

Information Quality and Empowering Leadership: A Communication Based Model of Innovation in Hierarchical Work Settings

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Abstract

The study examines how leadership communication influences employees' innovative work behaviour (IWB) within cultures characterised by high power distance. It conceptualises leader-member exchange (LMX) as the quality of dyadic information, encompassing clarity, timeliness, fairness, and

responsive feedback. In addition, leaders' humility is framed as a form of communication that validates employee voice, and a moderated mediation model is tested through psychological empowerment (PE). Data were collected via a cross-sectional survey of 366 employees from large manufacturing organisations, both governmental and private, and analysed using Smart-PLS. The study evaluated the measurement model and employed structural path analysis to test mediation through PE and moderation by leader humility, applying bootstrapping procedures. Findings reveal that hierarchical distance does not exert a direct suppressive effect on IWB. Instead, its influence is indirect, operating through PE. LMX, when considered as information quality, positively influences both PE and IWB, with PE emerging as the strongest determinant of IWB. Furthermore, leader humility significantly strengthens the link between PE and IWB, demonstrating that humble communication (such as acknowledging limitations, attributing credit to others, inviting alternative viewpoints, and providing clear explanations of decisions) transforms empowerment into innovative outcomes. The study acknowledges limitations, including its cross-sectional design within a single-country context, which constrains causal and cross-cultural generalisability. Future research is encouraged to employ longitudinal and multi-source approaches, such as supervisor-rated measures of IWB, and to investigate additional boundary conditions, including digital leadership and team climate. From a managerial perspective, sustaining innovation in hierarchical settings can be facilitated by enhancing LMX communication practices (for example, through clear goal setting, timely updates,

and explanatory feedback), adopting humble leader communication to normalise upward voice, and designing empowerment-focused human resource strategies that reinforce meaning, competence, self-determination, and impact. Overall, the study integrates structural aspects (hierarchical distance), relational-communication (LMX), and behavioural communication (humility) into a unified moderated mediation model. It positions information quality and humble communication as practical mechanisms through which empowerment can be converted into IWB within power-sensitive organisational contexts.

Keywords: Innovative Work Behaviour, Psychological Empowerment, Leader Humility, Hierarchical Distance, Malaysia.

Introduction

In contemporary knowledge-based economies, IWB has become a critical driver of organisational competitiveness, adaptability, and long-term growth. IWB refers to employees' capacity to generate, advocate, and implement novel ideas, which is essential for sustaining organisational dynamism in the face of global developments such as digital transformation, sustainability imperatives, and increasing automation of labour processes. Although innovation is frequently facilitated by technology, its ultimate success depends on human agency, particularly the voluntary actions of employees who extend their efforts beyond routine responsibilities to achieve innovative results.

Much of the existing research has focused on macro-level innovation indicators or firm-level performance, often neglecting the psychological and relational mechanisms that underpin IWB at the individual level. Although global scholarship increasingly recognises the pivotal role of leadership in fostering innovative behaviours (Vu et al., 2025), uncertainty remains about which leadership approaches are most effective, the mechanisms through which they operate, and the boundary conditions in which they function best. These ambiguities are particularly salient in hierarchical, collectivist, and power-sensitive cultural settings such as Malaysia (Wahab et al., 2024). While PE has been found to encourage IWB in hierarchical environments, including educational institutions in Iraq (Alwali, 2024), empirical evidence within the Malaysian context is scarce, highlighting the need for investigation within manufacturing

organisations.

The Malaysian manufacturing sector, which represents a cornerstone of national industrial development, is currently experiencing structural transitions driven by labour shortages, heightened automation, and demands for continuous process innovation (Rehman et al., 2024). However, research indicates that the dominance of hierarchical leadership in Malaysian organisations may obstruct bottom-up innovation, particularly where employees feel psychologically constrained from voicing concerns or initiating change (Khaddage-Soboh et al., 2024). These circumstances underscore the importance of examining hierarchical distance alongside LMX, two constructs grounded in power relations and relational leadership theory, to understand their contribution in enabling or restricting IWB (Dongxian and Batool, 2024).

In workplaces marked by high power distance, the influence of leadership on innovation is largely channelled through communication and information sharing. Recent scholarship conceptualises leader humility as a communicative resource, whereby leaders acknowledge limitations, attribute credit to others, and invite contributions, thereby enhancing psychological safety and legitimising employee voice. Such practices create conditions in which employees are encouraged to share and persist with novel ideas (Chan et al., 2024). Similarly, LMX has been framed as the quality of dynamic information exchanges, encompassing clarity, timeliness, fairness, and mutual understanding. This type of communication equips employees with meaningful feedback and discretion to act, thereby reinforcing PE and facilitating IWB (Diebig et al., 2024; Graen and Uhl-Bien, 1995). Framing humility and LMX as communicative assets is therefore both theoretically appropriate and contextually relevant for Malaysian manufacturing, where status distance may otherwise suppress upward communication. On this basis, the present study examines the direct, indirect, and moderating roles of humility and LMX in explaining IWB.

Although LMX has been extensively studied with respect to job performance and organisational commitment, its unique role in shaping IWB, particularly through PE as a mediating mechanism, has not been sufficiently theorised. Hierarchical distance, often considered a structural constraint to innovation, has similarly received limited attention regarding its psychological influence on employee

innovation. Moreover, humility, which is reflected in openness to feedback, recognition of others' contributions, and willingness to acknowledge limitations (Owens et al., 2013), has been suggested as a potential enabler of innovative behaviour in high power distance cultures, yet its moderating role in leadership-empowerment-innovation processes remains underexplored. Although a growing body of scholarship identifies PE as fundamental to enabling innovative behaviour (Dongxian and Batool, 2024; Hanafy et al., 2025), it remains unclear how its effects are shaped by contextual leadership practices. Specifically, limited evidence exists on the extent to which humility enhances the conversion of empowerment into innovation within structurally rigid organisational settings.

This study therefore identifies several theoretical and contextual gaps. First, the relational dynamics between hierarchical structures and empowering psychological states have not been fully conceptualised. Second, empirical investigations in high power distance, developing country contexts such as Malaysia remain scarce, particularly in large manufacturing organisations where the dual pressures of innovation and structural rigidity coexist. Third, prior studies have typically relied on cross-sectional designs and have examined leadership variables in isolation, without testing complex interaction effects. To address these limitations, the study draws on SET and empowerment theory to advance a moderated mediation framework. This framework proposes that hierarchical distance and LMX shape IWB both directly and indirectly through PE, while humility moderates the association between PE and IWB. By integrating these elements, the model provides a contextually relevant explanation of how leadership behaviours interact with psychological mechanisms to promote innovation outcomes. This study contributes to the literature in several key ways.

1. **Theoretical:** It introduces an integrative model that combines structural elements (hierarchical distance), relational constructs (LMX), and behavioural dimensions of leadership (humility). This framework provides a refined extension of SET and empowerment theory within the context of innovation research.
2. **Practical:** It provides evidence-based recommendations for leaders in the Malaysian manufacturing sector, highlighting how psychologically empowering practices and

humility-oriented leadership behaviours can enhance innovation.

3. **Methodological:** It applies partial least squares structural equation modelling (PLS-SEM) to data gathered from a diverse group of Malaysian manufacturing employees, thereby offering rigorous validation of complex moderated mediation effects.

In line with these contributions, the study seeks to address the following research questions:

1. How do hierarchical distance and LMX affect IWB and PE directly, and how do they exert indirect effects on IWB through PE as a mediating mechanism?
2. Does PE have a direct effect on IWB?
3. Does humility moderate the relationship between PE and IWB?

Literature Review

Innovative Work Behaviour

IWB refers to employees' deliberate and voluntary actions aimed at initiating, promoting, and implementing new ideas, practices, or solutions that enhance individual, team, and organisational outcomes (De Jong and Den Hartog, 2010; Scott and Bruce, 1994). Unlike creativity, which is primarily concerned with the generation of novel ideas, IWB encompasses a more comprehensive process that includes recognising opportunities, advocating for ideas, and realising innovations. These behaviours are generally proactive and extend beyond formal role expectations, demonstrating employees' willingness to question established norms and contribute to continuous improvement. The importance of IWB has intensified in contemporary contexts characterised by rapid technological advancements, competitive market pressures, and organisational restructuring following the pandemic. Evidence from Malaysia indicates that employees' perceptions of managerial support for innovation strongly shape their psychological thriving, which subsequently promotes proactivity and discretionary innovative actions (Koon and Yulita, 2024). These findings highlight the increasing recognition of leadership behaviour as a pivotal factor in fostering innovation, particularly in high power distance environments where bottom-up change is often limited by structural and cultural barriers.

Hierarchical Distance

HD refers to employees' perceptions of inequalities in status, authority, and power within organisations, most commonly between subordinates and their supervisors (Triguero-Sánchez et al., 2021). In contexts characterised by high HD, employees often defer to authority, exercise limited autonomy, and are reluctant to question established norms, which can diminish PE and inhibit IWB (Kwan et al., 2025; Mehmood et al., 2024). Although some studies indicate that reduced HD promotes team collaboration and engagement by encouraging participation and shared consensus (Triguero-Sánchez et al., 2021), the influence of HD on empowerment and innovation remains underexplored within hierarchical and collectivist cultures. Malaysia, known for its high-power distance and respect for authority, presents a particularly complex setting where traditional leadership practices may constrain employee agency and obstruct bottom-up innovation (Idris et al., 2018; Li and Rasiah, 2025). This highlights a significant gap in understanding how HD restricts or conditions the psychological states necessary for enabling IWB in power-sensitive Asian environments.

Recent research has increasingly conceptualised leadership as a form of communication and information infrastructure. LH has been defined as leaders' communicative conduct that involves acknowledging limitations, recognising the contributions of others, and soliciting input, all of which enhance psychological safety and legitimise employee voice, thereby facilitating IWB (Liu et al., 2024; Silard et al., 2025). Similarly, LMX is regarded as the quality of information exchange between supervisors and subordinates, characterised by clarity, timeliness, fairness, and constructive feedback that provide employees with actionable knowledge and confidence (Diebig et al., 2024; Lee et al., 2025). Framing LMX and LH as communicative resources allows integration of social exchange theory with empowerment perspectives, offering a valuable framework for understanding why these dynamics are particularly relevant in high power distance manufacturing contexts such as Malaysia, where hierarchical structures frequently restrict upward information flow (Dongxian and Batool, 2024; Graen and Uhl-Bien, 1995).

Leader-Member Exchange (LMX)

In this study, LMX is conceptualised as the quality of dyadic communication and information exchange between supervisors and subordinates, encompassing clarity of goals, timeliness of updates, fairness in explanations, and responsiveness in feedback. Drawing upon social exchange theory, LMX provides employees with actionable knowledge and an equitable interpretive framework, which enhances PE and subsequently promotes IWB (Graen and Uhl-Bien, 1995). Recent findings have linked high-quality LMX communication to reduced strain and greater proactive outcomes, supporting the empowerment pathway (Diebig et al., 2024; Lee et al., 2025). Within Malaysia, LMX has been found to encourage discretionary behaviours that support organisational change, emphasising its communicative function in high power distance environments where upward expression is often restricted (Lo et al., 2006; Rizvi et al., 2020).

Empirical evidence further suggests that LMX not only enhances psychological conditions such as autonomy and self-determination but also stimulates proactive behaviours including creativity and the implementation of new ideas (Lee et al., 2025; Lo et al., 2006). Nonetheless, the mediating influence of PE in the relationship between LMX and IWB has not been sufficiently examined, particularly in Asian high-power distance contexts such as Malaysia, where hierarchical traditions may weaken the potential of LMX to drive empowerment-based innovation (Idris et al., 2018; Kirkman et al., 2009). This highlights a critical theoretical and contextual gap, signalling the need for further research on how relational leadership dynamics activate psychological mechanisms to foster innovation in structurally rigid organisational settings.

Psychological Empowerment

PE is defined as a form of intrinsic task motivation reflected through four dimensions: meaning, competence, self-determination, and impact (Spreitzer, 1995). These elements represent an individual's orientation towards their role and their perceived capacity to shape work outcomes. As a psychological resource, PE strengthens employees' proactive engagement and equips them to operate effectively within complex and dynamic organisational contexts. Within the domain of IWB, PE functions as a core enabling mechanism that encourages employees to move beyond formal role prescriptions, take initiative, and support the advancement of

new ideas (Bhattacharya and Narad, 2024; Liu and Long, 2021). Employees who perceive themselves as empowered are more inclined to invest discretionary effort, question established routines, and persist in the face of obstacles, behaviours that are central to IWB (Barattucci et al., 2025). In addition to supporting creativity and problem solving, PE also enhances confidence and autonomy, which are vital for innovation-oriented behaviours in uncertain organisational environments.

Although extensive theoretical and empirical evidence supports the role of PE in promoting innovative behaviours, there is limited research addressing this relationship within high power distance and hierarchical cultures such as Malaysia. Structural and cultural barriers in such contexts often restrict employees' autonomy and voice, thereby constraining the psychological conditions necessary for empowerment (Aziz et al., 2024). These challenges are particularly evident in the Malaysian manufacturing sector, where directive leadership styles and rigid hierarchies dominate. While high-quality leader-member relationships have been associated with innovation outcomes, the psychological mechanisms, particularly empowerment, through which LMX contributes to IWB have not been sufficiently examined. This study seeks to address these gaps by proposing PE as a mediating variable in two critical pathways: HD→PE→IWB and LMX→PE→IWB, with a focus on Malaysia's power-sensitive manufacturing context.

Leader Humility

In this study, leader humility is conceptualised as a communicative behaviour in which leaders acknowledge their limitations, recognise the contributions of others, invite dissenting perspectives, and provide transparent explanations for decisions. Such practices reduce hierarchical distance, signal openness, and enhance the quality of information flow in terms of clarity, timeliness, and fairness. These behaviours foster psychological safety and legitimise upward voice, thereby encouraging employees to share ideas and sustain their implementation efforts (Liu et al., 2024; Owens and Hekman, 2016; Silard et al., 2025). In high power distance contexts, humble communication serves as a levelling mechanism that transforms discretion and role breadth into safe and actionable behaviour by making leader receptivity both visible and dependable. Within this perspective,

humility is best understood as a boundary condition that reinforces the link between psychological empowerment and IWB. Empowered employees are more inclined to implement innovative ideas when leaders communicate in ways that normalise error-tolerant learning and provide fair and explanatory feedback (Chan et al., 2024; Owens and Hekman, 2016).

Hypothesis Development

Hierarchical Distance and Innovative Work Behaviour

Hierarchical distance (HD) refers to the perceived disparity in authority, status, and decision-making power between leaders and subordinates, shaped by organisational structures and cultural traditions (Dansereau et al., 1975; Schaubroeck et al., 2011). In high power distance settings, such as those found in many Asian societies, this separation is more visible and significantly affects employees' perceptions of autonomy, psychological safety, and their willingness to contribute to organisational change (Aziz et al., 2024; Hofstede, 2001). According to SET, when leaders are viewed as inaccessible or overly distant, reciprocal trust, support, and resource exchange become weaker, which reduces the likelihood of discretionary behaviours directed at change (Blau, 1964). From a LMX standpoint, pronounced hierarchical separation hinders the establishment of high-quality relationships, limits access to developmental opportunities and constructive feedback, and thereby restricts conditions essential for innovation (Graen and Uhl-Bien, 1995).

IWB, which involves generating, promoting, and implementing novel ideas to improve processes, products, or services, has been shown to rely heavily on empowerment, open communication, and supportive leadership (Bhattacharya and Narad, 2024; De Jong and Den Hartog, 2010; Liu and Long, 2021). In contrast, heightened HD often fosters risk-averse climates, discourages employee voice, and constrains the exchange of knowledge, which collectively reduce the likelihood of innovative contributions (Li and Rasiah, 2025). In highly hierarchical organisations, innovation may even be perceived as disruptive, with employees prioritising compliance to avoid conflict with authority figures, thereby limiting creative problem-solving (Barattucci et al., 2025; Shen et al., 2025).

Although prior research has associated both leadership behaviours and organisational structures with IWB, direct empirical examination of HD as a determinant of innovation remains scarce, particularly in manufacturing sectors where directive leadership and rigid decision-making processes dominate (Aziz et al., 2024). This gap is especially relevant in Malaysia, where cultural deference to authority and deeply embedded hierarchical traditions may intensify the adverse effects of HD on IWB (Hofstede Insights, 2018; Tehseen et al., 2023). Consequently, HD emerges as a critical yet underexplored factor shaping innovation in such contexts, highlighting the need for more targeted, context-specific investigations in emerging economies. From a theoretical perspective, integrating SET and LMX helps to clarify how HD undermines IWB. SET suggests that elevated HD erodes trust and weakens reciprocal obligations, discouraging collaboration and knowledge exchange (Blau, 1964). LMX theory adds that greater hierarchical separation reduces the quality of leader–member interactions, depriving employees of the guidance, encouragement, and resources necessary for innovation (Graen and Uhl-Bien, 1995; Schaubroeck et al., 2011). Together, these frameworks predict that HD exerts a negative influence on employee engagement in innovation-related behaviours.

H1: There is negative significant relationship between hierarchical distance and innovative work behaviour.

Hierarchical Distance and Psychological Empowerment

HD reflects the perceived gap in authority, decision-making power, and status between leaders and subordinates (Triguero-Sánchez et al., 2021). In high HD settings, employees often defer to authority, experience reduced autonomy, and restrict upward communication, thereby limiting their perceived ability to influence organisational outcomes (Dai et al., 2022; Li and Rasiah, 2025). PE, conceptualised as an intrinsic motivational state comprising meaning, competence, self-determination, and impact (Spreitzer, 1995), is recognised as a critical psychological resource enabling employees to act proactively and contribute to organisational innovation (Barattucci et al., 2025; Liu and Ren, 2022).

From the perspective of empowerment theory, HD diminishes PE by constraining autonomy and weakening employees' sense of influence in decision-making processes. This is further supported by social

exchange theory (SET), which suggests that when leaders appear distant and unapproachable, reciprocal exchanges of recognition, trust, and support are weakened, undermining empowerment (Blau, 1964). Empirical evidence indicates that employees who perceive leaders as accessible and supportive report higher empowerment, whereas rigid hierarchical structures tend to erode these perceptions (Aziz et al., 2024; Tehseen et al., 2023). Despite these insights, limited studies have examined the direct influence of HD on PE, particularly in high power distance contexts such as Malaysia. In Malaysian manufacturing firms, hierarchical norms and rigid organisational structures frequently suppress employee autonomy and voice, thereby intensifying the disempowering effects of HD (Hofstede Insights, 2018; Idris et al., 2018). This gap highlights the importance of investigating HD as a structural antecedent of empowerment to clarify how organisational power dynamics shape employees' psychological states.

H2: There is negative significant relationship between HD and PE.

Leader Member Exchange (Communication Quality) and Innovative Work Behaviour

In this study, LMX is conceptualised as the quality of dyadic communication and information exchange, reflected in the clarity of goals, timeliness of updates, fairness of explanations, and responsiveness of feedback. Anchored in the LMX tradition and the principles of SET, high-quality exchanges provide employees with actionable knowledge and a reliable interpretive framework, thereby strengthening PE and fostering the willingness to initiate, advocate, and implement new ideas (Graen and Uhl-Bien, 1995). Emerging evidence highlights that strong LMX communication reduces strain and promotes proactive behaviours, consistent with empowerment-driven pathways to innovation (Diebig et al., 2024; Lee et al., 2025). Within high power distance environments such as Malaysia, LMX has been shown to support discretionary, change-oriented behaviours, demonstrating its communicative value in contexts where upward voice is often restricted (Lo et al., 2006; Rizvi et al., 2020). Furthermore, in such settings, supportive LMX relations are found to enhance psychological safety and PE, which in turn facilitate creativity and IWB (Diebig et al., 2024; Javed et al., 2019; Lee et al., 2025). Drawing on LMX and SET perspectives, it is therefore posited that higher

quality leader–member exchanges exert a positive influence on employee engagement in IWB.

H3: Leader-member Exchange (communication quality) is positively and significantly related to innovative work behaviour.

LMX and PE

In the preceding discussion, LMX was identified as a predictor of IWB through its communication quality. In this section, its proximal motivational pathway to PE is emphasised. When LMX provides clarity of goals, timely updates, and fair explanations, employees are more likely to experience strengthened conditions of PE, positioning empowerment as the immediate mechanism through which information-rich exchanges are transformed into innovative actions (Graen and Uhl-Bien, 1995; Spreitzer, 1995). According to LMX theory, leaders cultivate differentiated relationships with subordinates, ranging from low-quality transactional to high-quality trust-based exchanges (Graen and Uhl-Bien, 1995). High-quality LMX, characterised by mutual respect, openness, and reciprocal trust, creates supportive contexts that enhance employees' autonomy and influence (Liden et al., 1993). PE, defined as a motivational state encompassing meaning, competence, self-determination, and impact (Spreitzer, 1995), is thus shaped significantly by the quality of leader–follower relationships. Employees who perceive that their supervisors value their input and provide developmental support are more likely to internalise feelings of competence and control over tasks and outcomes (Kim and George, 2005).

Empirical evidence supports this linkage, showing that LMX enhances employees' psychological resources. For example, Lim et al. (2025) found that high-quality LMX reduces negative emotions, such as envy, while strengthening employees' sense of agency. Similarly, Rizvi et al. (2020) demonstrated that LMX, through rational trust and support, fosters commitment by enabling PE, which in turn improves outcomes. This aligns with empowerment theory, which asserts that leadership practices enhancing autonomy and voice directly influence employees' empowered states. Despite extensive global support, empirical studies explicitly examining the LMX–PE relationship remain scarce in Asian high-power distance contexts such as Malaysia. Evidence from Malaysian SMEs indicates that rigid

hierarchical structures often suppress empowerment; however, empowering leadership and high-quality exchanges may counteract these barriers (Nur Syifa, 2021). In manufacturing firms, where directive leadership is common, LMX can therefore play a critical role in nurturing PE by offering relational support and recognition that mitigate structural rigidity. Addressing this contextual gap is essential for understanding how relational leadership serves as a psychological enabler of IWB in Malaysia's manufacturing sector.

H4: Leader-member Exchange (communication quality) has positive and significant relationship with psychological empowerment.

PE □ IWB

PE represents an intrinsic motivational state in which employees experience a sense of meaning, competence, self-determination and impact (Spreitzer, 1995). These four cognitions illustrate how individuals perceive their work as purposeful, view themselves as capable, exercise independence in decision-making, and feel that they influence organisational outcomes. PE also equips employees with psychological resources that enable them to engage in discretionary actions proactively, positioning it as a critical determinant of IWB (Singh and Sarkar, 2012). IWB refers to the generation, promotion and implementation of novel ideas that improve organisational processes, products or services (Scott and Bruce, 1994).

Literature increasingly recognises that empowered individuals are more inclined to challenge established practices, experiment with new approaches, and persist in implementing changes despite resistance. PE has been shown to strengthen creativity and confidence, particularly within SMEs where adaptability and agility are essential for transforming innovative concepts into tangible outcomes. From a theoretical perspective, Social Cognitive Theory (Bandura, 1986) emphasises that empowered cognitions are closely associated with proactive behaviours, while Empowerment Theory posits that empowerment fosters autonomy and self-efficacy, both of which are foundational to innovative actions (Spreitzer, 1995). Empirical evidence aligns with these assertions. Prior literature found that empowerment significantly contributes to IWB within SMEs, even in resource-constrained environments. Similarly, Muneer et al. (2025)

demonstrated that empowerment dimensions such as meaning and self-determination are direct predictors of innovative outcomes. Nonetheless, gaps remain in the literature. Much of the current research is concentrated in educational, service-oriented or Western contexts, while fewer studies have explored manufacturing industries in developing economies. High power-distance cultures such as Malaysia often suppress employee voice and limit autonomy, thereby weakening the empowering processes fundamental to IWB. This highlights the need for contextually grounded investigations into how PE functions as a psychological enabler of innovation in Malaysian manufacturing firms.

H5: There is positive significant relationship between psychological empowerment and innovative work behaviour.

Psychological Empowerment as Mediator

PE is understood as a motivational construct encompassing meaning, competence, self-determination and impact, reflecting employees' belief that their actions can influence work outcomes (Spreitzer, 1995). It represents an internalised state of motivation that enables individuals to act proactively, challenge established routines, and persist in their efforts despite resistance, all of which are recognised as principal behavioural precursors of IWB (Vu et al., 2025). Within organisations, PE functions as a mechanism that translates structural conditions into psychological readiness, serving as a central mediator that connects leadership practices to employees' innovative performance. HD, however, has the potential to diminish both autonomy and psychological security, thereby undermining empowerment (Aziz et al., 2024).

In contexts characterised by high power distance, such as Malaysia, rigid hierarchies and strong deference to authority may obstruct upward communication, which in turn constrains employees' sense of meaning and influence (Hameli et al., 2023; Idris et al., 2018). Nonetheless, empowering practices can help employees reinterpret hierarchical constraints, transforming restricted autonomy into proactive innovation (Aristana et al., 2024). This highlights PE as a mediating pathway, demonstrating how HD indirectly limits or facilitates IWB depending on contextual and leadership dynamics. LMX theory proposes that high-quality leader–follower relationships enhance trust, support and

access to resources, all of which reinforce employees' empowerment cognitions (Graen and Uhl-Bien, 1995; Kim and George, 2005). When subordinates perceive individualised consideration and mutual respect, they are more likely to experience competence and self-determination, motivating them to pursue innovative activities beyond their formal responsibilities. Recent evidence in Asian settings indicates that relational leadership behaviours influence creativity and innovation through PE rather than exerting a direct impact (Vu et al., 2025; Wardani and Amaliah, 2020). This suggests that LMX contributes to IWB indirectly by activating psychological empowerment.

Despite the considerable body of research that identifies PE as a mediator between leadership and innovative behaviour, findings are not fully consistent. Some studies have reported only partial or weak mediation, suggesting that empowerment alone may not fully transmit leadership effects to innovation outcomes (Aristana et al., 2024; Hameli et al., 2023). Other research points to contextual barriers such as cultural expectations, organisational structures and resource constraints, which can attenuate the mediating effect (Aziz et al., 2024). For instance, in high power-distance environments, employees may hesitate to enact empowered behaviours even when supported by their leaders, thereby producing diluted or inconsistent effects (Idris et al., 2018). These divergences underscore the need for context-specific models that examine the mediating function of PE within both structural (HD) and relational (LMX) processes in Malaysian manufacturing firms.

H6: Psychological empowerment mediate the relationship between hierarchical distance and innovative work behaviour.

H7: Psychological empowerment mediate the relationship between leader member exchange and innovative work behaviour.

Leaders' Humility as a Moderator

Building on Section 2.5, leader humility, previously considered as a communication behaviour, is here conceptualised as a boundary condition moderating the PE–IWB relationship. This perspective suggests that when leaders acknowledge personal limitations, credit others, invite dissent, and provide transparent explanations for decisions, employees experience enhanced psychological safety and fair information exchange, which in turn

strengthen the translation of PE into IWB. Recent studies have integrated social learning and social exchange theories to explain how humble leadership influences employee behaviours. Through open-minded role modelling and recognition of others, leaders legitimise the act of speaking up and idea sharing (learning), while simultaneously reinforcing LMX quality and reciprocity norms (exchange) that support discretionary contributions such as creativity and innovation (Owens and Hekman, 2016).

In high power-distance, hierarchically rigid contexts such as those typical of Asian organisations, employees often withhold ideas due to perceived status gaps and fear of negative evaluation. These barriers can be mitigated by signals of humility from leaders, including feedback seeking, acknowledging limitations, and giving credit to subordinates, which foster psychological safety and status recognition, thereby encouraging discretionary innovative efforts. Evidence demonstrates that leader humility strengthens relational resources such as LMX and enhances creative performance, with its effectiveness contingent on team conditions such as conflict or competitive climates. Although humility may produce direct benefits, a growing body of literature underscores its contingency role, highlighting how it shapes the timing and mechanisms through which resources translate into outcomes. For instance, research on mediated-moderation structures indicates that humility moderates the influence of team climate

on the strength of indirect effects on creativity. Such findings provide support for theorising humility as a boundary condition that facilitates the transformation of psychological states into innovative behaviours, aligning with the PE–IWB pathway. Within this framework, employee voice and persistence are expected to be stronger when a sense of meaning, competence, self-determination, and influence is already established, and the openness and recognition demonstrated by a humble leader amplify rather than suppress these outcomes.

Nonetheless, findings on humility remain mixed. While some studies confirm its strong positive impact on innovation and creativity, others suggest that it may create role ambiguity, slow decision-making, or diminish leadership salience, particularly in highly competitive climates (Owens and Hekman, 2016). Moreover, much of the current evidence originates from service or education sectors, with limited exploration in high power-distance manufacturing firms. These limitations point to the importance of investigating the moderating role of humility in PE–IWB processes within Malaysian manufacturing, where hierarchical norms may restrict employee initiative and thereby alter the effectiveness of humble leadership.

H8: Leader humility moderate the relationship between psychological empowerment and innovative work behaviour.

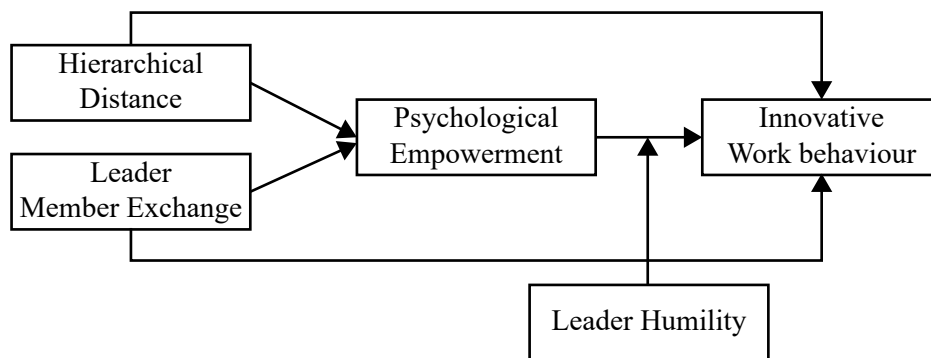


Figure 1: Conceptual Framework.

Research Methodology

Research Design

This study employs a quantitative, cross-

sectional survey approach to examine the proposed moderated mediation framework. In line with calls within change management research for theory-driven and methodologically rigorous designs, PLS-SEM was applied. PLS-SEM was deemed

appropriate given the model's complexity, which integrates both mediation and moderation pathways, as well as its ability to accommodate non-normal data distributions and relatively small sample sizes with robustness and reliability (Hair et al., 2022). The model specifically investigates the direct effects of HD and LMX on IWB, the mediating influence of PE, and the moderating effect of LH.

Population and Sampling

The study targeted employees from large manufacturing firms in Malaysia, a sector characterised by structural rigidity while simultaneously experiencing increasing pressure to innovate. To ensure representativeness, a random sampling strategy was employed across multiple sub-sectors, including electronics, automotive, chemicals, and food processing. Following the 10-times rule for PLS-SEM and existing recommendations regarding model complexity, a minimum sample of 300 responses was established as necessary. In total, 500 questionnaires were distributed, of which 366 were deemed valid after screening for missing data and response bias, resulting in a usable response rate of 73.2 per cent.

Data Collection Procedure

Data collection was undertaken using a Google Form survey distributed through organisational HR departments and professional associations within major manufacturing clusters in Selangor, Penang, and Johor. To ensure response reliability, participation was strictly voluntary, and confidentiality was guaranteed. Ethical clearance was granted by the university ethics committee, and informed consent was obtained from all respondents. A pilot test involving 30 employees was conducted to assess clarity and reliability of the measurement items, which resulted in minor refinements to wording before final administration.

Measurement of Construct

All constructs were measured using well-established and validated scales, with minor contextual adaptations for this study.

Hierarchical Distance (HD): Measured using a 6-item scale adapted from Triguero-Sánchez et al. (2021), assessing perceptions of authority gaps,

decision-making power, and status differentials.

Leader–Member Exchange (LMX): Conceptualised as communication quality and assessed using the 7-item LMX scale by Liden and Graen (1980), originally derived from Dansereau et al. (1975), as cited in Scandura and Graen (1984). The scale focuses on trust, respect, and mutual obligation.

Psychological Empowerment (PE): Measured with 8 items drawn from Spreitzer's (1995) 12-item scale, reflecting the four dimensions of meaning, competence, self-determination, and impact. This operationalisation is consistent with Barattucci et al. (2025), Bhattacharya and Narad (2024).

Leader Humility (LH): Treated as a communicative behaviour, measured with 9 items from Owens et al. (2013), later utilised in Owens and Hekman (2016).

Innovative Work Behaviour (IWB): Assessed using the 6-item scale developed by Scott and Bruce (1994), widely applied in subsequent research (De Jong and Den Hartog, 2010).

All items were evaluated using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Data Analysis

Data analysis was conducted using a two-stage approach.

1. **Measurement Model Assessment:** Reliability was assessed through Cronbach's alpha and composite reliability, while convergent validity was evaluated using Average Variance Extracted (AVE). Discriminant validity was examined using the Heterotrait-Monotrait (HTMT) ratio.
2. **Structural Model Assessment:** The structural model was evaluated by examining path coefficients, R^2 values, effect sizes (f^2), and predictive relevance (Q^2). Mediation effects were tested using bootstrapping with 5,000 resamples. Moderation and moderated mediation were analysed using interaction terms and conditional indirect effects.

Although the empirical focus of this research is on Malaysian manufacturing firms, the survey-based application of PLS-SEM offers methodological flexibility that extends beyond this sector. The same approach can be adapted to library, archival, and information organisations, where leadership-driven processes of communication, empowerment, and innovation can also be examined. Furthermore, while

constructs in manufacturing were measured through perceptual scales, future LIS research could integrate these with digital trace indicators (e.g., message latency, ticket turnaround, feedback completeness) to operationalise the notion of information quality in library and archival contexts.

Common Method Bias

To reduce the potential impact of common method variance, several procedural strategies were implemented. Anonymity of responses was maintained, the measurement of predictors and outcomes was separated within the survey, and the order of items was randomised to prevent response bias. At the statistical level, variance inflation factors (VIF) were examined, confirming that no individual factor disproportionately explained the variance and that multicollinearity remained within acceptable thresholds.

Analysis

Assessment of Measurement Model

Reliability & Convergent Validity: All constructs achieved or exceeded the conventional thresholds for internal consistency ($\alpha \geq .70$; $CR \geq .70$), confirming satisfactory reliability (Hair et al., 2022) as shown in Table 1 and Figure 2. Convergent validity was also supported since all constructs recorded AVE values above the recommended .50 threshold (Fornell and Larcker, 1981): HD (.553), IWB (.639), LH (.703), LMX (.819), and PE (.570). At the indicator level, most factor loadings were within the acceptable to strong range ($\geq .70$), for instance IWB2–IWB5 ranged between .867 and .890, LH1–LH7 between .807 and .894, and LMX1–LMX5 between .931 and .955. Although some items showed only moderate loadings, such as HD1 (.586), they were retained because the construct's overall AVE and CR values fell within acceptable limits (Hair et al., 2022).

LMX (Communication Quality): LMX, conceptualised as communication quality, demonstrates very high reliability ($\alpha = .963$; $CR = .969$) and strong convergent validity ($AVE = .819$). Similarly, LH shows robust psychometric properties ($\alpha = .939$; $CR = .950$; $AVE = .703$). IWB indicators also reflect consistently high loadings, with most values above .76, reinforcing the validity of the IWB

construct. For PE, two indicators ($PE6 = .541$; $PE7 = .484$) exhibited weaker loadings. Nevertheless, its overall AVE (.570) and CR (.862) surpassed the recommended thresholds, justifying retention for content validity. In line with PLS-SEM guidance, however, items with loadings below .50 warrant consideration for removal, rewording, or at least sensitivity analysis to test robustness (Hair et al., 2022). It is worth noting that three items, PE1, PE2, and PE8, had already been excluded from the final model.

Table 1: Loading, Alpha, CR, AVE.

Construct	Loading Alpha	CR	AVE
Hierarchical Distance	0.839	0.880	0.553
HD1	0.586		
HD2	0.719		
HD3	0.805		
HD4	0.807		
HD5	0.725		
HD6	0.796		
Innovative Work Behaviour	0.909	0.931	0.639
IWB1	0.704		
IWB2	0.867		
IWB3	0.879		
IWB4	0.890		
IWB5	0.876		
IWB6	0.760		
Leaders' Humility	0.939	0.950	0.703
LH1	0.870		
LH2	0.883		
LH3	0.876		
LH4	0.809		
LH5	0.818		
LH6	0.894		
LH7	0.807		
LH8	0.742		
Leader Member Exchange	0.963	0.969	0.819
LMX1	0.939		
LMX2	0.955		
LMX3	0.950		
LMX4	0.937		
LMX5	0.931		
LMX6	0.762		
LMX7	0.843		
Psychological Empowerment	0.804	0.862	0.570
PE3	0.894		
PE4	0.902		
PE5	0.844		
PE6	0.541		
PE7	0.484		

Note: PE1, PE2, PE8, are deleted due to very low factor loading, PE7, is continued due to very near to 0.50 can be considered in behavioural perspective.

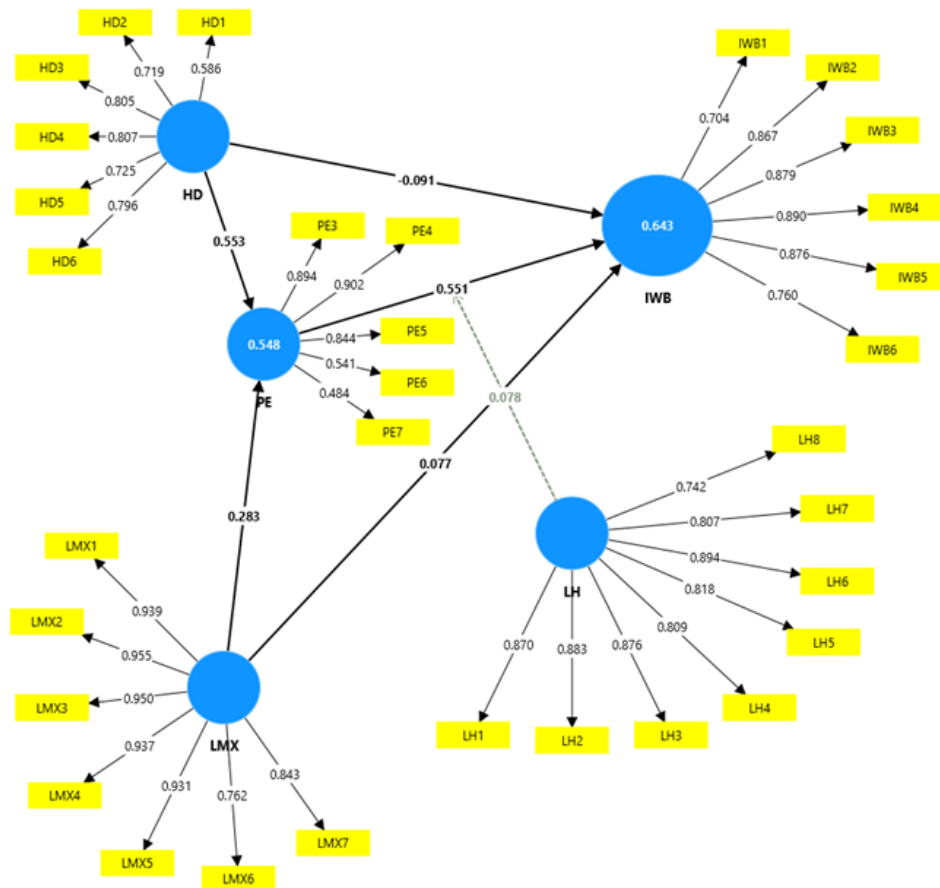


Figure 2: Measurement Model.

Assessment of Discriminant Validity

The HTMT analysis provides evidence of discriminant validity for all constructs in the proposed model (Table 2). All values fall below the conservative cut-off of 0.90 (Henseler et al., 2015), confirming that the constructs are empirically distinct. For instance, the HTMT value between HD and LMX is 0.556, reflecting limited overlap and supporting their conceptualisation as structural and relational leadership dimensions respectively. Likewise, the HTMT between LH and LMX is 0.460, highlighting that humility is better understood as a behavioural leadership attribute rather than a relational exchange. Stronger associations are noted between PE and IWB (0.872) and between PE and LH (0.868). Although relatively high, these remain below the threshold, indicating that empowerment and humility are closely aligned with innovative outcomes yet still conceptually distinct. Collectively, the HTMT results confirm that each construct represents a separate theoretical domain within the model.

Table 2: HTMT Criteria.

	HD	IWB	LH	LMX	PE
HD	==				
IWB	0.617	==			
LH	0.726	0.718	==		
LMX	0.556	0.532	0.460	==	
PE	0.726	0.872	0.868	0.614	==

Variance in Endogenous Factors

The R^2 outcomes presented in Table 3 indicate that the proposed model demonstrates substantial explanatory strength. IWB reports an R^2 value of 0.643 (adjusted = 0.638), showing that nearly 64% of the variance in employees' innovative behaviours is accounted for by HD, LMX, PE, and LH. This surpasses the benchmark of 0.26 considered substantial for behavioural research (Hair et al., 2022), thereby affirming the model's robustness in explaining the determinants of innovation in manufacturing firms. Similarly, PE records an R^2 of 0.548 (adjusted = 0.545), implying that more than half of its variance is explained by leadership-related factors. These

findings highlight the pivotal role of empowerment as a mediating construct and confirm that leadership dynamics strongly influence employees' sense of competence, autonomy, and purpose. Overall, the results provide compelling empirical support for the model's effectiveness in explaining innovation outcomes within high power-distance organisational contexts.

Table 3: R-Square and Adjusted R-Square.

	R- Square	Adjusted R-Square
IWB	0.643	0.638
PE	0.548	0.545

Assessment of Effect Size

The effect size (f^2) results reported in Table 4 provide deeper insights into the relative weight of the predictors within the model. For IWB, PE demonstrates a large effect ($f^2 = 0.357$), establishing it as the most influential determinant of innovation-related behaviours (Hair et al., 2022). LH records a moderate effect ($f^2 = 0.181$), emphasising its role as a boundary condition that enhances the extent to which empowerment translates into innovative action. Conversely, HD ($f^2 = 0.010$) and LMX ($f^2 = 0.011$) reveal only small direct effects on IWB, indicating that their influence operates primarily through the mediating function of PE rather than directly driving innovation. For PE, HD exerts a strong effect ($f^2 = 0.493$), underscoring the significance of structural hierarchies in shaping empowerment perceptions. LMX demonstrates a moderate effect ($f^2 = 0.129$), reflecting the contribution of relational exchanges to employees' sense of empowerment. Taken together, these results reinforce PE as the central mediating construct that connects leadership dynamics to innovative outcomes, particularly within high power-distance organisational contexts.

Table 4: Effect Size.

	IWB	PE
HD	0.010	0.493
LH	0.181	
LMX	0.011	0.129
PE	0.357	

Assessment of Predictive Relevance

The blindfolding procedure (Table 5) was employed to evaluate the predictive relevance (Q^2) of the structural model. In line with Hair et al. (2022), Q^2 values above zero demonstrate predictive

capability, with 0.02, 0.15, and 0.35 representing small, medium, and large predictive relevance, respectively. The results reveal that both endogenous constructs possess substantial predictive relevance. IWB records a Q^2 of 0.433, surpassing the 0.35 threshold, which indicates that the predictors (HD, LMX, PE, and LH) explain and predict innovative behaviours with strong accuracy. Likewise, PE achieves a Q^2 of 0.299, reflecting medium-to-large predictive relevance, thereby confirming that leadership constructs significantly predict employees' psychological empowerment. These results affirm the robustness of the model, showing that its explanatory strength (R^2) is supported by predictive accuracy (Q^2). This demonstrates that, beyond statistical associations, the model offers practical utility for forecasting innovation-related outcomes in Malaysia's hierarchical manufacturing sector.

Table 5: Blindfolding (Q-Square).

	SSO	SSE	$Q^2 = (1 - SSE/SSO)$
IWB	2196.000	1244.269	0.433
PE	1830.000	1282.141	0.299

Assessment of Structural Model

The structural model results (table 6 and figure 3) present evidence that, while mixed, remains theoretically meaningful in supporting the hypothesised relationships. The direct path from HD to innovative work behaviour (IWB) is negative ($\beta = -0.091$) but statistically insignificant ($p = 0.075$). This outcome indicates that hierarchy, in isolation, does not directly inhibit innovation, and its influence is instead channelled through indirect mechanisms. In contrast, HD demonstrates a strong positive association with psychological empowerment (PE) ($\beta = 0.553$, $p < 0.001$), suggesting that perceptions of authority distance strongly shape employees' experiences of meaning, competence, and autonomy. This finding is especially relevant in high power-distance contexts such as Malaysia, where structural hierarchies affect empowerment more profoundly than direct behavioural outcomes (Hofstede, 2001; Idris et al., 2018).

Leader-member exchange (LMX) reveals both direct and indirect effects. It positively predicts IWB ($\beta = 0.077$, $p < 0.05$) as well as PE ($\beta = 0.283$, $p < 0.001$), emphasising the importance of trust-based and reciprocal leader-follower relationships in promoting both empowerment and innovative discretion (Graen

and Uhl-Bien, 1995). Furthermore, PE exhibits a strong positive effect on IWB ($\beta = 0.551$, $p < 0.001$), reinforcing its role as a central psychological mechanism in enabling innovation (Bhattacharya and Narad, 2024; Spreitzer, 1995). Leader humility (LH) is also shown to play a significant moderating role in the PE→IWB relationship ($\beta = 0.078$, $p < 0.01$). This indicates that humble leadership enhances the extent to which empowerment translates into innovative outcomes by fostering environments characterised by openness and psychological safety (Owens and Hekman, 2016). Mediation tests further confirm significant indirect effects: HD→PE→IWB ($\beta = 0.304$, $p < 0.001$) and LMX→PE→IWB ($\beta = 0.156$,

$p < 0.001$). These results collectively underscore the function of PE as a key mediating mechanism that links structural and relational leadership antecedents with innovative behavioural outcomes.

Table 6: Hypothesis Testing.

Relationship	Beta	STDV	T Value	P Value	Decision
HD→IWB	-0.091	0.051	1.783	0.075	Insignificant
HD→PE	0.553	0.038	14.508	0.000	Significant
LMX→IWB	0.077	0.036	2.145	0.032	Significant
LMX→PE	0.283	0.044	6.462	0.000	Significant
PE→IWB	0.551	0.050	11.045	0.000	Significant
LH*PE→IWB	0.078	0.027	2.867	0.004	Significant
HD→PE→IWB	0.304	0.035	8.788	0.000	Significant
LMX→PE→IWB	0.156	0.028	5.466	0.000	Significant

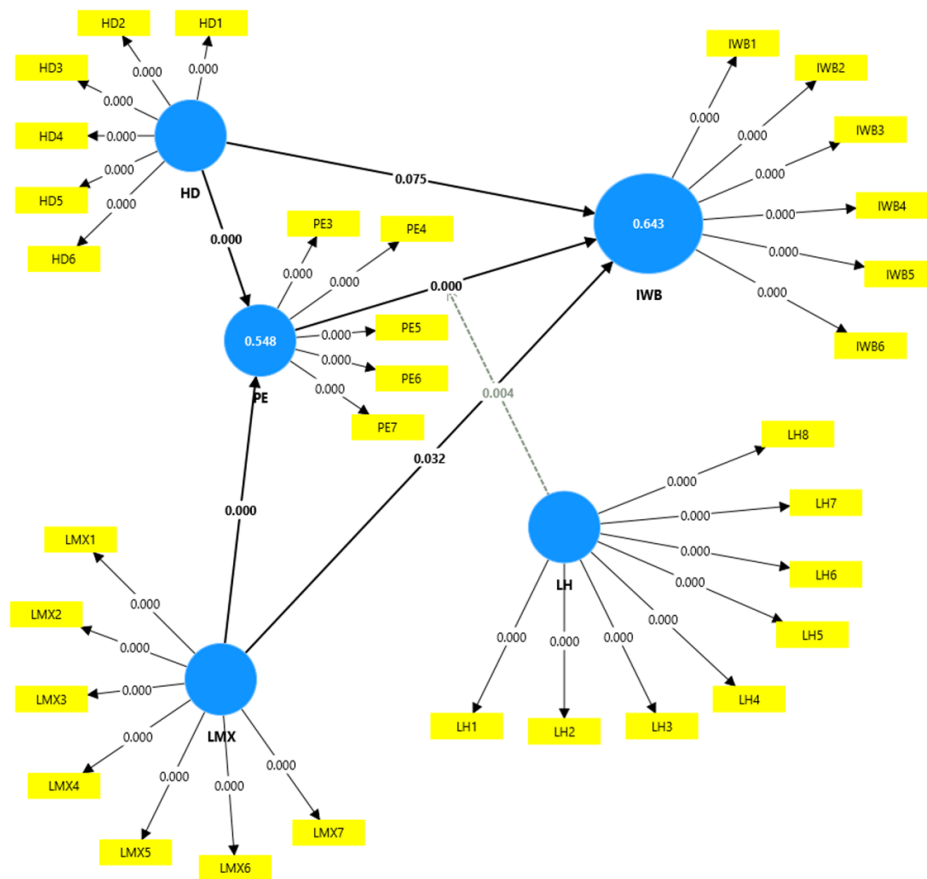


Figure 3: Please provide caption for figure 3.

Discussion

Hierarchical Distance and Innovative Work Behaviour

The insignificant direct effect of HD on IWB challenges prior studies that position hierarchy as a

consistent barrier to innovation. While research in high power-distance cultures (e.g., Li and Rasiah, 2025; Shen et al., 2025) suggests that hierarchical gaps suppress employee voice and creativity, the findings indicate that HD does not directly reduce IWB in Malaysian manufacturing. A possible explanation is that employees in such contexts have adapted to

hierarchical norms, perceiving authority distance as natural rather than restrictive. Recent Q1 studies on Asian firms reveal that structural distance often influences psychological states more strongly than behaviours (Vu et al., 2025). Hence, HD exerts its impact indirectly, as reflected in its strong effect on PE (H2), showing that hierarchy shapes psychological mechanisms rather than directly limiting innovation. This highlights the need to examine structural barriers through mediating processes instead of simplistic direct relationships.

Hierarchical Distance and Psychological Empowerment

The significant positive link between HD and PE appears counterintuitive yet is contextually meaningful. In Malaysia's collectivist and authority-oriented setting, distance from leaders can foster autonomy rather than constraint. Employees may view hierarchical separation as an indication of trust in their competence, which strengthens perceptions of impact and meaning (Aziz et al., 2024). This is consistent with recent evidence from high power-distance environments where greater agency was reported when leaders avoided micromanagement (Tehseen et al., 2023). Conceptually, this aligns with empowerment theory, which posits that self-determination and competence perceptions can emerge from autonomy, even when shaped structurally (Spreitzer, 1995). From a practical perspective, leaders in rigid hierarchies may enhance empowerment indirectly by stepping back and signalling confidence in employees' independent capabilities.

Leader-Member Exchange and Innovative Work Behaviour

Viewing LMX as communication quality helps explain its direct influence on IWB. High-quality exchanges that provide clear goals, timely updates, fair explanations, and responsive feedback equip employees with actionable information and a fair interpretive frame, reducing perceived interpersonal risk and legitimising idea expression and implementation. Prior research confirms a positive association between LMX and IWB, indicating that even small improvements in dyadic communication can stimulate discretionary innovation in Malaysian manufacturing settings (Graen and Uhl-Bien, 1995). More recent evidence also connects LMX-based

communication quality to proactive outcomes through the empowerment pathway (Diebig et al., 2024; Lee et al., 2025). Within hierarchical manufacturing contexts, this communicative perspective highlights why LMX is significant. The findings extend earlier studies by showing that modest gains in exchange quality generate substantial innovation benefits, reinforcing the view of LMX as a critical relational resource in such environments.

Leader-Member Exchange and Psychological Empowerment

Treating LMX as dyadic communication quality clarifies its association with PE. Exchanges characterised by clarity, timeliness, and fair explanations strengthen the empowerment dimensions of meaning, competence, self-determination, and impact (Spreitzer, 1995). In this study, LMX significantly predicts PE, consistent with evidence that communication-rich and trusting exchanges reduce strain while fostering agency (Diebig et al., 2024; Liu and Ren, 2022). Recent scholarship also supports empowerment theory and SET perspectives, showing that employees embedded in high-quality exchanges experience stronger perceptions of competence, voice, and control (Lim et al., 2025). This is in line with findings that relational trust mitigates disempowering emotions such as envy and enhances agency (Rizvi et al., 2020). Within the Malaysian context, where rigid hierarchies often constrain empowerment, relational leadership provides a compensatory mechanism. Accordingly, LMX functions not only as a relational resource but also as a psychological enabler that primes employees for innovation through enhanced empowerment. In Malaysian manufacturing, where formal hierarchy can suppress voice, the communicative role of LMX compensates by making information more usable and support more accessible, thereby reinforcing innovation via empowerment.

Psychological Empowerment and Innovative Work Behaviour

PE exerts the strongest direct effect on IWB, establishing it as the central psychological mechanism connecting leadership with innovation. When employees feel empowered, they view themselves as capable of shaping outcomes, which translates into greater willingness to take risks and implement ideas (Barattucci et al., 2025; Bhattacharya and Narad, 2024). This aligns

with recent evidence from emerging markets where PE predicts proactive behaviour even under structural rigidity (Muneer et al., 2025). In the Malaysian context, empowerment acts as a counterbalance to hierarchical constraints by legitimising employee agency. From a practical standpoint, cultivating PE should be prioritised by managers, as it provides the psychological foundation that enables innovation within rigid organisational systems.

Psychological Empowerment as Mediator

Both mediation hypotheses are confirmed, indicating that PE channels the effects of HD and LMX onto IWB. In the case of HD, PE functions as a reframing mechanism, whereby employees interpret structural distance as autonomy, which subsequently encourages innovation (Aristana et al., 2024). For LMX, PE explains how relational trust and reciprocity are transformed into innovative behaviours, supporting earlier findings from Asian contexts (Vu et al., 2025). These outcomes position PE as the psychological bridge linking structural and relational antecedents with behavioural outcomes, thereby contributing to theoretical refinement in empowerment research. From a methodological perspective, the significant indirect effects justify the incorporation of complex mediating paths in high power-distance environments, addressing calls for more integrative approaches in change management studies.

Leader Humility as Moderator

Viewing LH as a communicative moderator, this study finds that humble discourse, such as acknowledging limitations, crediting others, encouraging dissent, and clarifying decisions, strengthens the PE→IWB pathway. Such behaviours enhance psychological safety and perceptions of fairness and timeliness of information, thereby reducing interpersonal risk and enabling empowered employees to more confidently voice, champion, and implement innovative ideas (Owens and Hekman, 2016). This is especially salient in Malaysia, where hierarchical and status-oriented norms often suppress employee voice. By legitimising contributions and openly admitting limitations, humble leaders act as cultural disruptors who render empowerment practically effective. Nevertheless, recent scholarship warns that humility can sometimes generate ambiguity in competitive environments. Within the context of

rigid Malaysian manufacturing, however, the evidence indicates that LH is advantageous, offering a viable strategy for translating empowerment into innovative outcomes.

Contributions

Theoretical Contributions

This study provides three key theoretical contributions. First, it advances empowerment and social exchange perspectives by showing that HD affects IWB indirectly through PE, reframing hierarchy in high power-distance contexts as a structural input whose impact is mediated by employees' empowerment cognitions. Second, it reconceptualises LMX as the quality of dyadic communication, encompassing clarity of goals, timeliness of updates, fairness of explanations, and responsiveness to feedback. This perspective highlights that actionable information is the mechanism through which high-quality exchanges strengthen PE and, in turn, foster IWB. Third, it positions LH as a communication-based boundary condition moderating the PE–IWB link, enhancing psychological safety and perceptions of informational justice. Collectively, these insights integrate structural (HD), relational-communication (LMX), and behavioural-communication (LH) dimensions into a moderated-mediation framework suited to collectivist, hierarchical manufacturing environments.

Practical Contributions

Empowerment also provides managers with a chance to be innovative and this is achieved. Empowerment offers managers the opportunity to drive innovation, particularly through effective communication practices. Within Malaysia's manufacturing sector, leaders can implement several approaches to foster innovation:

1. Minimise micromanagement and express confidence in employees' abilities, ensuring clarity of expectations. Goals should be clearly articulated, and briefings should follow a structured why–what–next format.
2. Invest in the quality of LMX communication by prioritising one-to-one interactions and post-task debriefs. This ensures timely, fair, and constructive feedback, supported by clear explanations and actionable suggestions.

3. Adopt modest communication practices to enhance psychological safety by setting boundaries, appropriately attributing credit, encouraging dissent, and clarifying actions, thereby legitimising employee voice.
4. Continuously monitor the informational climate of teams, particularly regarding clarity, timeliness, and fairness of communication. Coach employees whose PE and IWB are underperforming.
5. Work in pairs during decision-making processes to maintain transparency and reduce role ambiguity, especially in fast-paced or competitive departments.

Together, these practices demonstrate how rigid hierarchical structures can be converted into dynamic, information-rich climates that support ongoing innovation. Beyond the manufacturing sector, these strategies are applicable to library, archival, and information service (LIS) institutions, which similarly operate within hierarchical and resource-constrained environments. In such contexts, leadership communication and empowerment are essential for enhancing employee creativity, service delivery, and organisational flexibility. Conceptualising LMX as information quality (clarity, timeliness, fairness, responsiveness) and LH as humble communication (acknowledging limits, crediting others, inviting dissent, and explaining decisions) provides LIS managers with practical guidance for empowering employees and facilitating bottom-up innovation. Furthermore, these mechanisms are platform-neutral. LMX, as information quality, and LH, as communication practices, can be operationalised through digital tools such as intranets, enterprise resource planning systems, and collaboration platforms. In the LIS environment, these mechanisms can also be implemented through integrated library systems, discovery layers, repositories, and service desks. By institutionalising structured briefings, timely updates, and feedback loops, managers can foster empowered environments that enable innovation, regardless of the specific technologies employed.

Contribution for Policy Makers

At the policy level, integrating communication-based empowerment into industry and workforce frameworks can enhance innovation outcomes:

1. Leadership Development: Allocate resources to programmes that cultivate LMX communication

routines, including clarity, timeliness, fairness, and constructive feedback, alongside humility micro-behaviours such as acknowledging limits, crediting others, inviting dissent, and ensuring decision transparency.

2. Standards and Incentives: Promote organisational adoption of communication quality KPIs, encompassing information clarity, feedback timeliness, and explanatory fairness, and link these metrics to innovation grants or fiscal incentives.
3. Empowerment-Focused HR Practices: Implement participative decision-making processes, clarify roles, and establish recognition systems that foster the four dimensions of psychological empowerment—meaning, competence, self-determination, and impact.
4. Sector-Specific Playbooks: Normalise safe upward information flows through manufacturing-tailored mechanisms such as shop-floor briefings, after-action reviews, and error-learning forums.

Such policy measures align organisational practices with national innovation priorities by positioning information quality and effective communication as central drivers of innovative work behaviour.

Limitations and Future Research Recommendations

Despite its contributions, this study has several limitations that offer directions for future research:

1. Cross-Sectional Design: The present design constrains causal inference. Subsequent studies should employ longitudinal or experimental methodologies to investigate how leadership behaviours and empowerment evolve over time and influence innovation outcomes.
2. Cultural Specificity: The results are situated within Malaysia's high power-distance context. Testing this moderated-mediation framework in other cultural and industrial environments (e.g., Western economies, service sectors) would assess the generalizability of the model.
3. Self-Reported Data: Although validated instruments were used, the potential for common method bias remains. Future research could incorporate multi-source data, such as supervisor evaluations of innovative work behaviour, or objective innovation metrics.
4. Focus on Leader Humility: While humility

emerged as a significant moderator, other boundary conditions—such as organisational climate, team diversity, or digital leadership—may also influence the empowerment–innovation relationship. Including these factors in extended models would deepen theoretical understanding.

5. **Omitted Variables:** Constructs such as psychological safety, resilience, and learning orientation were not included but may further clarify how empowerment translates into innovative behaviours.
6. **Industry Generalizability:** Although this study was conducted in corporate manufacturing, the processes examined—leadership communication, psychological empowerment, and innovative work behaviour—are not confined to a single sector. Future research should apply the moderated–mediation model to libraries, archives, and other information institutions, where hierarchical norms and innovation pressures also exist. Such replication would both validate the model across organisational contexts and contribute to the LIS literature by providing evidence on how communication-based leadership empowerment can foster staff-driven innovation.

Conclusion

This study contributes to the organizational change management literature by integrating structural, relational, and behavioural leadership dimensions into an empowerment-driven model of innovation. The findings indicate that hierarchical distance does not directly constrain innovative work behaviours; rather, it significantly shapes psychological empowerment, which subsequently drives innovation. High-quality leader–member exchange, conceptualised as dyadic communication, reinforces empowerment, while leader humility, understood as communication and information-oriented behaviours, strengthens the empowerment–innovation relationship, functioning as a cultural disruptor in rigid, high power-distance contexts. From a theoretical perspective, the research advances Social Exchange Theory and empowerment theory by highlighting the central mediating role of psychological empowerment and the moderating influence of leader humility. Practically, it provides organisational leaders with actionable strategies to foster empowerment, cultivate effective leader–member relationships, and exhibit humility to stimulate innovation within hierarchical structures. At the policy level, the study

emphasises the importance of incorporating leadership development into national innovation agendas. In conclusion, enabling employees through relational trust and humility-driven leadership is essential for sustaining innovation in Malaysian manufacturing firms and offers insights applicable to other emerging economies with comparable structural and cultural challenges.

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