

SPECIAL ISSUE: APPLYING THE JOB DEMANDS-RESOURCES THEORY:  
CONTEMPORARY CHALLENGES AND EMERGING TRENDS  
IN THE SERVICE SECTOR

GUEST EDITORS: DAMIANO GIRARDI, LAURA DAL CORSO, ALESSANDRO DE CARLO,  
DORA CAPOZZA, AND ALESSANDRA FALCO

Editorial  
NEW PERSPECTIVES  
ON THE JOB DEMANDS-RESOURCES THEORY:  
BRIDGING THEORY AND PRACTICE  
TO PROMOTE HEALTH AND WELL-BEING

DAMIANO GIRARDI  
LAURA DAL CORSO  
UNIVERSITY OF PADOVA, ITALY

ALESSANDRO DE CARLO  
UNIVERSITY OF MESSINA, ITALY

DORA CAPOZZA  
ALESSANDRA FALCO  
UNIVERSITY OF PADOVA, ITALY

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This Special Issue aims to extend the Job Demands-Resources (JD-R) theory from both a theoretical and practical perspective by identifying new factors or processes previously unexplored in the theory, opening pathways for future research and organizational interventions. Additionally, the Special Issue mostly focuses on workers in the service sector who are exposed to both traditional and specific psychosocial factors, sometimes exacerbated by the COVID-19 pandemic, the widespread use of information and communication technologies, and flexible work arrangements. The Special Issue features a literature review, a methodological study on scale adaptation and validation, and seven empirical articles employing both quantitative and qualitative methods. These contributions explore the role of personality traits (e.g., extroversion), personal resources (e.g., harmonious passion, emotional regulation, and resilience), and leadership in the motivational and health impairment processes of the JD-R theory. They also examine the complex, sometimes double-edged nature of some psychosocial factors, such as interactions with students, relationships with the care recipients and their relatives, and job autonomy. We believe that this Special Issue meets the current demands of the literature while addressing the practical needs of organizations.

Keywords: JD-R theory; Organizational well-being; Work engagement; Job burnout; Work-related stress.

*Correspondence concerning this article should be addressed to Damiano Girardi, Department of Philosophy, Sociology, Education, and Applied Psychology, Section of Applied Psychology, University of Padova, Via Venezia 14, 35131 Padova (PD), Italy. Email: damiano.girardi@unipd.it*

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The Job Demands-Resources (JD-R) theory combines motivational and work-related stress perspectives and has been widely used to examine the dynamics of occupational stress and employee well-being (Bakker et al., 2023; Demerouti et al., 2001). The theory classifies job characteristics as either demands or resources, which may give rise to two distinct processes: the health impairment and the motivational process, respectively. While job demands are those job characteristics that require effort and are associated with negative outcomes such as job burnout, job resources facilitate goal achievement and personal development as well as help employees to cope with job demands, thereby reducing their impact (Bakker et al., 2023; Demerouti et al., 2001). In line with transactional models of stress (see Cox et al., 2000), recent developments in the theory have incorporated personal resources such as optimism, self-efficacy, and resilience. This expanded theory proposes that personal resources have a reciprocal relationship with job resources (e.g., employees with more personal resources are expected also to have access to more job resources) with personal resources also moderating the impact of job demands on employee well-being (Demerouti & Bakker, 2023).

The JD-R theory has several strong points. One of the most significant advantages lies in its ability to be contextually flexible, allowing it to be applied across a wide range of occupations and sectors. In contrast to previous models, such as the Effort-Reward Imbalance (Siegrist, 1996), the Job Demand-Control (Karasek, 1979), or Job Characteristics (Hackman & Oldham, 1976) models — which propose a predefined set of risk and protective factors — the JD-R theory can be tailored to different organizational sectors. Notably, previous research in the field highlighted the need to examine occupation-specific psychosocial factors when assessing workplace stress (WR-S) and well-being. These factors should be identified based on existing literature or discussions with organizational stakeholders (Menghini & Balducci, 2021). Furthermore, the JD-R theory builds on the classical interactional and transactional perspectives on work-related stress (Cox et al., 2000). It emphasizes the importance of achieving a good balance between job demands and resources in order to achieve optimal employee outcomes, while also taking into account individual characteristics (e.g., personal resources) in how employees perceive and respond to job demands and resources. Finally, from a practical standpoint, the theory offers clear guidance for organizations on how to enhance employee well-being and performance through targeted, evidence-based interventions (Bakker et al., 2014; van Wingerden et al., 2016).

Given these strengths, JD-R theory has attracted the attention of researchers as well as health and safety/human resource practitioners, and has stimulated dialogue between academics and professionals interested in promoting employee health and performance. Similarly, the theory has inspired research and interventions in a range of sectors, including manufacturing, healthcare, education, and services, with a focus on different work-related fields, including work-ability (Viotti et al., 2017), career development (Lee & Eisenstat, 2018), work-home interference (De Carlo et al., 2019), physician-patient relationships (Capozza et al., 2024), and return to work after maternity leave (Carluccio et al., 2020).

More recently, the model has been used to address the challenges posed by the COVID-19 by examining occupational safety during the pandemic (e.g., perceived risk of infection as a job demand; Falco et al., 2022) and the phenomenon of technostress (Pansini et al., 2023). Building on these recent developments, the JD-R theory has been generalized to understand how organizations and their employees can best deal with workplace crises other than the pandemic (Demerouti & Bakker, 2023).

The Special Issue aims to contribute to the literature in at least two ways. First, it aims to extend the JD-R from a theoretical point of view by identifying new factors or processes not previously included in the theory, while at the same time enhancing its applicability to organizational contexts by adapting it to the evolving challenges of the labor market. This is especially relevant because the global COVID-19 pandemic, along with the widespread adoption of information and communication technologies (ICTs) and flexible work arrangements (e.g., smart working), has both intensified existing risk factors and introduced new ones (Karimikia

et al., 2021). Second, the Special Issue includes several studies primarily focused on workers in the service sector, such as education, healthcare, and volunteers from nonprofit organizations (NPOs). This focus is particularly valuable as it is well-known that workers in these sectors face unique psychosocial factors, often due to the high volume of interpersonal interactions — sometimes also in terms of violence and harassment — and the accompanying emotional demands, lack of organizational/job resources as well as the prevalence of temporary contracts (Eurofound, 2022; European Agency for Safety and Health at Work, 2023).

This Special Issue includes one literature review, one methodological study (i.e., scale adaptation and validation), as well as seven empirical articles employing different methodological approaches, including both qualitative and quantitative methods. The Special Issue is structured as follows: first, articles that focus primarily on negative outcomes are presented, followed by those that examine positive outcomes. Finally, articles that explore both negative and positive outcomes are included.

The first study conducted by Brecciaroli, Santarpia, Cantonetti, Albolino, and Borgogni, incorporated the construct of regulatory emotional self-efficacy as a critical personal resource within the JD-R theory. In particular, the authors examined the mediating role of exhaustion in translating workload into interpersonal strain, and the moderating role of regulatory emotional self-efficacy in these relationships. The results supported the proposed moderated mediation model with regulatory emotional self-efficacy attenuating the adverse effects of high workload on exhaustion among healthcare professionals. These findings underscore that the ability to regulate emotions effectively represents a central personal resource in the healthcare settings (Alessandri et al., 2023), characterized by high demands as exemplified by the circumstances surrounding the COVID-19 pandemic. By prioritizing the reduction of workload and the enhancement of personal resources such as regulatory emotional self-efficacy, healthcare organizations could foster a more supportive and resilient work environment, which may ultimately lead to improved outcomes for both employees and patients.

Next, Girardi, Dal Corso, Arcucci, Elfering, Pividori, De Carlo, Boatto, Capozza, and Falco investigated the impact of technology-related risks, or technostress creators (TCs), on stress in the context of smart working (SW), with a particular focus on the protective role of job autonomy. Following the JD-R theory, TCs are conceptualized as job demands potentially leading to psychological and physiological strain, while job autonomy is considered as a job resource that could mitigate these effects (Pansini et al., 2023). The study adopted a multimethod approach that included both psychological and physiological measures, namely the hair cortisol-to-DHEA(S) ratio as a stress biomarker. The authors found that techno-insecurity was positively associated with log cortisol/DHEA(S) ratio, while job autonomy exacerbated — rather than buffered — the association between techno-overload, techno-insecurity, and the stress biomarker. Therefore, by examining the physiological mechanisms potentially involved in the health impairment process of the JD-R theory, the study offers a deeper understanding of the consequences of technostress on health in a population of workers who are particularly at risk.

Di Santo, Tesi, Aiello, and Pierro conducted a cross-sectional study to test the hypothesis that the positive association between job demands and work-life conflict is mediated by the proneness to work motivational imbalance. Next, building on conceptualization of “passion” as a resource that can moderate the effect of demands (Benitez et al., 2023), the authors proposed that two types of passions — in terms of obsessive and harmonious passion — may act as distinct moderators of the relationship between job demands and proneness to work motivational imbalance. Results showed that the association between job demands and proneness to work motivational imbalance was stronger in employees with high (vs. low) obsessive passion. However, the same relationship did not occur in employees with high harmonious passion. The study contributed to the literature by showing that harmonious passion might act as a protective personal resource against job

demands. Accordingly, the adoption of managerial practices that promote positive, harmonious passion (e.g., through job enrichment or mentorship programs) may contribute to reduce the risk of imbalance in motivation and, eventually, work-life conflict.

The study by Villarroel-Núñez, Acosta-Antognoni, Salanova Soria, and Villacura-Herrera investigated the psychometric properties of the HERO (Healthy & Resilient Organization) Check Public instrument — developed to assess psychosocial factors and healthy organizations — in a sample of workers and supervisors from the Chilean public sector. The results showed that the six-factor model has high reliability and structural validity among workers, while the results are inconclusive for supervisors. Results indicated that the six-factor model, which extends the original five-factor HERO model by including job demands and specific variables such as servant leadership and public service motivation, provides an adequate fit for both workers and supervisors. However, an examination of measurement invariance raised questions about the uniform interpretation of the questionnaire items across genders. Specifically, metric nonequivalence suggests that certain aspects of psychosocial risks may be perceived or experienced differently by men and women, which is consistent with previous research (Purvanova & Muros, 2010), with women often facing higher psychosocial risks.

In a sample of Italian teachers Guglielmi, Iorio, van der Heijden, and Mazzetti investigated the relationship between extroversion, as a key personality trait, and work engagement, while also considering team cohesion and positive emotions as potential mediators of this relationship. The results showed that the association between extroversion and engagement was mediated by both individual-level and team-level resources, in terms of positive emotions and cohesion, respectively. These findings are consistent with the view that personality traits can influence perceptions and interactions in the workplace, thus contributing to overall engagement levels (Zulkarnain et al., 2023). Overall, results from this study support the person-situation interaction framework proposed by the JD-R theory and highlight that personal resources, in addition to job resources, play a key role in the motivational process. The paper offers practical insights for school administrators to enhance teacher well-being and effectiveness by creating positive emotional climates through recognizing accomplishments, celebrating successes, and offering support during challenges.

Yıldırım, Akgül, Geçer, Bal, Akgül, Aziz, Chirico, Szarpak, and Rizzo conducted a cross-sectional study to examine the potential mediating role of resilience and social connectedness in the association between COVID-19 impact and job satisfaction in a large sample of Turkish mental health professionals. Drawing on the JD-R theory, the authors emphasize the importance of considering the interplay between contextual, organizational, and personal factors in the development of health and well-being during major societal crises including the COVID-19 pandemic (Demerouti & Bakker, 2023). In line with this reasoning, resilience and social connectedness fully mediated the association between COVID-19 impact and job satisfaction. These findings align with the motivational process of the JD-R theory, and suggest that by developing interventions aimed at promoting resilience and social connectedness (e.g., through resilience training and opportunities for social interaction) employers can help reduce the negative impact of the pandemic on job satisfaction.

Although the JD-R theory has been used to examine the influence of context-specific demands/resources on the well-being and quality of life of academics, there is currently a lack of research concerning the multifaceted relationships with students. The study by Loera, Guidetti, Sottimano, Converso, and Molinengo offers valuable insights on this issue. Their research aimed to evaluate the psychometric properties of a recently developed scale designed to assess the complex nature of relationships with students as well as to apply the scale to investigate university professors' occupational well-being. In particular, based on the JD-R theory, the dual role of the relationship with students — conceptualized both as a job demand and a job resource (Cui, 2022) — was assessed as a possible factor influencing academic well-being. The results

demonstrated the reliability and validity of the instrument, as well as its invariance across genders and academic roles. Results also showed significant associations between students' draining requests and negative outcomes (i.e., job burnout) as well as significant associations between student's support and both engagement at work and specific dimensions of job burnout.

The study conducted by Martini, Viotti, Bacci, Edge, and Converso explored job demands and resources in the elderly home-care sector. This sector, often overlooked within the broader field of care professions, is characterized by high stress levels and distinct psychosocial risks, such as prolonged exposure to suffering and isolation in home settings. A template analysis was conducted on 49 interviews with home-care workers, including both Italian and immigrant participants. The results showed that the relationship with both the elderly and their families is the primary source of job demands and resources for home-care workers. Although these interactions can sometimes present challenges, such as aggressive behavior, they also provide valuable social support and recognition. Notably, the conflict between caring for the elderly and caring for their relatives in their countries represents a significant issue for immigrant home-care workers. In such a demanding profession, where formal and organizational support is lacking, the resources derived from the relationship with the recipient and their family could be a valuable buffer to reduce exhaustion (Liao et al., 2024).

A systematic literature review by Benevene, Buonomo, Pansini, and D'Anna investigated the pivotal role of leadership in influencing volunteer retention and intent to remain within NPOs. This review addressed a gap in the existing literature by identifying and examining the principal approaches to leadership and their effects on volunteer outcomes. The findings of the qualitative analysis of these studies indicate that the most prevalent approaches used to explain volunteers' intentions to remain are Leader-Member Exchange (LMX) theory, servant leadership, and transformational leadership. Furthermore, the review highlights the significant mediating role of work-related and individual factors, including job satisfaction and volunteers' motivation, which are shaped by these leadership styles. While the JD-R theory generally emphasizes the pivotal role of effective leadership in influencing the impact of job demands and resources on employee well-being (Tummers & Bakker, 2021) this study extends the JD-R theory to NPOs by providing a comprehensive overview of how different leadership styles contribute to the sustenance and growth of volunteer-driven organizations.

Overall, we believe this Special Issue will make a valuable contribution by extending the JD-R theory and adapting it to the evolving labor market challenges in the service sector, while also offering organizations and practitioners suggestions for interventions to promote employee health and well-being.

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