

JOURNAL OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP

Workplace Stressors and SME Sustainability in Malaysia: A Conceptual Framework Linking Human Capital and Employee Performance

Leni Cahyati Binti Ahmad Suryanto*

Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia

Abstract

This conceptual paper constructs a paradigm that associates workplace stressors with SME sustainability in Malaysia, mediated by human capital and modulated by social support, with employee performance as the immediate outcome. The research, grounded in the Job Demand-Control-Support (JDCS) model and Social Exchange Theory (SET), posits that stressors such as elevated job demands, ambiguous roles, inadequate compensation, and restricted autonomy adversely affect employee performance in Malaysian SMEs with little resources, exacerbated by informal structures. Human capital, encompassing skills, knowledge, health, and motivation, contributes to the transformation of performance into triple-bottom-line sustainability (economic, social, and environmental). Social support from supervisors, coworkers, and family also helps by giving people greater resources and motivating them to help one other. Using integrative review methods, the framework comes up with testable ideas that fit with Malaysia's policy focus on making small and medium-sized businesses more resilient and making transitions that are good for the environment. The implications underscore the necessity for SMEs to incorporate stress management, supporting practices, and capacity-building HR systems to protect productivity and fulfill sustainability requirements within the supply chain. It is advisable to do future empirical testing through structural equation modeling to corroborate these routes within Malaysian contexts.

Keywords: Workplace Stressors, Employee Performance, Social Support, Small and Medium-sized Enterprises (SMEs), Theoretical Frameworks (JD-R, DCS, SET)

1. Introduction

Small and medium enterprises (SMEs) form the backbone of Malaysia's economy. They account for more than 97% of all firms, employ over four million people, and contribute materially to national GDP (Bank Negara Malaysia [BNM], 2023). Increasingly, Malaysian SMEs participate in regional and global supply chains where buyers expect credible sustainability practices as a condition of access (BNM, 2023; Musman,

* Corresponding author. Tel.: +60163907066

E-mail address: leny_cahyati_a@oyagsb.uum.edu.my

Muda, Hussin, Ismail, Bi Mohamed Sadique, & Saleh, 2025). At the same time, the very features that make SMEs agile lean resources, informal structures, and multi-role jobs expose employees to high job demands, unclear responsibilities, limited autonomy, and modest pay, especially where formal HRM systems are underdeveloped (BNM, 2023; Jindal, Arora, & Singh, 2024).

Recent Malaysian evidence shows how these pressures erode well-being and work quality. Job demands, interpersonal conflict, and role ambiguity are linked to emotional exhaustion and a lower quality of work life, demonstrating how routine pressures can turn into harmful stress when clarity and resources are lacking (Mohamad, Othman, Hasan, Asha'ari, & Mahadi, 2025). These conditions also affect performance. Studies in high-pressure service settings report that stronger stressors raise psychological distress and lower engagement, which increases turnover intentions an early signal of performance decline and human capital loss that SMEs can ill afford in capability and reliability-driven supply chains (Baquero, Khairy, & Al-Romeedy, 2025; BNM, 2023).

This concept paper advances the view that employee human capital skills, knowledge, health, motivation, and tacit know-how acts as the mechanism linking workplace stressors to SME sustainability through performance. ASEAN-focused bibliometric work highlights human, structural, and relational capital as central themes in SME performance and sustainability, and shows that governance and knowledge systems strengthen the productivity gains from human capital. These insights imply that protecting, developing, and retaining employee capabilities are essential for competitive resilience in Malaysian SMEs (Musman et al., 2025).

The paper draws on the Job Demand–Control–Support (JDCS) approach to explain how stressors reduce performance and how social support interrupts that path. In JDCS, strain rises when demands exceed control; added resources supervisor and co-worker support, clear roles, and fair procedures reduce the conversion from demand to strain and help to protect performance (Karasek & Theorell, 1990; Mohamad et al., 2025). Prior evidence shows that support reliably weakens the stress–outcome link (Viswesvaran, Sanchez, & Fisher, 1999; Bakker & Demerouti, 2007). Social Exchange Theory complements this logic by clarifying why support motivates reciprocity, while resource-based stress views explain how added resources prevent loss spirals (Blau, 1964; Hobfoll, 2001). Together, these lenses provide clear, testable, and context-relevant propositions for SMEs under pressure. This research provides a conceptual framework that connects workplace stresses (job demands, role ambiguity, salary and benefits, and autonomy), employee performance, and SME sustainability in Malaysia, with human capital serving as a mediator and social support acting as a moderator. The framework is based on the JDCS model and SET, and it follows Malaysia's SME policy emphasis on resilience and sustainable supply-chain participation. It has four goals:

1. To investigate the influence of workplace stressors on employee performance in Malaysian SMEs.
2. To examine the mediation function of human capital in the relationship between performance and sustainability.
3. To examine the moderating influence of social support on the link between stressors and performance.
4. To promote a policy-aligned conceptual framework that positions workforce well-being as a fundamental sustainability strategy for Malaysian SMEs (BNM, 2023; Jindal et al., 2024; Razak et al., 2024).

This article underscores that SME sustainability encompasses not only environmental and financial dimensions but also employee well-being and institutional support mechanisms, positioning it as a critical human capital strategy vital for the resilience of Malaysia's SMEs.

2. Literature Review

2.1 Workplace Stressors in SMEs

Small and medium enterprises (SMEs) in Malaysia often run with informal structures, small teams, and tight budgets. Because of this, many employees juggle several roles, work long hours, and receive limited pay, autonomy, or training opportunities (Abugu & Ogundare, 2025; Chandrasekaran et al., 2025). These pressures are made worse when HRM systems are weak or ad hoc, so there are no clear tools to manage workload or staff well-being (Anjum et al., 2023; Jindal et al., 2024; Razak et al., 2024). Over time, this environment leads to burnout, low morale, and higher turnover, which hurts productivity and the organisation's ability to cope with challenges (Chandrasekaran et al., 2025). In Malaysian SMEs, the lack of structured practices like training and development or fair performance appraisal can make employees feel undervalued, reducing engagement and performance (Abugu & Ogundare, 2025; Razak et al., 2024).

Research from Malaysia and abroad shows similar patterns. Heavy workloads, role conflict, and weak workplace support are linked to lower job satisfaction and poorer well-being (Anjum et al., 2023; Wang et al., 2024). When stress is not managed, human capital erodes: motivation falls, health suffers, and performance drops, which then slows innovation and competitiveness (Wang et al., 2024; Chandrasekaran et al., 2025). This is critical for SMEs because employees drive efficiency and creativity, so any setback quickly affects growth (Razak et al., 2024). In Malaysia, factors like psychological ownership and job autonomy can help, but when finances are tight and roles are unclear, these strengths fade and performance declines, showing why targeted HRM support is needed (Razak et al., 2024; Abugu & Ogundare, 2025).

Recent Malaysian evidence suggests the problem is widespread. Ismail and Qi (2025) call workplace stress a "silent epidemic," with 67% of employees reporting high stress in 2024, often due to long hours and poor work life balance (Ismail & Qi, 2025; Chandrasekaran et al., 2025). The World Health Organization estimates stress costs Malaysia RM14.46 billion each year through lost productivity, showing both social and economic impacts (Chandrasekaran et al., 2025; Razak et al., 2024). National data such as NHMS 2023 also points to rising depression and burnout among working-age adults, reflecting a broader trend (Institute for Public Health, 2024; Ismail & Qi, 2025; Abugu & Ogundare, 2025).

External pressures make things harder. As Malaysia moves toward sustainability, SMEs face stricter climate rules and supply chain standards from buyers at home and abroad (Bank Negara Malaysia, 2023; Razak et al., 2024). Staff must handle more reporting, compliance, and operational changes, which increases workload and role ambiguity especially in firms with limited HR capacity or funds (Chandrasekaran et al., 2025; Bank Negara Malaysia, 2023). In this context, consistent HRM practices such as recruitment and selection, fair appraisal, and skills development are vital to reduce stress and support performance, yet implementation across Malaysian SMEs remains uneven (Razak et al., 2024; Abugu & Ogundare, 2025).

2.2 Employee Performance and Human Capital

Employee performance is the main driver of SME competitiveness. It shows how well a firm turns its skills, knowledge, health, and motivation into results, which aligns with Human Capital Theory and capability based views of the firm (Jindal et al., 2024; Adnan et al., 2025). Studies on SMEs also show that when HR practices are designed as strategic systems and not just routine administration, they improve individual efficiency and firm outcomes through better skill use, continuous learning, and clearer coordination. This matters even more in resource constrained SMEs (Jindal et al., 2024; Ismail et al., 2024). In Malaysia, evidence highlights that attracting, developing, and keeping capable employees is crucial because small firms depend on a few multitasking staff whose effort and expertise strongly shape performance (Adnan et al., 2025; Hamzah & Rahman, 2025).

Stress reduces the value gained from human capital. It lowers motivation, weakens focus, and increases withdrawal behaviours, which disrupt learning and daily operations (Zhang et al., 2024; Ismail et al., 2024). In SME settings, without supportive HR designs, rising digital demands and unclear roles are linked with weaker

employee digital performance. This shows that human capital can be drained when strain is not managed (Wang et al., 2024; Adnan et al., 2025). Malaysian retention studies also find that when job demands, rewards, and development do not match, satisfaction and commitment fall, turnover intentions rise, and the firm loses accumulated human capital that would have supported long term performance (Hamzah & Rahman, 2025; Saman et al., 2025).

Targeted investments can reverse this pattern. Digital HR practices, structured training, and data driven performance management build innovative work behaviour and productivity by strengthening the pathway that links human capital to performance (Zhang et al., 2024; Ismail et al., 2024). Recent findings show that digital HRM raises productivity directly and also indirectly through digital transformation and employee innovativeness. This suggests that HR architecture can act as a firm specific asset that is valuable, rare, and hard to copy when it is integrated with strategy and daily work (Zhang et al., 2024; Adnan et al., 2025). Related evidence shows that digital leadership improves employee digital performance through high involvement HRM and dynamic capabilities, meaning technology pays off only when employees are enabled to learn and reshape how they work (Wang et al., 2024; Toan et al., 2025).

In SMEs where formal systems are thin, relational HR that supports well-being and growth helps convert human capital into sustained performance. It does this by building trust, reciprocity, and discretionary effort (Adnan et al., 2025; Ismail et al., 2024). Qualitative studies on Malaysian SMEs describe an ethics of care among owner managers that supports work life balance and development, which in turn lifts motivation and adaptive effort in small teams (Hamzah & Rahman, 2025; Saman et al., 2025). Along with clear retention signals such as fair appraisal, job security, and structured development, these relational and formal levers protect and activate human capital as the closest channel through which SMEs achieve competitiveness and resilience (Toan et al., 2025; Adnan et al., 2025).

2.3 SME Sustainability

For SMEs, sustainability is more than staying alive in the short term. It means running the business in a way that balances economic results, social responsibility, and care for the environment. This triple bottom line view helps firms build long term resilience. Recent reviews stress that SME sustainability must combine all three pillars to be meaningful and lasting (Zaman, Tanewski, & Ekanayake, 2025). In Malaysia, policy discussions link greener SMEs to national competitiveness and supply chain access, so sustainability becomes both a firm goal and a national priority (Bank Negara Malaysia, 2023; Saman, Mahmud, Mat Nor, & Kamaludin, 2025).

Evidence shows that green innovation, digital tools, and corporate social responsibility (CSR) can lift SME sustainability. These steps improve resource use, signal credibility to customers and financiers, and build the ability to adapt when markets change. Studies on Malaysian and regional SMEs report performance gains across economic, environmental, and social outcomes, and a stronger licence to operate in climate aware value chains (Saman et al., 2025; Zaman et al., 2025). Earlier Malaysian work also notes that structured practices such as ISO 14001 can raise competitiveness when firms tackle capability and cost barriers (Musaa & Chinniah, 2016).

Sustainability reporting and ESG integration now play a key enabling role. Clear and simple metrics help smaller firms show real progress without heavy reporting burdens. Common indicators include energy use, greenhouse gas emissions, worker health and safety, and transition plans (OECD, 2025). In Malaysia, financial sector guidance encourages SMEs to start measuring, reporting, and improving. Capacity building and advisory support are framed as critical partners to disclosure (Bank Negara Malaysia, 2023; OECD, 2025). In the Malaysian service sector, results are strongest when digital adoption, resilience planning, and CSR move together. Benefits come through better efficiency, stronger stakeholder trust, and readiness to meet buyer and financier requirements. Still, effects differ by industry and firm size. This means returns depend on the right capabilities and ecosystem support (Saman et al., 2025; Zaman et al., 2025). For SMEs with thin margins and limited management time, a phased approach works best. Link basic digital tools, people

systems, and focused reporting so that good intentions turn into measurable and durable performance (OECD, 2025; Bank Negara Malaysia, 2023).

2.4 Role of Social Support

In collectivist settings such as Malaysia, social support from supervisors, co-workers, and family reduces the strain of heavy demands and role ambiguity, promotes commitment, and helps employees sustain performance when resources are tight, with convergent evidence that multiple sources of support act as complementary reservoirs that buffer stress and preserve work outcomes (Anjum, Hussain, & Abbas, 2023; Bell, Anderson, Roma, Landon, & Dev, 2025; Jolly, Kong, & Kim, 2021). The Job Demand Control Support tradition explains this buffering effect by arguing that high demands coupled with low control create job strain, while supportive relations alter the appraisal of demands and expand coping resources, which prevents iso strain and protects performance; the related Job Demands Resources perspective formalises support as a core resource that offsets demands and predicts engagement, burnout, and job performance, with meta analytic and field evidence showing consistent moderation of the stress to outcome link (Karasek & Theorell, 1990; Bakker & Demerouti, 2007; Viswesvaran, Sanchez, & Fisher, 1999).

Social Exchange Theory clarifies why support is motivational by showing that supportive treatment signals value and fairness, which triggers reciprocity norms that strengthen commitment and extra role behaviour; recent experiments further indicate that support is most beneficial when helpers experience autonomy to assist and perceive their help as effective, conditions that make supportive practices credible and energising in small firms (Blau, 1964; Xie et al., 2025). The effectiveness of support depends on matching the type of support to the stressor that employees face, since emotional support is especially useful for interpersonal strain, instrumental support offsets time pressure and workload, informational support aids problem solving in complex tasks, and appraisal support stabilises self efficacy; integrating these support types into daily routines allows small and medium enterprises to deliver low cost buffers that protect performance (Jolly et al., 2021).

Empirical findings across demanding work settings converge on the same conclusion that social support flattens the slope linking stressors to adverse outcomes by improving satisfaction, reducing burnout, and stabilising job performance, and studies with high stress roles and small firm contexts show that supervisor and co-worker support are especially potent when formal systems are thin and job control is limited (Anjum et al., 2023; Bell et al., 2025; Etzion, 1984).

2.5 Theoretical Framework

The Job Demand–Control–Support tradition explains how job demands, decision latitude, and social support jointly determine strain and performance, which fits Malaysian SMEs where employees often face high demands and limited control. In this model, heavy demands combined with low autonomy produce strain that degrades performance, while supportive relationships from supervisors and co-workers act as resources that change the appraisal of demands and expand coping options, thereby preventing iso-strain and protecting task quality (Karasek & Theorell, 1990; Bakker & Demerouti, 2007; Viswesvaran, Sanchez, & Fisher, 1999). In small firms that depend on a few multi-tasking contributors, the availability of such resources is especially consequential for sustaining day-to-day productivity under pressure (Jolly, Kong, & Kim, 2021).

Social Exchange Theory complements this strain logic by clarifying why support motivates sustained effort. Supportive treatment signals that the organization values the employee, which activates reciprocity norms that strengthen commitment and extra-role behaviour. Evidence shows that support has stronger motivational effects when employees perceive autonomy to seek or give help and when the help is effective, conditions that make supportive practices credible in lean SME settings. Studies in high-stress roles also find that social support weakens the link between work stress and adverse attitudes, consistent with SET's mechanism of reciprocal obligation and loyalty (Blau, 1964; Xie, Zhang, Wang, Zhang, & Li, 2025; Anjum, Hussain, & Abbas, 2023).

Anchored in these theories, the present framework specifies workplace stressors as the independent construct that shapes performance directly, with social support moderating this path and human capital mediating the downstream link from performance to sustainability. The mediator reflects the firm's accumulated skills, knowledge, health, and motivation that convert effort into adaptive capability and competitive outcomes, which aligns with evidence that high-involvement HR systems and digital HR practices build dynamic capabilities through employees and translate them into measurable performance in SMEs (Wang, Mansor, & Leong, 2024; Zhang, Iqbal, Tian, & Akhtar, 2024; Jindal, Arora, Singla, & Kaushal, 2024). The dependent construct of SME sustainability is treated in triple-bottom-line terms that combine economic viability with social and environmental outcomes, consistent with recent syntheses and with Malaysian policy emphasis on SME greening as a competitiveness and supply-chain requirement (Zaman, Tanewski, & Ekanayake, 2025; Saman, Mahmud, Mat Nor, & Kamaludin, 2025; Bank Negara Malaysia, 2023).

Figure 1 : Conceptual Framework: Workplace Stressors and SME Sustainability in Malaysia

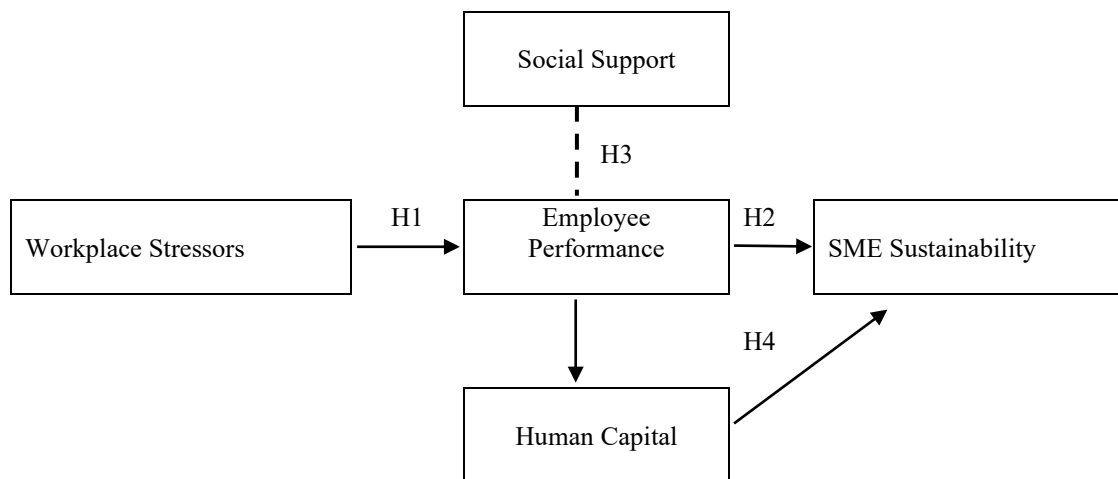


Figure 1. Conceptual framework illustrating the hypothesised relationships. H1 states that workplace stressors negatively affect employee performance. H2 proposes that employee performance positively influences SME sustainability. H3 indicates that social support moderates the relationship between workplace stressors and employee performance. H4 posits that human capital mediates the relationship between employee performance and SME sustainability.

3. Methodology of Study

3.1 Research design and sources

The research design is an integrative review that consolidates peer-reviewed studies and authoritative policy texts to derive constructs and theoretically justified linkages suitable for subsequent empirical testing in Malaysian SMEs. Inclusion emphasised recent systematic or narrative reviews on employee performance and HRM, SME sustainability syntheses, and empirical studies that operationalise stressors, support, and performance in small-firm settings; Malaysian policy materials were used to ensure contextual fit. This approach follows recommended steps for conceptual reviews: scoping, construct extraction, theory integration, and proposition specification so that later studies can be operationalised with clear variables and relationships (Mohammad et al., 2025; Jindal et al., 2024; Zaman et al., 2025; Saman et al., 2025).

3.2 Theory integration and construct specification

Two complementary lenses structure the model. First, the JDCS perspective holds that high job demands coupled with low control generate strain, while social support functions as a resource that buffers the translation of stressors into adverse outcomes such as impaired performance; this logic motivates modelling social support as a moderator of the stressor–performance link in SMEs where control is often limited (Karasek & Theorell, 1990; Bakker & Demerouti, 2007; Viswesvaran, Sanchez, & Fisher, 1999). Second, Social Exchange Theory explains why supportive treatment motivates sustained effort: perceived support signals value and fairness, activating reciprocity norms that strengthen commitment and extra-role behaviour, which is salient in lean SMEs that depend on discretionary effort (Cropanzano & Mitchell, 2005; Jolly, Kong, & Kim, 2021).

Within this theoretical scaffold, workplace stressors are specified as the independent construct encompassing quantitative demands and role stress; employee performance is the proximal outcome; human capital captures the mediating mechanism through which performance gains accumulate into durable capabilities; and social support distinguished into supervisor, co-worker, and family sources operates as the contextual moderator. This specification is consistent with evidence that high-involvement HR systems and digital HR practices build employee dynamic capabilities and translate them into measurable performance in SMEs, while weak people systems or unmanaged strain erode the value of human capital (Wang et al., 2024; Zhang et al., 2024; Jindal et al., 2024; Jolly et al., 2021).

3.3 Proposition development and hypotheses and suggested testing strategy

The integration of the Job Demand–Control–Support (JDCS) model and Social Exchange Theory (SET) provides a strong theoretical foundation for developing the propositions in this study. Workplace stressors, such as heavy workloads, role ambiguity, and limited job autonomy, are expected to have a negative impact on employee performance within Malaysian SMEs. The JDCS model suggests that high job demands combined with low control create psychological strain, thereby lowering individual productivity and overall organizational outcomes (Karasek & Theorell, 1990; Anjum et al., 2023). Empirical findings from Malaysian SMEs further indicate that unmanaged workplace stress reduces employee engagement and hampers organizational adaptability, thereby threatening SME sustainability (Jindal et al., 2024).

H1: Workplace stressors negatively affect employee performance in Malaysian SMEs.

Employee performance is central to the survival and competitiveness of SMEs. Based on Human Capital Theory, an organization's success is driven by the knowledge, skills, and health of its workforce, making human capital a crucial determinant of long-term sustainability (Wang et al., 2024; Zhang et al., 2024). Evidence from systematic reviews demonstrates that higher employee productivity leads directly to better financial performance, innovation, and resilience in SMEs (Mohammad et al., 2025; Eng et al., 2025). Thus, employee performance is positively associated with achieving triple-bottom-line sustainability outcomes, encompassing economic, social, and environmental dimensions.

H2: Employee performance positively influences SME sustainability.

Social support plays an important role in buffering the adverse effects of workplace stressors, consistent with the JDCS framework. Emotional and instrumental support from supervisors, peers, and family provides employees with psychological resources that reduce job strain and enhance their capacity to perform effectively under high-demand conditions (Hossain et al., 2025). Additionally, SET posits that supportive organizational relationships foster reciprocity, where employees return organizational support with higher commitment and stronger work performance (Bakker & Demerouti, 2007; Uddin et al., 2019).

H3: Social support moderates the relationship between workplace stressors and employee performance, such that higher social support weakens the negative impact of stressors on performance.

Finally, human capital is conceptualized as a mediating mechanism in the proposed framework. Human capital development through training, skill enhancement, and health initiatives allows SMEs to translate individual performance into organizational competitiveness and sustainability (Jolly et al., 2021). When SMEs invest in workforce capabilities, improved employee performance results in accumulated knowledge and innovative capacity, ultimately strengthening resilience against external market pressures (Eng et al., 2025; Mohammad et al., 2025).

H4: Human capital mediates the relationship between employee performance and SME sustainability.

For future empirical testing, a cross-sectional or longitudinal survey of Malaysian SMEs is suggested. Validated measurement scales should be adopted, including instruments assessing workplace demands, role ambiguity, social support, employee performance, and human capital investment. Data could be analyzed using structural equation modeling (SEM) to examine both direct and indirect effects, supported by moderated-mediation techniques to test interaction effects and mediating pathways (Hayes, 2013; Kline, 2016). This approach enables robust testing of the JDCS and SET mechanisms underlying SME sustainability in the Malaysian context.

4. Findings and Discussion

4.1 Workplace stressors as antecedents of employee performance

Consistent with the Job Demand Control Support tradition, high quantitative demands, role ambiguity and low decision latitude undermine cognitive and affective resources that employees need to execute tasks, which depresses in-role performance in lean, informally managed SMEs (Karasek & Theorell, 1990). Evidence from stress studies shows that overload and unclear expectations reliably predict lower job satisfaction and higher strain, both of which are proximal pathways to poorer performance; this pattern has been replicated in clinical, service and logistics settings and is theoretically identical in SME contexts where multitasking and resource scarcity are common (Anjum, Hussain, & Abbas, 2023; Shaari, Salleh, & Ahmad, 2023). Malaysian organisational research likewise indicates that when work pressures exceed available control and support, employees' concentration, persistence and citizenship behaviours fall, lowering unit productivity and service quality, with downstream risks for firm outcomes (Razak & Abdul Rahim, 2024; Bakker & Demerouti, 2007).

4.2 From employee performance to SME sustainability: the mediating role of human capital

At the enterprise level, aggregated individual performance feeds directly into survival and growth indicators such as cost efficiency, service reliability and innovation output that comprise the economic pillar of SME sustainability, while employee conduct and wellbeing shape the social pillar, and process improvements facilitate greener operations that support the environmental pillar (Zaman, Khan, & Afsar, 2025; Saman, Muhamat, Yusof, Hassan, & Majid, 2025). Recent reviews emphasise that SMEs which couple performance management with capability-building training, upskilling, safety and health investments accumulate human capital stocks that convert day-to-day performance into durable resilience and competitiveness, strengthening all three dimensions of sustainability (Hossain et al., 2025). In parallel, empirical work shows that high-involvement HRM and digital leadership cultivate employees' dynamic capabilities and adaptive behaviours, lifting individual performance and positioning SMEs to sustain gains amidst shocks and technological change, evidencing the mediating mechanism of human capital between

performance and sustainability (Wang, Mansor, & Leong, 2024). Policy guidance in Malaysia is directionally consistent: Bank Negara Malaysia's Annual Report 2023 highlights that people-centric capability building, disclosure readiness and green process skills are foundational enablers through which firms translate performance improvements into sustainability outcomes, with financing and toolkits (e.g., JC3 ESG Jumpstart, LCTF, GVC) designed to support that conversion (Bank Negara Malaysia, 2024).

4.3 The moderating role of social support and implications for SME practice

Social support informational, instrumental and emotional buffers the stressor strain performance chain by supplying alternative resources when demands are high, thereby preserving task focus and commitment under pressure (Viswesvaran, Sanchez, & Fisher, 1999; Bakker & Demerouti, 2007). Evidence from occupational settings shows that support from supervisors and peers weakens the adverse link between anxiety and work outcomes and raises satisfaction, which sustains effort and discretionary performance even when workloads are heavy, a logic especially pertinent in collectivist Malaysia where relatedness norms amplify reciprocity (Anjum, Hussain, & Abbas, 2023; Chen, Alers-Rojas, Benner, & Gleason, 2022). Synthesising these strands, the proposed framework argues that SMEs can defend performance and thus sustainability by pairing demand management with support practices (coaching, participative problem-solving, peer learning circles) and by embedding capability development into digital and green transitions so that human capital mediates short-run performance gains into long-run resilience (Wang, Mansor, & Leong, 2024; Saman et al., 2025; Bank Negara Malaysia, 2024).

5. Discussions

Strengthening human capital is therefore not a welfare adjunct but a performance architecture: investments in skills, health and motivation convert into higher in-role and innovative performance, buffering SMEs against shocks and enabling continuous improvement (Mohammad et al., 2025; Cha, Zhang, & Tang, 2024). Evidence from Malaysian and regional contexts shows that training, fair rewards, supportive climates and effective communication lift job performance directly and through engagement and commitment mechanisms, translating micro-level capability into macro-level productivity and resilience (Cha, Zhang, & Tang, 2024; Mohammad et al., 2025). This is aligned with national policy priorities: Bank Negara Malaysia emphasises that people-centric upgrades and workplace practices are integral to SMEs' orderly transition and competitiveness as customers, regulators and anchors raise expectations on efficiency, resilience and sustainability (Bank Negara Malaysia, 2024).

Digitalisation sharpens these imperatives. Emerging findings indicate that digitally capable leadership catalyses employee job crafting, innovation and performance, giving SMEs adaptive capacity under demanding, resource-constrained conditions (Wang, Park, & Gao, 2025). At the same time, SMEs must architect flexibility deliberately: manager interviews show that unstructured flexible work can fragment collaboration and slow project throughput unless coupled with clear deliverables, coordinated on-site rhythms and stronger process discipline design choices that protect productivity while preserving autonomy's stress-reducing benefits (Eng, Aboagye, Bergsten, & Strömberg, 2025). In other words, digital and flexible work practices should be embedded in a coherent human-capital system (skills, goals, feedback, support) so that they amplify, rather than dilute, performance and sustainability (Wang, Park, & Gao, 2025; Eng et al., 2025).

Social support is the keystone that binds JDCS and SET pathways in Malaysia's collectivist workplaces. Supervisor and peer support through instrumental help, fair treatment and voice dampens the stressor strain performance chain by replenishing resources and reaffirming reciprocity norms that sustain effort and citizenship behaviours (Bakker & Demerouti, 2007; Blau, 1964). Meta-analytic evidence shows that support reliably buffers the link between job stressors and adverse outcomes, indicating that even when job demands cannot be reduced immediately, SMEs can protect performance and well-being by strengthening supportive practices, including coaching, feedback cadence and respectful communication (Viswesvaran et al., 1999;

Mohammad et al., 2025). This is also consistent with national transition guidance: Bank Negara Malaysia highlights that engaging employees in the sustainability journey through training, shared goals and clear communication builds morale and commitment, which are necessary for SMEs to capture efficiency gains and withstand transition risks (Bank Negara Malaysia, 2024).

Taken together, the framework argues that Malaysian SMEs should treat stress management, social support and human-capital development as an integrated sustainability strategy. Concretely, SMEs that (i) tame role and workload ambiguity; (ii) invest in skills, health and motivation; (iii) structure digital and flexible work with coordination guardrails; and (iv) institutionalise supportive leadership and peer norms, are better positioned to sustain high employee performance and meet the evolving expectations of supply-chain partners and regulators (Bank Negara Malaysia, 2024; Wang, Park, & Gao, 2025). In a context where sustainability is increasingly tied to access to markets and finance, these people-system choices are not optional they are the operating model through which SMEs protect productivity, unlock innovation and maintain long-term viability (Bank Negara Malaysia, 2024; Eng et al., 2025).

6. Conclusions and Recommendations

This conceptual paper concludes that workplace stressors are foundational antecedents of employee performance and, through that channel, of SME sustainability in Malaysia, with human capital operating as the mediating mechanism and social support functioning as a contextual moderator that buffers the deleterious effects of high demands and low control (Karasek & Theorell, 1990; Bakker & Demerouti, 2007). Anchoring the model in the Job Demand–Control–Support tradition and Social Exchange Theory clarifies both the strain pathway and the reciprocity pathway, and situates employee well-being as a strategic rather than peripheral concern for firms that rely on a small number of multi-tasking contributors whose output and continuity disproportionately shape organisational outcomes (Blau, 1964; Jindal, Arora, Singla, & Kaushal, 2024). Within Malaysia’s policy environment, where SMEs are expected to meet evolving sustainability expectations to remain competitive in supply chains, this people-centred lens aligns with the national direction that links workforce capability and resilience to long-term viability (Bank Negara Malaysia, 2023; Zaman, Tanewski, & Ekanayake, 2025).

The evidence synthesised here indicates that managing stressors is not merely a welfare issue but a performance architecture that protects and compounds human capital, thereby supporting the economic, social and environmental pillars of sustainability (Mohammad et al., 2025; Zaman et al., 2025). Reducing role ambiguity, calibrating workloads and strengthening decision latitude are practical means to curb the strain mechanisms identified by JDCA, while cultivating supportive climates activates reciprocity norms that stabilise effort and citizenship behaviours in lean SMEs, consistent with meta-analytic results on the buffering effects of support (Viswesvaran, Sanchez, & Fisher, 1999; Bakker & Demerouti, 2007). Taken together, the proposed framework argues that stress governance, capability development and supportive relations must be designed as an integrated system if SMEs are to convert day-to-day performance into sustained competitiveness in Malaysia’s transition toward greener and more transparent value chains (Bank Negara Malaysia, 2023; Saman, Mahmud, Mat Nor, & Kamaludin, 2025).

Recommendations follow directly from this integration. First, SMEs should formalise stress-management practices that target known antecedents of strain by clarifying roles, smoothing workload peaks and widening decision latitude where feasible, because these design choices address the demand–control imbalance at the root of performance loss (Karasek & Theorell, 1990; Anjum, Hussain, & Abbas, 2023). Second, firms should institutionalise multi-source social support through supervisor coaching, peer learning routines and respectful communication norms, since informational, instrumental and emotional support consistently moderate the link from demands to outcomes and preserve task quality under pressure (Jolly, Kong, & Kim, 2021; Viswesvaran et al., 1999). Third, SMEs should invest in human-capital systems that link training, performance feedback and fair rewards to concrete adoption of digital tools and process improvements, because high-involvement

HRM and digital HR practices build employee dynamic capabilities that raise productivity and resilience (Wang, Mansor, & Leong, 2024; Zhang, Iqbal, Tian, & Akhtar, 2024). Fourth, owners and managers should align these people systems with Malaysia's sustainability agenda by measuring a concise set of ESG and human-capital indicators and by tapping sectoral toolkits and financing that encourage capability building and continuous improvement, which strengthens access to markets and finance while reducing transition risks (Bank Negara Malaysia, 2023; OECD, 2025).

Managerially, treating HR as a strategic platform rather than an administrative function is essential. In practice, this means coupling job design and support practices with digital transformation initiatives so that technology augments, rather than overwhelms, employees, thereby safeguarding the very human capital that underwrites innovative work behaviour and sustained performance in small-firm settings (Jindal et al., 2024; Wang et al., 2024). In the Malaysian context, where SMEs face external sustainability pressures alongside internal capacity constraints, coherent bundles that join clear goals, skills development, data-driven feedback and everyday support are more likely to translate into measurable gains across the triple bottom line than isolated initiatives, reinforcing the proposed mediation of human capital between performance and sustainability (Zhang et al., 2024; Saman et al., 2025). Policy alignment strengthens these micro-foundations, since national guidance and facilities are explicitly designed to help SMEs build the skills and routines that operationalise greener, safer and more efficient practices without imposing disproportionate reporting burdens (Bank Negara Malaysia, 2023; OECD, 2025).

Finally, while this study is conceptual, it provides a tractable set of hypotheses and measurement guidance for future empirical testing in Malaysian SMEs, including moderated mediation models that capture both JDCS and SET mechanisms with validated measures for demands, support, performance and human-capital investment (Hayes, 2013; Kline, 2016). Longitudinal or multi-wave designs are particularly important to observe how stressor reductions, support intensification and HR investments accumulate into capability stocks that yield sustainability outcomes over time, which would provide stronger causal leverage and refine the practical sequencing of interventions for entrepreneurs and policy makers in Malaysia (Mohammad et al., 2025; Saman et al., 2025). In sum, by embedding stress management, social support and human-capital development within digital and sustainability transitions, Malaysian SMEs can protect productivity, meet the expectations of buyers and regulators and secure long-run viability in a demanding operating landscape (Bank Negara Malaysia, 2023; Zaman et al., 2025).

7. Limitations of the Study

This paper is conceptual and therefore does not provide empirical validation of the proposed relationships; any inferences remain provisional until tested with primary data. As with all theory-building reviews, our integration is constrained by the coverage, quality and heterogeneity of extant studies, which vary in definitions, measures and contexts especially for multifaceted constructs such as "employee performance" and "human capital." Consequently, the strength and direction of some theorised links may shift once operationalised with sector-specific instruments and multi-source data (Mohammad, Menhat, Shafi, Hussein, Al-Mubaideen, & Alshakehtep, 2025; Jindal, Arora, Singla, & Kaushal, 2024).

Generalisation beyond Malaysia should be made cautiously because institutional arrangements, labour markets and cultural norms shape both stress processes and exchange relationships at work. The present framework embeds Malaysian policy priorities and collectivist work norms, which may not map neatly onto other national settings; even within Malaysia, sectoral heterogeneity implies that effects could differ between, for example, services and manufacturing SMEs (Bank Negara Malaysia, 2023; Saman, Mahmud, Mat Nor, & Kamaludin, 2025). Moreover, sustainability pathways and performance returns vary with ecosystem supports and buyer requirements, so translating this framework to other regions will require attention to local regulatory pressures and supply-chain governance (OECD, 2025; Zaman, Tanewski, & Ekanayake, 2025).

Measurement limitations are also salient because the constructs we theorise are broad and multi-dimensional. Workplace stressors comprise quantitative load, role ambiguity and decision latitude; employee performance spans task, adaptive and extra-role behaviours; human capital includes skills, health and motivation; and social support arises from supervisors, peers and family. Without careful operationalisation, studies risk construct conflation and common-method bias. Future tests should deploy validated JD-CS/JD-R instruments, distinct source type support scales and multi-source performance data, analysed with longitudinal or multi-wave models to address temporal ordering and mediated moderated mechanisms (Karasek & Theorell, 1990; Bakker & Demerouti, 2007; Jolly, Kong, & Kim, 2021; Kline, 2016; Hayes, 2013; Viswesvaran, Sanchez, & Fisher, 1999).

Finally, the sustainability and HRM landscape is dynamic. Regulatory expectations, disclosure guidance and green-financing tools are evolving in Malaysia and internationally, which can alter incentives and required capabilities for SMEs over short horizons. Our policy anchoring reflects current guidance and facilities, but future changes in financing schemes, reporting standards or supply chain due diligence could reshape the mechanisms we theorise, limiting temporal generalisability (Bank Negara Malaysia, 2023; OECD, 2025). Historical evidence also indicates uneven adoption of environmental practices among Malaysian SMEs due to capability and cost barriers, suggesting that implementation frictions may temper realised effects relative to conceptual predictions (Musaa & Chinniah, 2016; Saman et al., 2025).

8. Suggestions for Future Research

Future research should move beyond conceptual synthesis to empirical testing of the proposed moderated-mediation framework with appropriately powered, multi-wave designs that establish temporal precedence among workplace stressors, social support, human capital, employee performance, and SME sustainability; longitudinal structural equation modeling and conditional process analysis can adjudicate the JD-CS and SET mechanisms while minimizing common-method bias, thereby providing stronger causal leverage for Malaysian SME contexts (Karasek & Theorell, 1990; Bakker & Demerouti, 2007; Hayes, 2013; Kline, 2016). Comparative studies across SME sub-sectors such as manufacturing, services, and tourism are needed to capture heterogeneity in task demands, supply-chain pressures, and sustainability expectations that condition stress–performance dynamics, especially given service-sector evidence linking digital adoption and CSR to sustainability outcomes and policy signals that SMEs must align with greener value-chain requirements to remain competitive (Saman, Mahmud, Mat Nor, & Kamaludin, 2025; Zaman, Tanewski, & Ekanayake, 2025; Bank Negara Malaysia, 2023).

Measurement development should receive systematic attention so that the multi-dimensional constructs in this model are operationalized with sector-appropriate, validated scales and multi-source data, including task, adaptive and extra-role performance, as well as human capital indicators for skills, health, and motivation; this agenda can be advanced by linking digital HR practices and leadership to employee dynamic capabilities, which existing SME findings already associate with higher productivity and innovativeness (Jindal, Arora, Singla, & Kaushal, 2024; Wang, Mansor, & Leong, 2024; Zhang, Iqbal, Tian, & Akhtar, 2024). The social support component warrants multi-level designs that simultaneously model individual perceptions and team or unit climates, allowing tests of cross-level buffering and reciprocity effects under high demand and low control; integrating support from supervisors, co-workers, and family into the measurement model is particularly pertinent in collectivist Malaysian settings where multiple sources of support may act additively to sustain performance under strain (Jolly, Kong, & Kim, 2021; Viswesvaran, Sanchez, & Fisher, 1999; Bakker & Demerouti, 2007).

Policy-linked evaluations should leverage quasi-experimental and panel approaches to estimate the performance and sustainability effects of national toolkits and financing facilities that encourage capability building and greener operations, such as Malaysia's Low Carbon Transition Facility and related disclosure guidance; comparing adopters and matched non-adopters across time would illuminate whether capability

investments translate into reduced stressor exposure and stronger sustainability trajectories for SMEs (Bank Negara Malaysia, 2023; OECD, 2025).

Mixed-methods programs that combine surveys with qualitative cases and process tracing can reveal how SMEs actually configure stress-management, supportive practices, and digital HR into coherent bundles over time, complementing statistical tests with rich accounts of implementation frictions and enablers; such designs are well suited to volatile conditions in which flexible work, staffing constraints, and evolving buyer requirements interact to shape both performance and sustainability outcomes (Eng, Aboagye, Bergsten, & Strömberg, 2025; Mohammad, Menhat, Shafi, Hussein, Al-Mubaideen, & Alshakehtep, 2025).

Finally, sectoral and regional replications across Malaysia and comparative ASEAN samples will be important to assess boundary conditions and external validity, since institutional arrangements and ecosystem supports can alter the returns to human-capital investments and sustainability practices; coordinated projects that align measurement with international SME reporting convergence efforts would also help situate Malaysian evidence within broader policy dialogues on proportional, decision-useful ESG metrics for smaller firms (Zaman et al., 2025; OECD, 2025; Bank Negara Malaysia, 2023).

Acknowledgements

This article is developed in part from a Doctor of Business Administration (DBA) dissertation submitted to the Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia. The researcher wishes to thank Universiti Teknikal Malaysia Melaka for the support provided in the preparation of this paper, and the Othman Yeop Abdullah Graduate School of Business for the academic guidance that contributed to its development.

References

- Abugu, E., & Ogundare, E. (2025). Investigating the Effect of HRM Practices on Work Engagement Among SMEs in Malaysia. *International Journal of Economics, Business and Management Research*, 9(6), 56-92. <https://doi.org/10.51505/IJEBMR.2025.9604>
- Adnan, M. N. A., Yaacob, M. R., Adnan, M. W., Abdullah, N., & Mukhtar, D. (2025). The critical success factors (CSFs): Empirical insight from Malaysian SMEs. *Asian People Journal*, 8(1), 160-180. <https://doi.org/10.37231/apj.2025.8.1.738>
- Anjum, M. (2023). Impact of work stress on surgeons' job satisfaction with the moderating role of social support. *International Journal of Academic Research in Business and Social Sciences*, 13(9), 112-126.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bank Negara Malaysia. (2023). *Supporting SMEs transition to greener practices*. In *Annual Report 2023*(pp.113118).https://www.bnm.gov.my/documents/20124/12142010/ar2023_en_box8.pdf
- Bank Negara Malaysia. (2024). *Annual Report 2023: Box 8—Supporting SMEs' transition to greener practices*. Kuala Lumpur: Bank Negara Malaysia.
- Baquero, A., Khairy, H. A., & Al-Romeedy, B. S. (2025). Workplace stressors and the intention to quit: The role of psychological distress and psychological flexibility among hospitality employees. *Tourism and Hospitality*, 6(2), 72. <https://doi.org/10.3390/tourhosp6020072>
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Cha, K. T., Zhang, Z., & Tang, Y. (2024). Factors that influence employee job performance: A case study of GDEX Express Carrier Bhd. *Journal of Business and Social Sciences*, 2024(26), 1-24.
- Chandrasekaran, S., Guduru, R., & Loganathan, S. (2025). Factors causing work related stress and strategies for stress management: a study of working women in private and public sectors in the Indian context. *Frontiers in Global Women's Health*, 6, 1597409. <https://doi.org/10.3389/fgwh.2025.1597409>
- Chen, S., Alers-Rojas, F., Benner, A. D., & Gleason, M. E. J. (2022). Daily experiences of discrimination and sleep: The moderating role of social support. *Journal of Research on Adolescence*, 32(2), 596-610.
- Eng, I., Aboagye, E., Bergsten, E. L., & Strömberg, A. (2025). Balancing employee flexibility and organizational performance: Implications for innovation, productivity, and company attractiveness in SMEs. *Frontiers in Psychology*, 16, 1518284.

- Hamzah, N., & Rahman, N. H. A. (2025). Culture assessment in relation to SMEs sustainability: A case study in Malaysia. *Asian Journal of Accounting and Governance*, 23. <https://doi.org/10.17576/AJAG-2025-23-5>
- Hossain, M. I., Jamadar, Y., Islam, M. F., Rashed, M., & Akter, T. (2025). Environmental sustainability practices in SMEs: Insights from integrated PLS-SEM and fsQCA approaches. *Journal of Cleaner Production*, 503, 145185. <https://doi.org/10.1016/j.jclepro.2025.145185>
- Institute for Public Health. (2024). *National Health and Morbidity Survey 2023 (NHMS 2023): Non-communicable diseases, risk factors & other health problems*. Ministry of Health Malaysia.
- Ismail, F., & Qi, T. E. (2025). Enhancing workplace health in Malaysia: Addressing stress, sedentary lifestyles and nutrition deficits. *Quantum Journal of Social Sciences and Humanities*, 6(2), 150–165. <https://doi.org/10.55197/qjssh.v6i2.627>
- Ismail, M., Ahmad, N. H., & Rasool, M. S. A. (2024). Enhancing Malaysian human capital through holistic education approach: A literature review. *Global Business and Management Research: An International Journal*, 16(2s), 205-216.
- Jindal, N., Arora, N., Singla, L., & Kaushal, N. (2024). A systematic review of human resource management practices in small and medium-sized enterprises. *Corporate Governance and Organizational Behavior Review*, 8(3), 64–76. <https://doi.org/10.22495/cgobrv8i3p6>
- Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, 42(2), 229–251.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Mohammad, A. M., Menhat, M., Shafi, S., Hussein, A.-H. M. A., Al-Mubaideen, M. A., & Alshakehteep, K. (2025). Trends in employee performance: A comprehensive review and bibliometric analysis using Scopus and WOS. *SA Journal of Human Resource Management*, 23, a2887.
- Mohamad, N. I., Othman, A. S., Hasan, H., Asha'ari, M. J., & Mahadi, M. H. (2025). Workplace stress: How demands, interpersonal conflict, and role ambiguity affect human well-being. *Journal of Information Systems Engineering and Management*, 10(40s), 402–414. <https://doi.org/10.32629/jisem.v10i40s.2259>
- Musaa, H., & Chinniah, M. (2016). Malaysian SMEs development: Future and challenges on going green. *Procedia – Social and Behavioral Sciences*, 224, 254–262.
- Musman, M., Muda, S., Hussin, A. H., Ismail, N., Bi Mohamed Sadique, R., & Saleh, S. H. (2025). A decade of research on intellectual capital and SMEs performance in the ASEAN region: A bibliometric analysis of its impact. *Future Business Journal*, 11, 189. <https://doi.org/10.1186/s43093-025-00614-7>
- OECD. (2025). *Fostering convergence in SME sustainability reporting: A background study*(CFE/SME(2024)13/FINAL). Paris: OECD Publishing.
- Razak, Muhammad & Abdul Rahim, Noor. (2024). Factors Influencing Employee Performance in Malaysian SMES: The Mediating of Job Satisfaction and the Moderating Impact of Transformational Leadership. *International Journal of Academic Research in Progressive Education and Development*. 13. 10.6007/IJARPED/v13-i4/23471.
- Saman, N. R. M., Mahmud, N., Mat Nor, N., & Kamaludin, M. A. (2025). The sustainability performance of small and medium enterprises (SMEs) within the service sector: A comprehensive review. *Insight Journal*, 12(1), 13–29.
- Toan, N. D., Duc, P. M., & Anh, D. N. (2025). SME and ASEAN's path to sustainability: Green management practices in the context of SDG. *SDGsReview*, 5, e04540. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n02.pe04540>
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54(2), 314–334.
- Wang, G., Mansor, Z. D., & Leong, Y. C. (2024). Linking digital leadership and employee digital performance in SMEs in China: The chain-mediating role of high-involvement HRM practice and dynamic capability. *Heliyon*, 10(8), e36026. <https://doi.org/10.1016/j.heliyon.2024.e36026>
- Wang, Y., Park, J., & Gao, Q. (2025). Digital leadership and employee innovative performance: The role of job crafting and person–job fit. *Frontiers in Psychology*, 16, 1492264.
- Xie, P., Zhang, J., Wang, C., Zhang, R., & Li, Y. (2025). When giving social support is beneficial for well-being: The roles of autonomy and perceived effectiveness. *Acta Psychologica*, 255, 104911.
- Xin, Z., Guo, Y., Zheng, J., & Xie, P. (2025). When giving social support is beneficial for well-being? *Acta Psychologica*, 255, 104911. <https://doi.org/10.1016/j.actpsy.2025.104911>
- Zaman, M., Tanewski, G., & Ekanayake, G. (2025). What does sustainability mean for small and medium enterprises: A systematic literature review. *Journal of Cleaner Production*, 492, 144830. <https://doi.org/10.1016/j.jclepro.2025.144830>
- Zhang, Y., Iqbal, S., Tian, H., & Akhtar, S. (2024). Digitizing success: Leveraging digital human resource practices for transformative productivity in Chinese SMEs. *Heliyon*, 10(8), e36853. <https://doi.org/10.1016/j.heliyon.2024.e36853>