

Role of Playful Work Design in Improving Employees' Innovative Work Behaviour in Vietnamese Enterprises

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Abstract

This study investigates the role of Playful Work Design (PWD) in enhancing Innovative Work Behaviour (IWB) among employees and teams in Vietnamese enterprises, with a particular focus on the mediating role of leader–Member Exchange (LMX). Drawing on theories of positive organizational behaviour, job design, and social exchange, this study explores how elements of fun and competition embedded in daily work tasks can stimulate creativity and innovation.

The findings reveal that PWD significantly and positively influences both employee and team IWB. Moreover, LMX mediates this relationship, suggesting that high-quality leader–member interactions enhance the effectiveness of playful work environments in fostering innovation. This study contributes to the literature by positioning PWD as a strategic managerial tool rather than merely a psychological construct, especially in the context of developing economies.

Practically, this research offers actionable insights for organisations aiming to boost innovation through workplace design and leadership development. Encouraging playful behaviours at work—when supported by strong leader–member relationships—can lead to higher engagement, creativity, and innovation outcomes.

Keywords: Playful Work Design, Innovative Work Behaviour, Leader–Member Exchange, Vietnam Innovation

1. INTRODUCTION

Innovation is widely recognised as a key driver of growth, competitiveness, and sustainability in modern economy. Innovation is particularly critical for Vietnam, as the country has experienced rapid industrialisation, digital transformation, and integration into global value chains. According to the Global Innovation Index (2025), Vietnam was ranked 44th among 139 economies in the Global Innovation Index released by the World Intellectual Property Organization (WIPO, 2025). The Vietnamese government aims to position the nation among the top four most innovative ASEAN economies, highlighting the urgent need to foster innovation across all industries.

At the organizational level, innovation performance depends heavily on employees' innovative work behaviour (IWB), which includes generating, promoting, and implementing new ideas. Leadership, organizational culture, and work design are crucial for enabling IWB (Afsar & Umrani, 2019; Choi et al., 2016). Although leadership and culture have been extensively studied, work design remains underexplored in the context of innovation. Playful Work Design (PWD), an emerging concept in organizational behaviour, emphasises the intentional integration of fun

and competition into work tasks, with the potential to enhance creativity and engagement (Bakker et al., 2020).

However, the effectiveness of PWD may depend on the quality of leader–member relationships. Leader-member exchange (LMX) theory suggests that high-quality relationships based on trust, respect, and reciprocity create conditions that empower employees to innovate (Liden & Maslyn, 1998). In this context, this study explores how PWD influences both individual and team IWB in Vietnamese enterprises and how LMX mediates this relationship between PWD and IWB.

This study makes three contributions. First, it expands PWD research from Western contexts to developing economies. Second, it demonstrates how LMX mediates the relationship between PWD and innovative outcomes. Third, it provides practical insights for managers and policymakers seeking to boost innovation capacity in the country.

2. LITERATURE REVIEW

2.1. *Playful Work Design (PWD)*

Playful Work Design integrates theories of play and job design to understand how employees actively reshape their work experiences. Unlike traditional job design imposed by management, PWD is a self-initiated approach in which employees introduce humour, imagination, and competition to make tasks more engaging (Bakker & van Woerkom, 2018). Two dimensions of PWD are recognised: **designing fun (ludic play)** and **designing competition (agonistic play)** (Scharp et al. 2019).

Research shows that PWD enhances engagement and reduces burnout by satisfying basic psychological needs for autonomy, relatedness, and competence (Scharp et al., 2022). Daily diary studies have also revealed that employees who design playful work experiences exhibit higher creativity and flow (Liu et al., 2022). Importantly, PWD focuses more on self-directed competition than on rivalry with others, promoting personal mastery rather than conflict.

However, challenges remain. PWD may be constrained by rigid job structures, cultural norms and managerial resistance. In collectivist cultures such as Vietnam, the role of social dynamics and leadership may be particularly significant in determining how PWD translates into innovative behaviours.

2.2. *Innovative Work Behaviour (IWB)*

IWB is the deliberate generation, promotion, and realisation of new ideas to improve processes, products or services (Scott & Bruce, 1994). At the **individual level**, employees display IWB by searching for new methods, proposing creative solutions, and implementing innovative solutions. At the **team level**, IWB refers to collective efforts to share, refine, and execute innovative ideas (Zhang et al. 2023).

Prior studies have highlighted multiple antecedents of IWB, including leadership (transformational, entrepreneurial, authentic), organizational culture, and psychological capital (Afsar & Umrani, 2019; Novitasari et al., 2020). While creativity forms the foundation of the IWB, innovation goes beyond idea generation to implementation and scaling (De Jong & Den

Hartog, 2007). In dynamic environments such as Vietnam, IWB is critical to ensuring that organisations adapt to technological change and global competition.

2.3. Leader-Member Exchange (LMX)

LMX theory posits that leaders develop differentiated relationships with their subordinates. High-quality LMX relationships are characterised by trust, respect, and mutual support, leading to stronger performance and greater job satisfaction (Liden & Maslyn, 1998). Empirical studies have confirmed LMX's positive association with innovation outcomes (Saeed et al., 2019). Strong LMX encourages risk-taking and creativity by providing psychological safety and organizational support to employees.

In emerging markets, where hierarchical structures are common, LMX may be particularly influential in moderating the impact of new work design concepts, such as PWD, on employee behaviour. Employees who trust their leaders are more likely to embrace playful approaches and engage in innovation.

2.4. Integrating PWD, IWB and LMX – Conceptual Research Framework

At the organizational level, innovation performance depends heavily on employees' innovative work behaviour (IWB), which includes generating, promoting, and implementing new ideas. Leadership, organizational culture, and work design are crucial in enabling IWB (Afsar & Umrani, 2019; Choi et al., 2016). While leadership and culture have been extensively studied, work design remains underexplored in the context of innovation. Playful Work Design (PWD), an emerging concept in organizational behaviour, emphasizes the intentional integration of fun and competition into work tasks, with potential to enhance creativity and engagement (Bakker et al., 2020).

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The literature suggests a causal chain: PWD enhances engagement and creativity, which translates into IWB. However, this effect is stronger when supported by high-quality LMX relationships that reinforce playfulness as being legitimate and valuable. This study hypothesises that

- **H1:** PWD positively impacts Employee IWB.
- **H2:** PWD positively impacts Team IWB.
- **H3:** LMX positively impacts Employee IWB.
- **H4:** LMX positively impacts Team IWB.
- **H5:** LMX mediates the relationship between PWD and Employee IWB.
- **H6:** LMX mediates the relationship between PWD and Team IWB.

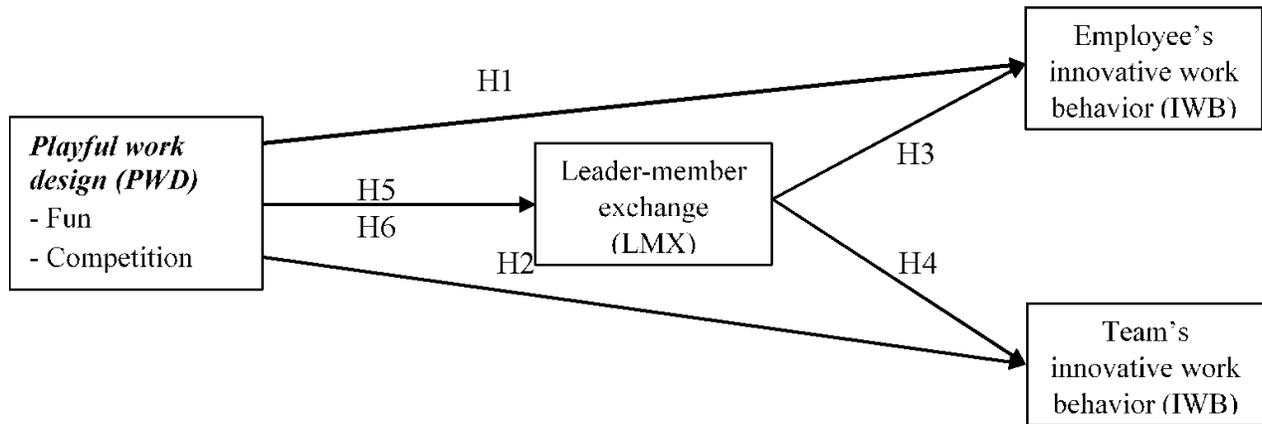


Figure 1: Conceptual Framework (Source: Author)

Research Problem

Understanding the dimensions and factors that contribute to innovative work behavior is crucial for organisations seeking to promote a culture of innovation and drive organizational success. Although the existing literature has confirmed the positive role of PWD in encouraging work satisfaction, work engagement, and creativity, it is still uncovering the relationship between this employee's self-initiated PWD concept and their IWB at both the individual and team levels remains unclear.

Several factors have been found to impact IWB practices. Employee involvement in innovative behaviors has been proven to be positively impacted by leadership styles such as transformational and entrepreneurial leadership (Bagheri & Akbari, 2017; Cai et al., 2020). The relationship between innovative work behavior and other constructs has been explored. For instance, the mediating role of continuance commitment in the relationship between directive leadership and innovative work behaviour has been explored (Mutmainnah et al., 2022). Team identification and entrepreneurial orientation have been found to mediate the association between team identification and innovative work behaviour (Shahid et al., 2022). The mediating role of LMX in the relationship between PWD and IWB is another area to explore. Organizational studies have shown interest in the connection between Leader-Member Exchange (LMX) and Innovative Work Behaviour (IWB). Numerous investigations have examined how LMX affects workers' willingness to engage in creative activities, providing insight into the relationships between team leaders and their subordinates. Lie et al. (2022) discovered that LMX positively and significantly influences IWB, emphasising the role of strong leader-member interactions in encouraging individual creativity. Schuh et al. (2017) examined a model in which LMX moderates the effect of innovative work behavior by employees' IWB on supervisors' judgments of performance, suggesting the importance of LMX in assessing innovative contributions.

While the majority of the literature focuses on how LMX affects conventional work-related outcomes, such as job performance and organizational commitment, the idea of playful work design is not as well examined in relation to LMX. However, it is reasonable to argue that a positive LMX connection may generate an environment that is favourable for encouraging playfulness and creativity in the workplace, given the positive impact of LMX on employee engagement and IWB. More broadly, reciprocity and mutual benefits in leader-follower interactions are highlighted by the social exchange theory, which forms the basis of LMX. This mutual benefit of LMX may extend to fostering an atmosphere at work that values enjoyment, playfulness, and innovation among employees.

The literature on LMX's impact of LMX on employee attitudes and behaviours indicates that, although there is little direct empirical evidence connecting LMX and playful work design, a positive LMX relationship may tangentially support the development of a playful and creative work environment. Additional investigation into the relationship between LMX and work design elements, such as playfulness, may yield important insights into fostering IWB. Consequently, **the research problem of this study is to explore the role of Playful Work Design in enhancing employees Innovative Work Behavior and the mediating role of Leader-member exchange in this cause-effect relationship.**

Based on the research problem, the following research questions should be addressed to fulfil the research gap in the existing literature. Research question is **How does PWD influence employee's and team's innovative work behavior?**, specifically,

RQ1: Is PWD associated with employees innovative work behavior?

RQ2: Is PWD associated with a team's innovative work behavior?

RQ3: Is the member-leader (cross-level) exchange a mediator variable in the cause-effect relationship between PWD and employees and teams' innovative work behaviour?

This study aims to explore how PWD is associated with individual and team innovative behavior and the factors affecting the relationship between PWD and team innovative behavior. The research objectives are as follows:

RO1: Investigate the role of PWD in stimulating employee's innovative work behavior

RO2: Investigate the role of PWD in stimulating team's innovative work behavior

RO3: Explore the mediating role of member – leader exchange in the relationship between PWD and employee's and team's innovative work behavior

3. METHODOLOGY

This study adopted a quantitative positivist design using a deductive approach. A cross-sectional survey was conducted, and the data were analysed using partial least squares structural equation

modelling (PLS-SEM). This method allows for the simultaneous testing of multiple constructs and mediation effects.

According to Saunders et al. (2019), research philosophy is the body of knowledge and belief system that guides a given topic's research process. The five primary philosophies that illustrate structural research in business and management are positivism, critical realism, interpretivism, post-modernism, and pragmatism (Saunders et al., 2019). This study uses a positivist research philosophy, which allows researchers to examine a quantitative research model to empirically test a hypothesis. Positivists emphasise deductive research because it develops hypotheses that result in the establishment of facts (Saunders et al., 2019). The deductive method starts with theory and works its way down to test hypotheses by gathering data and analysing it using an existing model to validate the assumptions (Flick 2017). The research will begin with the theoretical foundation on “**How does PWD influence employees’ and teams’ innovative work behaviour**”. The conceptual framework developed earlier in the literature (see Figure 5) was applied based on the research design. The researcher would employ to implement the aims and objectives of the study that are presented in the methodological procedure of the proposed research design. The literature review supports the proposed model with the theoretical concept of the study model. The relationship between variables was analysed to evaluate objective ideas. Then, utilising tools, variables can be measured to use statistical methods to assess numerical data. The final written report consisted of an introduction, literature review, and theoretical framework. The following is a discussion of the report's findings and conclusions. To verify the suggested theories, this study conducted a quantitative analysis.

Sample

The population of this study comprises leading innovative firms in Vietnam in the following sectors contributing to economic growth: Agriculture, Industrial - Construction (processing, manufacturing, pharmacy-medical equipment, construction – real estate), and service (ICT, logistics, banking-finance-insurance, retail, hospitality, food, and beverage) within the framework of the National Research Program on Innovation and Innovation, Investment Newspaper cooperates with Viet Research to announce the list of Top 50 creative and effective enterprises in Vietnam in 2023 (VIE50).. A questionnaire (both hard copy and online) will be developed in dual languages (Vietnamese and English) based on the proposed model and then will be distributed among respondents (cross-level managers and employees) in Vietnam’s main innovation hubs across the country.

Sample size and Data collection

The research manager contacted respondents and requested them to participate in the survey and share the link with managers to respond using the online survey method and extract the results in a spreadsheet for data analysis.

To determine the sample size for the first phase of the research, the Taro Yamane (Yamane, 1973) formula with a 95% confidence level will be utilised. The calculation formula of Taro Yamane is presented as: $n = \frac{N}{1+N(e)^2}$ Where : n = sample size required N = number of people in the population e = allowable error (%) $n = 370$ (with estimation of total 100 managers and employees of each selected enterprise).

The link to the online questionnaire was distributed via email and LinkedIn. It is critical to note that the unit of analysis for this study is the individual firm, and the questionnaire will be completed by the firm's cross-level management and its subordinates. Simple random sampling will be used to elicit replies from respondents from various manufacturing companies. This basic random strategy is more successful because it gives the understudying subject equal opportunities and reduces sample bias.

All constructs were measured using validated scales on a 5-point Likert scale.

- **PWD**: 12 items covering designing fun and competition (Scharp et al., 2019).- **LMX**: 11 items measuring trust, respect, and reciprocity (Liden and Maslyn, 1998).- **Employee IWB**: 10 items covering idea generation, promotion, and implementation (De Jong and Den Hartog, 2010).- **Team IWB**: Four items capturing collective innovation behaviours (Welbourne et al., 1998).

Respondents were given access to online and paper versions of the questionnaires, which included cover letters and closed-ended questions. Table 1 lists the four constructs that are significant to this study.

Constructs	Items	Sources
Playful Work Design	Designing fun	Scharp et al. (2019)
	1. Today, I approached my tasks creatively to make them more interesting 2. Today, I approached my work in a playful way 3. Today, I looked for humor in the things I needed to do 4. Today, I looked for ways to make tasks more fun for everyone involved 5. Today, I used my imagination to make my job more interesting 6. Today, I looked for ways to make my work more fun	
	Designing competition	
	7. Today, I pushed myself to do better even when it wasn't expected 8. Today, I approached my job as a series of exciting challenges 9. Today, I competed with myself at work - not because I had to, but because I enjoyed it 10. Today, I tried to make my job a series of exciting challenges 11. Today, I tried to keep score in all kinds of work activities	

	12. Today, I tried to set time records in my work tasks	
Leader-member Exchange	<p>1. I like my supervisor very much as a person</p> <p>2. My supervisor is the kind of person one would like to have as a friend.</p> <p>3. My supervisor is a lot of fun to work with.</p> <p>4. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in questions</p> <p>5. My supervisor would come to my defense if I were "attacked" by others.</p> <p>6. My supervisor would defend me to others in the organization if I made an honest mistake</p> <p>7. I do work for my supervisor that goes beyond what is specified in my job description.</p> <p>8. I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group</p> <p>9. I am impressed with my supervisor's knowledge of his/her job</p> <p>10. I respect my supervisor's knowledge of and competence on the job</p> <p>11. I admire my supervisor's professional skills.</p>	Liden, R. C., & Maslyn, J. M. (1998).
Employee's Innovative Work Behavior	<p>1. How often does this employee pay attention to issues that are not part of his daily work?</p> <p>2. How often does this employee wonder how things can be improved?</p> <p>3. How often does this employee search out new working methods, techniques or instruments?</p> <p>4. How often does this employee generate original solutions for problems?</p> <p>5. How often does this employee find new approaches to execute tasks?</p> <p>6. How often does this employee make important organizational members enthusiastic for innovative ideas?</p>	(De Jong and Den Hartog, 2010)

	<p>7. How often does this employee attempt to convince people to support an innovative idea?</p> <p>8. How often does this employee systematically introduce innovative ideas into work practices?</p> <p>9. How often does this employee contribute to the implementation of new ideas?</p> <p>10. How often does this employee put effort in the development of new things?</p>	
Team Innovative Work Behavior	<p>1. Coming up with new ideas</p> <p>2. Working to implement new ideas</p> <p>3. Finding improved ways to do things,</p> <p>4. Creating better processes and routines</p>	Welbourne et al. (1998)

Table 1: Measurements (Author's source)

Descriptive Statistic Analysis

Descriptive statistics aim to characterise the sample to draw conclusions. Demographic information and statistics of frequency, percentage, mean, and standard deviation were cross-tabulated.

Characteristic	Count (percentage)
Gender	
Male	200 (54.0)
Female	170 (46.0)
Age	
Under 18	19 (5.1)
18-35	149 (40.3)
36-55	126 (34.1)
56 or above	76 (20.5)
Level of Management	
Senior Management	38 (10.3)
Middle-line Management	56 (15.1)
Team leader	42 (11.4)
Non-management staff	234 (63.2)
Industry	
Agriculture	82 (22.2)
Manufacturing	50 (13.5)
Service	120 (32.4)
Pharmacy – Medical equipment	35 (9.5)

Processing	12 (3.2)
Construction-Real estate	71 (19.2)

Table 2. Profiles of Respondents (N = 370).

Quantitative method

Partial least squares and structural equation modelling (PLS-SEM) were used for data analysis. SEM is a statistical methodology for causal modelling that encompasses a wide range of mathematical models, computer algorithms, and statistical methods for fitting the network of constructs to data. SEM is a multivariate statistical analysis approach used to investigate the statistical correlations between measured variables and latent components. It can estimate various interrelated dependencies in a single statistical analysis. Because of its utility and capacity to infer correlations between unobserved constructs (latent variables) and observable variables, this technique is widely employed, particularly in the social sciences. SEM is embedded with a number of sub-techniques such as Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA). Furthermore, the SEM statistical test is useful for testing and confirming the constructs of the generated items. At this stage, a questionnaire will be constructed in accordance with the model, with pertinent hypotheses verified for validity and reliability as part of the model evaluation process (Barrett, 2007). EFA and PLS-SEM are the statistical tests of choice at this level of research because of their utility in developing the theoretical construct, examining the structure of relationships between variables in the theoretical framework, detecting and assessing the unidimensionality of the theoretical construct, evaluating the construct validity of the scale, and finally proving/disproving proposed hypotheses.

4. RESULTS

To examine construct dimensions and reliability, the following methods were applied: component analysis and internal consistency analysis (Cronbach's alpha). Cronbach's alpha analysis was used to assess internal consistency and dependability, in addition to item-to-total correlation and alpha value. To verify the dimensionality of each research topic, factor analysis was performed. High factor loadings can be chosen from the questionnaire items, and these items can be compared to theoretically hypothesised ones. The value of the latent roots (eigenvalues) in the principal component factor analysis determines the number of dimensions to be recovered. As stated by Hair et al. (2021), factor loading >0.6, eigenvalue >1, cumulative explained variance >0.6 (60%), item-total correlation >0.3, and coefficient alpha (α) > 0.7 are the requirements that must be satisfied.

Given that all Cronbach's alpha (CrA) and composite reliability (CR) values in Tables 3 and 4 are above the standard of 0.7 (Hair et al., 2021), the reliability is deemed satisfactory. Since all Average Variance Extracted (AVE) values are greater than 0.5 and all factor loading values are greater than the threshold level of 0.7, the results also imply acceptable convergent validity (Hair et al., 2021).

Constructs	Items	Factor	Mean
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			loadings			
Playful Work Design (PWD)		Two dimensions of PWD - Designing Fun (Ludic Play) and Designing Competition (Agonistic Play) increase LMX quality	0.754	3.728		
		PWD encourages employees to generate novel ideas creativity at work	0.767	3.605		
		PWD encourages employees goes beyond ideas to realization (innovation implementation)	0.765	3.635		
Employee Innovative Work Behavior (Employee IWB)		Employee IWB encourages (Creativity)	0.825	3.678		
		Employee IWB encourages goes beyond ideas to realization (Implementation)	0.803	3.728		
Team Innovative Work Behavior (Team IWB)		Team IWB collectively proposes and implements new ideas	0.857	3.684		
		Team IWB is impacted by Playfulness in workplace (Organization culture and climate)	0.742	3.475		
		Team IWB is impacted by Competitiveness in workplace (Organization culture and climate)	0.800	3.635		
		Team IWB impacted by leadership styles	0.781	3.615		
		Team IWB is impacted by social exchange within work groups	0.792	3.728		
		Team IWB is impacted by academic entrepreneurs' political skills	0.822	3.608		
		Leader-Member Exchange (LMX)		LMX increases trust between leader and employee	0.825	3.678
LMX increases positive relationship (liking) between leader and employee	0.824			3.605		
LMX increases mutual respect between leader and employee	0.794			3.661		
LMX influences Team IWB by strong leader-member interactions	0.787			3.598		
LMX influences Employee IWB on supervisory judgments of performance	0.749			3.635		

Table 3. Constructs, items, and factor loadings.

	CR	CrA	AVE	PWD		E_IWB		T-IWB		LMX	
				FLC	HTMT	FLC	HTMT	FLC	HTMT	FLC	HTMT
PWD	0.916	0.878	0.732	0.855	---	---	---	---	---	---	---
E_IWB	0.888	0.843	0.614	0.507	0.591	0.783	---	---	---	---	---

T_IWB	0.897	0.867	0.555	0.587	0.667	0.499	0.574	0.745	---	---	---
LMX	0.877	0.854	0.651	0.512	0.585	0.592	0.643	0.533	0.612	0.782	---

Note: PWD = playful work design; LMX = Leader-member exchange; E-IWB = employee innovative behaviour; T-IWB = team innovative behaviour; CR = composite reliability; CrA = Cronbach's alpha; FLC = Fornell-Larcker criterion; HTMT = Heterotrait-Monotrait ratio. The square roots of the AVE in bold font are on the main diagonal.

Table 4. Reliability and validity assessments.

Finally, the Heterotrait-Monotrait ratio (HTMT) and the Fornell-Larcker criterion were used to assess discriminant validity. Each construct's square root of the average variance expected (AVE), which ranged from 0.745 to 0.891, was larger than all correlation values with any other construct, as indicated in Table 4 (Fornell and Larcker, 1981). Furthermore, all HTMT ratios in Table 4 that fall between 0.574 and 0.766 are below the 0.9 criterion (Ringle et al., 2020). Thus, the discriminant validity of the study was sufficiently high.

Paths	Coefficient (b)	p-value	Conclusions
PWD -> E-IWB	0.420*	0.000	H1 supported
PWD -> T-IWB	0.342*	0.001	H2 supported
LMX -> E-IWB	0.340*	0.011	H3 supported
LMX -> T-IWB	0.407*	0.002	H4 supported
PDW -> LMX -> E-IWB	0.183*	0.012	H5 supported
PDW -> LMX -> E-IWB	0.201*	0.002	H6 supported

*Confidence interval at the 0.05 level.

Table 5. Path coefficients of the direct and indirect effects.

Table 5 demonstrates the substantial and indirect influence of PWD on E-IWB ($b = 0.183$, $p < 0.05$) and T-IWB ($b = 0.300$, $p < 0.05$) through the mediating roles of LMX, as determined by bootstrap analysis with 5000 samples and 95% confidence intervals. Hypothesis testing confirmed all the proposed relationships. The results demonstrate that PWD directly enhances IWB at both the employee and team levels. Moreover, LMX mediates this relationship, suggesting that playful environments are most effective when supported by strong leader-member trust and collaboration.

These findings contribute to job design theory by demonstrating how self-initiated work modifications enhance innovative outcomes when legitimised by leader support. They also enrich the social exchange theory by illustrating how reciprocity in leader–member relationships fosters the adoption of playful work strategies.

5. DISCUSSION

The projected contribution of this research to theory and practice is a subject of discussion in this session. This study contributes to the existing body of knowledge in several ways. First, PWD could be explored as a managerial factor affecting innovative behavior from a cross-level perspective, not just the psychological perspective, in various industries in developing economies such as Vietnam. From a practical perspective, this study offers implications for firms to allow PWD in organisations to improve the innovative behaviour of individuals and teams.

Theoretical Contributions

This study makes three theoretical contributions to the literature. First, it expands the literature on PWD beyond Western contexts, demonstrating its applicability in developing economies. Second, it establishes LMX as a mediating mechanism that explains how PWD translate into innovation outcomes. Third, it provides empirical evidence linking work design, leadership, and innovation in the Vietnamese context.

Practical Implications

For managers, this study underscores the importance of fostering a culture of playfulness. Practical strategies include gamifying tasks, encouraging humour, and allowing flexible problem-solving approaches. Leaders should cultivate high-quality LMX relationships because trust and respect amplify the positive effects of PWD. Organisations should integrate PWD into HR and innovation strategies and align them with leadership development programs.

Limitations and Future Research

This study is limited by its cross-sectional design, which cannot capture the long-term effects of PWD. Future research should adopt longitudinal or experimental designs to examine causal relationships over time. Cross-cultural comparisons would help assess whether the findings generalise beyond Vietnam. Future studies could explore boundary conditions, such as organizational size, digital transformation, and industry-specific norms.

Although there is limited direct empirical evidence linking LMX to playful work design, research on LMX's influence on employee attitudes and behaviours suggests that a positive LMX relationship may tangentially help establish a fun and creative work environment. Further research on the connection between LMX and aspects of job design, such as playfulness, might provide crucial information about how to promote IWB. Thus, the goal of this study is to investigate how playful work designs may foster employees' innovative work behaviours and how leader-member exchanges might act as mediators in this cause-and-effect connection.

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