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Research Article

Bridging Job Characteristics And Innovative Work Behavior: The Mediation Role Of Job-Based Psychological Ownership

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ABSTRACT

In the realm of business, innovative work behavior holds significant importance. While the direct connection between job characteristics and innovative work behavior has received attention, there remains a gap in understanding the indirect pathways and the influence of job-based psychological ownership in this relationship. This study seeks to address this gap by investigating the relationship between job characteristics and innovative work behavior through job-based psychological ownership. Data was collected through a survey of 574 Vietnamese employees, and the analysis was conducted using PLS-SEM with Smart PLS 4.0 software. The findings reveal that job characteristics positively influence job-based psychological ownership, which subsequently fosters innovative work behavior. Moreover, the results confirm the mediating role of job-based psychological ownership in the relationship between job characteristics and innovative work behavior. These findings carry significant practical implications for Vietnamese businesses.

Keywords: Job characteristics, job-based psychological ownership, innovative work behavior, mediator, Vietnam

1. Introduction.

Innovation is a cornerstone in bolstering organizational performance and securing competitive advantages within the business realm (Aziz & Samad, 2016; Al-Khatib & Al-ghanem, 2021; Alosani, Yusoff, & Al-Dhaafri, 2020). It operates on three distinct levels: organizational, group, and individual (Kabir, 2019). The individual level often remains overshadowed despite its pivotal role as a precursor to organizational and individual designable outcomes (Axtell et al., 2000; Ramamoorthy, Flood, Slattery, & Sardessai, 2005). Innovative work behavior encompasses intentional actions by employees aimed at generating, introducing, and implementing novel ideas within the workplace, whether within a team or across an entire organization, thereby augmenting overall performance (Janssen, 2000). Such behavior yields manifold benefits for both organizations and individuals alike. It catalyzes product/service innovation (Li, Li, & Chan, 2019; Sanz-Valle & Jiménez-Jiménez, 2018), streamlines processes (Enz & Siguaw, 2003), shapes consumer preferences (Victorino, Verma, Plaschka, & Dev, 2005), heightens customer satisfaction and experience (Su, 2011; Ta & Yang, 2018; Truong, Dang-Pham, McClelland, & Nkhoma, 2020), and fosters customer loyalty (Maria Stock, Jong, & Zacharias, 2017; Woo, Kim, & Wang, 2021; Yeh, 2015). Furthermore, innovative work behavior serves as a potent predictor of firm performance (Shanker, Bhanugopan, Van der Heijden, & Farrell, 2017) and organizational innovation performance (Dedahanov, Rhee, & Yoon, 2017). On an individual level, it correlates with heightened job satisfaction (Robinson & Beesley, 2010) and enhanced job performance (Aryee, Walumbwa, Zhou, & Hartnell, 2012; Kim & Koo, 2017).

Recognizing the significance of innovative work behavior, extensive research has focused on its drivers and impediments, which can be categorized into four main groups: organization, leadership, individual, and work characteristics (Minglong Li & Hsu, 2016). At the organizational level, various factors influence innovative work behavior, including organizational structure (Dedahanov et al., 2017), organizational culture (Botelho, 2020; Naranjo-Valencia, Jimenez-Jimenez, & Sanz-Valle, 2017; Yousaf, Javed, & Badshah, 2024), organizational climate (Ren & Zhang, 2015; Shanker et al., 2017), organizational learning (Tsamantouridis, Bellou, & Tsameti, 2023), and human resource management practices (Botelho, 2020; Jalil, Ullah, & Ahmed,

2021; Liu, Chow, Gong, & Wang, 2019). Leadership also plays a crucial role in fostering innovative work behavior, with aspects such as transformational leadership (Afsar, Badir, & Saeed, 2014; Choi, Kim, Ullah, & Kang, 2016; Tsamantouridis et al., 2023), servant leadership (Wang, Meng, & Cai, 2019; Zainal & Lata, 2021), leader-member relationships (Atitumpong & Badir, 2018; Taştan & Davoudi, 2015; Zuberi & Khattak, 2021), and employee empowerment (Rao Jada, Mukhopadhyay, & Titiyal, 2019; Stanescu, Zbuchea, & Pinzaru, 2021) being particularly influential. At the individual level, factors facilitating innovative work behavior include personality traits like proactive personality (Li, Liu, Liu, & Wang, 2017; Madrid, Patterson, Birdi, Leiva, & Kausel, 2014; Mubarak, Khan, Yasmin, & Osmadi, 2021; Zuberi & Khattak, 2021), individual resources such as psychological capital (Li et al., 2017; Zainal & Lata, 2021), employee attitudes and psychology such as job satisfaction (Alshebami, 2021; Mustafa, Coetzer, Ramos, & Fuhrer, 2021) and work engagement (Mubarak et al., 2021), organizational commitment (Battistelli, Odoardi, Vandenberghe, Di Napoli, & Piccione, 2019), organization-based psychological ownership (Hao, Chen, Mahsud, & Yu, 2024; Liu, Chow, Zhang, & Huang, 2019), employee behaviors such as knowledge sharing (Battistelli et al., 2019; Radaelli, Lettieri, Mura, & Spiller, 2014), and employee tenure (Woods, Mustafa, Anderson, & Sayer, 2018). Finally, work-related factors also contribute to innovative work behavior, such as job characteristics (Černe, Hernaus, Dysvik, & Škerlavaj, 2017; De Spiegelaere, Van Gyes, & Van Hootegem, 2016; Tsamantouridis et al., 2023; Verma & Singh, 2022; Zuberi & Khattak, 2021) and job standardization (Luoh, Tsaur, & Tang, 2014).

The relationships among job characteristics, psychological ownership, and innovative work behavior have been extensively explored (Černe et al., 2017; De Spiegelaere et al., 2016; Hao et al., 2024; Liu, Chow, Zhang, et al., 2019; Tsamantouridis et al., 2023; Verma & Singh, 2022; Zuberi & Khattak, 2021). It has been observed that all job characteristics directly impact innovative work behavior (Tsamantouridis et al., 2023). While each job characteristic exerts an independent influence on innovative work, some studies suggest that not all aspects of job characteristics significantly impact innovative work behavior (De Spiegelaere et al., 2016). Furthermore, while previous research has examined the direct impact of job characteristics on innovative work behavior, it has often overlooked the indirect effects. However, Li and Hsu (2016) emphasize the importance of considering both the direct and indirect relationships between job characteristics and innovative work behavior. Additionally, while the role of psychological ownership in influencing innovative work behavior has been investigated, prior studies primarily focus on organization-based psychological ownership (Hao et al., 2024; Kousina & Voudouris, 2023; You, Hu, Li, Wang, & Xu, 2022), neglecting the examination of job-based psychological ownership. Moreover, studies have demonstrated the mediating role of psychological ownership in relationships such as between innovation climate and innovative work behavior (You et al., 2022), as well as ambidextrous leadership and innovative work behavior (Kousina & Voudouris, 2023). However, to the best of the author's knowledge, no study has explored the mediating role of psychological ownership in the linkage between job characteristics and innovative work behavior. Lastly, previous studies investigating the interplay among job characteristics, psychological ownership, and innovative work behavior have utilized diverse samples from various regions, including Slovenia (Černe et al., 2017), India (Verma & Singh, 2022), Pakistan (Hao et al., 2024; Zuberi & Khattak, 2021), Ɛuro (De Spiegelaere et al., 2016; Kousina & Voudouris, 2023), and China (You et al., 2022).

This study makes several contributions to the literature on innovative work behavior. Firstly, it explores the role of job-based psychological ownership as a mediator between job characteristics and innovative work behavior. While previous research has explored psychological ownership as a predictor or mediator, it has predominantly focused on organization-based psychological ownership (Hao et al., 2024; Kousina & Voudouris, 2023; You et al., 2022). Secondly, although extensive research has investigated the relationship between job characteristics and innovative work behavior, most studies have primarily examined the direct association. However, as highlighted by Li and Hsu (2016), job characteristics may exert an indirect influence on innovative work behavior. This study fills this gap by exploring the indirect pathway between job characteristics and innovative work behavior through job-based psychological ownership. Finally, while innovative work behavior has been studied in Vietnam (Nguyen, 2023), to the best of the author's knowledge, there is a dearth of research on the relationship between job characteristics, psychological ownership, and innovative work behavior in Vietnam. Given Hofstede et al.'s (2005) assertion that cultural differences may influence behavior, there is a compelling need for this research to be conducted in the Vietnamese context.

This paper is organized as follows: The subsequent section provides a comprehensive literature review, outlining background theory and hypotheses. Following that, the methodology is detailed in section 3. Subsequently, the analysis of the results will be presented. Finally, the paper concludes with discussions on the implications of the findings and highlights limitations encountered during the research process.

2. Literature review

2.1. Psychological ownership theory

The Psychological Ownership Theory was initially proposed on the basis of three fundamental human needs: efficacy and effectance, self-identity, and having a place (Pierce, Rubenfeld, & Morgan, 1991). Psychological ownership denotes the state wherein individuals perceive the target of ownership (whether tangible or intangible) or a portion thereof as "theirs" (Pierce, Kostova, & Dirks, 2001; Pierce et al., 1991). This target may manifest tangibly, such as in the workplace, or intangibly, such as in one's job role (Pierce et al., 2001).

Psychological ownership exists within the minds of individuals, distinct from legal ownership (Pierce, O'driscoll, & Coghlan, 2004), and can manifest even in the absence of legal ownership (Mayhew, Gardner, Bramble, & Ashkanasy, 2007).

This theory proposes three pathways to psychological ownership: controlling the target, intimately knowing the target, and investing the self into the target (Pierce et al., 2001; Pierce et al., 1991). Research indicates that control over a target leads to feelings of ownership (Csikszentmihalyi & Halton, 1981; White, 1959), while objects beyond one's control are not perceived as part of the self (Seligman, 1975). Additionally, individuals treat objects they have created as extensions of themselves (Turner & Durkheim, 2013), fostering a sense of ownership. Lastly, intimate knowledge of an object leads to a fusion of self with the object (Beaglehole, 2015), thus contributing to psychological ownership.

This theory suggests that individuals who feel a sense of ownership are typically more accountable for the object and are inclined towards initiating changes autonomously (Pierce et al., 2001). When an employee's identity is closely intertwined with the organization, as seen in cases of psychological ownership, there emerges a heightened responsibility toward the outcomes of their work (Pierce et al., 1991). Additionally, individuals are likely to advocate for changes in objects they feel ownership towards, especially when these changes align with their sense of control and effectiveness, contribute to their sense of self-consistency, and add value to their sense of control, self-worth, and personal effectiveness (Pierce et al., 1991). Conversely, employees tend to resist changes imposed on them, particularly when these changes threaten their sense of control and continuity of self and diminish the essence of what they are attached to (Pierce et al., 1991)

The theory of psychological ownership has been widely applied and validated across numerous studies in the fields of Marketing and organizational behavior (Brundin, McClatchey, & Melin, 2023; X. Chen et al., 2023; Lyu, Jiang, & Balaji, 2023; Peck & Luangrath, 2023; Pham, 2022). It has been utilized to elucidate the antecedents of innovative work behavior (Bai, Jia, Liu, & Shahzad, 2023; Hao et al., 2024; Kousina & Voudouris, 2023) and to explain the antecedents and consequences of psychological ownership (Asatryan & Oh, 2008; Brown, Pierce, & Crossley, 2014; Pierce, Jussila, & Cummings, 2009). Therefore, it is justifiable that this theory be applied in the present research.

2.2. Hypothesis and research model

Job characteristics and job-based psychological ownership

Job characteristics, as proposed by Hackman and Oldham (1975), consist of skill variety, task identity, task significance, autonomy, and feedback. Skill variety refers to the extent to which a job entails various activities that require different skills and talents from the employee (Hackman, Oldham, Janson, & Purdy, 1975; Hackman & Oldham, 1975). Task identity pertains to the degree to which a job involves completing a whole and identifiable piece of work from start to finish, with a visible outcome (Hackman & Oldham, 1975). Task significance relates to the extent to which a job has a meaningful impact on the lives or work of others, whether within the organization or in the external environment (Hackman & Oldham, 1976). Autonomy refers to the degree of freedom, independence, and discretion provided to the employee in scheduling the work and determining the procedures for carrying it out (Hackman & Oldham, 1975). Feedback indicates the degree to which performing the job activities yields direct and clear information about the effectiveness of the employee's performance (Hackman & Oldham, 1975).

Drawing on the definition of psychological ownership proposed by Pierce et al. (2001), Mayhew et al. (2007) further define job-based psychological ownership as an individual's exclusive sense of possession of their job. Contrary to being an enduring personality trait, job-based psychological ownership is viewed as an attitude, as underscored by Van Dyne and Pierce (2004). Moreover, it is context-specific, reflecting an individual's current position within the organization and the specific nature of their job role (Mayhew et al., 2007).

According to psychological ownership theory, individuals develop a sense of ownership through three pathways: controlling the object, intimately knowing the target, and dedicating themselves to the target (Pierce et al., 2001; Pierce et al., 1991). Employees engaged in jobs requiring diverse skills tend to invest more time and effort, fostering psychological ownership of the job (Pierce et al., 2009). Task identity plays a significant role in job-based psychological ownership by facilitating a deep understanding of the job and personal dedication to it. Employees tasked with completing entire projects have the opportunity to grasp all aspects of the work, understand task sequencing, and invest more time in contemplation, leading to heightened ownership (Pham, 2022). Job autonomy empowers employees to make decisions, fostering a sense of job control and ownership (Pierce et al., 2009). Moreover, autonomy encourages dedication and involvement at work, further enhancing job-based psychological ownership (Chen & Chiu, 2009). The significance of tasks influences psychological ownership by encouraging self-investment in the work. Employees working on tasks with high significance tend to exert more energy and effort due to the impact of their work on others' lives, thereby increasing ownership (Chen & Chiu, 2009). Comprehensive feedback enhances employees' awareness of their performance effectiveness, leading to a deeper understanding of their work and heightened ownership (Pham, 2022; Pierce et al., 2001). Additionally, feedback fosters work engagement, which in turn predicts psychological ownership (Ghafoor, Qureshi, Khan, & Hijazi, 2011; Xanthopoulou, Baker, Heuven, Demerouti, & Schaufeli, 2008). Therefore, job characteristics positively affect job-based psychological ownership.

The relationship between job characteristics and job-based psychological ownership has been investigated in prior studies (Brown et al., 2014; Pham, 2022). Brown et al. (2014) suggest that job characteristics, viewed as

a composite variable, positively influence job-based psychological ownership. Conversely, Pham (2022) finds that, with the exception of skill variety, other job characteristics also positively impact job-based psychological ownership. In this study, the author maintains the belief that all job characteristics play a role in influencing job-based psychological ownership.
From the above analysis, the author hypothesizes that:
Hypothesis 1: Job characteristics positively affect job-based psychological ownership.

Job-based psychological ownership and innovative work behavior
There exist several interpretations of innovative work behavior. According to Janssen (2000), it encompasses the deliberate actions of employees to generate, introduce, and apply novel ideas within the workplace, whether individually, within a team, or across an organization, aimed at enhancing performance. Building upon this, De Jong and Den Hartog (2007) elaborate that innovative work behavior entails a series of actions involving the introduction of new, significant ideas aimed at improving both individual and organizational performance. Yuan and Woodman (2010) further expand on this concept by emphasizing the multifaceted nature of innovative work behavior, which includes the conceptualization, adoption, and implementation of new ideas spanning products, technologies, and work methods by employees. The definition by Janssen (2000) is frequently cited, underscoring the sequential phases of innovative work behavior: the introduction of novel and beneficial ideas akin to employee creativity, followed by their implementation.
According to psychological ownership theory, psychological ownership serves as a precursor to self-initiated change (Pierce et al., 2001; Pierce et al., 1991). Given that innovative work behavior entails purposeful actions by employees to generate, introduce, and apply novel ideas within the workplace (Janssen, 2000), it is reasonable to suggest a connection between psychological ownership and innovative work behavior. Furthermore, psychological ownership fosters individual engagement, thereby enhancing individual creativity (Martinaityte, Unsworth, & Sacramento, 2020). Moreover, psychological ownership within the work environment promotes incremental innovation behavior, which, in turn, enhances radical innovation behavior (Leyer, Hirzel, & Moormann, 2021). Additionally, psychological ownership enhances openness to change (Chai, Song, & You, 2020). Lastly, research indicates that job-based psychological ownership is positively associated with organizational citizenship behavior (Peng & Pierce, 2015) and voice behavior (Mayhew et al., 2007; O'driscoll et al., 2006). Therefore, it is plausible to deduce that job-based psychological ownership influences innovative work behavior.
From the above analysis, the author hypothesizes that:
Hypothesis 2: Job-based psychological ownership positively influences innovative work behavior.

The mediating role of job-based psychological ownership
Expanding upon the job characteristic model introduced by Hackman and Oldham (1975, Pierce et al. (2009) proposed the parsimonious model, which outlines how job characteristics facilitate pathways to psychological ownership. According to this model, job characteristics enable three routes to psychological ownership: control, intimate knowing, and investment of self. These routes, in turn, positively influence psychological ownership, which subsequently impacts various outcomes, including motivation, job satisfaction, sense of responsibility, in-role performance, extra-role behavior, and attitudes toward change. Therefore, it is reasonable to infer that psychological ownership mediates the relationship between job characteristics and innovative work behavior.
Baron and Kenny (1986) outline three conditions for mediation, necessitating the significant influence of the independent variable on the mediator, the significant influence of the mediator on the dependent variable controlling for the independent variable, and a reduction in the effect of the independent variable on the dependent variable when the mediator is included. Empirical studies confirm the positive impact of job characteristics on job-based psychological ownership (Brown et al., 2014; Pham, 2022), as well as on innovative work behavior (Černe et al., 2017; Tsamantouridis et al., 2023; Zuberi & Khattak, 2021). Additionally, evidence supports the connection between psychological ownership and innovative work behavior (Leyer et al., 2021). Moreover, production ownership mediates the association between flexibility and multifunctionality and innovative work behavior (Chai et al., 2020), suggesting that job-based psychological ownership could potentially mediate the relationship between job characteristics and innovative work behavior.
From the above analysis, the author hypothesizes that:
Hypothesis 3: Job-based psychological ownership mediates the relationship between job characteristics and innovative work behavior.
The research model is as follows.

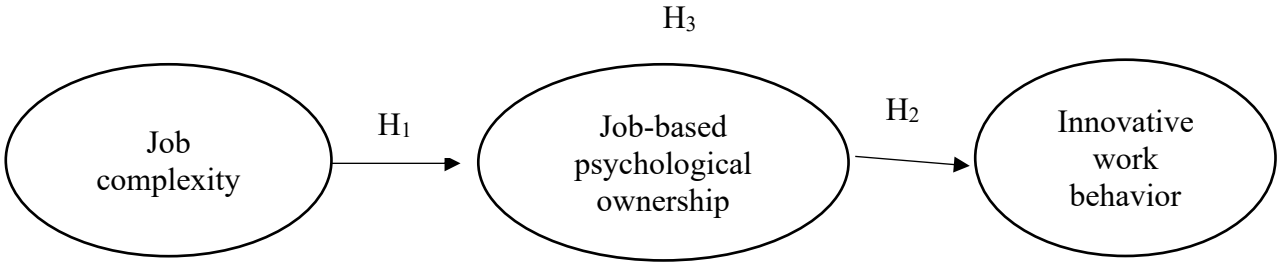

Figure 1: Research model

3. Methodology

3.1. Sample

The author developed a Google Form questionnaire and utilized the Snowball sampling technique to gather data. Initially, the questionnaire was distributed to 30 employees across seven companies, who were requested to forward it to their colleagues. After one month, a total of 527 responses were collected. Table 1 provides an overview of the demographic characteristics of the sample used in this study.

Table 1. Sample demographic

No	Variables/ criteria	Frequencies	Percentage
1	***Sex***		
	Male	254	44.3
	Female	320	55.7
2	***Age***		
	From 18 to 30	272	47.4
	From 31 to 40	145	25.3
	From 41 to 50	138	24.0
	From 51 to 60	16	2.8
	Over 60	3	0.5
3	***Positions***		
	Employees	440	76.7
	First-line managers	86	15.0
	Middle managers	41	7.1
	Top managers	7	1.2
4	***Education***		
	High school	24	4.2
	College	154	26.8
	Under graduate	270	47.0
	Post Graduate	126	22.0
5	***Sector***		
	Service	416	72.5
	Manufactoring	48	8.4
	Commerce	151	26.3
	Agriculture	13	2.3

Note: A respondent can choose more than one sector
(Source: From calculating survey data)

The research sample, comprising 574 individuals, exhibited a diverse demographic profile. Gender distribution revealed 44.3% male and 55.7% female participants. Age-wise, the majority fell within the 18 to 30-year bracket (47.4%), followed by 31 to 40 years (25.3%) and 41 to 50 years (24.0%), with smaller proportions in older age categories. Regarding positions, the sample encompassed 76.7% employees, 15.0% first-line managers, 7.1% middle managers, and 1.2% top managers. Educationally, the sample was varied, with 4.2% holding high school diplomas, 26.8% college graduates, 47.0% undergraduates, and 22.0% possessing postgraduate degrees. The sectors represented were primarily service-oriented (72.5%), with commerce (26.3%), manufacturing (8.4%), and agriculture (2.3%) sectors following suit.

3.2. Measure

The author utilized a scale derived from prior research to measure variables in this study, employing the backward translation technique outlined by Brislin (1970) to translate items from English to Vietnamese. Subsequently, an online survey was developed and distributed to 30 participants to refine the questionnaires, with adjustments made to align with Vietnamese cultural nuances.

Innovative work behavior was assessed using the scale proposed by Chai et al. (2020), which initially comprised two dimensions: creativity-oriented work behavior and implementation-oriented work behavior. However, due to their high correlation, these dimensions were combined into a single summative scale (Chai

et al., 2020). In this study, the author employed a composite scale consisting of 9 items from Chai et al. (2020), modifying the statements to be self-rated instead of colleague-rated. Examples of items include "I actively contemplate improvements in the work of direct colleagues" and "I am able to translate new ideas into practical applications." A Likert 5-point scale was utilized for measurement.

Job-based psychological ownership was assessed using the scale proposed by Van Dyne and Pierce (2004), originally comprising seven statements. However, feedback from pilot respondents indicated that collective psychological ownership items were unsuitable in the Vietnamese context, a sentiment echoed by (Pham, 2022). Consequently, job-based psychological ownership was measured using four items focusing on individual job-based psychological ownership. An example item is "This is my job." Measurement was conducted using a Likert 5-point scale.

Job characteristics were assessed using the scale introduced by Sims Jr, Szilagyi, and Keller (1976), comprising five dimensions: skill variety, task identity, task significance, autonomy, and feedback. The author utilized a shortened summated scale consisting of five items representing the five dimensions, a method previously employed by (Brown et al., 2014). An example statement related to job characteristics was, "The amount of variety in my job is substantial." Measurement was conducted using a Likert 5-point scale.

4. Results

4.1. Measurement model

The author utilized Smart PLS version 4.0 to conduct data analysis for this research. Following the guidelines outlined by Hair, Sarstedt, Hopkins, and G. Kuppelwieser (2014), the measurement model was assessed. Specifically, Hair et al. (2014) recommend evaluating the quality of observed variables using outer loadings, assessing construct reliability employing composite reliability, examining convergence validity using Average Variance Extracted coefficients, and appraising discriminant validity utilizing Heterotrait-Monotrait Ratios. Table 2 presents the results of Outer Loadings, Composite Reliability (CR), Average Variance Extracted (AVE), and Heterotrait-Monotrait Ratios (HTMT) derived from survey data analyzed with Smart PLS 4.0.

Table 2. Outer Loadings, Composite Reliability, Average Variance Extracted, Heterotrait-Monotrait Ratios

Code	Items	Outer loading	CR	AVE	HTMT
IWB1	I actively think along concerning improvements in the work of direct colleagues	0.867	0.973	0.803	0.504 – 0.718
IWB2	I generate ideas to improve or renew services my department provides	0.895			
IWB3	I generate ideas on how to optimise knowledge and skills within my department	0.879			
IWB4	I generate new solutions to old problems	0.929			
IWB5	I suggest new ways of communicating within your department	0.907			
IWB6	In collaboration with colleagues, I get to transform new ideas in a way that they become applicable in practice	0.921			
IWB7	I realize ideas within my department/ organization with an amount of persistence	0.935			
IWB8	I get to transform new ideas in a way that they become applicable in practice	0.942			
IWB9	I mobilize support from colleagues for my ideas and solutions	0.772			
JPO1	This is My job	0.912	0.929	0.765	0.504 – 0.627
JPO2	I feel a very high degree of personal ownership for this job	0.884			
JPO3	I sense that this is my job	0.867			
JPO4	It is hard for me to think about this job as mine (reversed score)	0.835			
JC1	**The amount of variety in my job is large**	0.551	0.904	0.660	0.627 – 0.718
JC2	The opportunity to do a job from beginning to end (ie. The chance to do a whole job) is large	0.898			
JC3	The results of my work likely to significantly affect the lives or well-being of other people.	0.914			
JC4	The opportunity for independent thought and action is huge	0.920			
JC5	The opportunity to find out how well I am doing on my work is large	0.711			

(Source: From calculating survey data)

In Table 2, all outer loadings surpass the threshold of 0.7, with the exception of JC1. As per Hair et al. (2014), outer loadings should ideally exceed 0.7; however, if they fall between 0.5 and 0.7, further assessment of Average Variance Extracted (AVE) and Composite Reliability (CR) is recommended. Given that the AVE and CR values for job characteristics exceed acceptable levels, the decision is made to retain JC1 for further analysis, ensuring the quality of observed variables.

For evaluating construct reliability, the author adopts Composite Reliability (CR) in accordance with the guidelines outlined by Hair Jr et al. (2014). They suggest a minimum CR threshold of 0.7. As depicted in Table 2, all CR values surpass 0.7, indicating sufficient reliability.

To assess the convergence validity of the measurement model, Average Variance Extracted (AVE) coefficients are utilized. Hair Jr et al. (2014) advocate for AVE coefficients to exceed 0.5. Table 2 demonstrates that all AVE coefficients surpass 0.7, indicating a satisfactory level of convergence.
Lastly, to evaluate the discriminant validity of the measurement model, Heterotrait-Monotrait Ratios (HTMT) are employed. Hair Jr et al. (2014) recommend that HTMT ratios should fall below the cutoff of 0.85. As evidenced in Table 2, all HTMT ratios are below 0.85, affirming sufficient discriminant validity.

4.2. Hypotheses testing

In this research, hypotheses were tested through bootstrapping, employing 5000 subsamples with a significance level set at 0.05. The outcomes of the hypothesis testing are presented in Table 3.

Table 3. Hypotheses testing

Relationships	Standardized β	P	f^2	Decisions
JC → JPO	0.573	0.000	0.858	Accept H_1
JPO → IWB	0.679	0.000	0.488	Accept H_2
JC → JPO → IWB	0.389	0.000		Accep H_3

(Source: From calculating survey data)

Table 3 presents a comprehensive analysis of the standardized path coefficients (β), p-values, effect sizes (f^2), and decisions for each hypothesis examined in the study. Notably, the relationship between job characteristics (JC) and job-based psychological ownership (JPO) is highlighted, revealing a significant path coefficient of 0.573 (p = 0.000) with a substantial effect size (f^2 = 0.858). Consequently, Hypothesis 1 is supported. Furthermore, the connection between job-based psychological ownership (JPO) and individual work behavior (IWB) is statistically significant, with a notable path coefficient of 0.679 (p = 0.000) and a moderate effect size (f^2 = 0.488), thereby confirming Hypothesis 2. Moreover, the analysis reveals a sequential relationship wherein JC influences JPO, subsequently impacting IWB. This path, characterized by a coefficient of 0.389 (p = 0.000), is found to be significant, leading to the acceptance of Hypothesis 3. These findings underscore the intricate dynamics between job characteristics, job-based psychological ownership, and individual work behavior within the research context.

5. Discussions and limitations

5.1. Discussion

The research endeavors to explore the relationship between job characteristics and innovative work behavior, with a focus on the mediating effect of job-based psychological ownership. The findings elucidate a positive impact of job characteristics on job-based psychological ownership. This outcome aligns with the findings of Brown et al. (2014) but presents a nuanced contrast with the study by Pham (2022). Brown et al. (2014), based on a sample of salesmen in the US, demonstrate that job characteristics, viewed as a composite scale, positively influence job-based psychological ownership. Conversely, Pham (2022) analyzing Vietnamese employees in the manufacturing sector, identifies that four out of five job characteristics impact job-based psychological ownership. This variance can be attributed to the distinct samples utilized in the studies. Pham (2022) focuses on respondents from the manufacturing sector, while our research sample is service-oriented. As underscored by Li and Hsu (2016), the service and manufacturing sectors differ in terms of standardized work, thereby yielding diverse impacts of job characteristics. Consequently, the findings suggest that enhancing job-based psychological ownership necessitates a multifaceted approach to boosting job characteristics. This implies a need for businesses to redesign work processes through strategies such as job enrichment and job enlargement.
As anticipated, job-based psychological ownership significantly influences innovative work behavior, consistent with prior research findings (Hao et al., 2024; Leyer et al., 2021). These studies underscore the pivotal role of ownership perception in fostering innovation at work. This suggests that cultivating employees' sense of ownership towards their roles is crucial for promoting innovative behaviors. As highlighted by Pierce et al. (2001), psychological ownership can be attained through three pathways: control, intimate understanding, and self-investment. Therefore, enhancing job-based psychological ownership through these avenues is imperative for encouraging innovation in the workplace.
Finally, the findings of this study highlight the significant influence of job characteristics on innovative work behavior via job-based psychological ownership. This result aligns with the concept that psychological ownership serves as a mediator between organizational stimuli and innovative work behavior (Hao et al., 2024; Li & Hsu, 2016). Consequently, these findings imply that fostering job-based psychological ownership is essential for leveraging job characteristics to enhance innovative work behavior.

5.2. Theoretical implications

This research contributes to the literature on innovative work behavior in several significant ways. Firstly, it investigates the role of job-based psychological ownership in influencing innovative work behavior. While previous studies have explored the impact of psychological ownership on innovative work behavior, they have predominantly focused on organization-based psychological ownership, overlooking the influence of job-based

psychological ownership. This study, to the best of the author's knowledge, represents the first attempt to investigate the effects of job-based psychological ownership on innovative work behavior.
Secondly, although the connection between job characteristics and innovative work behavior has been well-documented in prior research (Černe et al., 2017; Tsamantouridis et al., 2023; Verma & Singh, 2022), existing studies have primarily examined the direct impact of job characteristics on innovative work behavior. However, there is a noticeable gap in empirical research regarding the indirect relationship between job characteristics and innovative work behavior. The findings of this study suggest that future research exploring the relationship between job characteristics and innovative work behavior should consider incorporating job-based psychological ownership as a mediating factor. This would provide a more comprehensive understanding of the mechanisms through which job characteristics influence innovative work behavior.

5.3. Practical implications

The findings of this study carry significant practical implications. Firstly, enhancing innovative work behavior necessitates the improvement of job-based psychological ownership. To achieve this, several strategies are recommended, including enhancing employee empowerment, fostering knowledge sharing, implementing transformational and transactional leadership styles, and structuring the work environment effectively.
Secondly, the study underscores that job characteristics positively influence work behavior through psychological ownership. Therefore, businesses should focus on enhancing innovative work behavior through thoughtful job design. Specifically, it is suggested that businesses consider employing strategies such as job enlargement and promoting job engagement to optimize the impact of job characteristics on work behavior. These approaches can contribute to creating a work environment conducive to fostering innovation and productivity.

5.4. Limitations

While this research offers valuable insights into innovative work behavior, it's important for readers and practitioners to acknowledge several limitations when interpreting and applying these findings. Firstly, the study relies on self-rated measures, which may inflate perceptions of innovative work behavior compared to actual behaviors. This issue is common in studies on innovative work behavior (Hao et al., 2024; Tsamantouridis et al., 2023) and could be addressed in future research by employing more objective measures such as co-worker or supervisor ratings. Secondly, data collection was conducted spontaneously, potentially introducing common variance bias and artificial relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Employing longitudinal methods in future research could provide more robust and reliable results. Thirdly, the use of snowball sampling, a nonrandom method, may introduce biases into the findings (Saunders, Lewis, & Thornhill, 2019). Future studies employing random sampling methods would enhance the generalizability of the results. Lastly, while the sample size in this study is adequate (N = 574), the sample characteristics may not be representative. The sample is slightly skewed towards females, younger individuals, and highly educated participants. Future research with more diverse and representative samples would increase the validity and generalizability of the findings.
Despite these limitations, the author maintains that this research contributes valuable insights to the literature on innovative work behavior in Vietnam.

6. Conclusions

This research endeavors to explore the connection between job characteristics and innovative work behavior through the lens of job-based psychological ownership. The survey results validate the association between job characteristics and innovative work behavior while also highlighting the mediating influence of job-based psychological ownership. These findings underscore the importance of enhancing both job-based psychological ownership and job characteristics to promote innovative work behavior effectively. As far as the author is aware, this study represents the first attempt to examine the impact of job-based psychological ownership on innovative work behavior and the indirect relationship between job characteristics and innovative work behavior. From these insights, several practical implications emerge, including recommendations for job enlargement and job engagement strategies.

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Conflict of interest
The authors declare that there is no conflict of interest regarding the publication of this paper. All aspects of the research and manuscript preparation were conducted impartially, and no financial or personal relationships could influence the work's objectivity.

Ethics statement
This study adhered to ethical guidelines and research principles. All procedures involving human participants were conducted by the ethical standards of the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study. Confidentiality and anonymity were strictly maintained throughout the research process.

References

1. Abd Aziz, N. N., & Samad, S. (2016). Innovation and competitive advantage: Moderating effects of firm age in foods manufacturing SMEs in Malaysia. *Procedia Economics and Finance, 35*, 256-266.
2. Afsar, B., Badir, Y. F., & Saeed, B. B. (2014). Transformational leadership and innovative work behavior. *Industrial Management & Data Systems, 114*(8), 1270-1300.
3. Al-Khatib, A. W., & Al-ghanem, E. M. (2021). Radical innovation, incremental innovation, and competitive advantage, the moderating role of technological intensity: evidence from the manufacturing sector in Jordan. *European business review, 34*(3), 344-369.
4. Alosani, M. S., Yusoff, R., & Al-Dhaafri, H. (2020). The effect of innovation and strategic planning on enhancing organizational performance of Dubai Police. *Innovation & Management Review, 17*(1), 2-24.
5. Alshebami, A. S. (2021). The influence of psychological capital on employees' innovative behavior: mediating role of employees' innovative intention and employees' job satisfaction. *Sage Open, 11*(3), 21582440211040809.
6. Aryee, S., Walumbwa, F. O., Zhou, Q., & Hartnell, C. A. (2012). Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Human performance, 25*(1), 1-25.
7. Asatryan, V. S., & Oh, H. (2008). Psychological Ownership Theory: An Exploratory Application in the Restaurant Industry. *Journal of Hospitality and Tourism Research, 32*(3), 363-386. Retrieved from http://library.lincoln.ac.uk/items/eds/edselc/edselc.2-52.0-84855492709
8. Atitumpong, A., & Badir, Y. F. (2018). Leader-member exchange, learning orientation and innovative work behavior. *Journal of workplace learning, 30*(1), 32-47.
9. Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational and Organizational Psychology, 73*(3), 265-285.
10. Bai, T., Jia, D., Liu, S., & Shahzad, F. (2023). Psychological ownership and ambidexterity influence the innovative work behavior and job performance of SME employees: a mediating role of job embeddedness. *Current Psychology, 2023*, 1-20.
11. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology, 51*(6), 1173-1182.
12. Battistelli, A., Odoardi, C., Vandenberghe, C., Di Napoli, G., & Piccione, L. (2019). Information sharing and innovative work behavior: The role of work-based learning, challenging tasks, and organizational commitment. *Human Resource Development Quarterly, 30*(3), 361-381.
13. Beaglehole, E. (2015). *Property: A study in social psychology*: Psychology Press.
14. Botelho, C. (2020). The influence of organizational culture and HRM on building innovative capability. *International journal of productivity and performance management, 69*(7), 1373-1393.
15. Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185-216.
16. Brown, G., Pierce, J. L., & Crossley, C. (2014). Toward an understanding of the development of ownership feelings. *Journal of Organizational Behavior, 35*(3), 318-338.
17. Brundin, E., McClatchey, I. S., & Melin, L. (2023). Leaving the family business: The dynamics of psychological ownership. *Journal of Family Business Strategy, 14*(2), 100555.
18. Černe, M., Hernaus, T., Dysvik, A., & Škerlavaj, M. (2017). The role of multilevel synergistic interplay among team mastery climate, knowledge hiding, and job characteristics in stimulating innovative work behavior. *Human Resource Management Journal, 27*(2), 281-299.

19. Chai, D. S., Song, J. H., & You, Y. M. (2020). Psychological ownership and openness to change: The mediating effects of work engagement, and knowledge creation. *Performance improvement quarterly, 33*(3), 305-326.
20. Chen, C.-C., & Chiu, S.-F. (2009). The mediating role of job involvement in the relationship between job characteristics and organizational citizenship behavior. *The Journal of social psychology, 149*(4), 474-494.
21. Chen, X., Lee, C., Hui, C., Lin, W., Brown, G., & Liu, J. (2023). Feeling possessive, performing well? Effects of job-based psychological ownership on territoriality, information exchange, and job performance. *Journal of Applied Psychology, 108*(3), 403.
22. Choi, S. B., Kim, K., Ullah, S. E., & Kang, S.-W. (2016). How transformational leadership facilitates innovative behavior of Korean workers: Examining mediating and moderating processes. *Personnel Review, 45*(3), 459-479.
23. Csikszentmihalyi, M., & Halton, E. (1981). *The meaning of things: Domestic symbols and the self*: Cambridge University Press.
24. De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2016). Not all autonomy is the same. Different dimensions of job autonomy and their relation to work engagement & innovative work behavior. *Human Factors and Ergonomics in Manufacturing & Service Industries, 26*(4), 515-527.
25. Dedahanov, A. T., Rhee, C., & Yoon, J. (2017). Organizational structure and innovation performance: is employee innovative behavior a missing link? *Career Development International, 22*(4), 334-350.
26. Enz, C. A., & Siguaw, J. A. (2003). Revisiting the best of the best: Innovations in hotel practice. *Cornell Hotel and Restaurant Administration Quarterly, 44*(5-6), 115-123.
27. Ghafoor, A., Qureshi, T. M., Khan, M. A., & Hijazi, S. T. (2011). Transformational leadership, employee engagement and performance: Mediating effect of psychological ownership. *African journal of business management, 5*(17), 7391.
28. Hackman, J. R., Oldham, G., Janson, R., & Purdy, K. (1975). A New Strategy for Job Enrichment. *California Management Review, 17*(4), 57-72. Retrieved from http://library.lincoln.ac.uk/items/eds/bth/6412215
29. Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology, 60*(2), 159-170. doi: https://doi.org/10.1037/h0076546
30. Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*(2), 250-279.
31. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review, 26*(2), 106-121. doi:https://doi.org/10.1108/EBR-10-2013-0128
32. Hao, J.-X., Chen, Z., Mahsud, M., & Yu, Y. (2024). Organizational psychological ownership and innovative work behavior: the roles of coexisting knowledge sharing and hiding across organizational contexts. *Journal of knowledge management, preprint*(preprint).
33. Hofstede, G., Hofstede, G. J., & Minkov, M. (2005). *Cultures and organizations: Software of the mind* (Vol. 2): Citeseer.
34. Jalil, M. F., Ullah, W., & Ahmed, Z. (2021). Training perception and innovative behavior of SME employees: examining the mediating effects of firm commitment. *Sage Open, 11*(4), 21582440211067250.
35. Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology, 73*(3), 287-302.
36. Kabir, M. N. (2019). Innovation. In *Knowledge-Based Social Entrepreneurship: Understanding Knowledge Economy, Innovation, and the Future of Social Entrepreneurship* (pp. 163-204). New York: Palgrave Macmillan US.
37. Kim, M.-S., & Koo, D.-W. (2017). Linking LMX, engagement, innovative behavior, and job performance in hotel employees. *International journal of contemporary hospitality management, 29*(12), 3044-3062.
38. Kousina, E., & Voudouris, I. (2023). The ambidextrous leadership-innovative work behavior relationship in the public sector: The mediating role of psychological ownership. *Public Administration Review, 83*(6), 1478-1495.
39. Leyer, M., Hirzel, A.-K., & Moormann, J. (2021). It's mine, I decide what to change: the role of psychological ownership in employees'process innovation behaviour. *International journal of innovation management, 25*(01), 2150013.
40. Li, L., Li, G., & Chan, S. F. (2019). Corporate responsibility for employees and service innovation performance in manufacturing transformation: The mediation role of employee innovative behavior. *Career Development International, 24*(6), 580-595.
41. Li, M., & Hsu, C. H. (2016). A review of employee innovative behavior in services. *International journal of contemporary hospitality management, 28*(12), 2820-2841.
42. Li, M., Liu, Y., Liu, L., & Wang, Z. (2017). Proactive personality and innovative work behavior: The mediating effects of affective states and creative self-efficacy in teachers. *Current Psychology, 36*, 697-706.
43. Liu, F., Chow, I. H.-S., Gong, Y., & Wang, H. (2019). Mediating links between HRM bundle and individual innovative behavior. *Journal of Management & Organization, 25*(1), 157-172.

44. Liu, F., Chow, I. H.-S., Zhang, J.-C., & Huang, M. (2019). Organizational innovation climate and individual innovative behavior: exploring the moderating effects of psychological ownership and psychological empowerment. *Review of Managerial Science, 13*, 771-789.
45. Luoh, H.-F., Tsaur, S.-H., & Tang, Y.-Y. (2014). Empowering employees: job standardization and innovative behavior. *International journal of contemporary hospitality management, 26*(7), 1100-1117.
46. Lyu, C., Jiang, Y., & Balaji, M. (2023). Travelers' psychological ownership: A systematic review and future research agenda. *Journal of Travel Research, 62*(8), 1623-1646.
47. Madrid, H. P., Patterson, M. G., Birdi, K. S., Leiva, P. I., & Kausel, E. E. (2014). The role of weekly high-activated positive mood, context, and personality in innovative work behavior: A multilevel and interactional model. *Journal of Organizational Behavior, 35*(2), 234-256.
48. Maria Stock, R., Jong, A. d., & Zacharias, N. A. (2017). Frontline employees' innovative service behavior as key to customer loyalty: Insights into FLEs' resource gain spiral. *Journal of Product Innovation Management, 34*(2), 223-245.
49. Martinaityte, I., Unsworth, K. L., & Sacramento, C. A. (2020). Is the project 'mine'or 'ours'? A multilevel investigation of the effects of individual and collective psychological ownership. *Journal of Occupational and Organizational Psychology, 93*(2), 302-327.
50. Mayhew, M. G., Gardner, J., Bramble, T., & Ashkanasy, N. M. (2007). A Study of the Antecedents and Consequences of Psychological Ownership in Organizational Settings. *Journal of Social Psychology, 147*(5), 477-501. Retrieved from http://library.lincoln.ac.uk/items/eds/edsbl/RN221110028
51. Mubarak, N., Khan, J., Yasmin, R., & Osmadi, A. (2021). The impact of a proactive personality on innovative work behavior: the role of work engagement and transformational leadership. *Leadership & Organization Development Journal, 42*(7), 989-1003.
52. Mustafa, M., Coetzer, A., Ramos, H. M., & Fuhrer, J. (2021). Exploring the effects of small-and medium-sized enterprise employees' job satisfaction on their innovative work behaviours: the moderating effects of personality. *Journal of Organizational Effectiveness: People and Performance, 8*(2), 228-250.
53. Naranjo-Valencia, J. C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2017). Organizational culture and radical innovation: Does innovative behavior mediate this relationship? *Creativity and innovation management, 26*(4), 407-417.
54. Nguyen, T. P. L. (2023). Factors affecting innovative behavior of Vietnamese enterprises employees. *International Journal of Innovation Science, 15*(1), 186-203.
55. Peck, J., & Luangrath, A. W. (2023). A review and future avenues for psychological ownership in consumer research. *Consumer psychology review, 6*(1), 52-74.
56. Pham, T. T. (2022). How do work characteristics affect job performance? An investigation in Vietnam. *Cogent Business & Management, 9*(1), 2116801.
57. Pierce, J. L., Jussila, I., & Cummings, A. (2009). Psychological ownership within the job design context: Revision of the job characteristics model. *Journal of Organizational Behavior, Vol 30(4), May, 2009. pp. 477-496., 30*(4), 477-497. Retrieved from http://library.lincoln.ac.uk/items/eds/psyh/2009-05638-002
58. Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of management review, 26*(2), 298-310.
59. Pierce, J. L., O'driscoll, M. P., & Coghlan, A.-m. (2004). Work environment structure and psychological ownership: The mediating effects of control. *Journal of Social Psychology, 144*(5), 507-. Retrieved from http://library.lincoln.ac.uk/items/eds/edselc/edselc.2-52.0-4444348452
60. Pierce, J. L., Rubenfeld, S. A., & Morgan, S. (1991). Employee ownership: A conceptual model of process and effects. *Academy of management review, 16*(1), 121-144.
61. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi:https://psycnet.apa.org/doi/10.1037/0021-9010.88.5.879
62. Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. *Creativity and innovation management, 23*(4), 400-414.
63. Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardessai, R. (2005). Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity and innovation management, 14*(2), 142-150.
64. Rao Jada, U., Mukhopadhyay, S., & Titiyal, R. (2019). Empowering leadership and innovative work behavior: a moderated mediation examination. *Journal of knowledge management, 23*(5), 915-930.
65. Ren, F., & Zhang, J. (2015). Job stressors, organizational innovation climate, and employees' innovative behavior. *Creativity research journal, 27*(1), 16-23.
66. Robinson, R. N., & Beesley, L. G. (2010). Linkages between creativity and intention to quit: An occupational study of chefs. *Tourism management, 31*(6), 765-776.
67. Sanz-Valle, R., & Jiménez-Jiménez, D. (2018). HRM and product innovation: does innovative work behaviour mediate that relationship? *Management decision, 56*(6), 1417-1429.
68. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods. Business Students*. England: Pearson Education Limited, England.
69. Seligman, M. E. (1975). Helplessness San Francisco. *H. Freeman*.

70. Shanker, R., Bhanugopan, R., Van der Heijden, B. I., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of Vocational Behavior, 100*, 67-77.
71. Sims Jr, H. P., Szilagyi, A. D., & Keller, R. T. (1976). The measurement of job characteristics. *Academy of management journal, 19*(2), 195-212.
72. Stanescu, D. F., Zbuchea, A., & Pinzaru, F. (2021). Transformational leadership and innovative work behaviour: the mediating role of psychological empowerment. *Kybernetes, 50*(5), 1041-1057.
73. Su, C.-S. (2011). The role of service innovation and customer experience in ethnic restaurants. *The Service industries journal, 31*(3), 425-440.
74. Ta, D. T., & Yang, C.-H. (2018). Exploring the impacts of service innovation on customer satisfaction in the telecom industry: A perspective from interactive and supportive service innovations. *International journal of innovation management, 22*(07), 1850053.
75. Taştan, S. B., & Davoudi, S. M. M. (2015). An examination of the relationship between leader-member exchange and innovative work behavior with the moderating role of trust in leader: A study in the Turkish context. *Procedia-Social and Behavioral Sciences, 181*, 23-32.
76. Truong, N. T., Dang-Pham, D., McClelland, R. J., & Nkhoma, M. (2020). Service innovation, customer satisfaction and behavioural intentions: a conceptual framework. *Journal of Hospitality and Tourism Technology, 11*(3), 529-542.
77. Tsamantouridis, K., Bellou, V., & Tsameti, A. (2023). Innovation in the public sector: insights into the job design that enhances public servants' innovative behavior. *International Journal of Public Administration, 46*(16), 1125-1136.
78. Turner, B. S., & Durkheim, E. (2013). *Professional ethics and civic morals*: Routledge.
79. Van Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behavior, 25*(4), 439-460. Retrieved from http://library.lincoln.ac.uk/items/eds/psyh/2004-14302-001
80. Verma, S., & Singh, V. (2022). Impact of artificial intelligence-enabled job characteristics and perceived substitution crisis on innovative work behavior of employees from high-tech firms. *Computers in Human Behavior, 131*, 107215.
81. Victorino, L., Verma, R., Plaschka, G., & Dev, C. (2005). Service innovation and customer choices in the hospitality industry. *Managing Service Quality: An International Journal, 15*(6), 555-576.
82. Wang, Z., Meng, L., & Cai, S. (2019). Servant leadership and innovative behavior: a moderated mediation. *Journal of Managerial Psychology, 34*(8), 505-518.
83. White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological review, 66*(5), 297-333.
84. Woo, H., Kim, S. J., & Wang, H. (2021). Understanding the role of service innovation behavior on business customer performance and loyalty. *Industrial Marketing Management, 93*, 41-51.
85. Woods, S. A., Mustafa, M. J., Anderson, N., & Sayer, B. (2018). Innovative work behavior and personality traits: Examining the moderating effects of organizational tenure. *Journal of Managerial Psychology, 33*(1), 29-42.
86. Xanthopoulou, D., Baker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of occupational health psychology, 13*(4), 345-356. doi:https://doi.org/10.1037/1076-8998.13.4.345
87. Yeh, Y.-P. (2015). Corporate social responsibility and service innovation on customer loyalty: An empirical investigation in wealth management services. *International journal of bank marketing, 33*(6), 823-839.
88. You, Y., Hu, Z., Li, J., Wang, Y., & Xu, M. (2022). The effect of organizational innovation climate on employee innovative behavior: The role of psychological ownership and task interdependence. *Frontiers in psychology, 13*, 856407.
89. Yousaf, Z., Javed, A., & Badshah, W. (2024). Unlocking the Power of Minds: Understanding the Interaction of Organizational Culture, Innovative Work Behavior, and Emotional Intelligence for Improved Employee Performance. *Journal of the Knowledge Economy*, 1-17.
90. Zainal, S. R. M., & Lata, L. (2021). Enhancing innovative work behaviour: the role of servant leadership and creative self-efficacy. *On the Horizon: The International Journal of Learning Futures, 29*(2), 33-51.
91. Zuberi, M. A., & Khattak, A. (2021). Impact of proactive personality and leader member exchange on innovative work behavior: a job design perspective. *International Journal of Innovation Science, 13*(5), 664-683.