
Pietro Crescenzo₁

Affiliations:
Department of Human, Philosophical and Educational Science, University of Salerno, Salerno, Italy

Corresponding author:
Dr. Pietro Crescenzo, Department of Human, Philosophical and Educational Science, University of Salerno, Via Giovanni Paolo II, 132, Salerno, Italy. Mail: pcrescenzo@unisa.it.

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The word ‘stress’ descends from latin word ‘strictus’, which means narrow. From the word etymology, a sense of oppression, lack of movement and constriction is evident. The Austrian doctor Hans Selye was one of the first to use the word ‘stress’ in relation to the medical field, borrowing it from a physics and mechanics term that indicates the forces capable of deforming a body [1]. Stress is defined by the author as ‘a non-specific response of the body to any demand made on it from the external environment’, from the principle of homeostasis developed by Bernard and Cannon’s work on the role of adrenaline in the ‘fight-or-flight’ response. From this definition, the author theorizes a complex body response mechanism: the ‘General Adaptation Syndrome’ (General Adaptation Syndrome - GAS). The ‘GAS’ theory explains how the body possesses the capability to cope with stress through a general activation in order to achieve homeostasis [2]. Selye’s groundbreaking discovery opened the way to a deeper study of the theory of stress [3]. Particularly innovative is the ‘Job Strain’ or ‘Demand-control’ model (JDC), developed in 1979 by Robert Karasek. The main assumption of this model is that a situation of high demands and low control is viewed as stressful by the worker [4]. Since the 1980s, the JDC has been the most influential model for work-related stress, being applied to different physical and psychological issues, such as cardiovascular disease, depression and burnout [5–7]. The most prominent strengths of the Job Strain model are its simplicity and its effectiveness, together with its ability to provide crucial factors to determine the worker’s wellbeing and health. In the Karasek’s model, the ‘Job demands’ represent the psychological stressors in the work environment as they ‘results not from a single aspect of the work environment, but from the joint effects of the demands of a work situation and the range of decision-making freedom (discretion) available to the worker facing those demands’ [4]. They include factors such as: interruption rate, time pressures, conflicting demands, reaction time required, pace of work, proportion of work performed under pressure, amount of work, degree of concentration required, and the slowing down of work caused by the need to wait for others. Decision latitude refers to employees’ control over their tasks and how those tasks are executed. It consists of both skill discretion and

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decision authority. Skill discretion describes the degree to which the job involves a variety of tasks, low levels of repetitiveness, occasions for creativity and opportunities to learn new things and develop special abilities. Decision authority describes both the employees’ ability to make decisions about their own job, and their ability to influence their own work team and more general company policies [4]. The Karasek’s model creates four kinds of jobs: passive (low latitude, low demands), active (high latitude, high demands), low strain (high latitude, low demands) and high strain (low latitude, low demands). Since its introduction in 1979, the model has been extended to include social support at work as a predictor of job strain. Indeed, Johnson in the 1986 argued that the JDC model mainly focused on job control as a potential psychosocial resource without considering social support which is as important as job control as a moderator [8]. Thus, in 1988, it was proposed that Karasek’s model be extended by the addition of social support as a third dimension. In the expanded ‘Job Demand-Control-Support’ model developed by Johnson and Hall, the highest risk of poor health is expected when employees experience a high isolation-strain (iso-strain) job, that is a job characterized by high job demands, low job control and low social support [9–11]. The Job Content Questionnaire (JCQ) is a questionnaire-based instrument designed to measure the content of a respondent’s work tasks in a general manner which is applicable to all jobs and jobholders [12]. The three scales, decision latitude, psychological demands, and social support, are used to measure the high-demand/low-control/low-support model of job strain development. The JCQ has been translated into over 22 languages. In Italy, it is one of two validated tools available for health surveillance of job stress (the other one is the Siegrest’s ‘Effort Reward Imbalance’ Questionnaire) [13]. In 1990, the most internationally well-known publication was the book published by Karasek and Theorell with the title “Healthy Work” (Basic Books: New York; 1990) [14], which has been translated in Italy [15] and in many other countries and has been used both in scientific work and education, and is one of the most cited book of stress. Karasek and Theorell, American (naturalized) and Swedish academicians respectively, analyze in their important work how heart disease, diabetes, and other stress-related ailments are generated by the way in which people are forced to work in their jobs. In the first part of their book, the authors present the Job Strain model providing a detailed and heavily referenced discussion of the evidence, analyzing various stress/work studies done over the years in America and Europe [16–21]. In the second half of the book, they discuss various ways being developed to deal with the lack of worker participation in decision-making on the job. The alternative view presented in the book is that ‘damaging job stress is not inevitable and that its causes can be found in the conventional models of work organization in Western industrial society’. According to the authors ‘change in the workplace is not only desirable but essential’. Models of economic and production organization (Smith, Taylor, Ford) must be avoided; in this way ‘it is possible to reorganize production in a manner that can both reduce the risk of stress-related illness and increase aspects of productivity associated with creativity, skill development and quality’ [14]. In this book you can see both scientific divulgation and research, contemporaneously. Despite this book turned 26, it’s still useful for employers in order to find organizational measures to improve both health and productivity of the employees. Karasek’s model has received sufficient empirical support for it to provide a useful framework for interventions at work. It’s one of the most recognized models in occupational stress research. Despite the limitation in the number of job characteristics it considers, demands, control and support are dimensions considered in the most important European methods for the work-related stress risk assessment [5, 7]. Is it an ancient theory for a current problem?
References


