

Supervisor Well-Being in the Gig Economy: A Multitheoretical Framework

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Abstract

The rapid expansion of platform-based and other nontraditional work arrangements has reconfigured employment structures, flattened hierarchy levels, and introduced new sources of strain for workers across gig ecosystems. Although existing research has examined gig workers' experiences, particularly issues related to algorithmic management, precarity, and health, limited scholarly attention has been directed toward the well-being of individuals who assume supervisory or leadership responsibilities within gig and flexible work environments. Drawing on Self-Determination Theory, the Job Demands–Resources model, Person–Environment Fit theory, and boundary management theory, this paper argues that psychological need fulfilment may serve as a central mechanism linking gig work conditions to well-being outcomes for gig-based supervisors. Further, we theorize that work-arrangement fit and boundary conditions may operate as meaningful moderators that either strengthen or weaken these relationships. The paper outlines practical implications for designing sustainable gig-based leadership structures and presents several testable propositions to guide future empirical research.

Keywords: Gig economy, supervisor well-being, flexible work arrangements, Job Demands–Resources, Self-Determination Theory, autonomy, leadership

Introduction

The systems of work and employment are undergoing a profound transformation, driven by the rapid expansion of platform-mediated, short-term, and flexible work arrangements. Gig work, characterized by loosely structured tasks, algorithmic coordination, and discretionary scheduling, has grown alongside remote, hybrid, and other digitally mediated models that are reshaping how organizations manage performance and structure labour (Kadolkar, Kepes, and Subramony, 2024; Pilatti, Pinheiro, and Montini, 2024; Lin et al., 2025). Existing scholarship has largely focused on gig workers themselves, documenting how algorithmic supervision, financial precarity, and limited institutional support shape their stress, health, and subjective well-being (Nilsen & Kongsvik, 2023; Vučković et al., 2023; Kadolkar et al., 2024). Yet this emphasis has produced an uneven knowledge base. Supervisors who work within the same socio-technical systems but carry additional leadership, coordination, and relational responsibilities remain a comparatively underexamined group. Although they play a critical intermediary role between platforms, algorithms, and distributed workers, empirical evidence on how gig work conditions influence their well-being remains scarce. This gap is particularly notable given that theoretical mechanisms explaining worker well-being may function differently for supervisors, whose roles require navigating both algorithmic control and human interaction.

The evolving nature of supervisory work deepens this need. Unlike traditional supervisory roles grounded in stable teams, in-person interactions, and predictable structures, supervisors in platform-based settings must coordinate geographically dispersed workers, mediate algorithmic control systems, regulate digital surveillance mechanisms, and manage performance expectations across asynchronous schedules (Kellogg et al., 2020; Wood et al., 2019). These digitally intensified conditions fragment the relational and informational cues that traditionally support supervisory effectiveness, substantially complicating core responsibilities such as motivation, feedback, and performance management (Hartner-Tiefenthaler et al., 2021). The complexity of the role is further heightened by the tension between safeguarding organizational efficiency and honoring workers' expectations for autonomy and flexibility. Such tensions generate relational strain, psychological contract stress, and heightened emotional loads, especially when supervisors must implement algorithmically derived rules rather than exercising interpersonal judgement (Putnam et al., 2014; Bal et al., 2013; Zulkifli & Hamzah, 2024). Although autonomy-oriented structures in gig work can support well-being, supervisors themselves often face intrusive digital oversight, constant connectivity, and permeable work–nonwork boundaries, factors that erode psychological resources and reduce satisfaction (Wan et al., 2024; Peiró et al., 2024). At the same time, platform-based coordination requires supervisors to develop evolving competencies in participative leadership, goal

facilitation, digital communication, and remote engagement (Peiró et al., 2024). Collectively, these developments reveal that gig and flexible work systems generate new opportunities for resource access while simultaneously amplifying psychological demands, rendering supervisory well-being a vulnerable and insufficiently understood area of inquiry.

Recent literature further reveals conceptual gaps that complicate our understanding of supervisory experiences in gig contexts. Despite advances in gig research, there remains limited integration across theoretical traditions; few studies combine theories and models in ways that reflect the multilayered reality of supervisory work (Bakker et al., 2014; Allen et al., 2014; Schweitzer et al., 2025). Similarly, empirical studies seldom examine how work-arrangement fit or boundary control shape supervisors' responses to algorithmic demands, blurred temporal structures, and digitally intensified workloads (Allen et al., 2014; Nilsen & Kongsvik, 2023). Even less is known about conditional indirect effects or fluctuations in need satisfaction, supervisory demands, and boundary enactment, elements that are essential for establishing causal mechanisms in dynamic work environments (Maunz et al., 2024; Wan et al., 2024). These gaps collectively underscore the need for a holistic, mechanism-based framework that can explain how gig-based work conditions influence supervisory well-being.

Addressing these dynamics requires a theoretical framework capable of capturing the interplay between digital job demands, psychological resources, personal fit, and boundary management. In this regard, Self-Determination Theory, the Job Demands–Resources model, Person–Environment Fit theory, and boundary management theory together provide a comprehensive lens for examining how supervisors interpret and adapt to gig-based work characteristics. Self-Determination Theory clarifies how autonomy, competence, and relatedness needs may be supported or frustrated under algorithmic coordination. The JD–R model illuminates how digital surveillance, intensified performance pressure, and constant availability reshape both demands and resources. Person–Environment Fit theory explains how supervisors' values, abilities, and work preferences align or conflict with the fluid, technology-driven conditions of gig work. Boundary management theory captures how porous work–nonwork borders influence recovery, emotional strain, and self-regulation in contexts where physical and temporal boundaries are weak. Together, these frameworks offer a coherent rationale for positioning psychological need fulfillment as the central mechanism linking gig work conditions to supervisory well-being, while highlighting how work-arrangement fit and boundary control may moderate these relationships.

This study contributes to human resource management scholarship in several ways. First, it reframes the discussion of well-being in nontraditional work systems by shifting attention from frontline gig workers to supervisors, an underexamined group whose

psychological functioning is central to coordination quality, worker experience, and platform sustainability. Second, by integrating insights from Self-Determination Theory, the Job Demands–Resources model, Person–Environment Fit theory, and boundary management theory, the paper offers a multidimensional framework that illuminates how psychological need fulfillment connects gig work conditions to supervisory well-being. Third, it highlights boundary permeability and work-arrangement fit as critical moderating conditions in digital and flexible work, areas that remain insufficiently theorized for supervisory roles despite their relevance to remote, hybrid, and platform-mediated work. Finally, the study advances practice by generating testable propositions that can guide future empirical research and inform the design of more sustainable supervisory systems within gig and flexible work environments.

LITERATURE REVIEW

Gig Work

The global transition toward platform-mediated, project-based, and flexible work arrangements has reshaped how labor is organized, coordinated, and supervised. Gig work, influenced by algorithmic coordination, on-demand labor supplies, and flexible scheduling, now extends across transportation, logistics, digital service delivery, and professional domains (Kadolkar, Kepes, & Subramony, 2024; Lin et al., 2025). Along with these developments, flexible work arrangements such as remote, hybrid, and asynchronous formats have further decentralized work and reduced the extent of direct managerial oversight (Pilatti, Pinheiro, & Montini, 2024). Existing research has predominantly examined gig workers themselves, documenting how algorithmic control, income volatility, and limited institutional support create stress and undermine well-being (Nilsen & Kongsvik, 2023; Vučković et al., 2023; Kadolkar et al., 2024). These studies consistently demonstrate a paradox in gig work: while autonomy is often enhanced, digital monitoring and platform governance mechanisms impose restrictive, precarious, and resource-depleting conditions.

Despite these insights, relatively little attention has been directed toward supervisors who operate within the same digitally mediated ecosystems. Supervisors in gig and flexible environments encounter the same algorithmic pressures, temporal unpredictability, and relational distance experienced by gig workers, but their responsibilities amplify these pressures. They are responsible for coordinating dispersed teams, managing performance, resolving conflicts, and supporting workers who are embedded in algorithmic systems (Kellogg, Valentine, & Christin, 2020; Bakker, Demerouti, & Sanz-Vergel, 2014). Evidence suggests that digital monitoring, ambiguous work–nonwork boundaries, and accountability for others' well-being can erode supervisors' autonomy, competence, and relational connectedness (Peiró et al., 2024). Considering these unique pressures, an in-depth

understanding of supervisory well-being requires attention to the foundational features of gig work that shape supervisors' psychological experiences. In particular, algorithmic management and boundary fluidity may constitute central structural conditions that influence how supervisors perceive their roles, interpret demands, and mobilize resources.

1. Core Psychological Mechanisms Underlying Supervisory Well-Being

Understanding supervisory well-being in gig and flexible work systems requires attention to the psychological mechanisms through which work environments shape motivation and strain. Self-Determination Theory (SDT) offers a foundational explanation by positing that well-being derives from the satisfaction of three innate psychological needs—autonomy, competence, and relatedness. Extensive organizational research demonstrates that satisfaction of these needs enhances engagement, reduces burnout, and strengthens the sense of meaning at work (Van den Broeck et al., 2016; Fernet et al., 2023). Supervisors in digitally mediated environments, however, confront conditions that may both support and frustrate these needs. Algorithmic control can restrict discretion, diminish perceived competence, or complicate interpersonal connections, whereas managerial latitude, supportive platform tools, and opportunities for judgment can reinforce these same needs (Kadolkar et al., 2024). SDT is therefore particularly useful for explaining how supervisors psychologically interpret and respond to the stimuli embedded in gig-based work structures.

Whereas SDT foregrounds the processes of need satisfaction and need frustration, the Job Demands–Resources (JD–R) model provides a complementary lens for understanding how structural characteristics of work generate strain or motivation. JD–R theory conceptualizes work experiences as a balance of demands, which require sustained effort and can lead to exhaustion, and resources, which enable goal attainment, buffer strain, and enhance motivation (Bakker et al., 2014). In gig contexts, supervisors encounter a distinctive configuration of job demands, including algorithmic surveillance, asynchronous schedules, fragmented workflows, and heightened emotional labor associated with remote coordination. At the same time, they also benefit from flexible scheduling, location autonomy, and technology-enabled efficiencies. The JD–R model has repeatedly shown that such configurations trigger both the energetic and motivational pathways that shape individual well-being. When combined with SDT, JD–R helps clarify that psychological need fulfillment functions as an internal mechanism through which digitally structured job features translate into outcomes such as burnout, engagement, and satisfaction. This integration aligns with prior evidence showing that need fulfillment may mediate the effects of job characteristics in complex or technology-intensive work environments.

2. Supervisory Adaptation in Digitally Mediated Work Systems

The reactions of supervisors to digitally intensified work conditions vary substantially across individuals, and Person–Environment Fit theory explains these variations by emphasizing the alignment between personal attributes and environmental characteristics. Fit models propose that congruence between a person's needs, skills, values, and preferences and the conditions of their work environment predicts positive adaptation, satisfaction, and lower strain. Recent extensions of this logic to work-arrangement fit show that alignment between preferred and actual work modalities, such as remote, hybrid, or platform-based arrangements, strongly predicts well-being, work-life balance, and stress in ways not fully explained by the arrangement itself. When supervisors' expectations for structure, predictability, or autonomy align with the characteristics of gig work, potentially stressful features may have diminished psychological impact. Conversely, misalignment can magnify the strain associated with algorithmic demands, fragmented schedules, and remote coordination. Person–Environment Fit, therefore, serves as a critical moderating factor shaping how supervisors experience gig-based systems.

In addition to personal preference alignment, supervisors must also navigate the permeability of work and non-work boundaries that characterize gig and flexible employment systems. Boundary management theory focuses on how individuals construct, maintain, or blend roles across domains and highlights how these strategies shape well-being (Allen et al., 2014). Supervisors in gig settings often experience heightened temporal and spatial boundary erosion due to constant connectivity, unpredictable workflows, and digital surveillance systems that extend the reach of work into non-work domains. Boundary control, the sense of personal agency over transitions between roles, plays an important role in protecting psychological resources. Individuals with strong boundary control and effective segmentation or integration strategies can resist intrusions and maintain recovery, whereas those with weak boundary control may experience greater spillover, emotional depletion, and erosion of need satisfaction (Nilsen & Kongsvik, 2023). Accordingly, boundary management theory provides an essential contextual layer for understanding how the affordances and pressures of gig work shape supervisory well-being.

3. Integrated Theoretical Framework for Gig-Based Supervisory Well-Being

Taken together, SDT, JD–R, Person–Environment Fit, and boundary management theory offer a multidimensional conceptual foundation for understanding supervisory well-being in digitally mediated work systems. Each theory illuminates a different component of this experience: SDT explains the psychological mechanisms through which supervisors internalize job characteristics; JD–R

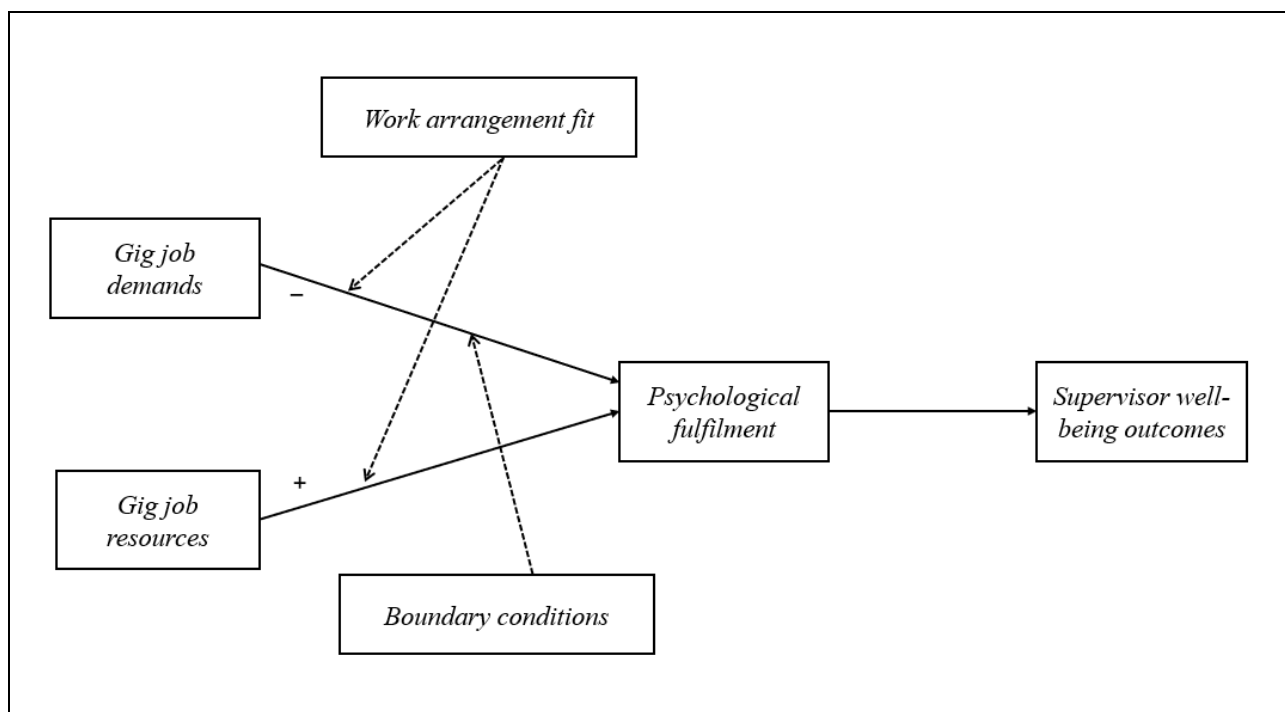
captures the structural demands and resources embedded in gig-based roles; Person–Environment Fit clarifies for whom these conditions become more or less impactful; and boundary theory highlights the regulation processes that shape strain, recovery, and emotional stability in environments with porous temporal boundaries. These theories have been applied extensively in traditional organizational settings but far less in leadership roles within gig or platform-mediated contexts, despite the rapid expansion of distributed, algorithmically coordinated teams.

An integrated framework is therefore essential for capturing the layered, interdependent nature of supervisory work in gig environments. This integration also directly addresses key research gaps identified in recent scholarship. Much of the existing research has focused on gig workers rather than the supervisors who must coordinate their work under algorithmic governance (Nilsen & Kongsvik, 2023; Lin et al., 2025). Little empirical evidence examines how the demands of gig work influence supervisors' psychological states or how need-based mechanisms shape their adjustment. Furthermore, most studies rely on single-theory perspectives, leaving the interconnections among SDT,

JD–R, fit, and boundary control largely unexplored (Bakker et al., 2014; Allen et al., 2014; Schweitzer et al., 2025). There is also a limited understanding of how work arrangements fit or boundary control conditions, supervisors' reactions to algorithmic oversight, or blurred schedules. Importantly, research rarely investigates conditional indirect effects or daily fluctuations in need satisfaction, job strain, and boundary management—elements that are critical for building causal explanations in gig-based supervisory roles (Maunz et al., 2024; Wan et al., 2024).

By integrating these theoretical perspectives, the present framework captures how structural job features, psychological needs, personal preferences, and boundary processes jointly shape supervisory well-being. This foundation enables a richer theorization of supervisory experiences in gig work and provides a robust basis for developing the propositions advanced later in the paper.

Figure 1. Conceptual model illustrating relationships among job demands, job resources, mediators, moderators, and supervisor well-being outcomes.



Source: Developed by authors

Theoretical Development and Propositions

Digitally mediated and algorithmically structured gig-work systems position supervisors at the intersection of technological control, dispersed labor, and fluctuating performance expectations. Unlike traditional managerial settings where supervisors exercise discretion within

relatively stable structures, gig environments embed managers within a digital architecture that simultaneously provides flexibility and imposes constraints. The Job Demands–Resources (JD–R) model offers a useful foundation for understanding this complexity because it distinguishes between job demands—conditions requiring sustained effort—and job resources—conditions that enable growth, learning,

and motivation. Gig-economy supervisors confront demands such as algorithmic oversight, continuous connectivity, asynchronous coordination, and the emotional regulation required when managing workers in distributed ecosystems. Yet, they also benefit from resources such as temporal autonomy, task discretion, technology-enabled efficiencies, and reduced place-based constraints. These opposing forces make the gig economy an ideal context for examining how managers interpret and respond to nonlinear combinations of demands and resources.

To understand how these environmental features translate into psychological experience, Self-Determination Theory (SDT) provides a complementary mechanism. SDT suggests that work contexts influence well-being by supporting or frustrating the basic psychological needs for autonomy, competence, and relatedness. Gig-work demands—opaque evaluation metrics, prescriptive algorithmic workflows, unpredictable coordination windows, and reduced in-person socialization—may frustrate these needs and diminish psychological fulfilment. Conversely, resources such as flexible scheduling, discretion in problem solving, and supportive platform affordances can strengthen need satisfaction. Together, JD–R and SDT clarify why the gig environment matters for supervisors: the structure of work either erodes or supports their psychological functioning depending on how demands and resources shape need fulfilment.

Proposition 1: Gig-economy job demands are negatively associated with supervisor psychological fulfilment, and gig-economy job resources are positively associated with supervisor psychological fulfilment.

SDT also provides a theoretically rigorous explanation for why psychological fulfilment is not merely a desirable outcome but a core mechanism linking work conditions to well-being. Need satisfaction has been shown to predict engagement, vitality, and job satisfaction, whereas need frustration predicts exhaustion, disengagement, and burnout. In gig environments where supervisors must respond rapidly to platform signals, coordinate across unstable workflows, and manage relational distance, fluctuations in psychological need fulfilment are especially consequential. Research in both traditional and digitally enabled work settings demonstrates that need satisfaction consistently mediates the influence of environmental characteristics on well-being, suggesting that supervisory well-being in gig contexts hinges on whether work conditions support or undermine psychological needs.

Proposition 2: Psychological fulfilment mediates the relationship between gig-economy job demands/resources and supervisor well-being outcomes (engagement, job satisfaction, and reduced burnout).

However, not all supervisors interpret the same conditions similarly. Person–Environment Fit (P–E Fit) theory argues that individuals vary in how well their abilities, values, and preferences align with the structure of their work. Work-arrangement fit—specifically, the match between supervisors’ desired work patterns (such as flexibility, remote functioning, or asynchronous coordination) and their actual work arrangements—shapes how they experience gig-based demands and resources. Supervisors with high fit may perceive algorithmic coordination as manageable and flexible schedules as empowering, thereby experiencing stronger need fulfilment. Those with low fit may view the same features as unpredictable or misaligned with personal expectations, amplifying the frustration of autonomy, competence, or relatedness. Thus, fit acts as a boundary condition that modulates the intensity with which job demands and resources affect psychological fulfilment.

Proposition 3: Work-arrangement fit moderates the job demands/resources–psychological fulfilment relationship such that high fit weakens the negative association between demands and psychological fulfilment and strengthens the positive association between resources and psychological fulfilment.

Gig work further complicates supervisory experience by blurring the temporal and spatial boundaries between work and nonwork roles. Boundary management theory emphasizes that the ability to control transitions between domains is a crucial determinant of well-being. Supervisors who maintain strong boundary control—through segmentation strategies, communication rules, or selective availability—can limit spillover and protect opportunities for recovery. In contrast, those with weak boundary control, especially in contexts requiring persistent digital presence or algorithmic responsiveness, may experience continuous intrusion, emotional depletion, and diminished need satisfaction. Because algorithmic systems often compress time, obscure responsibilities, and extend supervisory obligations beyond conventional limits, boundary control becomes a critical moderator shaping the psychological impact of gig-based demands.

Proposition 4: Boundary conditions moderate the relationship between gig-economy job demands and psychological fulfilment such that supervisors with greater boundary control experience weaker negative effects of job demands on psychological fulfilment than those with low boundary control.

Taken together, JD–R, SDT, P–E Fit, and boundary management theories suggest a conditional process in which the well-being of gig-economy supervisors depends not only on the inherent demands and resources of the digital work environment but also on the extent to which these conditions align with personal preferences and are buffered by effective boundary strategies. When work-arrangement fit is high, and boundary control is strong, supervisors may sustain psychological fulfilment even under demanding conditions and derive stronger motivational benefits from available resources.

Conversely, low fit and weak boundary control may exacerbate need frustration and amplify the negative consequences of gig demands. These patterns imply that the relationship between gig-work characteristics and supervisory well-being is not uniform but contingent on the interaction of personal alignment and boundary management capabilities.

Proposition 5: The indirect effect of gig-economy job demands and resources on supervisor well-being through psychological fulfilment is contingent on work-arrangement fit and boundary conditions (i.e., a moderated-mediation or mediated-moderation process).

IMPLICATIONS

Theoretical Implications

This study advances theory in several important ways by integrating leadership research with the emerging realities of digitally mediated gig work. Scholarship on gig work has largely prioritized platform workers while overlooking the managerial actors responsible for coordinating, supporting, and monitoring distributed labor. By centering supervisors within algorithmically governed environments, the present framework addresses a critical research gap: the lack of theoretically grounded explanations for how leaders themselves experience well-being, autonomy, and boundary conditions under gig-style work structures.

A primary contribution lies in extending gig-economy research beyond worker-level concerns of precarity, algorithmic control, and income volatility to the leadership architecture that sustains gig operations. Prior studies have examined algorithmic management or autonomy tensions mainly from workers' perspectives, but have rarely considered how these same conditions shape those in oversight roles. The integration of the Job Demands–Resources (JD–R) model with Self-Determination Theory (SDT) demonstrates that supervisory roles are equally shaped by resource scarcity, opaque algorithmic systems, and coordination complexity. This framework proposes that psychological need fulfilment is the mechanism through which digitally mediated conditions translate into supervisory well-being, enabling a richer understanding of intra-organizational dynamics within platform ecosystems.

Leadership research has largely been situated in co-located hierarchies, where influence occurs through observable behaviors and repeated personal interactions. In contrast, leaders in gig environments must negotiate algorithmic constraints, coordinate asynchronously, manage dispersed workers, and operate within technologically mediated relationships. This study thus extends leadership theory to include digitally constrained leadership, where influence is enacted partly through interactions with platform architectures rather than exclusively through human-centric leadership behaviors. Incorporating work-arrangement fit and boundary control as moderators further highlights the

importance of personal–context alignment and boundary navigation- factors that remain underdeveloped in mainstream leadership scholarship.

The integration of JD–R, SDT, Person–Environment Fit, and boundary management theory also marks a theoretical contribution. While these frameworks have been used separately across traditional employment, remote work, and motivational research, their combined application to supervisory roles in gig ecosystems is novel. The resulting model offers a unified explanation of how demands and resources cascade through psychological need satisfaction and are shaped by individual fit and boundary control. This multidimensional integration provides a holistic and theoretically robust explanation of supervisory well-being in digitally intensive work settings.

The proposed framework also opens several promising avenues for future research. Scholars may explore how leaders develop adaptive strategies for negotiating algorithmic constraints, whether specific leadership styles (such as empowering or participative leadership) are more effective in gig contexts, and how digitally mediated relationships reshape influence processes. Longitudinal designs could examine dynamic shifts in need fulfilment and boundary control; comparative studies could evaluate cross-platform differences; and policy-focused research could assess how platform design choices shape managerial autonomy and well-being. These directions extend leadership and HRM research toward emerging work arrangements that will continue expanding globally.

Practical and Social Implications

Practically, this framework provides organizations, platform operators, and HR professionals with insights into strengthening the well-being and effectiveness of supervisors in gig environments. Because psychological need fulfilment may mediate the relationship between job conditions and well-being, organizations may enhance supervisory functioning by improving autonomy, enabling clearer decision rights, increasing transparency around algorithmic evaluations, and ensuring that supervisors have adequate technological and relational support. Aligning work arrangements with supervisor preferences, through customizable schedules, clearer role expectations, and participatory decision-making around work design, can further improve well-being and reduce strain.

Boundary management emerges as critical for sustaining supervisory health in digitally intensive contexts. Organizations and platforms can establish communication norms that reduce expectations of constant availability, develop structured asynchronous coordination guidelines, and provide technological tools that help supervisors manage digital intrusions. Training supervisors in boundary maintenance strategies can enhance recovery, reduce burnout, and strengthen their ability to support dispersed workers. These efforts

promote sustainable supervisory performance and contribute to healthier platform ecosystems.

The social implications of this study are substantial, given the global scale of gig work. Supervisors play a pivotal role in shaping worker experiences, platform fairness, and operational stability. Supporting their well-being can therefore contribute to more ethical, equitable, and sustainable platform labor systems. The framework directly aligns with several United Nations Sustainable Development Goals, including SDG 3 (Good Health and Well-being), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities). By identifying structural conditions that undermine or support leaders' well-being, this model helps guide the design of platform governance practices that protect both managerial and worker welfare.

Policymakers and regulators can also draw on these insights to evaluate how algorithmic systems affect supervisors, not only front-line workers, and to develop well-being standards for digital labor governance. As gig work becomes central to labor markets globally, the well-being of supervisors becomes integral to the stability and fairness of platform systems. Strengthening supervisory well-being thus contributes to resilient digital workplaces and to the broader social objective of ensuring decent work across contemporary labor markets.

Limitations and Future Directions

Although this theoretical model advances understanding of supervisory well-being in digitally mediated gig environments, several limitations must be acknowledged. First, the propositions developed here are conceptual and require rigorous empirical examination. Because gig work varies across sectors, platforms, and national institutional contexts, future research should test the model across diverse industries (e.g., ride-hailing, delivery, digital freelancing, professional crowdwork) and across cultural environments where norms of autonomy, collectivism, and boundary management differ. Cross-country comparative studies would be especially valuable in uncovering institutional moderators of supervisory well-being.

Second, supervisors in gig ecosystems are not a homogeneous group. Some are platform-embedded supervisors who rely heavily on algorithmic tools, while others work within traditional organizations that coordinate gig workers externally. These structural differences may alter the salience of demands and resources, the types of boundaries supervisors navigate, and the degree of discretion they wield. Future research should therefore differentiate between supervisory profiles, examining whether the theoretical pathways operate similarly for platform-integrated leaders, team coordinators in hybrid systems, or organizational leaders managing gig labor indirectly.

Another important direction concerns the bidirectionality of well-being processes. While the present model positions job characteristics as antecedents of need fulfillment and well-being, future studies could examine whether diminished well-being erodes supervisors' boundary control, reduces perceptions of fit, or amplifies the subjective intensity of job demands. Longitudinal and experience sampling designs would be especially suitable for tracing these reciprocal dynamics and capturing the day-to-day fluctuations inherent in gig-driven work structures.

Additionally, the proposed framework focuses on how individual-level experiences shape supervisory well-being, but supervisory outcomes are also interwoven with platform governance and organizational support structures. Multi-level research is needed to examine how platform policies, algorithmic transparency, organizational support systems, and human-resource interventions interact to shape the well-being of supervisors. For example, platforms that offer customizable scheduling tools, participatory governance mechanisms, or transparent evaluation algorithms may mitigate need frustration and enhance perceptions of fit. Future research can extend the model by incorporating these structural and institutional factors.

Finally, the propositions outlined in this paper call for empirical validation through mixed-method approaches such as field experiments, diary methods, digital trace data, and multi-source surveys. Testing these proposals in real-world gig environments will allow scholars to refine the mechanisms articulated here and develop evidence-based recommendations for leaders, organizations, and policymakers navigating digitally intensive work arrangements.

Conclusion

The rise of algorithmically mediated and flexibly structured gig work is reshaping the nature of supervisory roles in profound ways. Supervisors must coordinate dispersed workers, negotiate algorithmic constraints, maintain performance standards, and manage relational dynamics without the grounding structures of traditional organizations. These conditions generate unique constellations of job demands and resources that challenge established assumptions in HRM and leadership research.

This paper proposes that psychological need fulfillment, grounded in Self-Determination Theory, serves as the central mechanism through which gig-related job characteristics influence supervisory well-being. By integrating SDT with the Job Demands–Resources model, Person–Environment Fit theory, and boundary management theory, the framework explains not only how supervisors experience their work but also why some supervisors thrive while others struggle within digitally intensified environments. Work-arrangement fit and boundary control emerge as critical moderators that can either buffer supervisors against strain or

heighten their vulnerability to exhaustion, disengagement, and reduced job satisfaction.

Taken together, these theoretical integrations offer a coherent and testable explanation for understanding supervisory well-being in gig contexts. They provide a foundation for designing healthier and more sustainable platform ecosystems, while also guiding organizations and policymakers toward more informed governance of digital labor systems. The propositions advanced in this paper now require empirical scrutiny, through longitudinal studies, experience sampling, and cross-platform research, to validate and refine the mechanisms proposed.

As gig work continues to expand globally, the well-being of supervisors becomes a central concern for the functioning, fairness, and sustainability of digital labor markets. By foregrounding supervisory experiences within the gig economy, this framework contributes to a more comprehensive understanding of contemporary work and offers a pathway for future research to support healthier organizational and societal outcomes.

References

1. Allen, T. D., Cho, E., & Meier, L. L. (2014). Work–family boundary dynamics. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 99–121. <https://doi.org/10.1146/annurev-orgpsych-031413-091330>
2. Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
3. Bal, P. M., de Cooman, R., & Mol, S. T. (2013). Dynamics of psychological contracts with work engagement and turnover intention: The influence of organizational tenure. *European Journal of Work and Organizational Psychology*, 22(1), 107–122. <https://doi.org/10.1080/1359432X.2011.626198>
4. Chambel, M. J., Carvalho, V. S., Gomes, F., & Rodrigues-Silveira, C. (2023). Work–family boundary management profiles and well-being at work: A study with militaries on a humanitarian aid mission. *Military Psychology*, 36(4), 431–442. <https://doi.org/10.1080/08995605.2023.2195793>
5. Fernet, C., Litalien, D., & Morin, A. J. S. (2023). The role of basic psychological needs in workplace well-being: A self-determination theory perspective. *Journal of Vocational Behavior*, 144, 103794. <https://doi.org/10.1016/j.jvb.2023.103794>
6. Fernet, C., Morin, A. J. S., Mueller, J. S., Gillet, N., & Austin, S. (2023). Psychological need satisfaction across work and personal life: An empirical test of a comprehensive typology. *Frontiers in Psychology*, 14, 1216450. <https://doi.org/10.3389/fpsyg.2023.1216450>
7. Hartner-Tiefenthaler, M., Goisauf, M., & Koeszegi, S. T. (2021). Supervisory practices in digitalized work environments: Managing complexity and distance. *Journal of Managerial Psychology*, 36(7), 527–540. <https://doi.org/10.1108/JMP-10-2020-0514>
8. Kadolkar, I., Kepes, S., & Subramony, M. (2024). Algorithmic management in the gig economy: A systematic review and research integration. *Journal of Organizational Behavior*, 46(7), 1057–1080. <https://doi.org/10.1002/job.2831>
9. Kadolkar, S., Kepes, S., & Subramony, M. (2024). Worker well-being in gig and platform labor: A review and meta-framework. *Journal of Vocational Behavior*, 144, 103835. <https://doi.org/10.1016/j.jvb.2023.103835>
10. Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14(1), 366–410. <https://doi.org/10.5465/annals.2018.0174>
11. Lin, P. M. C., Au, W. C. W., Baum, T., & Xia, S. J. (2025). Effects of social job characteristics on gig workers' well-being: The mediating role of off-the-job embeddedness. *International Journal of Hospitality Management*, 130, 104241. <https://doi.org/10.1016/j.ijhm.2025.104241>
12. Lin, X., Wang, Y., & Shen, Y. (2025). Supervisory challenges in algorithmically managed gig environments. *Journal of Management Studies*. Advance online publication.
13. Maunz, A., Hertel, G., & Otto, K. (2024). Daily dynamics of digital platform work: A diary study of fluctuating demands and well-being. *Work & Stress*, 38(1), 45–67. <https://doi.org/10.1080/02678373.2022.2134212>
14. Maunz, L. A., et al. (2024). Longitudinal dynamics of psychological need satisfaction, meaning in work, and burnout. *Journal of Vocational Behavior*. (Advance online publication)
15. Nilsen, M., & Kongsvik, T. (2023). Health, safety, and well-being in platform-mediated work: A job demands and resources perspective. *Safety Science*, 163, 106130. <https://doi.org/10.1016/j.ssci.2023.106130>
16. Nilsen, P., & Kongsvik, T. (2023). Algorithmic management and supervisory strain in platform-mediated work. *Human Relations*, 76(5), 789–812. <https://doi.org/10.1177/00187267221123456>
17. Peiró, J. M., Bravo-Duarte, S., González-Anta, B., & Todolí-Signes, A. (2024). Telework readiness, supervisory practices, and digital infrastructure in remote work contexts. *Journal of Applied Psychology*, 109(2), 215–230. <https://doi.org/10.1037/apl0001203>
18. Pilatti, L. A., Pinheiro, M. N., & Montini, E. (2024). The rise of flexible work arrangements: Implications for organizational dynamics. *Human Resource Management Review*, 34(1), 100921. <https://doi.org/10.1016/j.hrmr.2023.100921>

19. Putnam, L. L., Myers, K. K., & Gailliard, B. M. (2014). Examining the tensions in workplace flexibility and exploring options for new directions. *Human Relations*, 67(4), 413–440. <https://doi.org/10.1177/0018726713495704>
20. Schweitzer, L., Smith, C. J., Lyons, S., Henchey, A., & Kostuchuk, J. (2025). Working where we want: The role of work-arrangement fit in work-related and personal well-being. *Journal of Management & Organization*. Advance online publication. <https://doi.org/10.1017/jmo.2025.10024>
21. Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of Self-Determination Theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195–1229. <https://doi.org/10.1177/0149206316632058>
22. Vučković, V., Sutlović, D., & Livazović, G. (2023). Occupational stressors and well-being among gig workers: A systematic review. *Safety Science*, 165, 106159. <https://doi.org/10.1016/j.ssci.2023.106159>
23. Wan, M., Chen, T., & Lin, Z. (2024). Boundary-spanning, digital intrusions, and daily well-being in flexible work. *Journal of Applied Psychology*, 109(3), 472–489. <https://doi.org/10.1037/apl0001154>
24. Wan, M., Zhang, J., Wang, L., & Zhang, Z. (2024). Digital intrusion, autonomy, and daily well-being in virtual work. *Journal of Occupational Health Psychology*, 29(1), 37–52. <https://doi.org/10.1037/ocp0000346>
25. Wan, Z., Zhang, L., Wang, L., & Zhang, F. (2024). Navigating autonomy: Unraveling the dual influence of job autonomy on workplace well-being in the gig economy. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2024.1369495>
26. Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56–75. <https://doi.org/10.1177/0950017018785616>
27. Zulkifli, N. S., & Hamzah, S. R. (2024). Supervisory emotional labor and its implications for digital-era well-being. *International Journal of Stress Management*, 31(2), 147–162. <https://doi.org/10.1037/str0000271>