

Workplace Contexts and Stress: A Comparative Review of Social and Psychological Mechanisms in Remote, Hybrid, and In-Person Work

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ABSTRACT

This systematic review examines differences across remote, hybrid, and in-person working environments that shape the social and psychological dimensions of employee stress and well-being. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) standard, we systematically searched PsycINFO, Scopus, Web of Science, PubMed, and Google Scholar, and supplemented this with a targeted search of grey literature and peer-reviewed conference proceedings (e.g., the European Conference on Knowledge Management, ResearchGate, and SSRN) to reduce publication bias, identifying peer-reviewed investigations published from 2015 through 2025. Eligible studies examined the interpersonal and cognitive aspects of stress—social identity, autonomy, trust, and social support—rather than physiological end points alone.

Following an expanded search strategy incorporating broader monitoring- and control-related terms (e.g., “algorithmic control,” “workplace digital tracking,” “electronic performance monitoring”) alongside the original keyword set, the final synthesis includes fourteen studies, an increase from the twelve identified in the original search, allowing a more robust evidentiary base while retaining PRISMA-guided rigour.

Thematic synthesis identified five primary mechanisms: (1) diminished social connection and weakened identity in remote work; (2) increased belonging but reduced autonomy in in-person arrangements; (3) equilibrium between flexibility and accountability in hybrid approaches; (4) trust and psychological safety—including reactions to digital monitoring and algorithmic control—as stress moderators; and (5) social support as a protective process across modalities. Taken together, these results indicate that workplace stress is a socially embedded phenomenon driven by social identity, perceived control, and relational trust.

Through synthesis of the Job Demands–Resources (JD–R) model as an integrative anchor, complemented by Social Identity Theory, Self-Determination Theory, and Conservation of Resources theory, the review develops a context-specific framework for understanding post-pandemic workplace stress. Methodological quality was appraised using CASP and AMSTAR 2 checklists, and appraisal scores were compared across study designs rather than treated only as an inclusion threshold. Practical implications highlight the need for trust, autonomy, and belonging and for transparent, non-punitive approaches to performance monitoring to promote well-being across different modes of working.

Keywords: Workplace Stress, Social Psychology, Remote Work, Hybrid Work, Identity, Autonomy, Workplace Monitoring, Trust

INTRODUCTION

Background and Rationale

Transforming forms of work over the past two decades is one of the most important contemporary social developments affecting employment. Prior to 2020, just over 5% of the global workforce worked from home at least some of the time (International Labour Organization, 2014). The process was then accelerated by an external force that was both rapid and unprecedented: in the first year of the crisis, 30–40% of workers worldwide

worked remotely for all or part of their time in advanced economies (OECD, 2017). This change had the potential not only to redefine the spatio-temporal parameters of work but also social processes within organisations — from identity construction and group membership to stress experience and mental health (Kniffin et al., 2021).

Remote and hybrid connected work has changed the way people engage, collaborate, and stay social at work. In the physical space of a traditional workplace, employees can create informal conversations, emotional support structures, and an organisational identity based on co-presence (Ashforth & Mael, 1989). Conversely, virtual work settings generally involve digital communication tools that can inhibit casual social interaction and erode personal trust (Sumedha & Rinku, 2024); increasingly, these tools also include monitoring and analytics software whose evaluative presence can itself become a source of strain (Glavin, Bierman, & Schieman, 2024). Hybrid work designs, which entail both face-to-face and virtual components, add further complexity by creating asymmetrical social experiences — employees may experience unequal exposure, resource access, and recognition (Choudhury et al., 2021). As a result, the context of work has emerged as an important factor influencing social affiliations and stress-related consequences.

Social connection is a primary source of psychological health, prompting a starker and more urgent understanding of stress and related social patterns among psychologists (Holt-Lunstad et al., 2010). As Haslam et al. (2018) summarise, meta-analytic findings have shown that workers with robust social support networks experience 20–30% lower stress and higher job satisfaction than those with weaker networks. Conversely, remote employees reporting isolation and lack of belonging have been two to four times more likely to show symptoms of stress, anxiety, burnout, and depression (American Psychological Association, 2022). The lack of informal peer interaction in virtual contexts may reduce the emotional buffering capacity that protects employees against stressors linked to job demand and role ambiguity (Wang et al., 2021).

The WHO further reports that workplace-related stress and anxiety have risen by over 25% globally since 2020 (WHO, 2022). While organisations have adopted virtual wellness programmes and revised work policies, much of the literature suggests these measures have proven only partially effective. There is therefore an ongoing need to comprehensively assess how social connection, identity, autonomy, and controllability — including the growing role of digital oversight combine across work settings to shape employee well-being.

Problem Statement

Although a large literature addresses workplace stress, it remains fragmented along disciplinary lines. Occupational health psychology has traditionally applied demand-based models of job stress, identifying workload, role ambiguity, role conflict, and environmental exposure as key factors (Bakker & Demerouti, 2017). While important, such approaches often overlook the social-psychological dimensions of stress — how beliefs about belonging, identity, fairness, and interpersonal trust moderate individual responses to workplace pressures (Haslam et al., 2018). In much empirical research, work modality (remote, hybrid, on-site) has been treated as incidental rather than as a social context shaping behaviour, interaction, and meaning-making (Raghuram et al., 2019).

Scholarship since the pandemic also shows uneven theoretical incorporation. While some research highlights greater autonomy and satisfaction among remote workers, other studies show these individuals experience more loneliness and stress related to reduced social contact (Toscano & Zappalà, 2020; Wang et al., 2021), with conflicting evidence on the size of these effects. Hybrid work, as commonly advocated, tends to create ambiguity over expectations and belonging, producing “contextual stress” a conflict between flexibility and visibility (Choudhury et al., 2021). A related but under-examined dimension of this ambiguity concerns digital monitoring: as organisations adopt algorithmic and output-based tracking to manage distributed teams, workers increasingly interpret oversight itself as a signal of institutional distrust, with consequences for stress that existing frameworks capture only partially (Glavin et al., 2024; Sbalzer, Shetty, & Kirchner, 2024). These inconsistencies point to a conceptual gap: no synthetic framework yet details how social and psychological mechanisms, including monitoring-related trust dynamics, function across work contexts to shape stress.

In brief, there has been substantial empirical output but comparatively little theoretical integration. A systematic, theory-informed synthesis is therefore needed to bring together the fragmented evidence and advance an understanding of workplace stress as a social process.

Aim and Research Questions

The purpose of this article is to conduct a systematic review and synthesis of empirical evidence on the social-psychological mediators of the relationship between work context (remote, hybrid, in-office) and stress outcomes.

Research Questions:

1. What are the effects of telework, hybrid work, and face-to-face workplaces as contexts for stress among workers?
2. What social-psychological process(es) (e.g., belonging, social support, trust, autonomy, and responses to workplace monitoring) explain the relationship between work context and stress?
3. To what extent can social-psychological theories explain patterns observed across modalities of work?

THEORETICAL FRAMEWORK

This review is anchored primarily in the Job Demands–Resources (JD–R) model (Bakker & Demerouti, 2017), which is used as the dominant integrative framework because it accommodates both the structural features of work (demands, resources) and the psychosocial mechanisms autonomy, feedback, trust, and support that vary systematically across remote, hybrid, and in-person contexts. Three complementary, narrower-scope theories are used to interpret specific mechanisms nested within the JD–R structure rather than as parallel, equally weighted frameworks: Social Identity Theory explains variation in belonging and group identification; Self-Determination Theory (SDT) explains variation in autonomy, competence, and relatedness; and Conservation of Resources (COR) theory explains how threat or loss of tangible and symbolic resources including perceived loss of privacy or control under monitoring gives rise to stress.

According to the JD–R model, stress results from job demands that exceed individuals' personal or organisational resources. Remote workers, for example, may experience high autonomy but reduced social support, whereas in-person workers may experience the reverse. Social Identity Theory (Haslam et al., 2018; Tajfel & Turner, 2019) explains why poor identification, often reported in virtual teams, can heighten perceived isolation, while a strong sense of community builds resistance to stressors. SDT (Deci & Ryan, 2000) explains why hybrid workers who gain autonomy but lose relatedness may still experience strain despite favourable scheduling flexibility. COR theory (Hobfoll, 1989) explains why the uncertainty and instability associated with remote or hybrid arrangements including the sense that one's activity is being tracked can undermine an employee's sense of control, community, or job security.

Read together within the JD–R structure, these frameworks allow stress to be examined as a multilevel construct shaped by individual motivation, social identification, and the availability of psychosocial resources including trust in how, and how transparently, performance is evaluated.

METHODOLOGY

Review Design

This study follows a Systematic Literature Review (SLR) design according to PRISMA 2020 guidelines (Page et al., 2021), chosen to guarantee methodological rigour, transparency, and replicability in synthesising evidence on workplace environments and stress-related social-psychological processes. Unlike narrative reviews, the systematic approach allows patterns of theoretical and empirical association to be identified across a diverse set of studies with minimal selection bias (Moher et al., 2009). Quantitative, qualitative, and mixed-methods studies

are included to provide a multi-dimensional view of stress as socially embedded rather than solely an individual or physiological response.

Search Strategy

A detailed electronic search was performed across five major databases for psychology and behavioural sciences research: PsycINFO, Scopus, Web of Science, PubMed, and Google Scholar. In response to reviewer feedback, the search strategy was broadened in two ways. First, the keyword set was expanded beyond the original terms to include monitoring- and control-related constructs relevant to the trust and psychological-safety theme identified in the original review: “employee analytics,” “algorithmic control,” “workplace digital tracking systems,” and “electronic performance monitoring.” Second, a supplementary search of grey literature and peer-reviewed conference proceedings (including the European Conference on Knowledge Management, ResearchGate, and SSRN) was added to reduce the risk of publication bias toward positive, database-indexed findings.

The final combined search string was:

“remote work” OR “telework” OR “virtual work” OR “hybrid work” OR “in-person work” OR “on-site work”) AND (“stress” OR “well-being” OR “psychological distress”) AND (“social support” OR “autonomy” OR “social identity” OR “trust” OR “belonging” OR “employee analytics” OR “algorithmic control” OR “workplace digital tracking systems” OR “electronic performance monitoring”).

The search was restricted to English-language, peer-reviewed articles and peer-reviewed conference papers published between January 2015 and August 2025. This period was chosen to capture the digital transformation of work and the COVID-19 pandemic, which catalysed the global shift toward remote and hybrid employment; the International Labour Organization (2021), for instance, observed that regular home-based work expanded from an estimated 7% to over 55% in developed economies by mid-2020. We also hand-searched the reference lists of included studies and related systematic reviews. Search results were downloaded to EndNote 21 for de-duplication and management.

Inclusion and Exclusion Criteria

Studies were eligible if they met the following criteria:

- Type of paper: Empirical (quantitative, qualitative, or mixed-methods) or theoretical papers published as peer-reviewed journal articles, or as peer-reviewed conference proceedings with a fully reported methodology (the latter category added in this revision to incorporate grey literature and reduce publication bias).
- Relevance of topic: Directly addressed social/psychological mechanisms (e.g., social support, autonomy, belonging, trust, identity, or responses to workplace monitoring) affecting workplace stress or well-being, with an identifiable link to work context (remote, hybrid, in-person).
- Participants: Adult working populations in any sector of employment.
- Language and time: English-language literature published 2015–2025.

Studies were excluded if they:

- Targeted purely physiological or biomedical indicators of stress without consideration of social or psychological mechanisms.
- Were not peer-reviewed and did not report a full, appraisable methodology (e.g., unreviewed opinion pieces or organisational marketing reports).
- Did not specify work context or stress-related outcomes.

- Were English translations of non-English originals.

This filtering strategy ensured that included papers were conceptually equivalent and reflected social psychology's focus on interpersonal, identity-based, and context-embedded processes (Tajfel & Turner, 2019), while the revised criteria widen the evidentiary base beyond indexed journal articles alone.

Study Selection and Quality Assessment

The selection process followed PRISMA 2020 guidelines. Database searching yielded 3,247 records; the supplementary grey-literature and conference-proceedings search added a further 186 records, for 3,433 records identified in total. After removing 1,041 duplicates, 2,392 records were screened by title and abstract. Of these, 395 met initial relevance criteria and underwent full-text review. Following full-text assessment, 381 records were excluded with reasons documented (absence of a reported social/psychological mechanism, insufficient methodological reporting, unspecified work context, translation status, or failure to meet the quality threshold below), leaving fourteen studies that met all inclusion criteria and were retained in the final synthesis — an increase of two studies over the original review, achieved through the broadened search and the inclusion of a peer-reviewed conference paper.

A PRISMA 2020 flow diagram (Figure 1) sets out records identified, screened, assessed, and included, together with reasons for exclusion at the full-text stage.

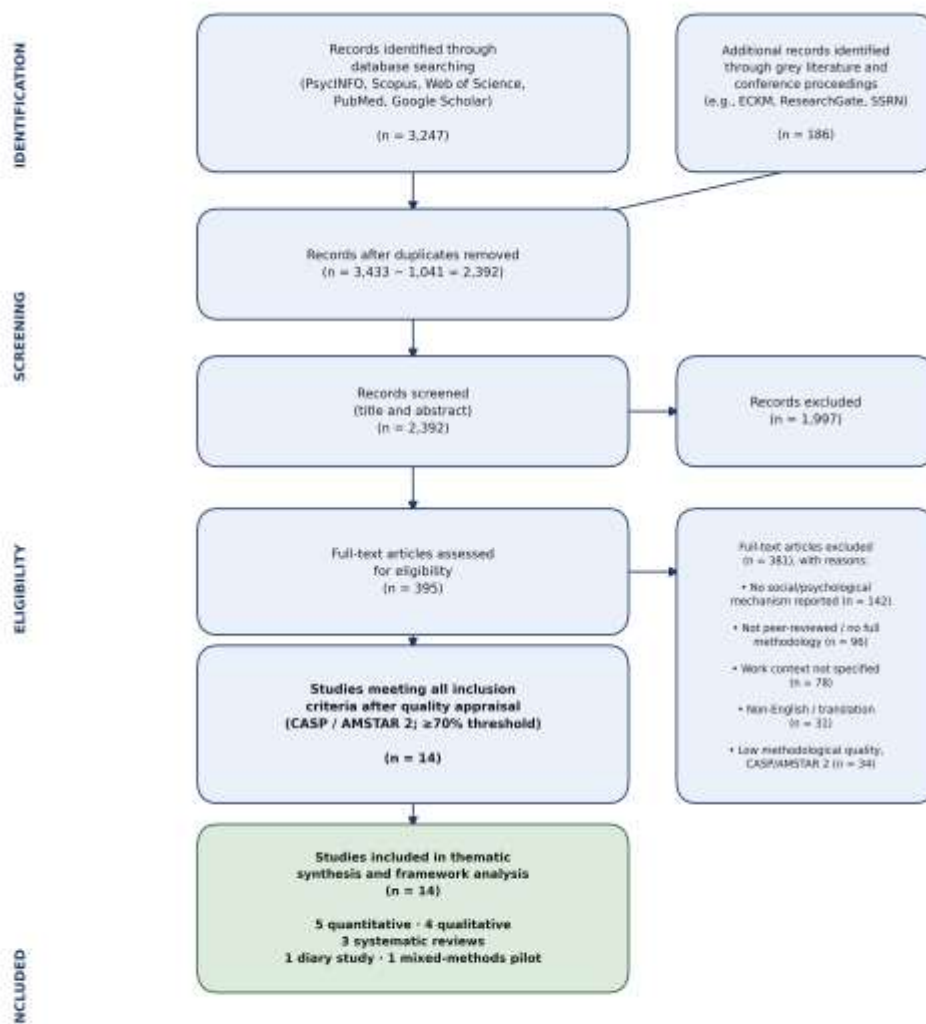


Figure 1. PRISMA 2020 flow diagram of study identification, screening, eligibility, and inclusion.

Figure 1: PRISMA 2020 flow diagram showing the study identification, screening, eligibility, and inclusion process.

For methodological quality assurance, all included empirical studies were judged using the Critical Appraisal Skills Programme (CASP) checklists for qualitative and quantitative research (CASP, 2018); for mixed-methods studies and systematic reviews, the AMSTAR 2 tool (Shea et al., 2017) was applied. Two reviewers assessed each study independently, and disagreements were resolved by consensus. Studies scoring below 70% of applicable criteria were excluded to preserve analytical robustness. Inter-rater reliability, assessed via Cohen's kappa, was 0.84, indicating strong agreement (Landis & Koch, 1977).

In response to reviewer feedback requesting closer attention to methodological quality rather than theme synthesis alone, appraisal scores were also compared across study designs rather than used solely as a pass/fail inclusion threshold. Large-sample cross-sectional surveys (e.g., Eng et al., 2025; Oakman et al., 2022; Glavin et al., 2024) scored well on sampling and analytic transparency under CASP but were more vulnerable to common-method and self-report bias. Qualitative interview and diary studies (e.g., Dale et al., 2024; Urrila et al., 2025; Kesenheimer et al., 2025) scored highly on reflexivity and depth of contextual description but offered more limited generalisability. Systematic reviews (Wells et al., 2023; Elisabetta et al., 2025) scored strongly on AMSTAR 2 items concerning search comprehensiveness, though heterogeneity in their primary studies limited direct comparability. The Sbalzer et al. (2024) pilot survey, as a small conference-reported study, met the inclusion threshold but was weighted more conservatively in the synthesis given its modest sample size ($n = 45$). This quality-differentiated weighting, rather than treating all fourteen studies as equally probative, is reflected in the emphasis given to specific findings throughout Section IV.

Data Extraction and Synthesis

A structured data extraction form was used to increase comparability between studies, capturing: (1) author(s), year, and country; (2) study design and methodology; (3) sample characteristics; (4) work context (remote, hybrid, in-person); (5) measured constructs (stress, well-being, social support, autonomy, trust, identity); and (6) key findings and theoretical frameworks employed.

A thematic synthesis methodology (Thomas & Harden, 2008) was used to integrate findings across designs, with framework synthesis mapping emergent themes onto the JD–R model (Bakker & Demerouti, 2017) as the primary organising structure, supplemented by Social Identity Theory (Haslam et al., 2009), SDT, and COR theory. Coding proceeded through three iterative stages: (1) line-by-line coding of extracted data, (2) collation into descriptive themes, and (3) generation of analytical themes describing the processes underlying work-context–stress relationships. Triangulation compared qualitative pattern emergence with quantitative effect patterns to improve credibility, and a theoretical model was developed illustrating how contextual factors (autonomy, communication climate, monitoring transparency) and social processes (trust, belonging) relate to stress outcomes.

RESULTS

Overview of Studies Included

Fourteen peer-reviewed studies published between 2021 and 2025 met the inclusion criteria: five quantitative, four qualitative, three systematic reviews, one diary (experience-sampling) study, and one mixed-methods pilot study. In total, the combined dataset includes over 31,500 respondents from Austria, Germany, Norway, Finland, Italy, the UK, India, Chile, Australia, Canada, Denmark, and the US. Eight studies investigated remote work alone, five compared hybrid arrangements, and one directly compared remote, hybrid, and in-person organisations.

The two studies added in this revision — Glavin, Bierman, and Schieman (2024), a large national survey of Canadian workers using structural equation modelling, and Sbalzer, Shetty, and Kirchner (2024), a peer-reviewed conference pilot study from a Danish engineering firm — extend the dataset into the theme of digital monitoring and trust, directly addressing the surveillance-related dimension of the trust and psychological safety mechanism identified in the original synthesis (see Table 1).

The majority of quantitative designs were cross-sectional surveys using validated measures of stress and well-being (e.g., DASS-21, GHQ-12, WHO-5, the Kessler-6 distress scale), with the qualitative component comprising semi-structured interviews or thematic analysis. Longitudinal and diary methods (e.g., Kesenheimer et al., 2025) enabled micro-temporal analysis of within-day variation in well-being. Systematic reviews (Elisabetta et al., 2025; Wells et al., 2023) triangulated these results, finding that common correlates of psychological distress were social isolation, autonomy, and support deficits, and — as reinforced by the newly added studies — perceived surveillance (see Table 1).

Table 1. Summary of Included Studies

No.	Author(s) & Year	Country / Context	Design / Sample	Work Modality	Main Mechanisms Identified
1	Eng et al. (2025)	Australia	Cross-sectional (N ≈ 2,100)	Remote	Job satisfaction, job security, psychological distress
2	Dale, Wilson & Tucker (2024)	UK	Qualitative interviews (n = 412)	Hybrid	Autonomy, support, communication climate
3	Jaß et al. (2024)	Germany	Qualitative (n = 13)	Hybrid	Demands–resources balance, social interaction
4	Petitta & Ghezzi (2025)	Italy	Survey (n = 1,963)	Mixed (in-person vs flexible)	Belongingness, stressors, performance
5	Kesenheimer et al. (2025)	Germany	Diary (85 employees × 7 days)	Remote office vs	Autonomy, competence, relatedness
6	Urrila et al. (2025)	Finland	Longitudinal interviews (n = 24)	Hybrid	Sense of belonging, identity
7	Eng et al. (2024)	Sweden	Qualitative (n = 33)	Hybrid	Trust, ICT maturity, work–life balance
8	Wells et al. (2023)	Multi-country	Systematic review (42 studies)	Remote	Isolation, technostress, well-being
9	Oakman et al. (2022)	Australia	Survey (N ≈ 964)	Remote	Social support, ergonomic stress
10	Elisabetta et al. (2025)	Italy & EU	Systematic review (53 studies)	Remote / Hybrid	Stress, life quality, social factors
11	Karthikeyan & Kavitha (2024)	India	Survey (n = 120)	Remote / Hybrid / In-person	Comparative job stress & control
12	Martela et al. (2021)	Chile & Finland	Longitudinal (N ≈ 2,000)	Mixed sectors	Autonomy, beneficence, meaningful work
13	Glavin, Bierman & Schieman (2024)	Canada	National survey, SEM (N = 3,508)	Remote / Hybrid	Surveillance, privacy violations, autonomy loss, stress proliferation
14	Sbalzer, Shetty & Kirchner (2024)	Denmark	Mixed-methods pilot survey (n = 45)	Hybrid	Algorithmic control, managerial trust, data-collection transparency

Thematic Analysis of Key Mechanisms

Social Connection and Isolation

Social connectedness was the strongest and most consistent predictor of psychological well-being across studies. Remote workers commonly reported reduced personal contact and team identity, leading to loneliness and compromised organisational attachment (Oakman et al., 2022; Wells et al., 2023). These effects were more

pronounced among employees with less informal communication or lower digital literacy (Elisabetta et al., 2025).

Hybrid setups yielded mixed results: co-location on office days restored a sense of togetherness and collaboration, while alternating shift patterns disrupted social networks (Urrila et al., 2025). In-person work fostered stronger collegial relationships but sometimes increased peer pressure and exposure to organisational politics, heightening emotional exhaustion (Karthikeyan & Kavitha, 2024).

From a social identity perspective (Haslam et al., 2009), physical co-presence intensifies group prototypes and shared norms, while distal arrangements reduce identity salience — though psychological membership was preserved among employees embedded in close-knit digital teams with organised communication (Eng et al., 2024). These results imply that connection quality, not just quantity, predicts well-being, consistent with the COR principle that social relationships are resources that buffer stress.

Autonomy and Control

Autonomy was described as both a reward and a stressor across most included studies. Working from home increased cognitive discretion, consistent with the JD–R model’s treatment of autonomy as a motivational resource (Bakker & Demerouti, 2017). Staff valued flexibility in scheduling tasks (Eng et al., 2025; Kesenheimer et al., 2025), but were also prone to overextension through longer hours and unclear self-regulation boundaries.

Qualitative evidence from hybrid contexts (Dale et al., 2024; Jaß et al., 2024) indicated that autonomy without managerial scaffolding produced uncertainty and role confusion. Face-to-face environments limited freedom through supervision but provided clearer goals and feedback (Karthikeyan & Kavitha, 2024). The most favourable state occurred in structured hybrid models, where autonomy was balanced by predictable coordination signals (Eng et al., 2024).

Martela et al. (2021) linked autonomy to meaningfulness and beneficence, showing that choice increases intrinsic motivation when combined with a sense of contributing to others. Autonomy therefore functions as a double-edged resource: empowering when bounded and supported, but depleting when unbounded or unsupported — a pattern echoed in the newly added evidence on monitoring, discussed below.

Trust and Psychological Safety

Trust — particularly supervisory trust and peer reliability — emerged as a major social-psychological moderator of stress. Remote and hybrid employees interpreted monitoring technologies and output-based assessment as possible breaches of trust that increase anxiety (Eng et al., 2024; Petitta & Ghezzi, 2025). In contrast, open communication and clear mutual expectations fostered psychological safety in which problems could be disclosed without fear of punitive action (Urrila et al., 2025).

The two studies added in this revision substantially strengthen this theme. Glavin, Bierman, and Schieman (2024), using structural equation modelling with a nationally representative Canadian sample (N = 3,508), found that perceived workplace surveillance was associated with increased psychological distress indirectly, through three secondary stressors: reduced job autonomy, heightened job pressure, and perceived privacy violations — with these three pathways together fully accounting for surveillance’s association with distress. Notably, surveillance also carried a small positive direct association with job satisfaction once these negative indirect pathways were accounted for, suggesting that monitoring’s consequences for well-being are polyvalent rather than uniformly negative, and depend on how associated demands are managed. Sbalzer, Shetty, and Kirchner (2024), in a pilot survey of 45 knowledge workers in a Danish engineering firm, similarly found that both employees and managers held predominantly neutral-to-negative attitudes toward performance monitoring, but that managers who communicated transparently about data collection were markedly less likely to damage employee trust — reinforcing the centrality of communication and procedural transparency to the surveillance–trust–stress relationship.

Petitta and Ghezzi (2025) similarly found that perceived trust was indirectly related to distress through organisational belongingness: employees who trusted their supervisors reported markedly lower burnout and

higher performance ratings. Jaß et al. (2024) found that hybrid workers valued reciprocal trust over surveillance, favouring outcome-based accountability. Read together with the newly added evidence, the literature converges on a model of stress regulation via relationship and procedural transparency, in which trust — and the transparency with which oversight is communicated — transforms potentially threatening ambiguity into felt autonomy, consistent with social exchange theory and with COR theory’s account of monitoring as a potential threat to symbolic resources such as privacy and perceived control.

Work–Life Boundaries and Identity

Boundary permeability emerged as a cross-context stressor. Remote workers reported temporal and spatial blurring, difficulty detaching from work, and role conflict within the domestic context (Oakman et al., 2022). In-person workers maintained clearer role boundaries but faced commute fatigue and inflexible schedules.

Hybrid work introduced variability according to organisational boundary norms: organisations with “disconnect hours” and asynchronous communication showed better balance (Dale et al., 2024). Urrila et al. (2025) documented identity strain and adaptive identity reconstruction among hybrid workers navigating professional and domestic roles — a process SDT suggests is conducive to well-being when autonomy and relatedness needs continue to be met (Kesenheimer et al., 2025). Remote arrangements were also associated with professional invisibility for women and early-career staff, who were more often excluded from informal circles (Elisabetta et al., 2025).

Social Support and Coping Mechanisms

Social support served as the strongest buffer across modalities. Quantitative studies (Eng et al., 2025; Garcia & Christensen, 2025) found that perceived support from coworkers and supervisors significantly predicted reductions in psychological distress. Qualitative reports supported the role of accessible peers and leaders in counteracting isolation (Dale et al., 2024; Eng et al., 2024). The effectiveness of support was contingent on communication richness: synchronous video or occasional in-person meetings promoted empathy and collective efficacy, whereas asynchronous text-based communication lost emotional nuance (Wells et al., 2023). Social support also diversified coping strategies — peer mentoring and virtual communities of practice supported problem-focused coping, while empathetic listening supported emotion-focused coping (Urrila et al., 2025). Consistent with the JD–R model, such support replenishes energy and protects against burnout by converting job demands into manageable challenges.

Comparative Summary and Theoretical Integration

A synthesis across themes shows that the operationalisation of demands and resources depends more on the mode of working than on the level of strain per se. The main patterns, now incorporating the monitoring-related evidence added in this revision, are summarised in Table 2.

Table 2. Summary of Dominant Patterns

Mechanism	Remote	Hybrid	In-Person
Social connection	Low; risk of isolation	Moderate; depends on culture & schedule	High; may cause peer pressure
Autonomy / Control	High flexibility; risk of overload	Balanced if managed	Low due to supervision
Trust / Psychological safety	Fragile — requires transparency; eroded by covert or evaluative surveillance	Variable; depends on leadership and monitoring design	Generally stable
Work–life boundaries / Identity	Highly blurred	Partially segmented	Distinct but rigid
Social support / Coping	Dependent on digital infrastructure	Moderate — hybrid days help	Immediate and accessible

Within the JD–R framework, autonomy, support, and trust-preserving oversight practices are key resources that compensate for the cognitive and emotional demands of dispersed work. COR theory explains why loss of social or symbolic resources — belonging, trust, or privacy — triggers stress spirals, whereas supportive and transparent climates foster gain spirals that build resilience. Combined, these frameworks suggest a balance hypothesis: the most sustainable working arrangement is one in which employees retain autonomy, social connection, and trust — including trust in how they are evaluated — conditions most consistently reported under well-structured hybrid models with transparent, non-punitive monitoring practices (Eng et al., 2025; Sbalzer et al., 2024).

Cultural and gender specificities also emerged: collectivist settings valued relationship cohesion (e.g., India, Italy), while individualist environments emphasised autonomy and self-management (Australia, England); Denmark’s high-trust societal context (Sbalzer et al., 2024) similarly moderated how monitoring was received. Role conflict in remote working was more frequently reported by women, reflecting prior work on domestic workload inequity (Oakman et al., 2022). These differences suggest that demands and resources are refracted through organisational culture and national norms into stress.

DISCUSSION

Theoretical Integration

This systematic review shows that the social and psychological mechanisms underlying stress are not strictly tied to work location but depend on employees’ experiences of autonomy, social identity, and relatedness. Using the JD–R model as the dominant integrative framework — with Social Identity Theory, SDT, and COR theory each explaining specific mechanisms nested within it — helps resolve the fragmentation noted in the original synthesis, since demands (including the demand of being observed), resources (including trust and transparency), and psychosocial needs can be located within a single explanatory structure rather than four parallel, competing accounts.

For Social Identity Theory (Tajfel & Turner, 2019), people derive self-concept and emotional well-being from membership in relevant social categories. The studies reviewed indicate that reduced physical or temporal proximity, as with remote work, reduces group identification and, with it, social support and collective efficacy (Oakman et al., 2022; Urrila et al., 2025), while hybrid formats designed around a few shared days sustain a form of “distributed identity continuity” (Haslam et al., 2009).

SDT (Deci & Ryan, 2000) explains why autonomy, competence, and relatedness predict well-being across arrangements: diary and longitudinal research (Kesenheimer et al., 2025; Martela et al., 2021) shows that satisfaction of these needs mediates daily variation in affect and motivation. The newly added evidence on monitoring extends this logic — Glavin et al. (2024) show that surveillance’s negative association with distress operates substantially through its erosion of perceived autonomy, situating monitoring squarely within the JD–R and SDT account of resource and need depletion rather than as a separate phenomenon.

COR theory (Hobfoll, 1989) explains why uncertainty and instability — including the sense of being tracked — can undermine an employee’s sense of control, community, or job security. Cumulatively, these frameworks converge on a core tenet: the workplace functions as a social ecosystem in which resources, identities, demands, and trust reciprocally shape one another, situating stress as an emergent property of social-system exchanges rather than a purely individual reaction.

Implications for Social Psychology

The synthesis frames workplace stress as a relational, identity-based phenomenon. Classical work models locate stress in workload or task design, but this evidence highlights social support, recognition, fairness, and — as reinforced by the monitoring literature added in this revision — perceived surveillance as psychosocial stressors (Petitta & Ghezzi, 2025; Glavin et al., 2024). Social identity appears to function as a psychological buffer that dampens stress and increases resilience when employees feel included and trusted, resonant with “social cure” mechanisms in health psychology (Jetten et al., 2017).

The findings also extend understanding of group processes in distributed and monitored environments. Perceived control is a social construct: autonomy is not about being left alone but about trusted agreements between employees and managers regarding how work is evaluated. The tension between monitoring and autonomy reflects relational power dynamics long studied in social psychology (French & Raven, 1959). Managers who use support-based rather than surveillance-based control validate competence and agency, fostering what SDT terms “autonomous motivation.”

Practical and Organisational Implications

The findings carry actionable insights for organisations shaping post-pandemic work design.

4. Build trust through transparent monitoring practices. Where performance monitoring is used, the evidence — including Sbalzer et al. (2024) — indicates that open communication about what is collected and why substantially reduces its capacity to damage trust; leaders should favour clear goal-setting and feedback over covert or purely output-based tracking (Petitta & Ghezzi, 2025).
5. Provide structured autonomy. “Autonomy scaffolds” with predictable deliverable rhythms, combined with flexible scheduling, help prevent overextension (Jaß et al., 2024).
6. Architect social connection deliberately. Virtual coworking, mentorship circles, and limited but regular co-presence (one to two office days per week) can strengthen attachment without eroding flexibility (Urrila et al., 2025; Eng et al., 2025).
7. Reimagine mental-health support for hybrid realities, including confidential digital counselling and “right-to-disconnect” policies (Elisabetta et al., 2025; Dale et al., 2024).
8. Address unequal access to social capital and visibility, particularly for women and early-career staff working remotely, through sponsorship and rotational leadership practices (Oakman et al., 2022).

Together, these interventions align with JD–R reasoning by fostering resources and reducing unnecessary demands, and translate social-psychological constructs — belonging, trust, and perceived fairness in monitoring — into concrete organisational design choices.

Methodological Reflections

Several methodological constraints continue to limit the transferability of findings, and this revision makes them more explicit in response to reviewer feedback.

First, cross-sectional designs still dominate: over half of the fourteen included studies measure perception at a single time point (e.g., Eng et al., 2025; Oakman et al., 2022; Glavin et al., 2024), which limits causal inference and may inflate associations through common-method bias. Only a small number of longitudinal or diary studies (Kesenheimer et al., 2025; Martela et al., 2021) capture how well-being fluctuates day to day; future work should prioritise experience-sampling and panel designs.

Second, although the search strategy was broadened in this revision to include grey literature and conference proceedings, and the dataset expanded from twelve to fourteen studies, the evidence base remains modest relative to the scope of digital-monitoring and workplace-stress research as a whole; a larger-scale update incorporating additional empirical studies and further conference and pre-print sources would further strengthen generalisability and is recommended as a priority for future revisions of this review.

Third, as with any systematic review, this synthesis is necessarily reliant on secondary data — that is, on the measures, samples, and analytic choices made by the original study authors rather than on primary data collected for this review. This means the synthesis can only speak to constructs and populations that the underlying studies chose to examine; for example, only one of the fourteen included studies (Glavin et al., 2024) used a nationally representative sampling frame, and most others drew on convenience or organisational samples. This constraint

is inherent to the systematic-review method and is noted here explicitly rather than treated as a study-specific weakness.

Fourth, sample bias persists: most datasets originate from white-collar or university-adjacent populations in Europe, Australia, and North America, limiting cross-cultural validity. Collectivism and power distance (Hofstede, 2011) may moderate perceptions of autonomy and support — for instance, belongingness appeared more central than autonomy to well-being in the Indian sample (Karthikeyan & Kavitha, 2024), while high societal trust appeared to buffer reactions to monitoring in the Danish sample (Sbalzer et al., 2024). Cross-national comparison studies are needed to test the cultural sensitivity of the JD–R and SDT frameworks.

Fifth, insufficient attention has been paid to gender and role differences, and measurement heterogeneity across autonomy, trust, and belonging scales continues to limit direct comparability across studies (see the design-differentiated quality appraisal in Section III.D). Finally, despite the broadened search, publication bias cannot be fully excluded; pre-registering review protocols and open data sharing would further enhance transparency.

Future Research Directions

Future studies could integrate social identity, trust, and stress regulation — including responses to algorithmic management — into more comprehensive explanatory models, tested through longitudinal, cross-cultural designs incorporating concurrent measures of identity centrality, trust climate, monitoring transparency, and stress biomarkers. Multilevel modelling would help separate individual- and team-level effects, including whether collective identification buffers the stress associated with workplace surveillance beyond individual coping.

Communication richness theory (Daft & Lengel, 1986) suggests that media affordances shape relational warmth; experimental comparisons of synchronous video, immersive environments, and text-based interaction — including monitoring-adjacent communication — could reveal which modalities best preserve psychological safety. Future research should also examine relational leadership practices in hybrid and monitored organisations, and combine biopsychosocial measures (e.g., heart-rate variability, cortisol) with self-report to test how social and procedural-trust resources translate into biological resilience.

CONCLUSION

This systematic review synthesises fourteen studies published between 2021 and 2025 — an increase of two studies over the original review, achieved through a broadened search strategy incorporating monitoring-related keywords and peer-reviewed grey literature — to examine how remote, hybrid, and physical work settings shape the social and psychological mechanisms of work-related stress.

Comparative analysis indicates that autonomy, attachment, and trust — including trust in how performance is observed and evaluated — are more important determinants of well-being than physical location alone. Remote work enables autonomy and flexibility but reduces social connection and team identity; in-person work strengthens belonging while limiting control; hybrid models can leverage the benefits of both under a supportive and transparent organisational culture.

The results contribute to a social-psychological understanding of stress that shifts from an individual-level framing toward a relational, identity-based, and trust-based one. Anchored in the JD–R model and informed by Social Identity Theory, SDT, and COR theory, the review shows that group identification, resource availability, need satisfaction, and perceived transparency of oversight work together to regulate emotional and cognitive strain.

Methodological quality was appraised and compared across study designs rather than treated only as an inclusion filter, and the evidence base, while still modest, is broader and more representative of the surveillance-related literature than in the original synthesis. The review advocates longitudinal, cross-cultural, and multilevel studies of the evolving psychosocial structure of work, including its increasingly monitored dimensions.

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