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Psychosocial Risk Factors in the Workplace: Impacts on Occupational Health, Safety and Productivity

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Abstract: *With the world of work moving into 2026, the conventional concept of physical safety is being overtaken rapidly by the emergence of invisible, psychosocial risks that are being fueled by AI-driven surveillance and algorithmic control. This essay discusses the 24/7 digital culture and subsequent obsolescence anxiety of the fast paced technological displacement. It examines the impact of unremitting behavioral scrutiny and constant performance control on worker autonomy and its resultant consequences of chronic cognitive load and fragmentation of professional identity. The paper divides these new threats into four main areas, which include the work design, social context, job security, and the work-life interface. It marks a critical point of the so-called Iceberg of Productivity Loss, in which unchecked mental stress is expressed in the form of decreased creativity, decision-making exhaustion, and whole-system burnout. The paper suggests that there should be a paradigm shift in the Occupational Health and Safety (OHS) procedures and that the psychosocial measurements, including cognitive load and the level of autonomy, should be included in the routine safety audits. Taking mental health as seriously as physical hazards, organizations are able to safeguard their greatest resource the human mind, which will help them stay economically stable and have a sustainable workforce during a turbulent and technology-driven period.*

Keywords: *AI Displacement Anxiety, Algorithmic Management, Cognitive Load, Digital Isolation, Job Crafting, Occupational Health and Safety (OHS), Productivity Loss, Psychosocial Risk Factors, Work-Life Interface*

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1.0 Introduction

By 2026, the contemporary workplace will have undergone a significant transformation driven by rapid digitalization, artificial intelligence (AI), and algorithmic management systems. Karri (2024) confirmed that the implementation of AI-based performance tracking has transcended mere data gathering to live behavioral tracking in which algorithms monitor each keystroke, every eye movement, and every second of idleness. This connected 24/7 digital culture has practically removed the lines between professional duty and personal recovery, establishing a condition of continuous cognitive overload (Mdhluli, 2025). To a lot of employees, the workload has ceased to be the main source of stress, but rather the psychological burden associated with continuous digital monitoring and performance evaluation.

This technological change has brought in a sense of instability that is deep-rooted and is called rapid technological displacement (Raffaelli, 2019). With the rapid development of generative AI and automated systems, the shelf-life of professional skills has dropped by a factor of four, and there is an overall sense of

obsolescence anxiety. Bharati & Gosavi (2025) described how employees are trapped in an endless loop of upskilling to keep up only to stay in the job, only to be scared that their job can be computerized overnight. Collectively, these studies indicate that technological advancement not only alters job structures but also reshapes workers' psychological experiences and perceptions of job security.

Such an atmosphere of uncertainty not only affects job security; it is undermining the underlying sense of agency and purpose that people can find in their expertise, resulting in a disjointed and shaky identity of a worker (Petriglieri *et al*., 2019).

Within this evolving work environment, understanding psychosocial risk factors has become increasingly important for occupational health research and practice.

Psychosocial risks refer to aspects of work design, organization, management practices, and social work environments that have the potential to cause psychological or physical harm. (Bazaluk *et al*., 2023). As opposed to conventional ergonomic or chemical hazards, psychosocial hazards are usually structural. Among them, there are overwork, role ambiguity, dysfunctional workplace relations, and the so-called technostress caused by the poorly introduced digital devices (Hegazy *et al*., 2023). These organizational stressors are left uncontrolled, and they are reflected in burnout, clinical anxiety and cardiovascular disease. These outcomes demonstrate that psychosocial hazards operate not only as individual health concerns but also as organizational risk factors affecting safety performance and productivity.

Traditionally, Evans & Wilton (2019) explain that the corporate world has viewed mental health as an aspect of the so-called wellness, a fringe benefit comprising meditation apps and the occasional seminars. But the intricacy of the 2026 labor market has made such a perception outdated. However, emerging research suggests that treating mental health solely as a wellness initiative fails to address systemic organizational stressors embedded in modern work structures (Gamba *et al*., 2025).

The psychosocial health should be redefined as a safety and productivity indicator that is as vital as physical safety measures and monetary KPIs (Dollard *et al*., 2019). A workforce exposed to persistent psychological stress demonstrates reduced efficiency, increased error rates, and diminished long-term sustainability (Thanem & Elraz, 2022).

Despite growing scholarship on workplace stress and mental health, existing occupational health and safety frameworks remain largely centered on physical hazards and provide limited integration of psychosocial risk assessment within technology-mediated work environments. Furthermore, insufficient attention has been given to how AI-driven management systems simultaneously influence occupational health, safety outcomes, and organizational productivity. Therefore, this study aims to examine key psychosocial risk factors in contemporary workplaces and analyze their impacts on occupational health, safety, and productivity within digitally mediated organizational systems.

It will be contended in the discussion that the health of the psychological infrastructure of an organization is the main factor that defines the resilience of that organization in the context of continuous technological disruption. Understanding these relationships is essential for developing integrated occupational health policies that address both physical and psychological workplace hazards.

By changing the mindset of individual resilience to organizational design, businesses can go beyond the surface-level wellness programs and into a solid structure that ensures the safety of the employee and the bottom line

(Adobor & Kudonoo, 2025). Consequently, integrating psychosocial risk management into occupational health and safety systems is essential for organizational resilience, employee well-being, and sustainable productivity in increasingly automated work environments.
(Corbett, 2025).

2.0. The Theoretical Framework: The Demand-Control-Support Model.

To understand the mechanisms underlying contemporary workplace stress, this study adopts the Job Demand–Control–Support (JDCS) model (Ricciardelli & Carleton, 2022). The Job Demand-Control-Support (JDCS) model was applied in this study. The JDCS model proposes that psychological strain results from the interaction between job demands, employee decision latitude (control), and available social support rather than from job demands alone.

This model is an essential perspective of where organizational design fails the individual in the dynamic digital work environments characterized by algorithmic management and accelerated work processes (Gregory *et al*., 2026). Consequently, the JDCS framework shifts responsibility from individual coping capacity toward structural characteristics of job design and organizational governance.

Radic *et al*. (2020) affirmed that the major usefulness of the JDCS model is that it classifies the roles into four different psychological experiences. We can predict health outcomes by plotting the levels of psychological demands (workload, deadlines, and mental effort) versus the levels of decision latitude (the capacity to control one's tasks and schedule). This structural design takes the emphasis off of personal grit and puts it on the objective design of the job itself (Kim *et al*., 2023).

2.1 The High Strain "Danger Zone

The High Strain job is the most dangerous segment of the JDCS model because it is a position with high demands and low control (Wu *et al*., 2023). This is common in 2026 in jobs where AI is used to track performance with strict quotas, with the human worker having no agency in their working process. Baethge *et al*. (2019) concurred that, in the case of an employee who has excessive time pressure and workload demands but no control over how and when the work is performed, the body is in a constant state of fight or flight, which results in the maximum rates of physical illness and psychological burnout.

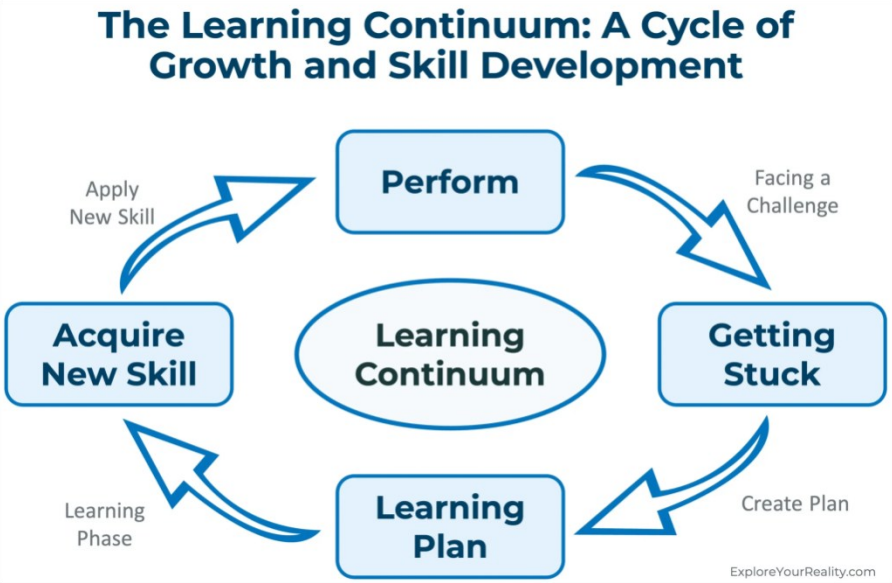
The physiological burden is cumulative because these workers have no outlets to relieve pressure, i.e., no possibility to take a break when necessary or resolve an issue with their intuition (Pearson and Martinez, 2023). Studies continuously associate high-strain jobs with the heightened risks of cardiovascular disease and clinical depression (Harshfield *et al*., 2020). The uncontrollability in this danger zone turns a difficult workload into harmful occupational conditions associated with significant adverse health outcomes.

2.2 The Active Job: Growth and Learning

Conversely, the Active Job is the most optimal case of professional growth and psychological well-being (Kutsyuruba *et al*., 2019). These jobs are characterized by high demands and high control and high support to the worker. In this case, the pressure is a stimulus of positive stress or eustress. The fact that the worker can choose how to address the challenges and what resources to support their choices gives them a sense of mastery and personal development instead of depletion (Jarrahi *et al*., 2020).

Sushereba *et al*. (2021) affirmed that the high-stakes nature of the contemporary digital economy in the context of an Active Job transforms into an environment that promotes

skill development rather than psychological strain. Employees in this quadrant have higher chances of being creative in their problem-solving and are less threatened by technological displacement since they are continually using their agency to acquire new skills. This quadrant demonstrates that high productivity does not necessarily imply sacrificing mental health in the name of empowering the worker, as long as the worker is empowered (Puspitosari *et al*., 2024). This quadrant illustrates how organizational empowerment mechanisms can simultaneously enhance productivity and psychological well-being.



Fig/ 1: The Cycle of Growth: How Learning and Performing Drive Success (Explore Your Reality, 2024).

2.3 The Passive Job: Boredom and Atrophy

Figure 2 illustrates the relationship between trait self-control, work-related boredom, and behavioral outcomes within low-demand occupational environments. As shown in the figure, reduced task engagement and limited decision latitude contribute to psychological disengagement despite the absence of excessive workload pressures. Within the Job Demand–Control–Support (JDCS) framework, this condition represents the Passive Job quadrant, where insufficient stimulation and restricted autonomy interact to produce cognitive stagnation and diminished occupational meaning. The visualization emphasizes that boredom is not merely an individual emotional response but a structurally generated outcome of job design.

Quinlan (2025) described the Passive Job as characterized by low demands and low control. Although these positions may appear as easy-going on the surface, they tend to cause deep boredom, lack of motivation and learned helplessness. These are usually jobs that have been over-computerized in 2026, and the human being is a simple button-pusher with no control of the larger system (Haitsma & Brink, 2026). Thus, insufficient stimulation and autonomy may be as detrimental to occupational well-being as excessive demands. The threat of a Passive Job in the long term is skill atrophy. In the absence of challenges and agency, workers start to lose cognitive and

professional skills, which further exposes them to displacement in the future (Ackerman and Kanfer, 2020). Such a state of being bored may result in loss of identity and purpose, proving that the lack of high demands is not a promise of psychological safety in case control and meaning are also deprived (ÖZSUNGUR, 2020).

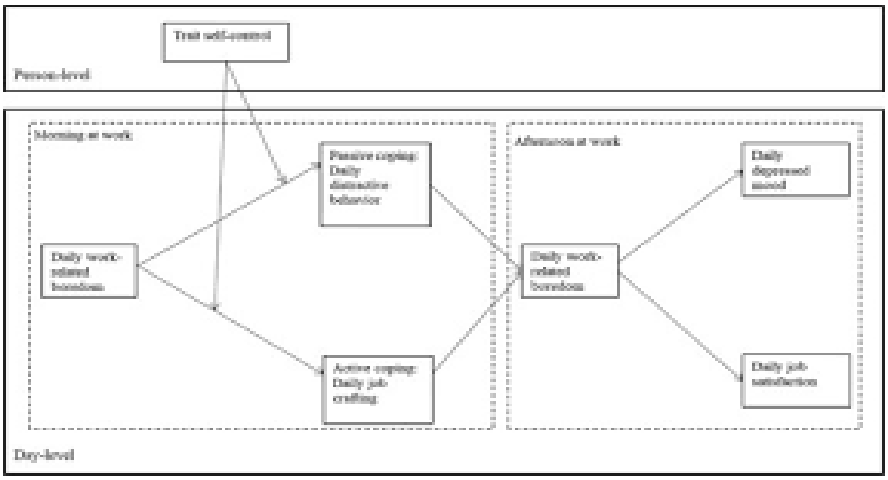


Fig. 2: The role of trait self-control in daily work-related boredom and its outcomes (Harju, *et al.*, 2025).

3.0 Identification of Psychosocial Risk Factors

Based on the JDCS framework and emerging digital workplace literature, key psychosocial risk factors were categorized as shown in Table 1.

Building upon the conceptual relationships illustrated in Figures 1 and 2, this section translates theoretical insights from the JDCS framework into identifiable psychosocial risk categories within contemporary workplaces. Figure 1 demonstrates how empowerment and learning cycles enhance productivity and well-being, whereas Figure 2 highlights the adverse consequences of low engagement and diminished control. Together, these visual models provide the analytical foundation for identifying emerging psychosocial hazards associated with digitally mediated work systems. The following classification, therefore operationalizes these theoretical dynamics into measurable organizational risk factors relevant to Occupational Health and Safety (OHS) practice**.**

Table 1: Identification of Psychosocial Risk Factors

Category	Specific Risk Factor	Impact on Worker
Work Design	Algorithmic Management	Loss of autonomy, "Ghost work" fatigue
Social Context	Digital Isolation	Reduced belonging, weakened team cohesion
Job Security	AI Displacement Anxiety	Chronic cortisol elevation, reduced focus
Work-Life Interface	"Leaky" Boundaries	Burnout, sleep deprivation

The future of occupational health: Anticipating risks in the evolving workplace (Parsakia & Seyed Ali Tabar, 2024).

The division of workplace risks in 2026 shows that the traditional physical stressors are increasingly complemented by structural and digital psychosocial stressors (Point & Butoi, 2025). Algorithms being used to control the pace, not human-controlled, result in the loss of individual control and the development of ghost work burnout, a condition where employees feel like replaceable parts of a machine that they have no control over. Digital isolation only adds to this feeling of reduced interpersonal interaction as remote and AI-enhanced workflows become the norm. The absence of natural human interaction undermines the integrity of the team (Sufi, 2025). The effect is an extreme loss of belonging, with socially dislocated workers who are digitally connected 24/7.

Selvakumar *et al*. (2026) discussed the ways in which the psychological toll goes deep into the Job Security and Work-Life Interface categories, with the threats being existential and physiological. AI displacement anxiety is a chronic background stressor that maintains employees in a state of chronic cortisol elevation, which affects the ability to focus high-level cognitive attention and make decisions (Matthews *et al*., 2025). This is not merely a future concern, but a constant biological charge on the present performance of the worker. Combined with the so-called leaky boundaries such as the inability to disconnect because of continuous digital notifications and the constant expectation to be available, this anxiety leads to a disastrous loop of sleep deprivation and burnout (Abera, 2023). Finally, these aspects prove that contemporary psychosocial hazards are interdependent and self-promoting (Nikolic, 2025). A socially isolated (Social Context) and micromanaged by an algorithm (Work Design) worker is less likely to feel confident about his/her future position (Job Security), which makes him/her more likely to overwork during personal time to demonstrate his/her value (Work-Life Interface) (Parker and Grote, 2022). To tackle these risks, it is necessary not only to go beyond personal coping strategies but also to redesign the system to restore human agency and create concrete digital boundaries. In the absence of these structural protection mechanisms, the same technological tools that are meant to propel efficiency will propel a crisis of human exhaustion (Albert, 2020). These findings highlight the systemic and interconnected nature of psychosocial risks within digitally mediated work environments.

4. 0 Influence on Occupational Health and Safety (OHS)

The interaction between psychosocial strain and physical safety outcomes can be conceptualized through a feedback loop model linking cognitive stress and occupational risk exposure (Hlatywayo, 2025). The first step of this cycle is an increased Cognitive Load, in which the amount of information and the constant presence of the modern job overwhelm the processing ability of the brain (Diagnoses, 2021). In case a person is exposed to high levels of psychological stress, he or she undergoes a process called attentional narrowing. This mental limitation compels the brain to concentrate on the most urgent task with a high level of pressure, which in effect causes the worker to be blind to the dangers of the environment (e Zehra & Malik, 2025).

This decline in situational awareness is one of the main causes of incidents in the workplace (Wang *et al*., 2021). An employee with high levels of psychological distress is three times more likely to be involved in an accident due to the fact that their mental capacities are fully occupied with fulfilling digital quotas and not watching what is going on around them (Kamardeen & Hasan, 2023). This absence of available cognitive resources, in high-stakes settings, such as automated warehouses or

tech-integrated construction sites, can result in the fact that a warning light or a small mechanical noise being entirely ignored until a physical failure happens (Lee, 2022).

When the pressure to perform grows, employees tend to use Safety Shortcuts in order to achieve excessively demanding performance targets (KPIs). In such cases, when the algorithmic management systems have speed as the ultimate goal, the human factor will inevitably find a way out of punishment by taking the path of least resistance (Benlian *et al*., 2022). It leads to the neglect of the essential safety measures, including not checking equipment or not using appropriate ergonomic aids, in the belief that this time saved is required to keep the job (Sarcevic *et al*., 2025). These shortcuts give the illusion of efficiency that conceals an increasing structural weakness. The normalization of deviance, in which the neglect of safety measures becomes a normal practice, preconditions the failure that is destined to happen in the long run (Wright *et al*., 2021). The OHS gap in this case is not the absence of training, but rather an organizational culture that implicitly encourages risk-taking in exchange with high-velocity production (Zekos, 2021). In this regard, psychosocial pressure is a direct trigger to physical danger and transforms a wellness problem into a life-threatening safety risk.

The last step of this cycle is the physical manifestation of chronic psychological strain. Exposure to psychosocial risks in the long term does not stay in the head; it is converted into psychosomatic symptoms, which undermine physical integrity (Agorastos & Chrousos, 2022). Chronic stress causes the continuous muscle tension that often appears as debilitating musculoskeletal pain in the neck, back, and shoulders (Hodges and Bourgeois,2023). Moreover, the regular stimulation of the stress system causes hypertension and cardiovascular stress, which may cause an acute health emergency during working hours (Vaccarino and Bremner, 2024). Such physical symptoms also worsen the functioning capabilities of a worker (Awada *et al*., 2021). An employee with chronic pain or fatigue has slower response times and less coordination, which is a second level of risk. This is the full circle of the feedback: the state of the mind leads to physical symptoms, and these physical symptoms make one more likely to get into an accident (Tasdelen & Özpınar, 2020). Having identified these psychosomatic connections, OHS professionals can regard psychosocial health as a predictor of physical safety, instead of an independent human resources issue (López-González *et al*., 2022). Therefore, psychosocial risk management should be integrated into occupational safety frameworks as a preventive safety strategy rather than treated solely as an employee wellbeing initiative.

5.0 Productivity and Economic Implications

The economic impact of psychosocial risks can be conceptualized using an iceberg model, distinguishing visible and hidden productivity costs.

Although the majority of organizations put emphasis on the quantifiable expenses that are visible above the water, they are just a small part of the overall monetary loss (Leonard *et al*., 2024). Companies that do not consider the enormous, submerged variables of cognitive disengagement usually undervalue the actual price of a psychologically burdened labor force and develop an incorrect budgetary and operational approach (Fredrick and Becker, 2023).

The first and most visible type of productivity loss is absenteeism, as it is the one that can be easily measured at the tip of the iceberg (Dobson *et al*., 2020). These are the days that are lost because employees cannot work physically due to stress-related leaves,

burnouts or mental health crises. The direct cost of absenteeism in the competitive 2026 labour market is high in terms of sick pay, cost of temporary replacements, and administrative costs of handling leave (Daharwal & Mishra, 2026). Nevertheless, due to the fact that these numbers are easily seen in a balance sheet, they tend to get the majority of the attention of the management, although they are only a symptom of a larger organizational problem.

Fig 3: Occupational Health and Safety Challenges In Developing Countries: Gaps, Opportunities and Policy Implications (Author TBD 2025)

The more perilous phenomenon is presenteeism, which explains the enormous percentage of the iceberg (Usseli & Yasin, 2021). This is where employees are present at work or at their computer workstations but cognitively disengaged, which is commonly known as quiet quitting. Working in this mode, employees perform just enough not to be fired, without the creativity, initiative, and ability to solve problems that are necessary in a high-tech economy. Behnassi *et al*. (2024) established that this loss under wraps is estimated to cost organizations much more than absenteeism does because it compromises the quality of output and kills innovation within the organization.

According to Pescaroli *et al*., (2023), the economic impact of this submerged loss in the long run is a loss of organizational resilience. When the percentage of the workforce is in the state of cognitive withdrawal, the possibility of the company to adapt to the technological changes is crippled (Saka *et al*., 2025). In a world like in 2026 where agility is the main currency the presenteeism tax is a silent anchor, making all processes and projects sluggish. To be economically viable, an organization has to dig below the waterline and respond to the psychosocial climate that contributes to this invisible drainage on human capital (Nkomo-Asare & Adanlawo, 2025).

Addressing psychosocial risks therefore represents both a health intervention and a strategic economic investment.

6. 0 Proposed Mitigation Framework: The 2026 Resilience Model

Transitioning from reactive stress management toward proactive organizational resilience requires systemic workplace redesign. Gruenewald and Mueller (2025). This model goes beyond focusing solely on individual coping strategies, but focuses on Organizational Resiliency using a systemic change. Through a three-tiered prevention approach, businesses will be able to shift their focus on treating the effects of stress instead of fundamentally redesigning the environment that makes it (Calvet *et al*., 2021).

The framework adopts a three-level prevention strategy comprising primary, secondary, and tertiary organizational interventions. According to Menzies *et al*. (2021), the primary level, the most effective, is Primary

Prevention, which aims at redesigning at the Source. Instead of providing a yoga session to address the stress of algorithmic management, Primary Prevention means redesigning algorithmic management systems to incorporate human oversight and autonomy safeguards The organization can establish a base of structural health by alleviating the stressors before they arrive at the employee (Woods *et al*., 2023). This proactive design makes productivity based on sustainable practices instead of exploitation of human endurance that is temporary (Bag *et al*., 2025).

Secondary Prevention is the organizational safety net, which is aimed at early detection and intervention by means of specialized training (Gore *et al*., 2020). This includes providing managers with the so-called Mental Health First Aid skills in 2026 so that they can identify the initial symptoms of cognitive load or digital isolation. This level does not involve managing managers as therapists, but rather establishing a Psychosocial Safety Climate in which stressors may be recognized and reduced before they become chronic disease. Such assistance fills the gap between the requirements of the job and the short-term ability of the employee to fulfil it (Mazumdar *et al*., 2021).

The last level is Tertiary Prevention that is concerned with the fact that even the most successful systems can sometimes fail (Baumann & Ylinen, 2020). This is accompanied by intensive Return-to-Work (RTW) programs that are specifically made to help individuals who have undergone burnout or psychological injury. In 2026, the effective RTW program will not be a mere welcome-back email, but rather a systematic, gradual reintegration that changes the environment in which the worker operates to ensure that they will not be exposed to the same stressor again. Korhonen and Komulainen (2023) said that when burnout recovery is approached with the same clinical and professional care as a physical injury, organizations safeguard their most important resource, their human capital.

Finally, the 2026 Resilience Model suggests that the amount of pressure its workers can handle is not what makes a company strong, but rather the effectiveness of the systems that help the company to stop the pressure before it turns into a toxic one. The shift to organizational resilience instead of individual coping generates a self-sustaining loop, in which the aspects of safety, mental health, and economic output are synchronized (Chandler, 2020). This paradigm shift is the means of long-term sustainability in a landscape characterized by a swift technological displacement and ever-changing digitization (Buchner *et al*., 2022).

7. 0 Conclusion and Recommendations

The evolving workplace landscape demonstrates that traditional occupational health frameworks are no longer sufficient to safeguard the contemporary workforce. The emergence of continuous digital connectivity and algorithmic management has introduced psychosocial risks that extend beyond conventional physical safety concerns. Consequently, organizations must move beyond voluntary wellness initiatives toward formal regulatory and organizational mechanisms, including the adoption of “Right to Disconnect” policies. Such measures represent a structural necessity for preventing blurred work–life boundaries that contribute to chronic stress responses, sleep disruption, and sustained cognitive fatigue. Establishing clear limits on after-hours work communication enables employees to achieve adequate psychological recovery, thereby supporting sustained performance, decision-making capacity, and long-term productivity. Collectively, these interventions reposition psychosocial protection as a core component of organizational risk management rather than an optional employee benefit.

Furthermore, the integration of psychosocial indicators into routine Occupational Health and

Safety (OHS) audits represents a critical strategic direction for modern workplace governance. Just as traditional safety inspections evaluate physical hazards such as air quality or equipment safety, contemporary OHS systems must incorporate measurable indicators, including cognitive load, worker autonomy, and social connectedness. This evidence-based approach transforms mental health from a subjective human resource concern into a measurable safety and productivity parameter. The present study contributes to occupational health scholarship by conceptualizing psychosocial risks as quantifiable organizational variables directly linked to safety performance and productivity outcomes. Addressing psychosocial hazards with the same regulatory rigour applied to physical risks enables organizations to detect early signs of productivity decline and prevent systemic burnout and workplace accidents.

In conclusion, as artificial intelligence increasingly shapes global productivity systems, human cognitive capacity remains both the most valuable and most vulnerable organizational resource. While automated systems process data with unprecedented speed, human judgment, contextual understanding, and creative problem-solving remain indispensable to effective and adaptive work environments. Protecting this cognitive infrastructure is therefore not an act of corporate philanthropy but a strategic requirement for economic resilience in technologically dynamic societies. Future research should focus on developing standardized metrics for assessing cognitive load, autonomy, and digital work intensity to support evidence-based psychosocial risk regulation. By embedding psychosocial safety within occupational health frameworks, organizations can cultivate resilient, innovative, and sustainable workforces capable of adapting to continuous technological transformation.

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Authors' Contribution

Oluwaseun Ibuife Oluwaniyi conceptualized the study, developed the theoretical framework, conducted the literature analysis, and drafted the manuscript. Abiodun Adebola Omoike contributed to methodology design, critical review of psychosocial risk classifications, interpretation of occupational health implications, and manuscript editing. Both authors jointly refined the analysis, approved the final version, and contributed equally to the intellectual content.