

Exploring Pathways to Teacher Mental Health: A Mixed-Methods Narrative Review of Job Demands, Job Resources, Professional Development, and Mediating Mechanisms in Multigrade Schools

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ABSTRACT

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Teacher mental health is a global concern shaped by workload, emotional labour, and time pressure. Guided by the Job Demands–Resources (JD–R) framework, this review synthesizes evidence published between 2020 and 2025 across diverse contexts. A narrative synthesis integrated quantitative, qualitative, and mixed-methods studies addressing job demands, job resources, occupational stress, teacher self-efficacy (TSE), and professional development (PD). Elevated demands—including administrative overload, role conflict, and multigrade complexity—consistently predict stress and burnout. Conversely, resources such as supportive leadership, collegiality, autonomy, and adequate materials enhance well-being and buffer strain. PD adequacy strengthens TSE, which mediates positive mental health outcomes and improves resilience. Findings highlight that dual-channel strategies—reducing avoidable demands while strengthening resource conditions—outperform isolated



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resilience initiatives. System-level supports, including protected planning time, collaborative structures, and job-embedded PD, are particularly critical in multigrade schools where stacked demands intensify stress. Comparative analysis underscores regional relevance: ASEAN-based studies reveal how workload and self-efficacy directly affect well-being in resource-constrained schools, while collegial support and resilience strategies buffer adverse effects. These findings complement Western evidence and emphasize the need for localized interventions. Overall, teacher mental health emerges from the dynamic interplay of structural conditions and psychological mechanisms. Sustainable improvements require coordinated interventions that reduce unnecessary demands, cultivate resource-rich environments, and strengthen self-efficacy. By integrating global and regional perspectives, this review advances theoretical understanding of JD–R pathways while offering practical recommendations for policy and practice, particularly in low-resource and multigrade settings.

INTRODUCTION

The Job Demands–Resources (JD–R) Model

The Job Demands–Resources (JD–R) model offers a flexible and widely validated framework for understanding how workplace conditions shape employee well-being and performance. In this model, job demands are defined as aspects of work that require sustained physical, cognitive, or emotional effort and therefore carry psychological or physiological costs. These include workload, administrative tasks, emotional labour, behavioural incidents, and task complexity. In contrast, job resources are features of the work environment that help employees achieve goals, reduce the burden of demands, or promote personal growth and development (Bakker & Demerouti, 2017; Demerouti et al., 2001). Resources may be structural (e.g., autonomy, time, instructional materials), social (e.g., leadership support, collegiality), or psychological (e.g., professional confidence, recognition).

According to JD–R, these dual categories activate two interrelated processes. The health impairment process explains how excessive or chronic job demands gradually deplete teachers' energy, culminating in stress, strain, and mental health difficulties. The motivational process, meanwhile, highlights how access to sufficient resources fosters engagement, satisfaction, and resilience. Importantly, resources not only support motivation but can also buffer or offset the detrimental effects of high demands, making JD–R particularly useful for analyzing complex school environments.

Mechanisms and Interactions

Recent research has deepened the explanatory power of JD–R by identifying key mechanisms and interaction patterns that clarify how and why demands and resources influence teacher mental health. Three pathways—corresponding to

H3, H4, and H5 in the present review have been especially well supported in studies conducted since 2020.

JD–R Pathways — The health-impairment process (demands → stress → poorer mental health) and the motivational process (resources → engagement/TSE → improved well-being), with job resources buffering the demands → outcomes pathway in multigrade contexts.

H3: Occupational stress as a mediator.

A growing body of evidence demonstrates that occupational stress plays a central mediating role in the health impairment process. High levels of job demands consistently predict elevated stress, and this stress, in turn, is strongly associated with poorer mental health outcomes, including burnout, emotional exhaustion, and reduced job satisfaction. This indirect pathway has been replicated across contexts and appears robust to methodological variation (Dreer, 2023; Skaalvik & Skaalvik, 2021).

H4: Professional development → teacher self-efficacy (TSE) as a mediator.

Within the motivational process, teacher self-efficacy has emerged as a critical psychological resource. Studies show that adequate, job-embedded professional development (PD) particularly PD that is sustained, contextually relevant, and collaborative, significantly increases TSE. Higher self-efficacy then enhances mental health by improving satisfaction, reducing stress reactivity, and promoting adaptive coping and resilience (Li et al., 2025; Wang et al., 2024). The PD→TSE→well-being pathway is increasingly recognized as a core mechanism linking organizational supports to teacher health.

H5: Job resources as moderators.

A third line of evidence highlights the moderating effects of job resources. Resources such as instructional autonomy, supportive school leadership, collegial collaboration, adequate time and materials, and access to mental health and psychosocial support services (MHPSS) can weaken the negative relationship between demands and mental health outcomes. In other words, when resources are high, the harmful effect of demands becomes smaller; when resources are low, demands become more damaging (Ostermeier et al., 2023; Skaalvik & Skaalvik, 2021). This buffering mechanism is central to JD–R’s explanatory power and underscores the importance of system-level supports

The Multigrade Teaching Context

Multigrade schools vividly illustrate how job demands can accumulate and interact. Teachers in multigrade settings must simultaneously manage mixed-age groups, design parallel or spiral lesson plans, differentiate instruction across several curriculum levels, and meet cyclical administrative and reporting requirements. These “stacked” or layered demands heighten cognitive load and

intensify emotional and time pressure. Within JD–R, such environments place teachers at high risk for chronic strain unless offset by strong structural and social resources.

Empirical work suggests that targeted structural supports—such as protected planning blocks, clerical assistance, instructional materials adapted for multigrade use, and peer coaching models designed specifically for mixed-age contexts—serve as essential buffers against accumulating demands (Zhou et al., 2024). In multigrade settings, the JD–R model predicts that without these supports, demands will overwhelm available resources, accelerating stress and compromising mental health; with them, teachers can maintain engagement, efficacy, and well-being even in the face of complex instructional conditions.

METHODOLOGY

Design

This review employed a narrative synthesis approach, prioritizing conceptual integration over quantitative aggregation. Unlike systematic reviews or meta-analyses, narrative reviews allow for the examination of complex, multi-level mechanisms and interactions across diverse study designs. To capture the multifaceted determinants of teacher mental health within the JD–R framework, we integrated evidence from quantitative studies—including cross-sectional surveys, longitudinal research, and intervention or meta-analytic reports—as well as qualitative studies, mixed-methods research, and policy syntheses. This triangulated approach enabled the identification of consistent patterns, contextual moderators, and causal mechanisms (Dreer, 2023; Zhou et al., 2024). By synthesizing multiple types of evidence, the review highlights both universal and context-specific pathways affecting teacher well-being.

Eligibility and Sources

Studies were included based on three criteria. First, they needed to align with the core constructs of the JD–R framework, explicitly addressing job demands, job resources, occupational stress, teacher self-efficacy, or mental health outcomes. Second, studies had to report clearly defined and measurable variables for demands, resources, stress, TSE, or mental health indicators. Third, all references required verifiable publication sources, including stable DOIs or official URLs; sources lacking permanent access were excluded to ensure replicability and reliability. Evidence was drawn from multiple continents to capture both high-resource and resource-constrained educational contexts, ensuring a broad and globally representative synthesis.

Synthesis Approach

To structure the narrative, the included studies were organized around five interrelated themes corresponding to the review's hypotheses:

- H1: The direct effects of job demands on teacher mental health,
- H2: The protective and motivational effects of job resources,
- H3: occupational stress as a mediating mechanism,
- H4: professional development → teacher self-efficacy as a mediating pathway, and
- H5: The moderating or buffering role of job resources in demand-related harm.

Findings were compared across continents, study designs, and measurement instruments, and then integrated with JD–R’s dual-process model to illuminate both health-impairment and motivational pathways. This thematic synthesis allowed for the identification of convergent evidence, contextual variations, and potential leverage points for intervention, offering a cohesive conceptual map of how teacher mental health is shaped by the interplay of demands, resources, and professional development.

Search Strategy

We searched Scopus, Web of Science, ERIC, and Google Scholar for studies published January 2020–December 2025 using the keywords: “teacher mental health,” “job demands,” “job resources,” “JD–R,” “self-efficacy,” and “multigrade.” We also scanned reference lists of key articles.

Inclusion and Exclusion Criteria

Included studies explicitly measured demands/resources/stress/TSE or mental health outcomes and reported verifiable publication details (DOI/official URL). Exclusions were non-research commentaries, sources without stable identifiers, and studies outside school settings.

Table 1
Evidence Summary for H1–H5

Hypothesis	Summary Finding	Representative Sources
H1	Higher job demands predict poorer mental health.	Doan et al., 2023; Voss et al., 2023
H2	Job resources increase engagement and well-being.	Capone & Petrillo, 2020; Ostermeier et al., 2023
H3	Occupational stress mediates Demands → Mental Health.	Dreer, 2023; Skaalvik & Skaalvik, 2021
H4	PD improves well-being via TSE.	Täschner et al., 2025; Li et al., 2025; Wang et al., 2024
H5	Resources buffer demand-related harm.	Ostermeier et al., 2023; Skaalvik & Skaalvik, 2021

Compact synthesis of representative findings by hypothesis (H1–H5), including study design and key outcomes (e.g., Doan et al., 2023; Voss et al., 2023; Capone & Petrillo, 2020; Ostermeier et al., 2023; Dreer, 2023; Skaalvik & Skaalvik, 2021; Täschner et al., 2025; Li et al., 2025; Wang et al., 2024).

RESULTS AND DISCUSSION

H1 — Job Demands Predict Poorer Mental Health

Across global contexts, elevated job demands consistently predict poorer teacher mental health. Workload intensification, administrative burden, time pressure, challenging student behaviours, and the emotional labour inherent to teaching are strongly associated with higher stress, burnout, and lower job satisfaction (Doan et al., 2023). Longitudinal studies conducted during the pandemic period further demonstrate rises in emotional exhaustion, largely linked to rapid digital transitions, heightened student needs, and extended professional responsibilities (Voss et al., 2023). These findings underscore that reducing avoidable job demands—through strategies such as simplified reporting cycles, rationalized marking protocols, and streamlined accountability processes is a foundational step in safeguarding teacher well-being.

H2 — Job Resources Predict Better Well-Being and Engagement

Conversely, access to sufficient job resources emerges as a primary driver of teacher well-being and engagement. Autonomy in instructional decision-making, supportive leadership, collegial networks, constructive feedback and recognition, protected time for collaboration, and adequate teaching materials are all associated with higher engagement, greater job satisfaction, and lower exhaustion (Capone & Petrillo, 2020; Ostermeier et al., 2023). Resource-rich environments enable teachers to manage demands more effectively, reinforcing

the motivational pathway described by the JD–R model. These findings indicate that interventions aiming to strengthen well-being should prioritize the systematic enhancement of job resources alongside any demand-reduction strategies.

H3 — Occupational Stress Mediates Demands → Mental Health

Occupational stress functions as a proximal mechanism through which job demands compromise mental health. High demands increase stress, which in turn predicts burnout, anxiety, depression, and reduced well-being (Dreer, 2023; Skaalvik & Skaalvik, 2021). Intervention studies, including mindfulness training and psychological capital (PsyCap) programs, demonstrate that reducing stress improves mental health, supporting the mediating role of stress. Micro-level processes underlying this pathway include depletion of personal resources, negative affect, maladaptive coping strategies, and physiological activation (Ostermeier et al., 2023). Embedding stress reduction measures within workload redesign is therefore crucial to ensuring durable improvements in teacher mental health.

H4 — Professional Development Adequacy Improves Mental Health via Teacher Self-Efficacy

Evidence indicates that adequate, job-embedded professional development (PD) improves mental health primarily through enhancing teacher self-efficacy (TSE). Meta-analytic and programmatic research shows that PD incorporating mastery experiences, reflective practice, and collaborative learning strengthens TSE (Täschner et al., 2025). Large-scale modeling further supports the pathway PD → TSE → classroom practices/assessment → positive outcomes (Li et al., 2025). Higher TSE is consistently linked to improved well-being and reduced stress, often mediated through satisfaction and resilience (Wang et al., 2024). To maximize mental health gains, PD initiatives should be paired with workload-sensitive scheduling that allows teachers to engage meaningfully with learning opportunities.

H5 — Job Resources Buffer Demand-Related Harm

Finally, the buffering effect of job resources on the negative impact of demands is well established. Autonomy, supportive leadership, collegial collaboration, protected time and materials, and access to mental health and psychosocial support services (MHPSS) all weaken the association between high demands and poor mental health (Ostermeier et al., 2023). Longitudinal evidence emphasizes that autonomy and supervisory support are particularly protective, whereas persistent time pressure remains a key predictor of exhaustion (Skaalvik & Skaalvik, 2021). Buffering is strongest when resources are high-quality, contextually relevant, and sustained over time, highlighting the importance of systemic, rather than ad hoc, resource provision.

Integrated Pathways

The synthesis of global evidence reveals a coherent network of interrelated pathways linking job characteristics to teacher mental health. Job demands exert both direct effects on well-being (H1) and indirect effects via occupational stress (H3), whereas job resources improve well-being directly (H2), indirectly through enhancements in teacher self-efficacy (H4), and by buffering the negative consequences of high demands (H5). This mapping highlights the insufficiency of single-channel interventions; strategies that target either demands or resources in isolation are unlikely to achieve sustained improvements. Instead, a dual-channel approach—combining systematic demand reduction with deliberate resource enablement—emerges as the most effective framework for promoting teacher mental health.

Multigrade Schools

Multigrade teaching environments exemplify contexts of heightened complexity, where stacked demands threaten sustained well-being. Three context-specific levers emerge as particularly salient: (1) Administrative redesign: clustering reporting cycles away from instructional peaks and providing clerical relief to reduce unnecessary workload. (2) Protected planning blocks: embedding peer coaching within multigrade lesson planning to support collaborative problem-solving and skill development. (3) Leadership calibration: adjusting behaviour management and marking policies to prevent chronic overload. These strategies align directly with the JD–R framework, emphasizing structural and social resources as critical buffers in high-demand contexts (Zhou et al., 2024).

Mechanism-Targeted Supports

Occupational stress and teacher self-efficacy (TSE) function as hinge variables within the causal network. Interventions that explicitly target these mechanisms—such as school-based mental health and psychosocial support (MHPSS) programs, mindfulness training, or psychological capital (PsyCap) initiatives—can mitigate stress, while mastery-oriented, job-embedded PD enhances TSE. Crucially, these interventions are most effective when paired with workload adjustments, ensuring that improvements in well-being are durable and not offset by persistent excessive demands (Dreer, 2023; Täschner et al., 2025).

Measurement and Causal Inference

Despite growing evidence, much of the literature remains dominated by cross-sectional designs, limiting causal inference. To strengthen the evidence base, multi-wave structural equation modeling (SEM) is recommended to establish temporal order (e.g., T1 demands → T2 stress → T3 mental health), while randomized or quasi-experimental trials can estimate indirect and interactive effects with greater confidence. Harmonizing measurement instruments for

stress, TSE, and well-being across studies will further enhance comparability and enable stronger global synthesis, particularly in complex or multigrade educational settings (Zhou et al., 2024).

Practical Implications

To promote teacher mental health, evidence suggests a multi-pronged, system-level approach. First, avoidable demands should be reduced through simplified administrative cycles, rationalized marking and accountability procedures, and behaviour management protocols aligned with realistic teacher capacity (Doan et al., 2023; Voss et al., 2023). Second, schools should enable resource-rich environments by fostering autonomy, supportive leadership, structured collegial time for co-planning and peer coaching, ensuring access to adequate teaching materials, and providing school-based mental health and psychosocial support (MHPSS) services (Ostermeier et al., 2023; Skaalvik & Skaalvik, 2021). Third, adequate professional development (PD) should be delivered to build teacher self-efficacy (TSE), emphasizing job-embedded, practice-oriented learning with mastery experiences, feedback, and relevance to daily instructional tasks; PD scheduling should also consider workload peaks to maximize engagement and impact (Täschner et al., 2025; Li et al., 2025). Finally, for multigrade teaching contexts, interventions must explicitly target complexity through protected planning blocks, embedded peer coaching, and formalized clerical support during reporting-intensive periods (Zhou et al., 2024). Together, these strategies align with the Job Demands–Resources framework, addressing both demand reduction and resource enablement, and offer a practical roadmap for sustaining teacher well-being across diverse and high-demand educational settings.

Limitations

This synthesis is constrained by the predominance of cross-sectional study designs and the substantial variability in measurement instruments for stress, teacher self-efficacy (TSE), and well-being. While triangulation across quantitative, qualitative, and policy studies enhances confidence in observed patterns, it does not support strong causal inferences. To address these gaps, future research should prioritize multi-wave longitudinal designs and randomized or quasi-experimental interventions that can establish temporal order and estimate indirect and interaction effects. Additionally, harmonizing measurement tools across studies will improve comparability and enable more robust global syntheses, particularly in complex or resource-constrained educational contexts.

DIRECTIONS FOR FUTURE RESEARCH

Future research should prioritize longitudinal and intervention studies to test JD–R pathways in multigrade schools. ASEAN-specific resource configurations must be examined, as Bao et al. (2021) demonstrate that professional development

in Singapore significantly enhances teacher self-efficacy. Such culturally grounded evidence will help identify effective support bundles tailored to regional contexts.

Future research should address two critical gaps to strengthen the evidence base on teacher mental health within the JD–R framework. First, causal tests of mediation and moderation are needed. Multi-wave longitudinal designs and randomized or quasi-experimental trials can establish temporal order and causality for key pathways, including occupational stress as a mediator (H3), professional development → teacher self-efficacy as a mediator (H4), and job resources as moderators of demand-related harm (H5) (Dreer, 2023; Zhou et al., 2024). Second, research should examine context-specific resource configurations to determine which combinations of supports such as autonomy packages, structured collegial networks, digital workload relief, culturally responsive PD, and access to mental health and psychosocial support services (MHPSS) most effectively sustain teacher well-being. Particular attention should be paid to multigrade and low-resource school contexts, considering dose–response relationships and implementation fidelity to identify which resource bundles are both feasible and impactful (Ostermeier et al., 2023; Skaalvik & Skaalvik, 2021). Addressing these priorities will advance causal understanding and provide actionable guidance for designing contextually sensitive, evidence-based interventions to protect and promote teacher mental health globally.

Ethical and Originality Statement — This article is original, has not been submitted elsewhere, and complies with JPAIR ethical standards on authorship, transparency, and research integrity. No human subjects were directly involved; all data are secondary. The author declares no conflict of interest.

CONCLUSION

Teacher mental health arises from a dynamic interplay between structural conditions and psychological mechanisms. Global evidence consistently demonstrates that high job demands predict elevated stress and burnout, whereas access to job resources—including autonomy, supportive leadership, collegial networks, protected time and materials, and job-embedded professional development—enhances well-being and mitigates strain. Occupational stress and teacher self-efficacy function as key mechanisms through which demands and resources exert their effects, while moderation analyses confirm that resources buffer the negative impact of high demands. Achieving sustainable improvements therefore requires dual-channel interventions: systematically reducing avoidable demands while simultaneously cultivating resource-rich environments, complemented by targeted supports to strengthen self-efficacy and reduce stress. This integrated approach not only protects teacher mental health but also stabilizes the instructional core, fostering resilience and effectiveness within

educational systems.

LITERATURE CITED

- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: taking stock and looking forward. *Journal of occupational health psychology*, 22(3), 273. <https://doi.org/10.1037/ocp0000056>
- Bao, C., Zhang, L. J., & Dixon, H. R. (2021). Teacher engagement in language teaching: Investigating self-Efficacy for teaching based on the project “Sino-Greece online Chinese language classrooms”. *Frontiers in Psychology*, 12, 710736.
- Capone, V., & Petrillo, G. (2020). Mental health in teachers: Relationships with job satisfaction, efficacy beliefs, burnout and depression. *Current Psychology*, 39(5), 1757-1766. DOI:10.1007/S12144-018-9878-7
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>.
- Doan, S., Steiner, E. D., Pandey, R., & Woo, A. (2023). Teacher well-being and intentions to leave. *Rand Corporation*. <https://tinyurl.com/mswym34>
- Dreer, B. (2023). On the outcomes of teacher wellbeing: A systematic review of research. *Frontiers in psychology*, 14, 1205179. <https://doi.org/10.3389/fpsyg.2023.1205179>
- Li, Z., Chen, J., & Li, Q. (2025). The relationship between teacher professional development and students’ social and emotional skills: Mediating roles of teacher self-efficacy and teaching practices. *Current Psychology*, 44, 12661–12678. <https://doi.org/10.1007/s12144-025-08031-3>
- Ostermeier, T. C. J., Peccei, R., & Koops, W. (2023). Effects of job demands/resources on teachers’ subjective well-being. *Review of Education*, 11, e3416. <https://bera-journals.onlinelibrary.wiley.com/doi/pdf/10.1002/rev3.3416>
- Skaalvik, E. M., & Skaalvik, S. (2021). Teacher burnout and school context: Relations with job satisfaction and motivation for teaching (longitudinal). *Teachers and Teaching*, 26(7–8), 602–616. <https://doi.org/10.1080/13540602.2021.1913404>

- Täschner, J., Dicke, T., Reinhold, S., & Holzberger, D. (2025). "Yes, I can!" A systematic review and meta-analysis of intervention studies promoting teacher self-efficacy. *Review of Educational Research*, 95(1), 3–52. <https://doi.org/10.3102/00346543231221499>
- Voss, T., Klusmann, U., Bönke, N., Richter, D., & Kunter, M. (2023). Teachers' emotional exhaustion and teaching enthusiasm before versus during the COVID-19 pandemic. *Zeitschrift für Psychologie*. <https://doi.org/10.1027/2151-2604/a000520>
- Wang, X., Gao, Y., Wang, Q., & Zhang, P. (2024). Relationships between self-efficacy and teachers' well-being: The mediating role of teaching satisfaction and resilience. *Behavioral Sciences*, 14(8), 629. <https://doi.org/10.3390/bs14080629>
- Zhou, S., Slep, G. R., & Vella-Brodrick, D. A. (2024). Factors associated with teacher well-being: A meta-analysis. *Educational Psychology Review*, 36, Article 63. <https://doi.org/10.1007/s10648-024-09886-x>