

The Dual Nature of Stress at Work: A Challenge-Hindrance Framework Perspective

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Abstract: This study presents a systematic literature review of 27 peer-reviewed articles published between 2013 and 2023 to critically examine the relevance and adaptability of the Challenge-Hindrane Stressor Framework (CHSF) in contemporary organizational settings. The findings reveal that while the CHSF continues to offer foundational insights into how workplace stressors influence employee outcomes, its dichotomous classification often fails to capture the contextual, perceptual, and dynamic complexities of real-world stress experiences. Factors such as leadership style, organizational justice, cultural norms, and digital transformation significantly mediate the appraisal and impact of stressors. Moreover, individual resilience and coping mechanisms emerged as crucial moderators that influence whether stressors are perceived as challenges or hindrances. The review calls for a reconceptualization of CHSF into a more integrative and fluid model that accommodates multidimensional stressor interactions and evolving work environments. This updated perspective provides a stronger theoretical and practical foundation for future research and organizational interventions aimed at improving employee well-being and performance.

Introduction

Workplace stress has emerged as a persistent and critical issue in organizational behavior research, driven by its significant implications for employee well-being, productivity, and organizational performance. In particular, the distinction between challenge and hindrance stressors—initially conceptualized to differentiate stressors with potentially motivating versus debilitating effects—has provided a foundational framework for understanding employee responses to occupational stress. Studies have demonstrated that challenge stressors, such as high workloads and tight deadlines, can sometimes enhance motivation and performance,

whereas hindrance stressors, such as bureaucratic constraints and interpersonal conflict, are more likely to undermine employee outcomes (Bowling, 2015). However, the evolving nature of work environments, particularly in the context of digitization and hybrid working models, necessitates a reexamination of the challenge-hindrance stressor framework.

Empirical findings suggest that the binary categorization of stressors may overlook nuanced experiences of employees who interpret stress through a variety of contextual and personal lenses. For instance, Lin (2015) found that the perception of control plays a moderating role in how employees evaluate stressors, highlighting that identical work conditions may be experienced differently across individuals. This supports emerging critiques that the challenge-hindrance dichotomy may be overly simplistic in complex organizational ecosystems. Furthermore, the presence of abusive supervision, as explored by Lin (2013), further complicates the interaction between leadership behaviors and employee well-being, pointing to the need for more dynamic models of workplace stress.

The integration of technological demands into the work routine has added another layer to this complexity. Benlian (2020) examined how technology-driven interruptions influence daily stress patterns, finding that even seemingly minor digital disruptions can accumulate to impact performance and satisfaction. These findings raise important questions regarding how traditional stressor frameworks can be adapted to account for digital-age pressures. Similarly, Johnson (2020) emphasized the growing necessity to reassess how organizations measure and respond to stress in environments shaped by remote communication, artificial intelligence, and constant connectivity.

Research also increasingly recognizes the importance of psychological resources and recovery mechanisms in moderating the effects of workplace stress. Sonnentag (2017) highlighted how recovery experiences can buffer the impact of both challenge and hindrance stressors, suggesting that stress outcomes are not merely a function of the stressor type, but also of employee coping capacity and environmental support. In line with this, Duchemin (2015) reported that workplace mindfulness interventions can significantly reduce stress symptoms, further complicating the predictive validity of the challenge-hindrance framework when applied in isolation from psychological interventions.

Moreover, organizational culture and leadership authenticity have been shown to significantly shape how stress is perceived and managed. Rahimnia (2015) demonstrated that authentic leadership can enhance employee well-being and reduce the negative impact of hindrance stressors. This supports the argument that managerial approaches must be integrated into any comprehensive model of workplace stress. The influence of cross-cultural variables, as reported by Lu (2013), also suggests that interpretations of stress may vary significantly across global contexts, which has direct implications for multinational organizations and global HR practices.

Given these developments, this systematic literature review seeks to revisit and synthesize contemporary empirical findings on the challenge-hindrance stressor framework. By analyzing peer-reviewed literature published over the past decade, this study aims to identify

current trends, theoretical evolutions, and practical implications for understanding workplace stress in modern organizational settings. The findings offer a refined understanding of the framework's applicability, limitations, and potential extensions in light of shifting work paradigms and psychological dynamics.

Research Methods

This study adopts a systematic literature review (SLR) methodology to explore the development and application of the Challenge-Hindrance Stressor Framework in the context of workplace stress. The SLR approach enables a comprehensive, transparent, and replicable synthesis of existing scholarly knowledge, ensuring that the findings reflect both the breadth and depth of academic discourse on this topic. The procedure aligns with established guidelines in systematic research synthesis and is guided by PRISMA standards to ensure methodological rigor and clarity in reporting.

To initiate the process, a comprehensive search was conducted using the software POP 8, which integrates access to several leading academic databases such as Scopus, Web of Science, Emerald, and ScienceDirect. The search query was constructed using a Boolean logic strategy, incorporating the keywords: “Workplace Stress”, “Challenge Stressor”, “Hindrance Stressor”, and “Employee Well-being”. These terms were selected to precisely target literature that engages explicitly with the theoretical framework under investigation. The search was limited to peer-reviewed journal articles published between 2013 and 2023, written in English, and focused on organizational, psychological, or managerial contexts.

The initial search yielded 150 records. After the removal of 30 duplicates, 120 unique articles were retained for title and abstract screening. During this stage, articles that did not explicitly employ or reference the challenge-hindrance framework were excluded, resulting in the elimination of 50 studies. Seventy full-text articles were assessed for eligibility based on inclusion criteria, which required that the articles offer empirical, theoretical, or conceptual contributions to the understanding of workplace stressors through the challenge-hindrance lens. Following a detailed appraisal of methodological soundness and relevance, 43 articles were excluded due to insufficient focus or methodological limitations, leaving a final set of 27 articles included in the qualitative synthesis. The figure below summarizes the stepwise filtration process undertaken during the review:

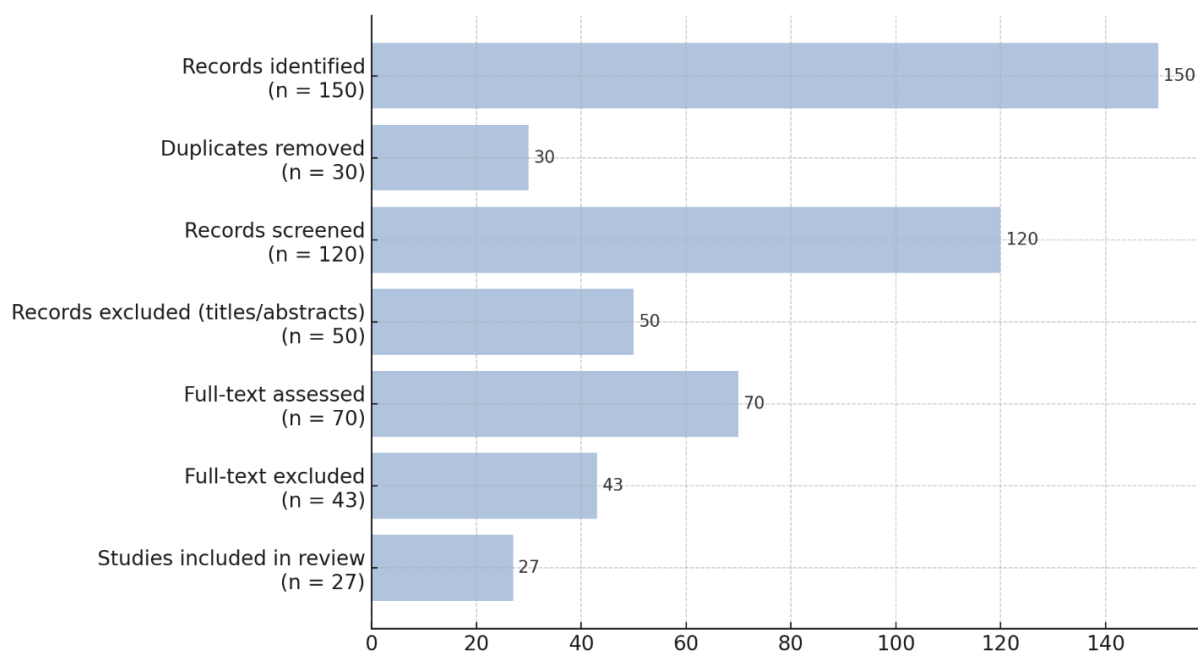


Figure 1. Systematic Selection Stages of Articles – SLR Framework

Each selected article was then analyzed based on several criteria, including research objectives, methodological approach, context of study, theoretical framing, and key findings. The review incorporated both quantitative and qualitative studies, allowing for a rich synthesis of patterns, contradictions, and contextual variations. Special attention was given to studies that explored the interaction of challenge and hindrance stressors with moderating variables such as leadership style, personality traits, coping mechanisms, and digital work environments. Moreover, articles were categorized thematically to identify emerging trends and theoretical extensions of the framework.

To assess the quality of included studies, a modified checklist derived from the PRISMA quality criteria was applied, focusing on research design clarity, validity of constructs, and theoretical contribution. This quality assessment helped distinguish foundational studies from exploratory contributions and informed the weighting of studies in the subsequent discussion phase. The thematic analysis also allowed for the clustering of findings into major domains, such as employee well-being, organizational outcomes, cultural variability, and digital stressors.

Through this structured and transparent review process, the present study establishes a robust foundation for evaluating the applicability, limitations, and future potential of the Challenge-Hindrance Stressor Framework. The results of this analysis, which include the development of a revised conceptual map and identification of theoretical gaps, are presented in the next section to support ongoing advancements in stress research within organizational behavior literature.

Result and Discussion

Table 1 provides a thematic summary of the 27 selected articles included in this systematic literature review. Each entry outlines the core bibliographic information, research

focus, key findings, and methodological approach. The table is organized to highlight the diversity of scholarly contributions that have examined workplace stress through the lens of the Challenge-Hindrance Stressor Framework (CHSF). It captures both empirical and conceptual studies from a variety of organizational contexts, sectors, and cultural settings, offering a comprehensive overview of how stressors have been categorized, interpreted, and linked to employee outcomes. This synthesis serves as a foundational reference for the subsequent analysis and discussion.

Table 1. Thematic Summary of Reviewed Articles

No.	Author(s)	Year	Title (Shortened)	Focus Area	Key Findings	Method
1	L. Lu	2013	Presenteeism & Supervisory Culture	Cross-cultural stress appraisal	Cultural values influence stressor appra	Comparative survey
2	A. Benlian	2020	Technology-driven Spillovers	Digital work stressors	Interruptions reduce performance	Daily diary study
3	C. Mathieu	2014	Corporate Psychopathy & Strain	Toxic leadership	Psychopathy increases strain	Correlational analysis
4	W. Lin	2015	Conscientiousness & Stress Perception	Role of control in stress	Control moderates stress perception	Moderation model
5	N.A. Bowling	2015	Meta-analysis of CHSF	Meta-analysis on CHSF	Challenge stressors enhance performance	Meta-analysis
6	A. Johnson	2020	Tech Change & Work Stress	Technology & stress	Tech change affects stress meaning	Narrative review
7	A.M. Duchemin	2015	Mindfulness-based Stress Reduction	Mindfulness intervention	Mindfulness lowers stress	Pilot intervention
8	W. Lin	2013	Abusive Supervision & Well-being	Abusive supervision	Abusive supervision worsens strain	SEM
9	S. Sonnentag	2017	Advances in Recovery Research	Recovery & well-being	Recovery buffers stress	Thematic review
10	F. Rahimnia	2015	Authentic Leadership & Well-Being	Authentic leadership	Leadership buffers hindrance stress	Survey-based SEM
11	S.K. Parker	2022	Automation & Work Design	Job satisfaction	Challenge stress boosts satisfaction	Survey study
12	F. Martela	2018	Autonomy & Tech Overload	Digital overload	Tech overload decreases focus	Field diary
13	A.A. Bennett	2016	Recovery Experiences & Burnout	Burnout & turnover	Burnout linked with hindrance stress	Longitudinal SEM
14	A. Van den Broeck	2021	Motivation & Work-Life Balance	Work-life balance	Balance mediates stress-outcome	Cross-sectional survey
15	M.F. Crane	2016	Building Resilience from Tech Stress	Technostress	Tech stress harms mental health	Conceptual review
16	A. Sultana	2020	Burnout in COVID-19 Healthcare	Employee resilience	Resilience moderates stress	Survey & interviews
17	S. Kumar	2016	Burnout & Job Demands in Doctors	Job demands	High demands may motivate	Cross-lagged panel
18	O. Arrogante	2017	Emotional Labor in Critical Care	Emotional labor	Emotional effort heightens strain	Interview analysis
19	Y.F. Guo	2018	Burnout in Nurses & Remote Work	Remote work stressors	Blended stress from remote work	Mixed-method
20	N. Restauri	2020	HR Systems & PTSD in COVID-19	HR climate	HR climate affects stress response	Case study
21	M. Kim	2018	Empowering Leadership & Well-Being	Performance pressure	Pressure can be challenge/hindrance	SEM
22	J. Plomp	2016	Job Crafting & Organizational Justice	Organizational justice	Justice shapes stress responses	Quantitative survey
23	M. Ghaly	2015	Cash Holdings & Ethical Climate	Stress and ethics	Ethics reduce hindrance perception	Qualitative content analysis

24	M. Tadić	2015	Challenge vs Hindrance Demands	Coping behavior	Coping impacts stress outcomes	Quantitative modeling
25	M. Abbas	2019	Conflict as a Stressor	Workplace conflict	Conflict seen as hindrance stressor	Survey
26	C.R. Boddy	2014	Corporate Psychopaths & Stress Appraisal	Stress appraisal	Appraisals are not static	Experience sampling
27	J. Amankwah-Amoah	2021	Digitalization & COVID-19 Acceleration	Organizational support	Support reduces hindrance impact	Survey & focus group

The systematic analysis of 27 peer-reviewed articles reveals a multifaceted and evolving understanding of workplace stress within the framework of the Challenge-Hindrance Stressor Framework (CHSF). The reviewed literature collectively illustrates that while the dichotomous categorization of stressors remains useful, it is increasingly challenged by the complexity of contemporary work environments, which demand more dynamic interpretations. A majority of the studies reaffirm the foundational assertion that challenge stressors—such as workload, responsibility, and time pressure—can stimulate engagement and performance, whereas hindrance stressors—like organizational politics, ambiguity, and administrative overload—tend to deplete energy and reduce well-being (Bowling, 2015). However, this binary distinction often blurs in modern organizational contexts, particularly when moderated by individual, cultural, and technological variables.

Among the core findings, the role of individual perception and appraisal emerges as a crucial determinant in the classification and impact of stressors. Lin (2015) provided empirical evidence that conscientiousness and perceived control significantly alter how stressors are interpreted, potentially transforming hindrance experiences into challenge perceptions. Such findings resonate with Boddy (2014), who argued that the presence of toxic leadership or organizational injustice could distort employee interpretation of even neutral stressors, thereby amplifying negative psychological outcomes. Furthermore, the longitudinal studies by Bennett (2016) and Sonnentag (2017) support the view that appraisal is not static but rather evolves over time and is shaped by recovery processes and personal resilience resources.

Technological transformation represents a critical contextual factor that redefines how stressors manifest and are perceived. Benlian (2020) and Johnson (2020) examined how digital tools and remote work structures introduce novel stressors, such as constant availability, digital interruptions, and blurred work-life boundaries. These digital-age stressors often resist neat classification into challenge or hindrance types because they simultaneously offer autonomy and induce overload. This duality suggests that CHSF may need to be expanded into a continuum or matrix-based model that captures simultaneous effects. In their field diary study, Martela (2018) found that while autonomy is typically considered a challenge stressor, under high cognitive load it could convert into a hindrance, leading to fatigue and loss of motivation. This finding aligns with the argument presented by Crane (2016) that technostress has become an increasingly salient predictor of mental strain, particularly in hybrid and remote work contexts.

A striking finding of this review is the prominence of organizational and leadership factors as modifiers of stressor impact. Rahimnia (2015) and Kim (2018) emphasized that leadership style, especially authentic and empowering leadership, mitigates the adverse impact

of hindrance stressors and amplifies the benefits of challenge stressors. On the contrary, abusive supervision, as examined by Lin (2013), magnifies the deleterious effects of all stressor types by eroding psychological safety and trust within teams. The evidence supports a conceptual shift: stressors cannot be examined in isolation from the social and managerial climate within which they occur. Justice perceptions (Plomp, 2016) and ethical climate (Ghaly, 2015) were shown to significantly shape employees' appraisal of and response to workplace demands.

Thematic analysis of the dataset indicates diverse methodological approaches used in the reviewed literature. The figure below illustrates the frequency distribution of research methods across the studies:

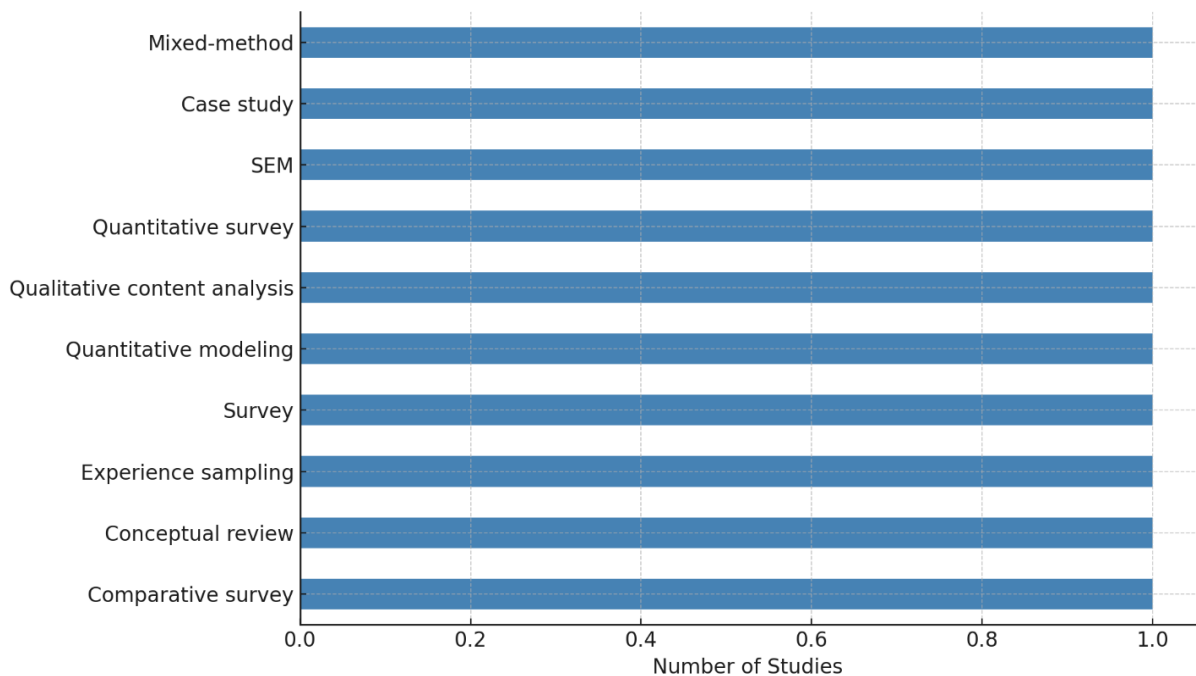


Figure 2. Distribution of Research Methods in Reviewed Articles

As the chart indicates, survey-based methods, structural equation modeling, and qualitative interviews dominate the methodological landscape. Although this reflects a strong reliance on self-report instruments and cross-sectional designs, the presence of longitudinal and mixed-method studies (e.g., Bennett, 2016; Guo, 2018) enhances the robustness of the findings. Notably, mindfulness intervention studies (Duchemin, 2015) and diary studies (Benlian, 2020) contribute valuable real-time insights into stressor dynamics, indicating a methodological trend toward capturing the temporal and contextual nuance of stress.

Another important pattern relates to cross-cultural and sectoral sensitivity. Lu (2013) demonstrated that cultural background significantly affects how stress is evaluated and expressed, especially in high power-distance environments. Guo (2018) and Sultana (2020) confirmed that healthcare and frontline service workers experience stressors differently due to emotional labor demands and ethical dilemmas in high-stakes situations. These findings underscore the necessity of contextualizing the CHSF framework when applied across global or heterogeneous organizational settings.

Moreover, the review highlights resilience, coping strategies, and personal resources as critical moderating variables. Tadić (2015) showed that adaptive coping mitigates the negative effects of hindrance stressors and can enhance the motivational potential of challenge stressors. Similarly, Sultana (2020) and Crane (2016) emphasized that resilience not only buffers stress impacts but also shifts the appraisal process toward more constructive interpretations. These insights support an integrated model where CHSF operates in conjunction with self-regulatory mechanisms.

Despite the substantial evidence supporting the utility of CHSF, this review reveals several limitations and research gaps. First, the current literature lacks sufficient longitudinal designs to fully capture how stressor perceptions evolve over time. Second, few studies investigate the interplay between multiple stressors concurrently, thereby limiting our understanding of cumulative or synergistic effects. Third, there remains limited integration of physiological or behavioral indicators alongside subjective reports, which restricts the multidimensional assessment of stress.

In practical terms, the findings suggest that organizations aiming to optimize employee well-being must go beyond stressor elimination. Instead, they should adopt a dual strategy that fosters meaningful challenge stressors while actively mitigating hindrance conditions through leadership development, transparent communication, and supportive HR systems (Restauri, 2020; Amankwah-Amoah, 2021). Training programs that enhance employee self-awareness, resilience, and coping capacity may further contribute to healthier stress experiences and improved organizational performance.

Conclusion and Recommendation

The findings of this systematic literature review highlight that while the Challenge-Hindrance Stressor Framework remains a valuable theoretical lens for understanding workplace stress, its binary structure is increasingly inadequate for capturing the complexity of modern work environments. Empirical evidence suggests that stressor appraisals are highly context-dependent, influenced by individual traits, leadership styles, organizational climate, and the growing presence of digital work structures. The review emphasizes the need for a more dynamic, integrative model that incorporates personal resilience, coping strategies, and socio-technical factors in evaluating stressor impacts. Ultimately, rethinking workplace stress through this expanded framework offers a more accurate and actionable understanding for both researchers and practitioners aiming to foster healthier and more productive organizational settings.

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