

Technostress and Worker Well-Being in the Platform Economy: An Integrative Literature Review

Mr. Raman^{1*} | Dr. Vinod Kumar² | Ms. Ankita³

¹Research Scholar, Department of Management, Gurugram University.

²Assistant Professor, Department of Management, Gurugram University.

³Research Scholar, Department of Management, Gurugram University.

*Corresponding Author: ramankadam3888@gmail.com

Citation: Raman, R., Kumar, V. & Ankita, A. (2026). Technostress and Worker Well-Being in the Platform Economy: An Integrative Literature Review. *International Journal of Advanced Research in Commerce, Management & Social Science*, 09(03(I)), 198–208.

Abstract

The rapid expansion of digital platform work has transformed how labour is organized, evaluated, and compensated, deepening workers' dependence on technology-mediated systems. This integrative literature review examines the relationship between technostress and worker well-being in the platform economy, with particular attention to algorithmic management. Drawing on 29 peer-reviewed sources identified through a structured search of academic databases and search engines, the review synthesizes evidence on techno-overload, techno-complexity, techno-insecurity, and techno-uncertainty alongside algorithmic monitoring, performance evaluation, scheduling, and compensation. Technology-related demands are consistently associated with emotional exhaustion, poorer well-being, work-life conflict, burnout, impaired productivity, reduced engagement, and intentions to discontinue platform work. These relationships are not uniform: worker appraisal, self-efficacy, personality, autonomy, transparency, fairness, and human influence shape how technological demands are experienced, while economic dependence and financial insecurity can intensify the consequences of algorithmic control by limiting workers' ability to reject undesirable conditions or exit platforms. The review conceptualizes platform worker well-being as a sociotechnical outcome arising from the interaction of digital demands, algorithmic governance, individual resources, and structural conditions, and proposes an integrated multilevel framework linking these elements. Gaps concerning longitudinal evidence, cross-platform comparison, measurement integration, geographic diversity, and platform-level interventions are identified, and a corresponding research agenda is outlined. The review contributes by connecting technostress theory with algorithmic-management and platform-dependence perspectives, and by arguing that improving platform worker well-being requires attention to platform design and governance rather than individual coping alone.

Keywords: Technostress, Algorithmic Management, Platform Economy, Gig Work, Worker Well-Being,; Job Demands–Resources.

Introduction

Digital platforms increasingly mediate the allocation of tasks, communication, performance evaluation, scheduling, payment, and access to work. Unlike conventional workplaces, where technology typically supports managerial and employee activity, platform work embeds technology directly into the employment relationship: workers interact continuously with digital interfaces, algorithmic systems, ratings, automated feedback, and changing platform rules while performing their tasks (Umair et al., 2023; Parent-Rocheleau & Parker, 2022).

Algorithmic management has intensified this shift by transferring traditional managerial functions to computational systems that monitor activity, allocate tasks, set performance expectations, determine schedules and compensation, and influence continued access to work (Kadolkar et al., 2024). These arrangements can provide coordination and flexibility, but they can also increase workers' exposure to continuous monitoring, performance pressure, uncertainty, and rapidly changing technological requirements. Technology is thus not merely an instrument through which platform work is performed; it increasingly constitutes part of the work environment itself.

Technostress strain associated with technology-related work demands, commonly examined through techno-overload, techno-complexity, techno-insecurity, and techno-uncertainty — provides a well-established lens for understanding these demands (Tarafdar et al., 2007; Nisafani et al., 2020). Worker well-being, in turn, is broader than the absence of technological strain: it spans affective well-being, mental health, emotional exhaustion, work–life balance, burnout, engagement, and intentions to continue or discontinue platform work. These outcomes are not interchangeable exhaustion reflects resource depletion, well-being and mental health reflect broader states, and engagement or discontinuation intention reflect attitudes and behavioural intentions and distinguishing them matters for understanding the diverse consequences of technology-mediated platform work.

The Research Problem and Gaps in the Literature

Technostress research has developed largely in conventional organizational settings, while platform-work research has separately examined algorithmic management, autonomy, surveillance, ratings, and economic dependence. These two streams overlap conceptually but have rarely been integrated: technostress in platform work cannot be understood solely as an individual response to difficult technology, because digital systems simultaneously perform managerial functions and structure workers' access to income. Nor should algorithmic management be treated as synonymous with technostress — the former describes a form of work organization and control, the latter the strain experienced in response to technology-related demands.

Four gaps motivate this review. First, evidence linking technostress to platform worker well-being remains fragmented across occupational and national contexts and relies heavily on cross-sectional designs. Second, technostress and algorithmic management are usually studied as separate constructs despite plausible overlap in the demands they generate. Third, existing research offers limited insight into how individual resources interact with platform-level conditions such as autonomy, transparency, fairness, and economic dependence. Fourth, longitudinal and intervention-based evidence on whether changes to platform design or governance can reduce technostress remains scarce.

Research Questions and Contribution

This review addresses the following questions:

- RQ1:** What forms of technostress are experienced by workers in the platform economy?
- RQ2:** How does technostress influence the well-being and work-related outcomes of platform workers?
- RQ3:** How does algorithmic management contribute to or shape technology-related demands and worker well-being?
- RQ4:** What individual, work-related, and structural factors moderate or mediate the relationship between technostress and worker well-being?
- RQ5:** What theoretical, methodological, and empirical gaps remain, and what directions should future research pursue?

The review contributes in three ways. First, it brings together the technostress and platform-work literatures, which have largely developed along separate lines. Second, it positions algorithmic management as a platform-specific mechanism through which technological demands are created, intensified, or buffered. Third, it develops a sociotechnical framework in which worker well-being emerges from the interaction of technological demands, worker appraisal and resources, algorithmic governance, and structural conditions shifting the discussion beyond individual coping toward platform design, governance, and institutional protection.

Method

• Review Approach

This review adopts an integrative literature review approach rather than a formal PRISMA-registered systematic review. An integrative design was chosen because the aim is theoretical synthesis and framework-building across two literatures that use different constructs, measures, and methods (technostress research and algorithmic-management research), a purpose for which integrative and narrative synthesis is an established and appropriately labelled method (Torraco, 2005). Readers seeking a fully protocol-driven systematic review with database-level screening counts should treat the present synthesis as a foundation for, rather than a substitute for, such a review.

• Search Strategy and Study Selection

A structured search was conducted using Google Scholar and publisher platforms (ScienceDirect, Emerald Insight, Wiley Online Library, SAGE Journals, Frontiers, and PubMed Central/PMC) using combinations of the terms “technostress,” “algorithmic management,” “platform economy,” “gig work,” “gig economy,” “worker well-being,” “burnout,” “job demands–resources,” and “worker voice.” Searches were limited to peer-reviewed journal articles in English. No fixed date window was imposed, so that foundational technostress research (e.g., Tarafdar et al., 2007) could be combined with recent platform-economy scholarship. Titles and abstracts were screened for relevance to at least one research question, and reference lists of key sources were checked for additional relevant studies (backward citation tracking). This process yielded 29 studies that form the evidence base summarized in Table 1, spanning quantitative surveys, longitudinal studies, scale-development research, qualitative studies, mixed-method studies, and systematic reviews.

• Conceptual Scope

The review distinguishes three levels of analysis that are often conflated in the literature: technology as a work environment, algorithmic management as a form of work organization and control, and technostress as the worker's experienced strain arising from technology-related demands. Three complementary theories organize the synthesis. The Job Demands–Resources (JD-R) perspective treats technostressors and algorithmic control as job demands whose effects depend on available resources such as autonomy, knowledge diversity, self-efficacy, and human influence (Parent-Rocheleau & Parker, 2022). Transactional appraisal theory explains why workers exposed to similar demands may respond differently, distinguishing challenge appraisals (associated with problem-focused coping) from hindrance appraisals (associated with emotion-focused coping; Tarafdar et al., 2007; Zhao et al., 2020). A platform/algorithmic-management perspective accounts for the institutional context, in which transparency, fairness, legitimacy, and human influence shape worker responses to algorithmic control (Parent-Rocheleau et al., 2023; Wiener et al., 2021).

Table 1: Overview of Key Studies Included in the Review

Author(s) & Year	Context / Population	Sample	Design	Key Focus
Tarafdar et al. (2007)	ICT users, multiple organizations	223 organizations	Cross-sectional survey	Technostress, role stress, productivity
Wang, Ding & Kong (2022)	Manufacturing employees, China	235 (3-wave)	Longitudinal	Exhaustion mediates technostress–well-being link
Ma, Ollier-Malaterre & Lu (2021)	Female workers, multiple occupations	646	Longitudinal	Exhaustion, self-efficacy, work–life balance
Umair, Conboy & Whelan (2023)	Online labour-market workers	366	Cross-sectional survey / SEM	Technostress antecedents & consequences in OLMs
Parent-Rocheleau et al. (2023)	Gig workers, 3 samples	1,332	Scale development	Algorithmic-management questionnaire
Zha, Hu, Shan, Huang & Han (2026)	Gig workers	639 (3-wave)	Longitudinal / CFA	AM → well-being via precarity and autonomy
Lu, Yang, Zhu & Wang (2024)	Food-delivery riders	1,362	Mixed-method	AM, commitment, service quality

Wiener, Cram & Benlian (2021)	Uber drivers	Qualitative sample	Qualitative	Legitimacy perceptions of algorithmic control
Möhlmann, Salge & Marabelli (2023)	Platform workers	Qualitative sample	Qualitative	Algorithm sensemaking
Alacovska, Bucher & Fieseler (2024)	Creative freelancers	Qualitative sample	Qualitative	Algorithmic paranoia
Cameron (2024)	Platform workers	Longitudinal qualitative	Qualitative	Constant and confined choice
Glavin & Schieman (2022)	Platform workers, Canada	National samples	Cross-sectional survey	Economic dependence, psychological distress
Pflügner et al. (2024)	ICT-using employees	Survey sample	Configurational analysis	Technostressor combinations and burnout
Dong, Zhang & Wu (2025)	Food-delivery riders, China	953	Cross-sectional survey	Algorithmic management and burnout
Weidenstedt et al. (2025)	Gig workers, international	2,385	Cross-sectional survey	Stress and satisfaction as parallel outcomes
Ajonbadi et al. (2025)	Platform workers, Nigeria	37 (interviews)	Qualitative	Worker voice and representation
Adekoya, Mordi, Ajonbadi & Chen (2023)	Gig workers, developing-country context	Qualitative sample	Qualitative	AM, careers, employment relationships
Kadolkar, Kepes & Subramony (2024)	Cross-disciplinary AM literature	NLP topic modelling	Systematic review	Integrative AM framework
Mansuroğlu & Smith (2026)	Employees, multiple sectors/countries	201 studies	Systematic review	Technostress–well-being synthesis (DRIVE model)

Results

• Core Technostressors in Platform Work

The literature identifies techno-overload, techno-complexity, techno-insecurity, and techno-uncertainty as the principal dimensions of technostress in digitally mediated work (Wang et al., 2022; Nisafani et al., 2020). Techno-overload arises when technology increases the volume or speed of tasks and information workers must process; techno-complexity, when systems require knowledge workers perceive as difficult to acquire; techno-insecurity, from concerns that technological change threatens employment, income, or competence; and techno-uncertainty, from continual system changes that prevent stable routines. Platform work can intensify these demands because workers manage task allocation, communication, feedback, ratings, and changing platform requirements simultaneously. Umair et al. (2023) found that technology complexity was associated with work overload among online labour-market workers and that frequent digitally delivered feedback was positively associated with both overload and job insecurity — suggesting the dimensions of technostress interact rather than operate independently, and that feedback can function as a source of continuous evaluative pressure rather than pure learning support.

• Technostress, Exhaustion, and Well-Being

A consistent pattern is that technology-related demands affect well-being through resource depletion and emotional exhaustion. Using three-wave data, Wang et al. (2022) found that work exhaustion mediated the relationship between all four technostressors and employee well-being; Ma et al. (2021) similarly found that emotional exhaustion mediated the relationship between techno-stressors and work–life balance. Evidence on mental health specifically is supportive but more cautious: Dragano and Lunau (2020) identified relationships among technology use, workload, complexity, and psychobiological stress reactions but noted insufficient evidence that technostress causes diagnosable mental disorders. Pflügner et al. (2024) showed that specific configurations of technostressors, rather than any single stressor, were associated with job burnout, and Dong et al. (2025), surveying 953 Chinese food-delivery riders using the Maslach Burnout Inventory, found moderate burnout linked to ranking systems, punishment mechanisms, monitoring, and workflow design — direct platform-worker evidence for the exhaustion pathway.

- **Productivity, Engagement, and Behavioural Outcomes**

Technostress also affects performance and behavioural outcomes. Tarafdar et al. (2007) found technostress positively associated with role stress and, together with role stress, negatively associated with individual productivity across 223 organizations. Zhao et al. (2020) qualified this: challenge appraisals predicted problem-focused coping while hindrance appraisals predicted emotion-focused coping, with different productivity consequences — technology-related demands do not uniformly harm performance. In platform-specific contexts, Umair et al. (2023) linked strain to negative affective well-being and discontinuation intention, and Parent-Rocheleau et al. (2023) found algorithmic-management exposure indirectly associated with lower engagement through reduced autonomy and job complexity. Not all evidence is uniformly negative, however: Weidenstedt et al. (2025), surveying 2,385 gig workers internationally, found that stress and job satisfaction can occur in parallel rather than as mutually exclusive outcomes, with higher work pace and physical activity enhancing satisfaction without increasing stress — a finding that cautions against assuming platform work is uniformly aversive.

- **Algorithmic Management as a Platform-Specific Mechanism**

Algorithmic management represents a distinctive source of technology-related demand because computational systems perform functions traditionally associated with human managers — monitoring, goal setting, scheduling, evaluation, compensation, and decisions over continued access to work (Parent-Rocheleau & Parker, 2022). Perceived algorithmic-management exposure has been associated with reduced autonomy and job complexity and, indirectly, with lower engagement (Parent-Rocheleau et al., 2023); a broader systematic review across disciplines confirms that different dimensions of algorithmic management influence outcomes through distinct mechanisms rather than a single uniform pathway (Kadolkar et al., 2024). Importantly, algorithmic management is not automatically harmful: Wiener et al. (2021) found that Uber drivers' responses depended on perceived legitimacy, with guiding forms of control receiving more favourable judgments; Zha et al. (2026), using three-wave data from 639 gig workers, found that algorithmic management's negative association with well-being operated through job precarity and reduced autonomy, and that this relationship was weaker where union instrumentality was higher — direct evidence that collective institutional resources can buffer algorithmic demands. The evidence therefore supports a contingent rather than deterministic interpretation: consequences depend on the specific function performed, the degree of worker discretion, and the transparency and fairness of decisions.

- **Sensemaking, Opacity, and Confined Autonomy**

Algorithmic opacity introduces a distinct cognitive and emotional dimension. When workers cannot clearly understand how tasks are allocated, ratings generated, or compensation determined, they engage in continuous sensemaking to infer how the platform operates, drawing on personal experience and community knowledge (Möhlmann et al., 2023). This interpretive labour can itself become a source of strain, and where workers believe algorithmic decisions are arbitrary or retaliatory, the consequences can be severe: Alacovska et al. (2024) describe “algorithmic paranoia” among creative freelancers — mistrust, anxiety, fear, and hypervigilance — that conventional overload or complexity measures do not capture. Cameron (2024) similarly shows how platform workers experience a form of “constant and confined choice”: discretion over when to log in or which tasks to accept, exercised within conditions that algorithms otherwise structure. Perceived agency can therefore cut two ways — greater control over immediate decisions may buffer strain, but maintaining that control can itself require continuous monitoring and strategic adaptation.

- **Individual, Platform-Level, and Structural Resources**

Workers do not respond uniformly to technology-related demands. Self-efficacy reduced emotional exhaustion and weakened the technostress–work–life balance relationship (Ma et al., 2021); workplace knowledge diversity similarly buffered the indirect relationship between technostress and well-being (Wang et al., 2022); and personality traits moderated relationships between technostress creators and job outcomes (Srivastava et al., 2015). Individual resilience cannot substitute indefinitely for structurally excessive demands, however: a worker with high self-efficacy may still have limited ability to contest an unfair rating or an opaque deactivation decision. Platform-level resources — fairness, transparency, human influence, and worker representation — may therefore matter as much as individual coping. The Fairwork framework identifies pay, conditions, contracts, management, and representation as core dimensions of platform-work quality (Graham et al., 2020), and worker-voice

research indicates that formal and informal channels for raising concerns can function as an institutional resource complementing individual autonomy (Ajonbadi et al., 2025; Zha et al., 2026). Economic dependence acts as a structural boundary condition on all of the above: Glavin and Schieman (2022) found that dependent platform workers experienced greater psychological distress than secondary platform workers, wage workers, and traditional self-employed workers, with financial strain accounting for roughly half of that difference — evidence that the same technological demand can have different consequences depending on workers' economic alternatives.

Table 2: Technostress Dimensions, Associated Outcomes, and Key Moderators

Technostress Dimension	Typical Platform-Work Trigger	Associated Outcomes	Key Moderators / Buffers
Techno-overload	Multiple simultaneous tasks, constant notifications, frequent feedback	Exhaustion, reduced productivity, discontinuation intention	Self-efficacy, knowledge diversity, autonomy
Techno-complexity	Changing interfaces, unfamiliar algorithmic rules	Overload, role stress, lower engagement	Technological competence, training, human influence
Techno-insecurity	Threat of deactivation, unstable ratings, income volatility	Anxiety, psychological distress, hindrance appraisal	Economic alternatives, transparency, appeal mechanisms
Techno-uncertainty	Frequent algorithm changes, unclear rules	Vigilance, sensemaking burden, algorithmic paranoia	Predictability, fairness, worker voice

Discussion and Integrated Conceptual Framework

Across the reviewed evidence, technostress in platform work is multidimensional, and its consequences are transmitted primarily through a resource-depletion pathway in which exhaustion and vigilance mediate the relationship between technology-related demands and outcomes such as well-being, work-life balance, burnout, engagement, and discontinuation intention (Wang et al., 2022; Ma et al., 2021; Dong et al., 2025). This pathway does not operate deterministically. Three factors consistently qualify it.

- **Algorithmic Management as a Distinct Mechanism, Not Just Another Stressor**

Algorithmic management changes the nature of technostress because technology becomes directly involved in the governance of work: the same systems that allocate tasks also evaluate performance, determine pay, and decide continued access to work (Parent-Rochelleau & Parker, 2022). This creates a combination of technical, managerial, economic, and psychological demands that conventional technostress measures, developed for tool-use contexts, may not fully capture. At the same time, the evidence does not support treating algorithmic management as inherently harmful: legitimacy, guiding (rather than purely disciplinary) forms of control, and institutional buffers such as union instrumentality all shape whether algorithmic exposure translates into worse outcomes (Wiener et al., 2021; Zha et al., 2026).

- **Worker Appraisal and the Autonomy Paradox**

Transactional appraisal theory explains why identical technological features can be experienced as a resource by one worker and a hindrance by another (Zhao et al., 2020). This is compounded by an autonomy paradox specific to platform work: workers may retain discretion over immediate decisions (when to log in, which tasks to accept) while having little influence over the rules that govern pay, evaluation, or access to work (Cameron, 2024). Measures of autonomy limited to task-level discretion may therefore overstate platform workers' substantive independence; meaningful autonomy should also capture workers' ability to understand, influence, and contest the systems that structure their work.

- **Economic Dependence as a Structural Amplifier**

Economic dependence does not function as one stressor among many but as a condition that changes workers' practical capacity to cope with existing demands (Glavin & Schieman, 2022). Where platform income is essential to livelihood, workers have fewer opportunities to reject undesirable tasks,

challenge ratings, or exit the platform — meaning the same algorithmic practice can carry very different consequences depending on the availability of alternative income. This structural layer is what most clearly distinguishes platform technostress from technostress in conventional employment, where exit and voice options, however limited, are typically less tightly coupled to the technology itself.

• Integrated Model

Figure 1 integrates these findings into a multilevel pathway. Algorithmic management structures the technological environment (monitoring, evaluation, scheduling, compensation), generating or intensifying technology-related demands (overload, complexity, insecurity, uncertainty). Workers interpret these demands through appraisal and sensemaking; challenge appraisals support adaptive coping, while hindrance appraisals and algorithmic opacity generate vigilance and defensive coping. Both pathways can converge on exhaustion, which in turn shapes well-being and downstream work-related outcomes. Individual resources (self-efficacy, personality, knowledge diversity), platform-level resources (autonomy, transparency, fairness, human influence, worker voice), and structural conditions (economic dependence, financial insecurity, platform governance) act as moderators at every stage of this pathway rather than only at the end.

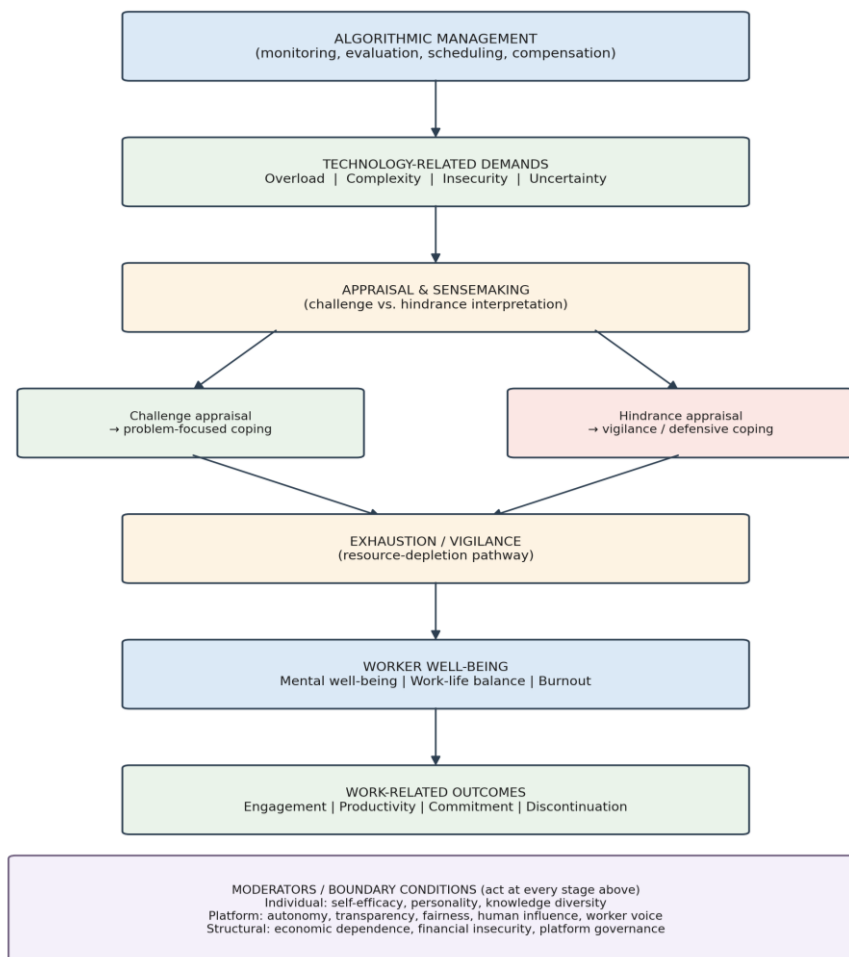


Figure 1: Integrated multilevel framework linking algorithmic management, technostress, appraisal, exhaustion, and platform worker well-being.

• Theoretical Contribution

This synthesis contributes to the literature in three ways. First, it connects technostress theory with algorithmic-management and platform-dependence research, showing that technology-related strain

in platform work is shaped not only by complexity or overload but by the managerial functions embedded in digital systems. Second, it extends a resource-based account of technostress by incorporating platform-level and structural resources alongside individual ones, recognizing that well-being cannot be improved by strengthening individual coping capacity alone. Third, it advances a contingent rather than technologically deterministic explanation: outcomes depend on appraisal, legitimacy, the specific form of algorithmic control, available resources, and workers' economic alternatives.

Research Gaps and Future Research Agenda

Longitudinal evidence. Most evidence remains cross-sectional. Existing three-wave studies (Wang et al., 2022; Zha et al., 2026) provide a foundation, but future research should track platform workers through algorithm changes, interface redesigns, and demand fluctuations to determine whether technostress accumulates, whether workers adapt, and whether highly strained workers exit before deterioration becomes observable in cross-sectional snapshots.

Cross-platform and cross-occupation comparison. The evidence base spans ride-hailing, food delivery, online labour markets, and creative freelancing (Umair et al., 2023; Lu et al., 2024; Alacovska et al., 2024) but rarely compares them directly. Future studies should compare platforms on monitoring intensity, rating design, compensation transparency, and appeal mechanisms to identify which specific practices drive technostress.

Integrated measurement. Technostress research and algorithmic-management research use different constructs and instruments (Wang et al., 2022; Parent-Rochelleau et al., 2023). These operate at different analytical levels and should not be collapsed into a single measure; instead, future work should develop integrated models measuring both algorithmic-management exposure and experienced technostress together with autonomy, transparency, fairness, and economic dependence.

Appraisal and lived experience. Standardized surveys should be paired with qualitative and experience-sensitive methods — diary studies, experience sampling, repeated interviews — to capture how workers interpret changing algorithmic rules in real time, building on sensemaking and algorithmic-paranoia research (Möhlmann et al., 2023; Alacovska et al., 2024).

Structural and institutional mechanisms. An overemphasis on individual coping risks shifting responsibility for technological demands onto workers. Future research should examine platform-level and institutional mechanisms — transparency requirements, human review, worker voice, and union instrumentality — alongside individual resources (Glavin & Schieman, 2022; Zha et al., 2026; Ajonbadi et al., 2025).

Geographic and demographic diversity. Evidence remains concentrated in a small number of countries and platforms. Emerging developing-country evidence (Adekoya et al., 2023; Ajonbadi et al., 2025) suggests that labour regulation, social protection, and collective representation shape both exposure to technostress and workers' capacity to cope with it; broader geographic coverage is needed before findings can be generalized.

Intervention and experimental research. Evidence on associations is far more developed than evidence on interventions. Field experiments and quasi-experimental designs testing changes in algorithmic transparency, human review, rating systems, or compensation structures would provide stronger evidence for platform design and public policy than the largely correlational evidence base reviewed here.

Configurational approaches. Pflügner et al. (2024) show that combinations of technostressors, not isolated stressors, predict burnout. Configurational and person-centred methods may be more appropriate than additive models for identifying distinct patterns of platform-worker vulnerability and adaptation.

Implications for Practice and Policy

• Platform Design and Management

Platforms should treat transparency, fairness, autonomy, and human influence as core work resources rather than optional features. Concretely, this means providing understandable information about task allocation, performance evaluation, and account-related decisions; establishing meaningful human review and appeal mechanisms for consequential automated decisions; and evaluating flexibility not only by whether workers can choose when to log in, but by whether they can understand, influence, and contest the rules that structure evaluation, compensation, and access to work.

- **Worker Support and Capability Development**

Training that improves technological competence and platform literacy can help workers adapt to change (Ma et al., 2021; Wang et al., 2022; Srivastava et al., 2015), but capability development should not be presented as a substitute for improvements in platform design; its value is limited where underlying systems remain opaque, unpredictable, or difficult to contest.

- **Well-Being Monitoring**

Because technostress affects multiple, non-interchangeable outcomes (Wang et al., 2022; Ma et al., 2021; Umair et al., 2023), platforms and researchers should track indicators of worker strain alongside productivity and rating metrics, and should distinguish immediate strain (e.g., exhaustion) from longer-term consequences (e.g., disengagement or exit).

- **Policy, Worker Voice, and Governance**

Because economic dependence substantially shapes the consequences of algorithmic control (Glavin & Schieman, 2022), policy should address both technological and economic dimensions of platform work: transparency requirements for consequential algorithmic decisions, contestable deactivation procedures, predictable compensation, and appropriate social protection. The Fairwork framework offers a useful starting point (Graham et al., 2020), and worker-voice mechanisms — including union instrumentality where present (Zha et al., 2026) — can complement individual coping and formal appeal processes (Ajonbadi et al., 2025). Governance interventions should recognize that a policy voluntary in effect for an economically independent worker may be functionally compulsory for one whose livelihood depends on a single platform.

Limitations of the Review

This review has several limitations. First, it is an integrative rather than a fully protocol-driven systematic review: the search was conducted through search engines and publisher platforms rather than a licensed multi-database interface, no PRISMA flow diagram was produced, and no formal quality-appraisal instrument or independent dual-screening process was applied. Readers requiring a fully systematic evidence base should treat this review as a scoping foundation rather than a substitute for a registered systematic review or meta-analysis. Second, the reviewed literature is heterogeneous in design, population, and measures, limiting direct comparison and precluding a pooled effect estimate. Third, a substantial share of the evidence is cross-sectional, limiting causal inference despite the presence of several longitudinal studies (Wang et al., 2022; Ma et al., 2021; Zha et al., 2026). Fourth, the evidence base remains concentrated in a limited set of occupations and countries (China, Canada, the United States, and a small number of others), so findings should not be assumed to generalize to all forms of platform work. Finally, evidence on the effectiveness of specific platform-level interventions remains limited; transparency, fairness, and worker voice are identified as theoretically important, but causal evidence on their magnitude of effect is largely absent from the current literature.

Conclusion

This review examined the relationship between technostress and worker well-being in the platform economy, with particular attention to algorithmic management and the conditions shaping workers' responses to technology-mediated work. Techno-overload, techno-complexity, techno-insecurity, and techno-uncertainty represent important demands, and algorithmic monitoring, evaluation, scheduling, and compensation can intensify them. These demands are associated with exhaustion, poorer well-being, work–life conflict, burnout, impaired productivity, reduced engagement, and discontinuation intentions — but not deterministically. Worker appraisal, individual resources, platform-level resources, and economic dependence all shape how technological demands are experienced. Platform worker well-being is therefore best understood as a sociotechnical and governance challenge: sustainable improvement requires attention to platform design, algorithmic transparency, procedural fairness, worker voice, and institutional protection, alongside — not instead of — individual coping resources. Future research should strengthen longitudinal and comparative evidence, integrate technostress and algorithmic-management measurement, and test the effectiveness of platform-level interventions, moving the field from documenting that technology-mediated work produces strain toward understanding when, how, and for whom it does so, and which interventions reduce avoidable harm.

References

1. Adekoya, O. D., Mordi, C., Ajonbadi, H., & Chen, W. (2023). Implications of algorithmic management on careers and employment relationships in the gig economy – a developing country perspective. *Information Technology & People*.
2. Ajonbadi, H. A., Adekoya, O. D., Mordi, C., Cronk, H., Islam, M. A., & Idowu, T. (2025). Exploring the voice and representation mechanisms of platform workers and implications for decent work in the Nigerian gig economy. *Journal of Industrial Relations*. Advance online publication.
3. Alačovska, A., Bucher, E., & Fieseler, C. (2024). Algorithmic paranoia: Gig workers' affective experience of abusive algorithmic management. *New Technology, Work and Employment*, 40, 421–435. <https://doi.org/10.1111/ntwe.12317>
4. Cameron, L. D. (2024). The making of the “good bad” job: How algorithmic management manufactures consent through constant and confined choices. *Administrative Science Quarterly*, 69(2), 458–514. <https://doi.org/10.1177/00018392241236163>
5. Dong, J., Zhang, G., & Wu, L. (2025). Life against algorithmic management: A study on burnout and its influencing factors among food delivery riders. *Frontiers in Public Health*, 13, 1531541. <https://doi.org/10.3389/fpubh.2025.1531541>
6. Dragano, N., & Lunau, T. (2020). Technostress at work and mental health: Concepts and research results. *Current Opinion in Psychiatry*, 33(4), 407–413. <https://doi.org/10.1097/ycp.0000000000000613>
7. Glavin, P., & Schieman, S. (2022). Dependency and hardship in the gig economy: The mental health consequences of platform work. *Socius: Sociological Research for a Dynamic World*, 8. <https://doi.org/10.1177/23780231221082414>
8. Graham, M., Woodcock, J., Heeks, R., Mungai, P., Van Belle, J.-P., du Toit, D., Fredman, S., Osiki, A., van der Spuy, A., & Silberman, S. M. (2020). The Fairwork Foundation: Strategies for improving platform work in a global context. *Geoforum*, 112, 100–103. <https://doi.org/10.1016/j.geoforum.2020.01.023>
9. Kadolkar, I., Kepes, S., & Subramony, M. (2024). Algorithmic management in the gig economy: A systematic review and research integration. *Journal of Organizational Behavior*, 46, 1057–1080. <https://doi.org/10.1002/job.2831>
10. Koon, V., Sathasivam, K., Anthony, M., & Thomas, A. (2026). Beyond algorithmic management: A systematic review and strategic reconceptualisation of human resource management in the gig economy. *EuroMed Journal of Business*, 21(5), 276–297. <https://doi.org/10.1108/EMJB-02-2026-0121>
11. Li, X., Seah, R. Y. T., & Yuen, K. F. (2025). Mental wellbeing in digital workplaces: The role of digital resources, technostress, and burnout. *Technology in Society*, 81, 102844. <https://doi.org/10.1016/j.techsoc.2025.102844>
12. Lu, Y., Yang, M. M., Zhu, J., & Wang, Y. (2024). Dark side of algorithmic management on platform worker behaviors: A mixed-method study. *Human Resource Management*, 63(3), 477–498. <https://doi.org/10.1002/hrm.22211>
13. Ma, J., Ollier-Malaterre, A., & Lu, C. (2021). The impact of techno-stressors on work–life balance: The moderation of job self-efficacy and the mediation of emotional exhaustion. *Computers in Human Behavior*, 122, 106811. <https://doi.org/10.1016/j.chb.2021.106811>
14. Mansuroğlu, E., & Smith, A. P. (2026). Technostress and employee well-being: A systematic review of empirical evidence. *Computers in Human Behavior Reports*, 21, 100941. <https://doi.org/10.1016/j.chbr.2026.100941>
15. Möhlmann, M., Salge, C. A. de L., & Marabelli, M. (2023). Algorithm sensemaking: How platform workers make sense of algorithmic management. *Journal of the Association for Information Systems*, 24(1), 35–64. <https://doi.org/10.17705/1jais.00774>
16. Nisafani, A. S., Kiely, G., & Mahony, C. (2020). Workers' technostress: A review of its causes, strains, inhibitors, and impacts. *Journal of Decision Systems*, 29(sup1), 243–258. <https://doi.org/10.1080/12460125.2020.1796286>

17. Pansini, M., Buonomo, I., De Vincenzi, C., Ferrara, B., & Benevene, P. (2023). Positioning technostress in the JD-R model perspective: A systematic literature review. *Healthcare*, 11(3), 446. <https://doi.org/10.3390/healthcare11030446>
18. Parent-Rochelleau, X., & Parker, S. K. (2022). Algorithms as work designers: How algorithmic management influences the design of jobs. *Human Resource Management Review*, 32(3), 100838. <https://doi.org/10.1016/j.hrmr.2021.100838>
19. Parent-Rochelleau, X., Parker, S. K., Bujold, A., & Gaudet, M. (2023). Creation of the algorithmic management questionnaire: A six-phase scale development process. *Human Resource Management*, 63(1), 25–44. <https://doi.org/10.1002/hrm.22185>
20. Pflügner, K., Maier, C., Thatcher, J. B., Mattke, J., & Weitzel, T. (2024). Deconstructing technostress: A configurational approach to explaining job burnout and job performance. *MIS Quarterly*, 48(2), 679–698. <https://doi.org/10.25300/misq/2023/16978>
21. Srivastava, S. C., Chandra, S., & Shirish, A. (2015). Technostress creators and job outcomes: Theorising the moderating influence of personality traits. *Information Systems Journal*, 25(4), 355–401. <https://doi.org/10.1111/isj.12067>
22. Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301–328. <https://doi.org/10.2753/mis0742-1222240109>
23. Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4(3), 356–367. <https://doi.org/10.1177/1534484305278283>
24. Umair, A., Conboy, K., & Whelan, E. (2023). Examining technostress and its impact on worker well-being in the digital gig economy. *Internet Research*, 33(7), 206–242. <https://doi.org/10.1108/intr-03-2022-0214>
25. Wang, H., Ding, H., & Kong, X. (2022). Understanding technostress and employee well-being in digital work: The roles of work exhaustion and workplace knowledge diversity. *International Journal of Manpower*, 44(2), 334–353. <https://doi.org/10.1108/ijm-08-2021-0480>
26. Weidenstedt, L., Palmtag, E.-L., Leick, B., & Copley, M. (2025). Stressed or happy – or both? Nuancing gig workers' experiences with platform work. *Economic and Industrial Democracy*. Advance online publication. <https://doi.org/10.1177/0143831X251366931>
27. Wiener, M., Cram, W. A., & Benlian, A. (2021). Algorithmic control and gig workers: A legitimacy perspective of Uber drivers. *European Journal of Information Systems*, 32(3), 485–507. <https://doi.org/10.1080/0960085x.2021.1977729>
28. Zha, X., Hu, E., Shan, H., Huang, L., & Han, M. (2026). Algorithmic management and gig worker well-being: Unpacking the roles of job autonomy, precarity and union instrumentality. *Personnel Review*. Advance online publication. <https://doi.org/10.1108/PR-03-2024-0230>
29. Zhao, X., Xia, Q., & Huang, W. (2020). Impact of technostress on productivity from the theoretical perspective of appraisal and coping processes. *Information & Management*, 57, 103265. <https://doi.org/10.1016/j.im.2020.103265>.

