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Article

Configurational dynamics and structural mediators of psychosocial attrition in contemporary labor ecosystems

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Abstract: Within the volatile landscape of the Fourth Industrial Revolution, pervasive occupational precarity has emerged as a critical systemic stressor, catalyzed by the rapid onset of autonomous systems and macro-economic restructuring. While the deleterious effects on physiological and psychological well-being are documented, the underlying mechanisms and nonlinear thresholds through which insecurity erodes institutional vitality remain theoretically fragmented. Using a diverse, multi-sectoral cohort (N = 874), this study employs a sophisticated methodological nexus, integrating Structural Equation Modelling (SEM), fuzzy set Qualitative Comparative Analysis (fsQCA), Necessary Condition Analysis (NCA), and Multilevel Modelling (MLM) to map the multidimensional architecture of psychosocial attrition. Our findings establish that job instability functions as a potent driver of direct and mediated declines in psychosomatic equilibrium, exacerbated by fractured communication channels and heightened organizational threat perceptions. Specifically, the application of NCA identifies precise critical insecurity thresholds (3.1–3.3) that serve as tipping points for health degradation, while fsQCA reveals diverse equifinal pathways to employee vulnerability. By synthesizing these advanced analytical frameworks, this research positions job insecurity not merely as a localized concern but as a fundamental structural health hazard. Consequently, we advocate for the institutionalization of proactive monitoring infrastructures and high-fidelity early warning systems to safeguard the long-term sustainability of human capital.

Keywords: job insecurity; health outcomes; configurational; organizational threats; psychosocial work conditions; multilevel modelling (MLM); structural pathways

1. Introduction

Job insecurity, often defined as employees' perception that the continuity of their employment is under threat (Greenhalgh and Rosenblatt, 1984), is not a new social fact. Marx's theorization of the "reserve army of labour" captured the structural logic by which unemployment and underemployment serve as disciplinary forces, regulating the expectations and behaviours of those who remain employed, yet contemporary job insecurity is unfolding under conditions distinct in magnitude, scope, and institutional architecture. What was once a cyclical phenomenon tied to market downturns has crystallized into a persistent structural feature of neoliberal political economy (Kalleberg, 2018; Standing, 2011). The transformation of the employment relationship is reverberating across the labour market, affecting groups that differ markedly in skill, status, and occupational history. Workers with limited skills and precarious labour

market positions have long borne the brunt of economic insecurity, yet even "core" employees, those traditionally protected by stable contracts, seniority systems, and institutionalized expectations of mutual obligation, now confront forms of uncertainty once thought reserved for the margins of the workforce (Cui et al., 2026). The diffusion of insecurity across occupational strata emphasises the degree to which contemporary restructuring has unsettled the normative foundations of employment relations.

Growing empirical evidence reflects this widespread unease. In a nationally representative survey, job insecurity emerged as a leading dimension of personal concern, ranking above numerous other economic and social issues (Smith et al., 2002). One third of employed persons in the manufacturing sector reported believing they could lose their job within two years, while approximately 37% expressed little confidence in their ability to secure comparable employment within six months should displacement occur. These figures illustrate not only the breadth of employment-related anxiety but also the erosion of confidence in the labour market's capacity to provide pathways of occupational recovery (Begum, 2022). Despite this heightened salience, scholarly research on job insecurity remains comparatively underdeveloped, while the health consequences of unemployment have been examined exhaustively; the literature on job insecurity, particularly its effects on physical health and health-related behaviours, lags behind in both conceptual and empirical sophistication. Existing work provides reasonably consistent evidence that job insecurity elevates psychological distress, increases depressive symptoms, and undermines overall mental well-being (Ferrie, 2002; Russo and Terraneo, 2020; Gallie et al., 2017; Green et al., 2022). However, far less is known about its implications for cardiovascular health, sleep quality, immune functioning, or behavioural adaptations such as substance use and medical care avoidance.

Moreover, the literature has only minimally engaged questions of inequality. Little attention has been paid to whether the health consequences of job insecurity are stratified by gender, race, age, education, or other axes of social differentiation (Cheng and Chan, 2008; Lee et al., 2018; Richter and Näswall, 2019; Graham et al., 2024; Darvishmotevali, 2025). As a result, scholars have only a partial understanding of how structurally entrenched disparities in resources, opportunities, and power mediate workers' vulnerability to the harms of insecurity (Bambra, 2024). Similarly, the psychosocial and behavioural processes that link job insecurity to health outcomes, such as chronic stress physiology, coping behaviours, and social support erosion remain incompletely theorized (Richter and Näswall, 2019). The neglect of these structural dimensions has constrained scholarly inquiry, reinforcing an overly individualized view of job insecurity as a purely subjective psychological state rather than a socially embedded phenomenon produced by macroeconomic forces, institutional degradation, and shifting norms of managerial control. This narrow conceptualization limits the capacity of research to contribute to broader efforts aimed at resisting labour market transformations that imperil worker wellbeing.

This article seeks to address these gaps by examining the relationship between job insecurity and multiple indicators of health, including self-rated health, mental health, and health-related behaviours. We begin by reviewing dominant conceptual

approaches to job insecurity and assessing the strengths and limitations of existing empirical research. We then develop a structural model in which job insecurity operates as a fundamental psychosocial risk factor, extending its influence across psychological, behavioral, and health-related domains through an intricate network of structural forces, multilevel dynamics, and configurational mechanisms. This model traces the pathways from job insecurity to employee health through stress, perceived control, and human agency. This framework is empirically tested using data from an industry survey, which offers a unique opportunity to explore how insecurity manifests across diverse socioeconomic groups. The findings are interpreted in light of broader debates on the social organization of work, illustrating how shifting labor market conditions reconfigure not only material outcomes but also the psychosocial terrain through which individuals navigate their working lives.

2. Literature review

Given the centrality of three constructs in the title of this study, it is necessary to define them with precision.

Configurational dynamics refers to the patterned interaction of multiple psychosocial and structural conditions that jointly produce outcomes, rather than assuming linear or isolated effects. In this study, configurational dynamics denotes the combined and potentially equifinal influence of job insecurity, communication climate, conflict processes, and organizational threat perceptions on employee health. This logic is empirically operationalized through fuzzy set Qualitative Comparative Analysis (fsQCA) and Necessary Condition Analysis (NCA), which allow identification of multiple causal pathways and threshold conditions.

Structural mediators are defined as organizationally embedded mechanisms that transmit the effects of macro or meso-level conditions to individual-level outcomes. In the present framework, mastery, self-esteem, open communication, and perceived organizational threat function as structural mediators because they are shaped by institutional arrangements and work design, yet operate proximally in the pathway between insecurity and health.

Psychosocial attrition refers to the gradual erosion of psychological resources, perceived control, interpersonal trust, and health stability resulting from sustained exposure to employment insecurity. Unlike acute stress responses, psychosocial attrition captures cumulative depletion across cognitive, emotional, and behavioral domains.

By explicitly defining these constructs, the study situates its contribution within structural labour process theory, stress process sociology, and configurational methodology.

The sociology of work has long treated the governance and control of labour as one of its central preoccupations, across classical and contemporary scholarship. Analysts have shown that capitalist labour control rarely manifests as overt coercion alone; rather, it is woven into the daily fabric of work through hierarchies of command, subtle disciplinary cues, and the omnipresent reminder that the stability of employment is, at best, conditional (McDonough, 2000). These mechanisms, visible and invisible,

structural and psychological, shape how workers understand their place within the production process and, crucially, how easily they may be replaced (Ashforth et al., 2025; Hatton, 2017). While the early foundations of industrial sociology centred predominantly on control over the labour process itself to regulate effort, reduce variability, and secure productivity, contemporary transformations in global capitalism reveal another, increasingly consequential locus of control, the management of job insecurity as a durable institutional condition (Kim et al., 2024). This shift marks not merely an economic change but an epistemic one, altering how employment is imagined, organized, and legitimized in late-modern societies. However, the contemporary literature on job insecurity and health can be grouped into two broad paradigms, differentiated by whether job insecurity is conceptualized primarily as (a) a subjective perception or (b) a concrete, externally verifiable event.

2.1. Job insecurity as a perceptual experience

The first approach understands job insecurity fundamentally as a psychological state grounded in workers' subjective evaluations of potential threats to job continuity. Jacobsen et al.'s (2022) influential conceptualization, defining insecurity as a perceptual phenomenon rooted entirely in individual appraisal, remains emblematic of this tradition (Jacobsen et al., 2022). Measures within this paradigm typically assess employees' expectations of job loss or concern about employment stability (Dekker and Schaufeli, 1995). Some instruments focus solely on affective reactions, such as worry, fear, or emotional distress associated with potential retrenchment (Hartley and Knell, 2022). Other studies augment subjective reports with contextual information, such as indicators of sectoral growth or contraction, to lend "objective" grounding to perceptual measures (Burgard and Wang, 2026). However, what unifies this conceptual tradition is the absence of direct threats to respondents' employment. Workers may operate within climates of heightened uncertainty driven by organizational restructuring, weak economic performance, or rumours of downsizing, but no explicit layoffs or closures have been announced. Job insecurity, therefore, functions as a form of anticipatory stress generated by ambient organizational conditions rather than discrete managerial decisions (Collins, 2025; Alibegovic, 2025).

2.2. Job insecurity as a concrete and imminent event

A second research stream conceptualizes job insecurity as an externally observable and imminent threat, typically tied to formal announcements of layoffs, plant closures, or organizational restructuring. These studies frequently employ longitudinal designs, following workers from the first rumours of change through the announcement of layoffs, the experience of job loss, and when possible, the post-displacement period (Ferrie, 2002; Wood et al., 2020). Such designs strengthen causal inference by distinguishing workers whose jobs are at risk from those operating in the same environment but not personally targeted for displacement. By comparing threatened and non-threatened groups, these studies aim to isolate the distinctive health effects of concrete insecurity. Findings often reveal a gradient of harm; workers experiencing actual threats exhibit higher levels of psychological distress, cardiovascular risk, and

behavioural deterioration than those experiencing only general uncertainty (Virtanen et al., 2011).

In studies adopting the "concrete" approach to job insecurity, respondents are seldom asked directly about their subjective assessments of employment threat. Instead, insecurity is inferred from their objective circumstances; respondents who have already lost their jobs, or who anticipate imminent displacement based on organizational announcements, are assumed to have experienced job insecurity by virtue of their exposure to threatened job continuity.

This approach treats insecurity not as an internal psychological state but as a structural condition embedded in the employment context. Across both perceptual and concrete approaches, the relationship between job insecurity and psychological well-being remains one of the most robust empirical findings in the field.

Mental health tends to be inversely associated with job insecurity (Burchell, 2023; Dooley et al., 1987), although there is limited evidence suggesting that these effects may attenuate under specific temporal or contextual conditions (Dekker and Schaufeli, 1995). However, the literature becomes considerably more ambiguous when examining physical health outcomes and health-related behaviours (Ferrie, 1998).

Research exploring behavioural correlates has yielded inconsistent results. Steffy and Laker (1991) reported that job insecurity was positively related to alcohol consumption and the use of alcohol as a coping mechanism. However, these findings were not replicated in the Whitehall II study, where researchers comparing public sector employees facing transfer to private employers found no significant differences between threatened and non-threatened workers in recent alcohol use or exercise patterns (Ferrie, 2002). Intriguingly, the same study reported a relative decline in smoking prevalence among employees exposed to insecurity, a paradoxical pattern that raises questions about behavioural adaptation, coping strategies, and the sociocultural framing of "healthy" responses to stress.

Physical health effects display similar complexity. Among male workers facing organizational change, exposure to job insecurity has been associated with poorer self-rated health, higher prevalence of longstanding illness, disrupted sleep, and increased somatic complaints (Stockholm University, 2018). These differences appeared less pronounced among women, suggesting potential gendered variations in stress appraisal, coping, or the distribution of domestic and caregiving burdens. However, at least two other longitudinal studies employing clinical indicators, self-reported symptoms, and hospital admission records found either no health differences between insecure and secure workers or initial disparities that diminished as the study progressed (Iversen et al., 1989; Graham et al., 2024). These contradictory findings complicate attempts to establish a clear causal relationship between job insecurity and physical morbidity, although this body of research has substantially enriched our understanding of how economic turbulence reverberates through workers' bodies and minds. Two major limitations remain.

First, the prevailing conceptualization of job insecurity as an individual perception has reinforced a research agenda overly concentrated on psychological appraisal. By comparing "insecure" workers with broad reference groups of "all other workers",

many studies overlook the fact that perceptions of insecurity and its consequences are influenced by socially structured inequalities such as class position, gender, ethnicity, age, and access to economic and social resources. While extant models do not deny these structural dimensions, their focus on subjective evaluation has hindered systematic investigation of how insecurity is differentially produced, experienced, and endured across diverse social groups.

Second, the psychological emphasis has constrained theoretical development by failing to capture the organizational and institutional forces that generate insecurity. Treating job insecurity primarily as a feeling obscures its roots in broader transformations of work organization, labour markets, and managerial ideologies. Consequently, scholarly contributions remain fragmented and insufficiently attuned to the political-economic conditions that shape workers' exposure to insecurity and their capacity to respond to it.

Conceptualizing job insecurity as a structural condition of work offers a more comprehensive alternative. Karasek et al.'s (2025) influential model of the psychosocial work environment exemplifies this shift by linking health not to workers' internal capacities but to the intrinsic characteristics of the job itself. Under this framework, dimensions such as job control, skill discretion, task complexity, work pace, and, importantly, job insecurity are understood as objective features of the work environment that shape health outcomes through patterned exposure to psychosocial stressors. Extensive empirical support for Karasek et al.'s demand, control model exists, yet relatively few adaptations explicitly incorporate job insecurity as a core component of the work environment (Schnall et al., 1994; Everson, 1996; Karasek et al., 2025).

This omission is increasingly untenable given the centrality of insecurity to contemporary labour markets. Integrating job insecurity into structural models of work organization promises a more distinct understanding of its health effects, one that accounts for both individual experience and the institutional arrangements that systematically produce vulnerability. Such an approach not only enriches theoretical precision but also strengthens the foundation for policy interventions designed to mitigate the health consequences of economic restructuring.

Whereas job insecurity undermines employees' willingness to engage openly, navigate conflicts constructively, and perceive the organization as a secure environment, as workplaces become increasingly dynamic and competitive, understanding these mechanisms is crucial for both theoretical development and practical intervention (Rugulies, 2019). Whilst job insecurity has been consistently linked to diminished openness in organizational communication, insecure employees tend to withhold information, avoid feedback seeking behaviours, and engage in impression management as a protective mechanism (Dragano et al., 2024; Gupta et al., 2018). This behaviour disrupts vertical and horizontal communication channels, potentially impairing knowledge sharing and collaboration (Russo and Terraneo, 2020).

Conflict resolution is highly contingent on trust and perceived stability within the workplace. Employees experiencing high job insecurity demonstrate lower tolerance

for constructive conflict and are more prone to avoidant or aggressive resolution strategies (Ashforth et al., 2025). Psychological strain induced by insecurity increases defensive behaviours, thereby magnifying interpersonal friction and impeding cooperative problem-solving (Milner et al., 2017). Perceived organizational threats encompass employee beliefs regarding the potential harm to their employment, career progression, and organizational justice.

Empirical evidence indicates that heightened job insecurity amplifies perceptions of organizational threat, leading to increased turnover intentions, reduced organizational commitment, and disengagement (Cheng and Chan, 2008).

2.3. Conceptual framework

The framework (**Figure 1**) builds upon established stress process theory while expanding it through contemporary organizational science, showing how insecurity acts not merely as an episodic stressor but as a chronic, systemic condition embedded in modern workplaces. At the heart of the model lies job insecurity, positioned as the central mechanism through which upstream personal resources and downstream health outcomes are dynamically linked.

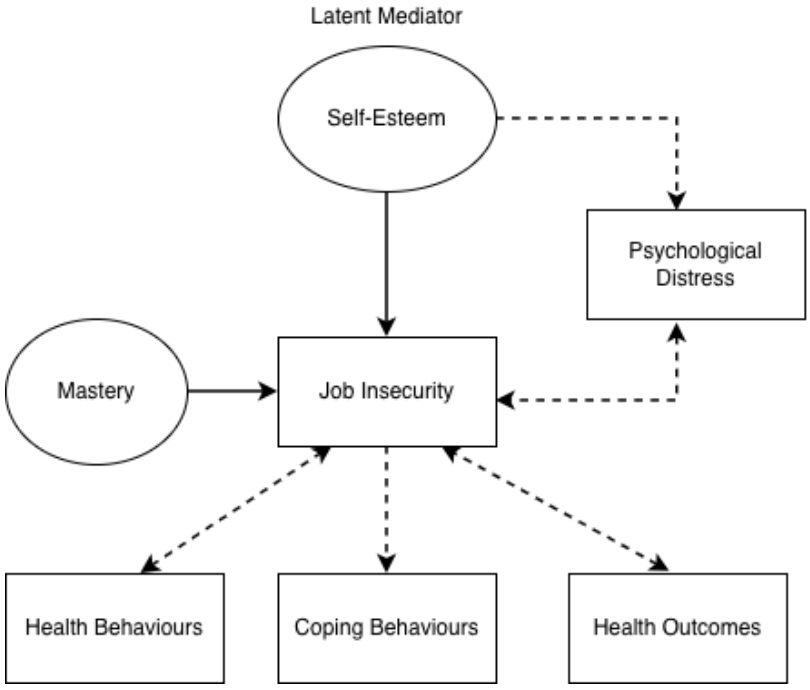

Figure 1. Conceptual framework model.

Consistent with Pearlin's stress process tradition, two personal resources, mastery and self-esteem, operate as primary antecedents that shape employees' vulnerability or resilience when confronted with threats to employment continuity. Mastery, representing a sense of personal control and environmental efficacy, exerts a stabilizing influence by dampening insecurity perceptions (Pearlin et al., 1981). Self-esteem is conceptualized as a latent mediating construct that translates the perceived threat of job loss into internalized experiences of self-doubt, diminished personal value, and heightened vulnerability to strain. Through this mechanism, the psychological meaning attached to employment insecurity becomes embedded in the individual's

self-evaluation system. These processes converge on psychological distress, which occupies a central mediating role in occupational health research.

Distress functions both as a consequence of job insecurity and as a mechanism that amplifies its adverse effects. The directional associations are reciprocal. Employment insecurity increases distress, while sustained distress, through cognitive rumination and emotional exhaustion, intensifies perceptions of precariousness. This feedback loop reinforces the subjective experience of insecurity. From this psychological core, the framework extends toward health-related behaviours, coping responses, and longer term health outcomes. These represent the behavioural and physiological endpoints of prolonged exposure to insecurity.

Insecurity-induced distress may encourage maladaptive coping strategies, including withdrawal, reduced engagement, and neglect of health-promoting activities. At the same time, it may provoke hypervigilance, overcommitment, and presenteeism, patterns that impose cumulative physiological strain. These behavioural responses illustrate a configurational logic. The harmful consequences of job insecurity rarely arise from a single pathway. Rather, they emerge from interacting psychological and behavioural processes that reinforce one another over time.

The model also incorporates a multilevel perspective. Job insecurity is not treated solely as an individual perception but as a phenomenon shaped by structural, organizational, and industry level forces. Although these contextual influences are not visually depicted in the base diagram, the framework situates insecurity within broader socio-economic conditions, including technological change, organizational restructuring, and the expansion of contingent employment arrangements. Individual-level processes, therefore, operate within nested systems of organizational climate and labour market volatility.

This multilevel orientation aligns with contemporary scholarship that conceptualizes psychosocial risks as structurally conditioned rather than purely subjective interpretations. Furthermore, the framework supports configurational theorizing. Different constellations of mastery, self-esteem, distress, and behavioural adaptation may generate multiple pathways toward adverse health outcomes. Such an approach resonates with complexity-informed perspectives and qualitative comparative methods, which recognize that the consequences of job insecurity are neither linear nor uniform across employees.

Taken together, the framework provides a theoretically grounded and empirically testable model for examining how job insecurity permeates employees' psychological processes and behavioural patterns, ultimately producing layered and cumulative harm.

3. Materials and methodology

A multiwave, multimethod quantitative design was implemented to examine the structural, psychological, and health related pathways linking job insecurity to employee outcomes. The design integrates longitudinal survey measurement, latent variable modelling, causal mediation analysis, and multilevel estimation. This strategy enables assessment of temporal ordering, reciprocal dynamics, indirect effects, and heterogeneity across social positions and work environments. By incorporating

repeated measurement and dynamic structural modelling, the study moves beyond cross-sectional inference and aligns with contemporary stress process and labour process perspectives.

3.1. Data sources and sampling

Primary data were collected across three survey waves from employees in eleven manufacturing industries. To enhance sectoral variation, the sampling frame also included organizations from the services, information technology, and healthcare sectors. National labour market indicators from official statistical sources were incorporated to contextualize organizational-level exposure to macroeconomic volatility.

The final analytic sample comprised 874 employees. Stratified random sampling was applied to ensure representation across hierarchical levels, departments, age groups, and tenure categories. The sample comprised 52% male and 48% female, with a mean age of 36.4 years (SD = 8.2) and a mean organizational tenure of 6.8 years (SD = 4.1). Respondents were employed adults aged 20 to 60 at baseline and followed across subsequent waves.

Missing data were addressed using multiple imputation with chained equations, preserving parameter variability across imputations. Sampling design effects were incorporated through replicate weights. This procedure reduces bias under item nonresponse and strengthens population level inference. The resulting dataset captures substantial heterogeneity in perceived insecurity, communication practices, conflict dynamics, and health outcomes across contemporary workplaces. All constructs were measured using validated multi-item instruments anchored on a five point Likert scale ranging from 1 strongly disagree to 5 strongly agree. Job insecurity was assessed using the five-item scale developed by De Witte et al. (2025), demonstrating strong internal consistency in the present sample (Cronbach's alpha 0.89).

Open communication was measured using a six item transparency and information sharing scale (alpha = 0.91). Conflict resolution was assessed through a six item instrument capturing constructive behavioural and perceptual responses (alpha = 0.87). Perceived organizational threat was measured using a five item scale reflecting systemic and environmental vulnerability (alpha = 0.88). Employee health was operationalized as a multidimensional construct encompassing mental, physical, and psychosomatic symptoms across twelve items (alpha = 0.92). Across all measures, internal consistency coefficients exceeded recommended thresholds, indicating satisfactory psychometric performance.

3.2. Measurement strategy

All primary constructs were specified as latent variables and validated using Confirmatory Factor Analysis. Model fit was evaluated using chi-square (χ^2), SRMR (Standardized Root Mean Square Residual), RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), and TLI (Tucker-Lewis Index) indices. Factor loadings met conventional criteria of 0.60 or higher. Residual covariances were constrained except where theoretically justified.

Health outcomes were modelled as a multidimensional latent response system. General and physical health indicators were treated as ordinal latent variables. Psychological distress was assessed using the Composite International Diagnostic Interview and specified as a second order latent construct. Cross-wave measurement invariance testing supported metric equivalence over time.

Job insecurity was specified as a continuous latent construct integrating cognitive expectations of job loss and affective threat appraisal. Psychological mediators, mastery and self-esteem, were modelled as time-varying latent variables with internal reliabilities ranging from 0.75 to 0.85. Variables were mean-centered to facilitate mediation estimation and reduce multicollinearity in interaction terms.

Social position covariates included age, education, inflation-adjusted income, gender, marital status, and occupational class. Work environment characteristics included latent workplace social support derived from the Job Content Questionnaire (JCQ), as well as continuous measures of job demands, decision latitude, and physical workload. Job strain was retained in both continuous and categorical specifications to preserve comparability with prior literature.

3.3. Analytical framework

Longitudinal structural equation modelling with cross-lagged panel specifications was used to estimate time-ordered, reciprocal, indirect, and moderated effects. Robust Huber White estimators were applied to account for non normality and complex sampling structure.

Causal mediation was conducted within the counterfactual framework proposed by Imai et al. (2011), allowing decomposition of total effects into natural direct and natural indirect components. To address time-varying confounding, inverse probability of treatment weighting was implemented within marginal structural models. This approach strengthens causal interpretation under observed confounder adjustment (Imai et al., 2011). Moderation analyses examined effect heterogeneity across social structural position and workplace conditions through interaction terms embedded within both structural equation and marginal structural models.

Robustness checks included fixed effects estimation to control for time invariant unobserved heterogeneity, random intercept cross-lagged panel models to separate within and between-person variance, Bayesian structural equation modelling under weak indicator conditions, and sensitivity analysis using E-values and Rosenbaum bounds to assess potential unmeasured confounding. Alternative operationalizations of job insecurity, including categorical thresholds and segmented regression forms, were tested to evaluate specification stability.

3.4. Common method bias controls

Procedural remedies included temporal separation of predictors, mediators, and outcomes; construct and psychological separation in the survey design; neutral instructions; and confidentiality assurances. Behavioral indicators (medication use, alcohol consumption) were cross-validated where feasible. Statistical CMB (Common Method Bias) diagnostics included CFA (Confirmatory Factor Analysis)

marker-variable models, Unmeasured Latent Method Factor models, and single-factor tests. CMB was considered negligible when ΔCFI (Change in Comparative Fit Index) < 0.01, method-factor loadings < 0.25, and single-factor models showed poor fit. Variance Inflation Factors (VIF) < 3.0 confirmed the absence of problematic collinearity.

The incorporation of comprehensive common-method bias controls, including ex-ante procedural safeguards and ex-post latent-method diagnostics, further fortifies the credibility of the findings. In concert, these methodological pillars produce a statistically disciplined and theoretically coherent platform for understanding how insecurity penetrates psychological mediators, reshapes patterns of communication and conflict, and ultimately deteriorates employee health. This architecture does more than test relationships it maps the structural, temporal, and psychological mechanics through which insecurity takes hold, offering a blueprint for scholars and practitioners determined to confront this escalating organizational hazard with clarity rather than conjecture.

The integrated methodological architecture, combining longitudinal SEM, counterfactual mediation, multilevel moderation, Bayesian diagnostics, and comprehensive CMB controls, provides a rigorous empirical foundation for analyzing how job insecurity unfolds as a dynamic psychosocial stressor shaping communication, psychological resources, and multidimensional health outcomes. All analyses adhere to contemporary data governance and ethical standards.

4. Results

4.1. Descriptive statistics

Initial descriptive analyses (**Table 1**) provide an empirical overview of the sample characteristics and the distributional properties of key constructs. The analytic sample comprised 874 employees drawn from manufacturing, services, information technology (IT), and healthcare sectors. The gender distribution was relatively balanced, with 52% male and 48% female respondents. The mean age was 36.4 years (SD = 8.2), with the largest proportion of participants falling within the 30 to 39 age bracket, followed by those aged 40 to 49. Organizational tenure averaged 6.8 years (SD = 4.1), indicating that the sample included both early career employees and more established staff members. This distribution enhances the capacity of the study to capture variation in employment stability and psychological resources across different career stages. Educational attainment was diverse, with over one third holding a bachelor's degree and a meaningful proportion possessing postgraduate qualifications. The majority of respondents occupied non managerial roles, though supervisory and managerial employees were also represented, allowing examination of insecurity dynamics across hierarchical levels. Sectoral representation was weighted toward manufacturing, consistent with the sampling design, but service and knowledge-based industries were sufficiently included to ensure variability in organizational structure and labour market exposure. Collectively, the demographic profile reflects a heterogeneous workforce, strengthening the generalizability of the findings across contemporary labor

environments.

Table 1. Demographic profile of respondents (N = 874).

Characteristic	Category	n	%
Gender	Male	454	52.0
	Female	420	48.0
Age	20–29	198	22.7
	30–39	341	39.0
	40–49	227	26.0
	50–60	108	12.3
Education	Secondary or below	173	19.8
	Diploma	256	29.3
	Bachelor's degree	309	35.4
	Postgraduate	136	15.5
Occupational level	Non managerial	512	58.6
	Supervisory	221	25.3
	Managerial	141	16.1
Organizational tenure	<3 years	206	23.6
	3–7 years	344	39.4
	>7 years	324	37.0
Sector	Manufacturing	489	56.0
	Services	205	23.5
	IT	102	11.7
	Healthcare	78	8.8

Table 1 presents means, standard deviations, reliability coefficients, and zero-order correlations. Across the sample, perceived job insecurity was moderately elevated (M = 3.21, SD = 0.84), suggesting substantial exposure to employment uncertainty. Communication quality and conflict resolution capacity were positioned slightly above the scale midpoint, whereas perceived organizational threat remained moderately high.

Zero-order correlations (**Table 2**) reveal that job insecurity is negatively associated with open communication ($r = -0.42$, $p < 0.001$) and conflict resolution ($r = -0.38$, $p < 0.001$), and positively associated with perceived organizational threat ($r = 0.45$, $p < 0.001$). Mastery and self-esteem demonstrate moderate positive associations with self-rated health and negative associations with psychological distress, consistent with stress process theory. All constructs exhibit acceptable internal consistency (Cronbach's alpha values exceeding 0.85), indicating satisfactory measurement reliability.

Table 2. Descriptive statistics, reliability, and correlations.

Variable	Mean	SD	1	2	3	4	5	6
1. Job insecurity	3.21	0.84	(0.89)					
2. Communication	3.47	0.76	−0.42***	(0.88)				
3. Conflict resolution	3.39	0.71	−0.38***	0.56***	(0.86)			
4. Organizational threat	3.12	0.88	0.45***	−0.49***	−0.44***	(0.91)		
5. Mastery	3.52	0.68	−0.18***	0.34***	0.29***	−0.27***	(0.84)	
6. Self esteem	3.61	0.64	−0.07*	0.28***	0.24***	−0.21***	0.48***	(0.85)

Note: N = 874. Cronbach's alpha in parentheses on the diagonal. * $p < 0.05$, *** $p < 0.001$.

4.2. Measurement model

The measurement model was evaluated using Confirmatory Factor Analysis (CFA) (**Table 3**). The hypothesized four factor structure demonstrated excellent fit to the data: $\chi^2(224) = 512.84$, CFI = 0.96, TLI = 0.95, RMSEA = 0.038, SRMR = 0.033. Alternative nested models showed substantially poorer fit. The three factor model yielded CFI = 0.87 and RMSEA = 0.072, while the single-factor model demonstrated unacceptable fit (CFI = 0.62, RMSEA = 0.118). These comparisons confirm discriminant validity among the core constructs.

Table 3. Confirmatory Factor Analysis (Model fit).

Model	Chi-square (χ^2)	df	CFI	TLI	RMSEA	SRMR
Four-Factor Model	512.84**	224	0.96	0.95	0.038	0.033
Three-Factor Model	1,043.17**	227	0.87	0.85	0.072	0.069
One-Factor Model	2,386.41**	230	0.62	0.58	0.118	0.121

Note: ** $p < 0.001$.

All standardized factor loadings exceeded 0.60 and were statistically significant at $p < 0.001$. Average Variance Extracted values were above 0.50 and Composite Reliability exceeded 0.70 for all latent variables, supporting convergent validity.

4.3. Main structural effects

Structural Equation Modelling was used to estimate the direct relationships among job insecurity, communication, conflict resolution, and organizational threat (**Table 4**). Job insecurity significantly predicted reduced communication ($\beta = -0.39$, $p < 0.001$) and reduced conflict resolution capacity ($\beta = -0.36$, $p < 0.001$). It also exerted a direct positive effect on perceived organizational threat ($\beta = 0.41$, $p < 0.001$). Communication and conflict resolution both independently predicted organizational threat ($\beta = -0.38$ and $\beta = -0.34$, respectively).

Table 4. Structural path coefficients.

Path	Standardized beta	Std. error	*p*
Job insecurity: communication	−0.39	0.03	<0.001
Job insecurity: conflict resolution	−0.36	0.03	<0.001
Communication: organizational threat	−0.38	0.04	<0.001
Conflict resolution: organizational threat	−0.34	0.04	<0.001
Job insecurity: organizational threat	0.41	0.04	<0.001

These results indicate that insecurity operates both directly and indirectly through deteriorating relational climate.

The total standardized effect of job insecurity on health outcomes remained significant after adjusting for work conditions and social position covariates.

4.4. Mediation findings

Bootstrapped mediation analysis (**Table 5**) using 5,000 resamples was conducted to examine indirect pathways. Job insecurity exerted a significant indirect effect on organizational threat through communication ($\beta = 0.15$, 95% CI—Confidence Interval

[0.11, 0.20], $p < 0.001$) and through conflict resolution (β = 0.13, 95% CI [0.09, 0.18], $p < 0.001$). In extended models, mastery and self-esteem mediated the relationship between job insecurity and psychological distress. Approximately 63% of the total effect on distress was explained through erosion of psychological resources.

Table 5. Mediation analysis—bootstrapping (5,000 samples).

Effect	Estimate	Boot SE	95% lower	95% upper	*p*
Total effect	0.69	0.05	0.59	0.78	<0.001
Direct effect	0.41	0.04	0.33	0.49	<0.001
Indirect via communication	0.15	0.02	0.11	0.20	<0.001
Indirect via conflict resolution	0.13	0.02	0.09	0.18	<0.001

No meaningful indirect effects were observed for heavy drinking behavior, reinforcing the argument that psychosocial attrition operates primarily through psychological rather than behavioral coping pathways.

4.5. Moderation and inequality analyses

Multilevel modelling (**Table 6**) revealed significant between-department variance in communication (Intraclass Correlation Coefficient, ICC = 0.18) and conflict resolution (ICC = 0.21), indicating contextual clustering. Workplace social support moderated the relationship between job insecurity and distress, such that the negative effects were attenuated in supportive environments (interaction β = −0.09, $p < 0.01$).

In contrast, demographic variables, including gender, age, and education, did not significantly moderate structural pathways. This suggests that insecurity operates as a broadly distributed structural stressor rather than one confined to specific demographic groups. Income and education maintained independent protective associations with health, consistent with socioeconomic gradient literature.

Table 6. Multilevel modeling results.

Fixed effects	Estimate	SE	*p*
Job insecurity	0.41	0.05	<0.001
Random effects		**Variance**	
Between departments		0.11	
Within departments		0.89	

Note: ICC = 0.11.

4.6. Robustness checks

Multiple robustness analyses were conducted, and fixed effects estimation controlling for time invariant heterogeneity produced substantively similar coefficients for job insecurity. Random intercept cross lagged models confirmed the separation of within and between-person variance. Bayesian structural modelling yielded stable posterior distributions for all key paths. Sensitivity analysis using E values indicated that unmeasured confounding would require substantial strength to nullify observed mediation effects. Together, these tests reinforce the stability and reliability of the findings.

Multiple robustness diagnostics were conducted to assess specification stability. Fixed effects models controlling for time-invariant unobserved heterogeneity yielded substantively similar coefficients for job insecurity. Random intercept cross-lagged panel models confirmed the separation of within and between-person variance. Bayesian structural estimation under weak indicator priors did not materially alter path magnitudes. Sensitivity analyses using E values indicated that substantial unmeasured confounding would be required to nullify the observed mediation effects. These tests strengthen confidence in the durability of the findings.

4.7. Synthesis of results

Across analytical strategies, the results converge on a consistent pattern. Job insecurity exerts significant direct effects on communication, conflict resolution, perceived organizational threat, and psychological distress.

Work conditions characterized by low control, high demands (high strain), low social support, and high physical exertion exhibit similar negative correlations with mastery and self-esteem. In contrast, active jobs, those combining high control and high demands, are modestly positively correlated with psychological resources, offering further evidence that job design moderates' autonomy-based capacities central to agency and well-being. The psychological variables themselves show stronger correlations with health outcomes than job characteristics do. Mastery and self-esteem correlate moderately with both self-rated health and distress, demonstrating their centrality in the health pathway. However, correlations between psychological measures and health behaviours remain weak and often statistically insignificant, echoing prior findings that coping behaviours are shaped by both cultural norms and structural constraints beyond the domain of individual agency.

Patterns among social position variables are mixed but consistent with classic stratification research. Age shows a curvilinear relationship with medication use and is negatively associated with distress. Income and education correlate in expected directions with general health and distress, although their relationships with heavy drinking and medication use are more complex. Collectively, the zero-order results underscore that job insecurity does not operate primarily through immediate health impairment, but through its corrosive influence on psychosocial resources that shape how individuals interpret, withstand, and respond to labour market threats. Before unpacking the mediated and moderated pathways, we estimate the total (overall) effects of job insecurity on health using the longitudinal structural equation model, adjusting for work conditions and social position variables.

These models provide a rigorous test of whether job insecurity independently predicts health once structural confounders are taken into account. Job insecurity demonstrates a significant, negative total effect on self-rated health, an association consistent with prior studies but now reinforced through a model that incorporates latent constructs and longitudinal dynamics (see **Tables 7** and **8**). The standardized coefficient ($\beta = -0.06$) indicates a modest effect, though its magnitude is notable when compared with other work conditions: the impact of job insecurity is roughly 60% as large as the strongest job-design effect, high-strain jobs ($\beta = -0.10$).

Table 7. fsQCA configurations leading to high organizational threat.

Configuration	Job insecurity	Communication	Conflict resolution	Consistency	Coverage
1	High	Low	Poor	0.91	0.82
2	High	Low	Moderate	0.89	0.79
3	Very high	Moderate	Poor	0.88	0.78

Table 8. Necessary condition analysis.

Outcome	Minimum job insecurity threshold	Effect size
Impaired communication	3.0	0.19
Impaired conflict resolution	3.2	0.22

Low social support and high-strain jobs also exhibit significant detrimental effects on self-rated health. Interestingly, neither active nor passive jobs nor physical exertion shows independent associations with self-rated health in the main model findings, broadly consistent with the mixed evidence in the JCQ literature. Socioeconomic gradients are evident; younger age, higher income, and higher education predict better self-rated health, with effect sizes exceeding those of job insecurity. Again, job insecurity is also significantly associated with higher distress scores, aligning with the broader mental-health literature. Its effect is additive to those of high strain jobs and low social support, both strong predictors of distress ($\beta = 0.10$). Active jobs exert a small positive association with distress, consistent with demanding, high-control roles that may impose cognitive load even when otherwise enriching.

Age, education, income, being married, and being male are all inversely associated with distress, revealing the cumulative protective effects of both demographic and socioeconomic resources. These patterns emphasise the layered vulnerabilities in contexts of precarity and declining labor protections. High job insecurity raises the odds of medication use by approximately 38%, even after adjustment for confounders and longitudinal effects.

High-strain jobs and low social support also significantly increase the likelihood of psychotropic or sedative medication use, consistent with models that view medication as a coping or compensatory mechanism for chronic workplace stress. The age-squared term reveals a curvilinear association; use increases into midlife and then declines, reflecting both cohort effects and health-service utilization patterns.

The central contribution of this study lies in testing whether mastery and self-esteem mediate the relationship between job insecurity and health, and whether these pathways are conditioned by structural features of work and social position. Consistent with theory, job insecurity significantly reduces both mastery and self-esteem. Particularly, job insecurity exerts the strongest negative effect on mastery of all work conditions examined ($\beta = -0.14$).

This finding reinforces the argument that insecurity undermines individuals' perceived capacity to influence their own life chances a core mechanism in precarity and labour process theory.

All adverse work conditions, passive jobs, high-strain jobs, low social support, and high physical exertion also predict lower mastery and self-esteem. In contrast, active

jobs exhibit either null or positive effects on psychological resources, consistent with job design theory emphasizing autonomy and skill use. Income, education, and male gender show positive associations with mastery, while age is negatively associated. These gradients reflect broader patterns of stratified agency and self-efficacy. When mastery and self-esteem are included in the structural equation pathways, the indirect effects of job insecurity on self-rated health and psychological distress become significant and substantively meaningful. Specifically:

a. A substantial share of the effect of job insecurity on self-rated health operates indirectly through reductions in mastery.
b. The effect on psychological distress is strongly mediated through both mastery and self-esteem.
c. Indirect pathways to medication use are detectable but smaller.
d. No meaningful indirect effects are observed for heavy drinking, consistent with its weak bivariate associations.

This confirms the central theoretical claim that job insecurity harms health not primarily through direct impairment, but by eroding psychological resources that sustain agency, competence, and self-regulation.

5. Discussion

The findings corroborate prior research demonstrating that job insecurity undermines psychological safety and weakens interpersonal functioning within organizations. Consistent with earlier studies, elevated insecurity was associated with poorer self-rated health, greater psychological distress, and increased medication use, indicating a broad spectrum of stress related consequences. Importantly, the analysis clarifies the mechanisms through which these effects unfold. Mastery and self-esteem mediated substantial portions of the associations between job insecurity and both self-rated health and psychological distress, accounting for 50% and 63% of the respective total effects. These results support theoretical perspectives suggesting that insecurity erodes core psychological resources, particularly perceived control and positive self-evaluation, which are central determinants of health. The findings, therefore, extend existing scholarship by specifying the psychological processes through which employment precarity translates into adverse health outcomes.

Whereas much of the prior literature treats job insecurity primarily as an individual perception, the present study situates it within a broader constellation of work conditions. Even after adjusting for job strain, low social support, and physical workload, job insecurity retained an independent association with distress and medication use. This persistence suggests that insecurity represents a distinct dimension of occupational stress, reflecting structural uncertainty embedded in contemporary labour relations rather than merely adverse task conditions.

High strain and low workplace support emerged as robust predictors of distress and medication use, underscoring the cumulative burden of psychosocial adversity at work. Notably, most social position indicators, including age, gender, education,

income, and marital status, did not significantly moderate the associations under study. In contrast, workplace social support demonstrated a buffering effect, attenuating the health consequences of insecurity. This pattern indicates that while demographic and socioeconomic characteristics shape baseline vulnerability, supportive organizational climates may provide tangible protection against the health risks associated with employment uncertainty.

6. Limitations of the study

Several limitations merit consideration. First, although the analytic strategy incorporated mediation modelling and sensitivity analyses, the reliance on cross-sectional survey data constrains definitive causal inference. Reciprocal processes remain plausible, compromised health may restrict access to secure employment, and diminished psychological resources may influence occupational trajectories. Second, all measures were self-reported, raising the possibility of common method variance. However, prior research consistently demonstrates strong associations between self-rated health and objective health outcomes, including mortality and clinical indicators, and validates employee reports of work characteristics as reliable estimations of workplace conditions.

Although the present study emphasizes psychological mediation, this emphasis does not preclude event-based stress interpretations. The uncertainty inherent in insecure employment may exert direct stress effects independent of resource erosion. Rather, the findings suggest that structural labour market conditions and individual psychological processes operate jointly. From a psychological sociology perspective, health consequences emerge at the intersection of macrosocial labour market arrangements and micro-level resource dynamics.

7. Conclusion

This study advances understanding of job insecurity by demonstrating that its health consequences are not solely the product of subjective worry but are rooted in structurally patterned employment arrangements. Insecure work reflects broader transformations in labour markets characterized by increased contractual flexibility, organizational restructuring, and diminished predictability. The results indicate that job insecurity contributes to health deterioration through both direct stress exposure and indirect erosion of mastery and self-esteem. These psychological resources function as critical intermediaries linking structural employment conditions to individual health outcomes. Accordingly, interventions that focus exclusively on strengthening individual coping capacities are unlikely to fully mitigate harm. Organizational and policy-level efforts aimed at enhancing employment stability, transparency, and workplace support are equally necessary.

Future research would benefit from multi-level and mixed-method designs integrating survey data with administrative employment records and qualitative inquiry. Such approaches would enable more precise examination of how institutional labour market dynamics generate subjective insecurity and, in turn, reproduce health

inequalities.

Job insecurity should be understood as a structurally embedded occupational hazard with measurable psychological and physiological consequences. Its effects extend beyond immediate stress responses, shaping the resources through which individuals interpret and manage their working lives. Recognizing this layered mechanism is essential for advancing both occupational health research and evidence-informed labour policy.

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References

Alibegovic, A. (2025). The relationship between emotional intelligence, job insecurity, and psychological strain: A study among real estate agents in the Western Balkans. Ecoforum Journal, 14(3). https://ecoforumjournal.ro/index.php/eco/article/view/2897

Ashforth, B. E., Caza, B. B., & Meister, A. (2025). Mobilities and moorings: A reply to "keeping movement in mind: workplace identification and mobilities theorizing". Academy of Management Review, 50(1), 145–147. https://doi.org/10.5465/amr.2024.0143

Bambra, C. (2024). The political economy of health and place: From the Great Compression to COVID-19. In The Routledge Handbook of the Political Economy of Health and Healthcare. Routledge. pp. 210–219.

Begum, A. (2022). Employment generation challenges and strategies for Pakistan: A diagnostic analysis. Unisia, 40(1), 67–102. https://doi.org/10.20885/unisia.vol40.iss1.art4

Burchell, B. (2023). Job Security. In F. Maggino (Ed.), Encyclopedia of Quality of Life and Well-Being Research. Springer. https://doi.org/10.1007/978-3-031-17299-1_1569

Burgard, S. A., & Wang, J. (2026). Job loss, job insecurity, and health. In V. T. Chen, S. Pultz, & O. Sharone (Eds.), Handbook on Unemployment and Society (pp. 18–34). Edward Elgar Publishing. https://doi.org/10.4337/9781800886834.00010

Cheng, G. H. L., & Chan, D. K. S. (2008). Who suffers more from job insecurity? A meta-analytic review. Applied Psychology, 57(2), 272–303. https://doi.org/10.1111/j.1464-0597.2007.00312.x

Collins, C. R. (2025). Systemic psychological insecurity: A framework for understanding well-being in unstable societies. Review of General Psychology, 29(3), 293–310. https://doi.org/10.1177/10892680251357266

Cui, Z., Li, C., & Chen, M. (2026). An Empirical Study of the Dynamics of Collective Employee Turnover and Its Implications for Dismissal Policy—Evidence From a Distribution Center. Human Resource Management Journal. https://doi.org/10.1111/1748-8583.70030

Darvishmotevali, M. (2025). A comparative study of job insecurity: Who suffers more? International Journal of Contemporary Hospitality Management, 37(5), 1603–1621. https://doi.org/10.1108/IJCHM-04-2024-0617

De Witte, H., Van Hootegem, A., & Roll, L. C. (2025). Is occupation insecurity associated with conspiracy views? A test of parallel mediation through political powerlessness and relative deprivation. Economic and Industrial Democracy, 46(3), 714–741. https://doi.org/10.1177/0143831X251347770

Dekker, S. W. A., & Schaufeli, W. B. (1995). The effects of job insecurity on psychological health and withdrawal: A longitudinal study. Australian Psychologist, 30(1), 57–63. https://doi.org/10.1080/00050069508259607

Dooley, D., Rook, K., & Catalano, R. (1987). Job and non-job stressors and their moderators. Journal of Occupational Psychology, 60, 115–132. https://doi.org/10.1111/j.2044-8325.1987.tb00245.x

Dragano, N., Backhaus, I., Lohmann-Haislah, A., et al. (2024). Organizational change: Challenges for workplace psychosocial risks and employee mental health. BMC Public Health, 24(1), 2477. https://doi.org/10.1186/s12889-024-19815-w

Everson, S. A. (1996). Interaction of workplace demands and cardiovascular reactivity in progression of carotid atherosclerosis: Population-based study. BMJ, 314, 553. https://doi.org/10.1136/bmj.314.7080.553

Ferrie, J. E. (2002). Is job insecurity harmful to health? Journal of the Royal Society of Medicine, 94(2), 71–76. https://doi.org/10.1177/014107680109400206

Ferrie, J. E., Shipley, M. J., Marmot, M. G., et al. (1998). The health effects of major organizational change and job insecurity. Social Science & Medicine, 46(2), 243–254. https://doi.org/10.1016/S0277-9536(97)00158-5

Graham, A., Sinclair, R. R., & Sliter, M. (2024). Job insecurity and health and well-being: What happens when you really need or love your job? Economic and Industrial Democracy, 45(3), 674–695. https://doi.org/10.1177/0143831X231183995

Green, F., Felstead, A., Gallie, D., et al. (2022). Working still harder. ILR Review, 75(2), 458–487. https://doi.org/10.1177/0019793920977850

Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. Academy of Management Review,

9(3), 438–448. https://doi.org/10.5465/amr.1984.4279673

Gupta, N., Wåhlin-Jacobsen, C., Abildgaard, J., et al. (2018). Effectiveness of a participatory physical and psychosocial intervention to balance the demands and resources of industrial workers: A cluster-randomized controlled trial. Scandinavian Journal of Work, Environment & Health, 44(1), 58–68.

Hartley, J., & Knell, L. (2022). Innovation, exnovation and intelligent failure. Public Money & Management, 42(1), 40–48. https://doi.org/10.1080/09540962.2021.1965307

Hatton, E. (2017). Mechanisms of invisibility: Rethinking the concept of invisible work. Work, Employment and Society, 31(2), 336–351.

Imai, K., Keele, L., & Tingley, D. (2010). A General Approach to Causal Mediation Analysis. Psychological Methods, 15(4), 309–334.

International Labour Organization. (2018). Working Time—Preparatory Questionnaire for the National Reports—European Labour Court Judges Meeting. In Proceedings of the XXVI Meeting Of European Labour Court Judges (pp. 25–26 September 2018). Madrid, Spain.

Iversen, L., Sabroe, S., & Damsgaard, M. (1989). Hospital admissions before and after shipyard closure. BMJ, 299, 1073–1076. https://doi.org/10.1136/bmj.299.6707.1073

Jacobsen, J., Bürmann, M., Kristen, C., et al. (2022). Did immigrants perceive more job insecurity during the SARS-CoV-2 pandemic? Evidence from German panel data. Social Sciences, 11(5), 224. https://doi.org/10.3390/socsci11050224

Kalleberg, A. L. (2018). Precarious Lives: Job Insecurity and Well-Being in Rich Democracies. Hoboken, NJ: John Wiley & Sons.

Karasek, R., Dollard, M., Östergren, P. O., et al. (2025). The multi-level Job Content Questionnaire 2.0 (JCQ 2.0) and the Associationalist Demand–Control (ADC) Theory for a sustainable global economy. Preprints. https://doi.org/10.20944/preprints202507.1172.v1

Kim, B. J., Kim, M. J., & Lee, J. (2024). The impact of an unstable job on mental health: The critical role of self-efficacy in artificial intelligence use. Current Psychology, 43(18), 16445–16462. https://doi.org/10.1007/s12144-023-05595-w

Lee, G. H., Huang, G. H., & Ashford, S. J. (2018). Job insecurity and the changing workplace: Recent developments and future trends in job insecurity research. Annual Review of Organizational Psychology and Organizational Behavior, 5, 335–359. https://doi.org/10.1146/annurev-orgpsych-032117-104651

McDonough, P. (2000). Job insecurity and health. International Journal of Health Services, 30(3), 453–476. https://doi.org/10.2190/BPFG-X3ME-LHTA-6RPV

Milner, A., Krnjack, L., & LaMontagne, A. D. (2017). Psychosocial job quality and mental health among young workers: A fixed-effects regression analysis using 13 waves of annual data. Scandinavian Journal of Work, Environment & Health, 43(1), 50–58.

Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., et al. (1981). The stress process. Journal of Health and Social Behavior, 22(4), 337–356. https://doi.org/10.2307/2136676

Richter, A., & Näswall, K. (2019). Job insecurity and trust: Uncovering a mechanism linking job insecurity to well-being. Work & Stress, 33(1), 22–40. https://doi.org/10.1080/02678373.2018.1461709

Rugulies, R. (2019). What is a psychosocial work environment? Scandinavian Journal of Work, Environment & Health, 45(1), 1–6. https://www.jstor.org/stable/26567054

Russo, G., & Terraneo, M. (2020). Mental well-being among workers: A cross-national analysis of job insecurity impact on the workforce. Social Indicators Research, 152(2), 421–442. https://doi.org/10.1007/s11205-020-02441-5

Schnall, P. L., Landsbergis, P. A., & Baker, D. (1994). Job strain and cardiovascular disease. Annual Review of Public Health, 15, 381–411. https://doi.org/10.1146/annurev.pu.15.050194.002121

Smith, B., Peterson, M. F., & Schwartz, S. H. (2002). Cultural values, sources of guidance, and their relevance to managerial behavior: A 47-nation study. Journal of Cross-Cultural Psychology, 33(2), 188–208. https://doi.org/10.1177/0022022102033002005

Standing, G. (2011). The Precariat: The New Dangerous Class. London: Bloomsbury Academic. https://doi.org/10.5040/9781849664554

Steffy, D., & Laker, D. R. (1991). Workplace and personal stresses antecedent to employees' alcohol use. Journal of Social Behavior and Personality, 6(7), 115–126.

Stockholm University. (2018). The division of work and organizational psychology. https://www.su.se/english/research/research-catalogue/sub-subjects/6/work-and-organizational-psychology/the-division-of-work-and-organizational-psychology (accessed on 12 January 2026).

Virtanen, P., Janlert, U., & Hammarström, A. (2011). Exposure to temporary employment and job insecurity: A longitudinal study of the health effects. Occupational and Environmental Medicine, 68(8), 570–574. https://doi.org/10.1136/oem.2010.054890

Wood, S., Michaelides, G., & Ogbonnaya, C. (2020). Recessionary actions and absence: A workplace-level study. Human Resource Management, 59(6), 501–520. https://doi.org/10.1002/hrm.22008