NEJM, 1998)

Although Demerouti et al.’s (2001) job demands–resources model is among the most influential contemporary conceptual frameworks, it does not exist in a vacuum, but is part of a broader research tradition that includes other significant approaches. The job demands–resources (JD–R) model is based on the premise that each work context is characterized by certain demands (job demands), which require effort and can lead to psychological and physiological strain, and resources (job resources), which facilitate coping with the demands and stimulate motivation. When demands exceed available resources, a process of energy expenditure is activated, which, if sustained, leads to chronic stress and burnout.

This view finds its logical support in earlier theories, such as Hobfoll’s Conservation of Resources Theory (Hobfoll, 1989, 2001). According to this theory, people strive to acquire, preserve, and protect resources that are valuable to them - material, social, personal, or energetic. The loss of these resources, or the threat of loss, is perceived as a major source of stress, which, if chronic, can develop into burnout. The threat of resource loss causes stress, and when this process is repeated and reinforced, a spiral of resource erosion occurs, which sets the stage for burnout. As Hobfoll emphasizes: “Individuals strive to retain, protect, and build resources, and what is threatening to them is the potential or actual loss of these valued resources” (Hobfoll, 1989, p. 516). The application of COR to burnout research emphasizes that when job demands exceed available resources, a vicious cycle of loss is activated that maintains and exacerbates chronic stress, leading to burnout.

An additional analytical perspective is offered by the Person–Environment Fit Model of French, Caplan, and Harrison (1982), which emphasizes not so much the quantity of resources as the degree of fit between individual characteristics and the work environment. In this model, stress is not a product solely of external demands or internal characteristics, but arises from a mismatch between the two. This model suggests that stress and its associated negative consequences arise

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when there is a mismatch between individual abilities, needs, and values and the demands and resources that the environment offers. In the event of persistent mismatch, psychophysiological tension builds up, which can culminate in burnout. The chronic imbalance between skills, values, and needs, on the one hand, and organizational demands and capabilities, on the other, leads to persistent tension, which can ultimately manifest as burnout.

Another significant contribution in this area is Siegrist's Effort–Reward Imbalance Model (Siegrist, 1996). This approach views stress as the result of a systemic imbalance between the efforts made and the rewards received – be they material, social, or psychological.

Johannes Siegrist's model emphasizes the imbalance between the efforts an individual makes and the rewards he or she receives (material, social, or psychological). “High-cost, low-gain work conditions elicit sustained strain reactions which, in the long run, may lead to stress-related disorders” (Siegrist, 1996, p. 27). When efforts systematically exceed rewards, chronic stress occurs, which is directly linked to emotional exhaustion and cynicism – key components of burnout. The model is particularly valuable in that it links the experience of injustice and lack of recognition with chronic stress reactions which, if continued, turn into burnout. Siegrist explicitly notes that “high-cost, low-gain work conditions elicit sustained strain reactions which, in the long run, may lead to stress-related disorders” (Siegrist, 1996, p. 27).

On the other hand, Lazarus and Folkman's Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) introduces a psychological mechanism into the analysis that is missing in purely resource-structural models. This model explains stress as a dynamic transaction between the individual and the environment, in which the significance of the stressor depends on cognitive appraisal and the chosen coping strategies. In the context of professional exhaustion, this model helps to understand why, under similar working conditions, some individuals develop burnout and others do not: differences in the appraisal of situations and in coping skills moderate the relationship between objective demands and the subjective experience of stress.

Conclusion

When considered together, these models outline a multidimensional picture of the process in which acute stress, provoked by specific challenges, can develop into chronic strain under the influence of: (1) structural factors – such as high demands and low resources; (2) psychological judgments – such as the assessment of threat and coping resources; and (3) socio-organizational imbalances – such as the inequivalence between effort and reward. In this integrative perspective, burnout is the result not of a single mechanism, but of the interaction between several complementary processes that reinforce each other and lead to a gradual depletion of personal and professional resources.

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