



Article Type: Research Paper

The Role of Women's Leadership Characteristics in Shaping Job Autonomy and Its Effects on Employee Innovation Performance

Puspa Dewi¹ and Devi Alviani^{*2}

Abstract

Research aims: This study investigates the impact of women's leadership traits on employee innovation performance and the role of job autonomy as an intermediary.

Design/Methodology/Approach: This study used a quantitative approach with a cross-sectional design, focusing on micro-level analysis, with 323 employees from a Pekanbaru Public Health Center (Puskesmas) as the target population. One hundred seventy-five samples were obtained using Cluster Random Sampling, and the SEM statistical test and Smart PLS 4.0 software were utilized for quantitative analysis.

Research findings: Women's characteristic leadership supports the creation and development of employee innovation performance. It will be better if the provision of work autonomy accompanies it.

Theoretical Contribution/Originality: Developing a job autonomy theory covers procedural autonomy, soft skills, and decision-making. Scheduling autonomy includes time flexibility and technical tasks. Autonomy within job criteria is assessed through task priority, management, and performance.

Practitioners/Policy Implications: The research highlights the importance of work autonomy in Pekanbaru Health Centers, highlighting the role of women's leadership characteristics and proving that women possess the same abilities as men, thereby supporting employee innovation performance.

Research Limitations/Implications: The study suggests that future research could benefit from a longitudinal design to assess theory constructs over time, considering the limitations of cross-sectional designs and the limited sample size of Pekanbaru City Health Center employees, allowing for a more comprehensive analysis.

Keywords: Employee Innovation Performance; Job Autonomy; Women's Leadership Characteristics



AFFILIATION:

¹ Department of Management,
Institut Teknologi dan Bisnis
Indragiri, Riau, Indonesia

² Department of Management,
Faculty of Economics and
Business, Universitas Padjadjaran,
West Java, Indonesia

*CORRESPONDENCE:

devialviani8@gmail.com

THIS ARTICLE IS AVAILABLE IN:

<http://journal.umy.ac.id/index.php/mb>

DOI: [10.18196/mb.v14i2.17648](https://doi.org/10.18196/mb.v14i2.17648)

CITATION:

Dewi, P., & Alviani, D. (2023). The Role of Women's Leadership Characteristics in Shaping Job Autonomy and Its Effects on Employee Innovation Performance. *Jurnal Manajemen Bisnis*, 14(2), 297-312.

ARTICLE HISTORY

Received:

02 Jan 2023

Revised:

07 Apr 2023

04 Jun 2023

19 Aug 2023

Accepted:

21 Aug 2023



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)

Introduction

Studying human resources remains a perpetual fascination due to its pivotal role in shaping an organization's triumph, particularly evident in its innovation accomplishments. Innovation performance encapsulates a sequence of endeavors orchestrated by research and development teams, to forge novel advancements aimed at attaining distinct objectives, such as securing a competitive edge, upholding fundamental competitiveness, and fostering enduring growth trajectory.

This progression encompasses three distinct phases: the initial phase of innovation strategizing, the subsequent phase of innovation execution, and the final phase of innovation results (Jing et al., 2022). An organization's innovation capability depends on the ability of employees, who are the core of the organization and the subject of innovation. Therefore, to increase organizational innovation and ensure the continuity and development of the organization, it is necessary to increase employee innovation performance simultaneously (Chai & Xiao, 2018; Tohidi & Jabbari, 2012; Xiang et al., 2017). Thus, maximizing employee innovation performance is now the focus of attention. In their article, Vakulov et al. (1994) state that one of the factors influencing employee innovation performance is leadership (Xiang et al., 2017). Leadership is not only held by men; nowadays, many successful organizations are under women's leadership.

Previous studies have found that women's leadership characteristics significantly improve employee innovation performance (Bilal et al., 2021; Khalili et al., 2016). As outlined by Jiang Lai (2010), women in leadership roles exhibit characteristics that involve skillful utilization of intuition, a fearless stance towards risks, a propensity for innovation, and adept communication abilities. Female leaders can identify openings for "people-focused attention," prioritize emotional expression, demonstrate empathy, seize opportunities amidst crises, and showcase a strong sense of responsibility and dedication. These attributes collectively contribute to a positive impact on innovation performance (Jing et al., 2022).

It differs from the study by Christopher et al., stating that organizations led by women do not invest in innovation (Reutzler et al., 2018). Byrnes et al. (1999) and Jianakoplos and Bernasek (1998) consider women to be more risk-averse than men, supported by the trait theory of Costa et al. (2001) that men outperform in domains related to openness, including receptiveness to concepts, forward-looking perspectives, cognitive acumen, flexibility, or a broad affinity for specific subjects (innovation, creativity, imagination, insight, and strong self-assurance) (Alviani et al., 2023).

Referring to the previous studies, inconsistent research results were uncovered. It is a research gap that provides space for researchers for further studies. Hence, the present researchers provide a solution with job autonomy as a mediating variable in the relationship between women's leadership characteristics and employee innovation performance. Job autonomy was discovered to favor innovative conduct by enhancing intrinsic motivation, prompting individuals to explore diverse concepts and approaches for enhanced imaginative issue-solving within assigned duties (Lee et al., 2021). Breugh (1985) identifies job autonomy as an opportunity given by the organization to its employees to plan work assignments independently (work scheduling), the freedom to decide how to carry out the given work tasks (work methods), as well as choose goals and determine the priority scale of tasks in work (autonomy criteria) (van Dorssen-Boog et al., 2022).

In today's context, the integration of job autonomy holds significance across diverse institutions, encompassing healthcare organizations. Within health organizations and their constituents, the imperative lies in devising strategies to enhance their capabilities,

thereby striving for community contentment and augmenting overall effectiveness (van Dorssen-Boog et al., 2022). Healthcare professionals, such as doctors, nurses, pharmacists, and other healthcare professionals, often work in situations that require rapid judgment, medical decision-making, and responsibility for patient care. Therefore, in most cases, they have considerable autonomy in making day-to-day decisions regarding the care of their patients. However, the work autonomy of health workers is governed by professional ethics, medical care standards, applicable laws and regulations. Health workers must comply with established guidelines and protocols to ensure that decisions are always made in the interests and safety of patients.

For that reason, this study undertook the advancement of applying the job autonomy concept proposed by Breugh (1985) within healthcare organizations. The theoretical development is achieved by gauging the dimensions of work autonomy through the facets of work procedures, soft skills, and decision-making; scheduling autonomy encompassing timing, technical aspects, and work frequency; and autonomy in job criteria assessed through three indicators, namely task priorities, work management, and performance evaluation. The results of this study are expected to strengthen Self Determination Theory by Ryan and Deci (2000), which is rooted in the three premises of natural tendencies and human development, namely psychological growth, internalization, and well-being. Hence, this study assumes that the strength of women's leadership characteristics through job autonomy will be able to increase the innovation performance of employees of health organizations to gain a competitive advantage.

Literature Review and Hypotheses Development

Women's Leadership Characteristics

Women's leadership characteristics refer to the general characteristics and distinctive features of female leaders that color the leadership process, including physical, psychological, behavioral, and attitude-related aspects (Jing et al., 2022). Women's leaders are perceived to possess qualities such as empathy, compassion, keen intuition, meticulous attention to particulars, adept team-building skills, perseverance, substantial credibility, courage in the face of risks, a propensity for innovation, effective communication prowess, emphasis on emotional articulation, the ability to empathize with others, adeptness in identifying opportunities within crises, and a robust sense of responsibility and commitment. These attributes collectively contribute to establishing a management approach characterized by humaneness and an adaptive response to environmental shifts (Hui, 2017). Women's leaders also have intuition, irrational thoughts and judgments, special social skills, and enthusiasm, making non-authoritarian leadership decisions (humanization) (Dai, 2015). Klenke (1993) aligns women's leadership concerning feminism and transformational leadership, in line with Burns' (1978) description that transformational leadership style is about the leader's efforts to identify potential followers and inspire them, which in turn motivates and enables them to achieve set goals (Denizci Guillet et al., 2019). This research adopted and adapted the women's leadership characteristics instrument Jing et al. (2022), which is a development of transformational

leadership, such as flexible leadership charm, personality caring ability, motivating ability, and intelligent stimulation ability (Jing et al., 2022)

Job Autonomy

Job autonomy refers to a level of considerable liberty, self-reliance, and personal discretion in formulating and executing job tasks (Saragih, 2011). Autonomy offers employees the freedom and empowerment to experience heightened decision-making latitude within their work, fostering innovative concepts through a sense of accountability and ownership (Pattnaik & Sahoo, 2021). This study aligns with Breugh's (1985) characterization of job autonomy, which encompasses the organization's provision of opportunities for employees to autonomously devise work assignments (work scheduling), the latitude to determine the approach for task execution (work method), and the authority to select objectives and establish the relative priority of tasks within the scope of work (criteria autonomy) (van Dorssen-Boog et al., 2022). This study developed the concept of job autonomy based on its dimensions. Work method autonomy is identified as the degree of control an employee has over how to complete tasks. Work method autonomy is measured by work procedures, soft skills, and decision-making. In addition, work scheduling autonomy refers to employees' level of control when they complete tasks, which consists of time, technical work, and work frequency. Also, work criterion autonomy is employees' control over the standards and results of their work assignments. Autonomy of work criteria is measured using three indicators: work priority, work management, and performance evaluation.

Employee Innovation Performance

Innovation performance emerges as the outcome of underlying elements that drive success through the lenses of creativity and revitalization. Linton (2009) defines innovation performance as the result of the innovation process, its development, and its implementation (Robertson et al., 2023). According to Mumford (2000) and Han Yi et al. (2007), innovation performance is characterized by a sequence of endeavors undertaken by research and development teams to achieve specific objectives, including securing a competitive edge, sustaining core competitiveness, and fostering enduring growth momentum. These endeavors unfold through three distinct phases: the initiation of innovative intent, the execution of innovative actions, and the realization of innovative outcomes (Jing et al., 2022). This study measures innovation performance based on instruments developed by Jing et al. (2022) so that employees' success in carrying out tasks and responsibilities through new methods and original, independent, and creative solutions is described as innovation performance.

Hypotheses

Women leaders are highly moral, inspiring, motivating, controlling, and building connections—until they outperform men in terms of effectiveness and democracy (Mubin et al., 2022). In line with Eagly et al. (2003), who stated that women are conducive to embodying transformational leadership qualities, Bass and Avolio's (1994) Four I was put

forward (Silva et al., 2018). Women's transformational leadership attributes mirror the capacity to inspire employees via intrinsic motivation, effective communication, and the dissemination of information, thereby yielding a constructive impact on innovative conduct. Through commendation and reinforcement for employee accomplishments, leaders foster heightened self-assurance, manifesting as positive emotions, subsequently engendering novel ideas, adaptability, and contentment. Furthermore, a leader's encouragement of positive psychological capital, driven by intellectual stimulation encompassing technical guidance in task execution problem-solving, serves to stimulate individual creativity and exert a significant influence on innovation performance.

H₁: Women's leadership characteristics have a significant positive effect on employee innovation performance.

The characteristics displayed by women leaders align with the transformational leadership style. Leaders with a transformational style provide more autonomy support and exhibit fewer psychologically controlling behaviors (Jain & Duggal, 2018). Consequently, employees under the leadership of women in the transformational style have the freedom to schedule their work and determine the procedures to be used in their tasks (Jain & Duggal, 2018; Pattnaik & Sahoo, 2021).

H₂: Women's leadership characteristics have a significant positive effect on job autonomy.

Employees granted job autonomy experience elevated freedom in making decisions about their tasks, fostering a heightened sense of accountability and ownership (Pattnaik & Sahoo, 2021). The increased opportunities for making independent decisions about their work effectively and efficiently allow employees to generate and acquire new ideas and concepts (Nasution et al., 2021). Past investigations have demonstrated a positive correlation between the extent of job autonomy and innovative behaviors (Siregar et al., 2021; Swaroop & Dixit, 2018).

H₃: Job autonomy has a significant positive effect on employee innovation performance.

Positive responses are closely related to innovative behavior. Through individual consideration, women leaders in a transformational context can create close relationships, emotional attachment, and trust between leaders and employees, and this trust will give employees the flexibility to carry out work activities, resulting in a positive impact on creative behavior and innovation (Lee et al., 2021). Exercising authority over all tasks inherently cultivates heightened activity, openness, and motivation among subordinates. This empirical observation is characterized by imagination, cultural awareness, curiosity, originality, open-mindedness, intelligence, and a penchant for variety and aesthetic sensitivity. Consequently, it not only enhances work efficiency and problem-solving capabilities but also elevates employees' creative prowess and innovation performance (De Spiegelaere et al., 2016).

H₄: Job autonomy positively mediates the effect of women's leadership characteristics on employee innovation performance.

Research Methods

This research employed a quantitative approach to investigate the effect of women's leadership characteristics on employee innovation through job autonomy. The research design was cross-sectional and focused on micro-level (individual-level) analysis. Taking samples using the Cluster Random Sampling technique, the researchers divided the Pekanbaru Public Health Centers into five groups based on their quality services, namely: (1) Not Accredited; (2) Basic Accreditation; (3) Associate Accreditation; (4) Main Accreditation; and (5) Plenary Accreditation. A Public Health Center receives Plenary Accreditation if the achievement of Chapters I, II, IV, V, VII, and VIII is at least 80% and Chapters III, VI, and IX is at least 60%, as determined by an independent institution appointed by the Minister of Health. Therefore, the researchers believe that the Health Centers with Main Accreditation (Rejosari Health Center, Limapuluh Health Center; Pekanbaru Kota Health Center, Langsung Health Center, Garuda Health Center; Karya Wanita Health Center; Rawat Inap Sidomulyo Health Center; and Payung Sekaki Health Center) had the concept of "good" management implementation so that they were effective as the research subjects.

The population of this study was 323 employees of the Public Health Center with Main Accreditation in Pekanbaru led by the Public Health Center Head, Administration Head, Person in Charge, and Head Coordinator, the female gender. Referring to the population table provided by Krejcie and Morgan (1970), 175 samples were obtained (Augusty, 2006). In order to obtain primary data, the researchers distributed a closed questionnaire with a 7-point Likert scale, aiming to maintain the validity and reliability of variables as well as time efficiency. The instrument for measuring employee innovation performance variables was adopted based on a 5-item scale by Jing et al. (2022), such as "I am willing to contribute new ideas to improve existing conditions." Likewise, the women's leadership characteristic scale comprised 16 items constructed on four dimensions (flexible leadership charm, personality caring ability, motivating ability, and intelligent stimulation ability). "My leader often praises employees for encouraging them to always move forward through hard work" is an example of a statement on the characteristics of women's leadership. Furthermore, work autonomy was built and developed based on the concept of Breaugh (1985) from three dimensions (work methods, work schedule, and work criteria) and nine indicators; one example statement is "I can decide how to serve patients according to medical care standards."

Quantitative analysis techniques were carried out with the structural equation modeling statistical test and Smart Partial Least Squares 4.0 as the analysis software. SmartPLS was designed to efficiently test complex models, encompassing relationships between latent and indicator variables, even within a restricted sample size. It facilitates high-order testing, enabling thorough analysis of intricate relationships among variables (AlNuaimi et al., 2021). Previous studies related to high-order PLS-SEM constructs show that

reflective-reflective and reflective-formative types attract the attention of various fields (Sarstedt et al., 2019). The conceptualization of this study used a reflective-reflective construct, with the assumption that it can overcome the problems of the high-order model, created and estimated using a two-stage approach (Becker et al., 2012; Ringle et al., 2018; Sarstedt et al., 2019). The initial phase commences with a conventional iterative approach involving indicators, which are then subjected to testing to evaluate external models. Moving to the second stage, the construct score is integrated as an indicator within the structure of the high-order construct measurement model (AlNuaimi et al., 2021).

Results and Discussion

This study utilized primary data collected by distributing 175 questionnaires directly to employees of Public Health Centers in Pekanbaru City. The complete responses from all distributed questionnaires amounted to 175, achieving a total response rate of 100%. Analysis of respondent demographics revealed that most participants were female, comprising 112 individuals, equivalent to 64.00% of the total sample. In contrast, male respondents accounted for 63 individuals, constituting 36.00% of the sample. This balanced representation of both genders allows for a comprehensive examination of the impact of women's leadership attributes on employees' innovation performance.

Regarding tenure, the study's results revealed that five respondents, constituting 2.85%, possessed a work experience of less than two years. Meanwhile, 55 respondents, 31.43% of the sample, accumulated 2 to 5 years of work experience. A significant proportion, 82 respondents, or 46.86%, had a tenure spanning 5 to 10 years. The remaining 33 individuals, representing 18.87%, boasted a work history of more than a decade. These findings suggest that participants with over two years of experience likely possessed substantial familiarity with the research variables and a sound grasp of the prevailing conditions within Pekanbaru's Public Health Centers.

Furthermore, most respondents held a bachelor's degree (undergraduate level), comprising 125 individuals, equivalent to 71.43% of the total sample. The subsequent category encompassed participants with a Master's degree (postgraduate level), numbering 32 individuals or 18.28%. Additionally, there were 14 individuals (8.00%) with a diploma (D3) educational background, alongside four individuals (2.29%) holding a high school diploma. It suggests that respondents likely possessed a proficient comprehension of the presented statements.

Finally, considering the distribution of workplaces, most respondents stemmed from various Public Health Centers within Pekanbaru City. Specifically, there were 41 individuals from Pekanbaru Kota Health Center, 33 individuals from Rejosari Health Center, 27 individuals from Lima Puluh Health Center, 23 individuals from Payung Sekaki Health Center, 20 individuals from Rawat Inap Sidomulyo Health Center, 16 individuals from Langsat Health Center, ten individuals from Garuda Health Center, and five

individuals from Karya Wanita Health Center. It implies that the study involved participation from Pekanbaru's Public Health Centers employees with Main Accreditation.

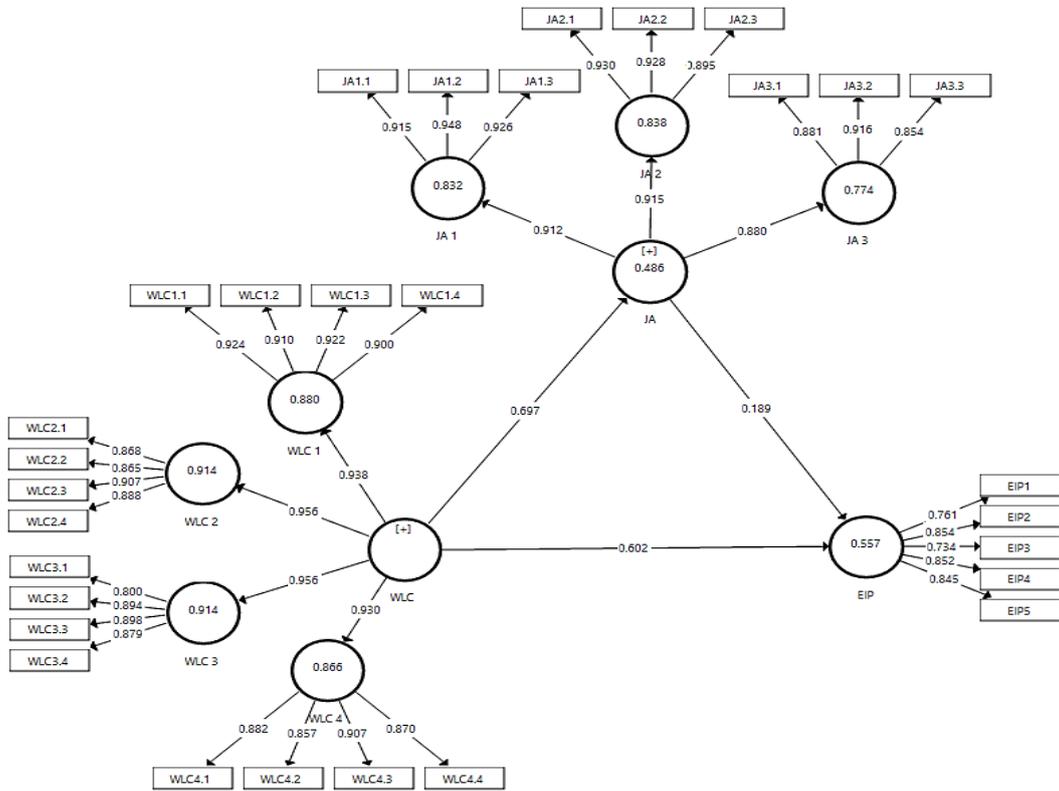


Figure 1 First-Order Research Model

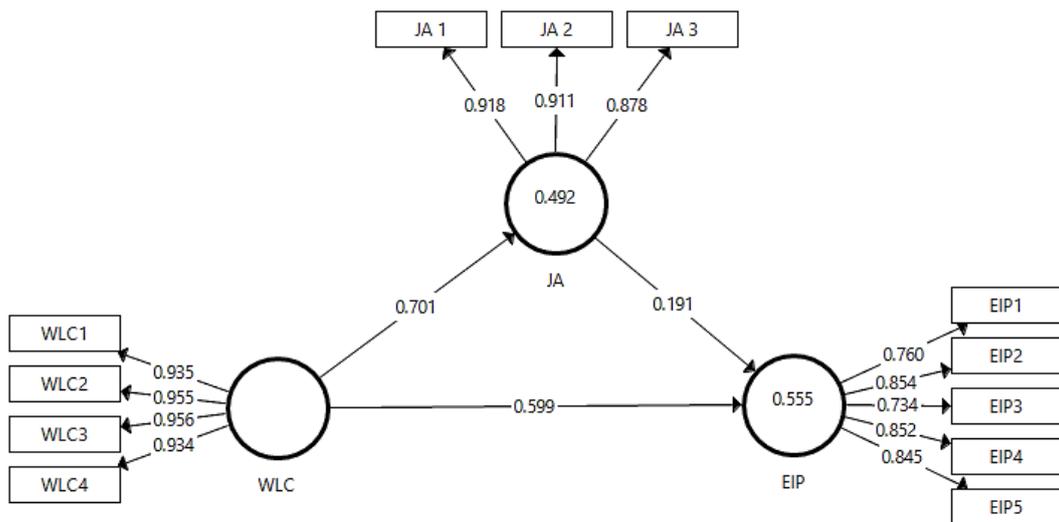


Figure 2 Second-Order Research Model

Measurement Model Evaluation

The evaluation of the measurement model was based on the value of the loading factor, Cronbach's alpha, composite reliability (CR), and average variance extract (AVE). The loading factor value is suggested to be greater than 0.7, as well as Cronbach's alpha and composite reliability (CR), which must pass 0.7. At the same time, the average variance extract (AVE) is said to meet the requirements of the index is more significant than 0.5 (Hair et al., 2017). Table 1 shows the loading factor, Cronbach's alpha, composite reliability, and average variance extract values for each variable indicator exceeding the criteria. Thus, all indicators are said to be valid and reliable.

Table 1 Convergent Validity and Reliability

Dimension	Item	Loadings	FIRST ORDER			SECOND ORDER			
			Cronbach's Alpha	CR	AVE	Loadings	Cronbach's Alpha	CR	AVE
Job Autonomy									
Work Method Autonomy	JA1.1	0.915	0.921	0.923	0.864	0.918	0.887	0.902	0.814
	JA1.2	0.948							
	JA1.3	0.926							
Work Scheduling Autonomy	JA2.1	0.930	0.906	0.907	0.842	0.911			
	JA2.2	0.928							
	JA2.3	0.895							
Work Criteria Autonomy	JA3.1	0.881	0.860	0.861	0.782	0.878			
	JA3.2	0.916							
	JA3.3	0.854							
Employee Innovation Performance									
Employee Innovation Performance	EIP1	0.761	0.868	0.872	0.657	0.760	0.868	0.872	0.657
	EIP2	0.854							
	EIP3	0.734							
	EIP4	0.852							
	EIP5	0.845							
Women's Leadership Characteristics									
Flexible Leadership Charm	WLC1.1	0.924	0.934	0.934	0.835	0.935	0.960	0.961	0.893
	WLC1.2	0.910							
	WLC1.3	0.922							
	WLC1.4	0.900							
Personality Caring Ability	WLC2.1	0.868	0.905	0.906	0.779	0.955			
	WLC2.2	0.865							
	WLC2.3	0.907							
	WLC2.4	0.888							
Motivating Ability	WLC3.1	0.800	0.891	0.897	0.754	0.956			
	WLC3.2	0.894							
	WLC3.3	0.898							
	WLC3.4	0.879							
Intelligent Stimulation Ability	WLC4.1	0.882	0.902	0.903	0.773	0.934			
	WLC4.2	0.857							
	WLC4.3	0.907							
	WLC4.4	0.870							

Source: Smart PLS 4.0

Fornell-Larcker was used for discriminant validity by examining the outer loading matrix. All constructs analyzed, including first and second order, uncovered that all square roots of AVE had a higher value than the correlation between constructs, thereby ensuring the consistency of the external model (Hair et al., 2017). Thus, the research indicators were declared valid to measure variables.

Table 2 Discriminant Validity (Fornell-Larcker Criteria)

FIRST ORDER								
	JA 1	JA 2	JA 3	EIP	WLC 1	WLC 2	WLC 3	WLC 4
JA 1	0.930							
JA 2	0.753	0.918						
JA 3	0.694	0.722	0.884					
EIP	0.625	0.520	0.493	0.811				
WLC 1	0.627	0.521	0.467	0.738	0.914			
WLC 2	0.643	0.585	0.508	0.685	0.872	0.882		
WLC 3	0.663	0.579	0.490	0.670	0.855	0.869	0.898	
WLC 4	0.764	0.652	0.589	0.676	0.811	0.844	0.866	0.879
SECOND ORDER								
	Job Autonomy			Women's Leadership Characteristics		Employee Innovation Performance		
Job Autonomy	0.902							
Women's Leadership Characteristics	0.701			0.945				
Employee Innovation Performance	0.611			0.733		0.811		

Source: Smart PLS 4.0

Structural Model Evaluation

Confirmatory research requires evaluating the feasibility of the model (Henseler, 2018). Feasibility is the starting point for verifying whether the model fits the data (Henseler et al., 2016). Goodness of fit showed an NFI value of 0.884, below the recommended value of 0.95. However, if the SRMR value is $0.060 < 0.08$, it is declared "model fit with data." Bootstrap analysis was conducted on the second-order model. The value of R² (0.75, 0.50, or 0.25) is interpreted as predicting strong, moderate, or weak effects (García-Machado & Martínez-Ávila, 2019). The predictive value of the criteria for woman leadership characteristics explained nearly half (0.49) of the variance in job autonomy, with job autonomy more than half (0.55) identifying woman leadership characteristics. It identifies the relationship as being in the "medium" category.

The path coefficient value accepted ($\beta = 0.599$; $t = 7.429$; $P = 0.000$) indicates that "women's leadership characteristics had a significant positive effect on innovation performance." Likewise, Hypothesis 2 was supported ($\beta = 0.701$; $t = 15.627$; $P = 0.000$): "The characteristics of women's leadership have a significant positive effect on job autonomy," and the value ($\beta = 0.191$; $t = 2.236$; $P = 0.025$) confirms the significant positive effect of job autonomy on innovation performance. The results of the mediation test indicated a noteworthy and statistically significant indirect effect between women's leadership characteristics and employee innovation performance ($\beta = 0.134$; $t = 2.221$; $P = 0.026$) through job autonomy, acting as full mediation.

Table 3 Hypothesis Testing

	Original Sample (O)	T Statistics (O/Stdev)	P Values	Description
<i>Job autonomy-> Employee innovation performance</i>	0.191	2.236	0.025	Supported
Women's leadership characteristics -> Job autonomy	0.701	15.627	0.000	Supported
Women's leadership characteristics -> Employee innovation performance	0.599	7.429	0.000	Supported
Women's leadership characteristics -> Job autonomy -> Employee innovation performance	0.134	2.221	0.026	Supported

Source: Smart PLS 4.0

Women's Leadership Characteristics and Employee Innovation Performance

Women's leadership characteristics had a significant influence on improving the employee innovation performance of Pekanbaru Public Health Center, thus increasing the character of women's leadership along with the innovation performance of its employees. This study contradicts the findings of Marvel et al. (2015) and Adrita et al. (2022), which stated that women-led organizations are often perceived as less likely to pursue innovation opportunities (Iman et al., 2022; Marvel et al., 2015), but confirms the statement of Eagly et al. (2003) that employees under women leadership show more innovation; women's emotional intelligence is aligned with creative and innovation organizational performance (Mayer et al., 2017), as well as previous research (Bilal et al., 2021; Jing et al., 2022; Khalili et al., 2016).

The dimensions of behavior, character, and characteristics of women's leaders, such as flexible leadership, caring abilities, motivation, and stimulation (Jing et al., 2022), are closely related to transformational leadership. In the process of conveying aims and objectives, leaders evolve into individuals who are open to embracing novel concepts and beliefs, which may undergo validation or refutation, imply employee appreciation, fundamentally change values and goals, and destroy old paradigms and create new paradigms (Bono et al., 2012; Savovic, 2012). It has a positive correlation with employee innovation performance, such as the willingness of employees to update work methods, create innovations, and learn new skills to translate new ideas and concepts into practical applications.

The ability to motivate was the dominant dimension that constructed the variable characteristic of women's leadership (cross-loading 0.956). Women's leaders in Pekanbaru Public Health Center provided opportunities for employees to understand new work plans, explain long-term job prospects, be extravagant in giving praise, and encourage bored employees to keep working to form employee actions that continuously shift the focus of knowledge to gain a competitive advantage. In contrast to the stimulation ability indicator, which made the smallest contribution to the women's

leadership characteristic variable (cross loading of 0.934), it needs to increase its role in employee innovation performance. The ability to stimulate can be increased through the attitude of leaders who are aware of employee problems and influence them to see problems from various perspectives, including (1) increasing employee awareness of existing problems, (2) generating sensitivity to similarities and differences between employees, and (3) providing insight regarding the values and beliefs shared by leaders and employees (Hartanto, 2009).

Women's Leadership Characteristics and Job Autonomy

Women leaders have personality traits that correlate with positive behavior, such as being friendly, managing institutions well, motivating others, and paying attention to work arrangements and the surrounding environment. The sincerity of women leaders in creating close relationships with employees, bringing trust and respect, increasing psychological stability, guiding and providing feedback, and enabling employees to exercise more autonomy in completing tasks (Lee et al., 2021). For example, women leaders who try to stimulate the intellectual intelligence of employees by discussing problem-solving, giving freedom in work, and trying to get each individual to participate actively make employees dare to decide how to complete work and choose effective and efficient procedures and methods in carrying out work.

Job Autonomy and Employee Innovation Performance

This finding confirms the Self-Determination Theory (Van den Broeck et al., 2016) and aligns with prior empirical research (De Spiegelaere et al., 2016; Lee et al., 2021; Nasution et al., 2021). Increasing job autonomy allows the work process to be more flexible in carrying out tasks and determining roles, providing opportunities for employees to be more creative and experiment with different work approaches and methods (De Spiegelaere et al., 2014; Wenjing et al., 2013). It forms creative performance as the originality of ideas, products, or procedures that are effective and efficient. Conversely, according to Oldham & Cummings (1996), if the leader controls or reduces employee intrinsic motivation, it inhibits individual creativity, resulting in lower employee creativity and innovation performance (Wenjing et al., 2013).

The control capacity possessed by employees at the Pekanbaru Public Health Centers in choosing how to complete their work (work method autonomy) was the most important determinant of work autonomy (cross-loading 0.918). It allowed them to challenge the status quo, think outside the box, take risks, and develop unconventional methods, ideas, and skills. In contrast, the autonomy of work criteria (cross loading 0.878), such as the freedom of employees to determine service priorities, plan and manage services, and assess their performance, had minor implications for building work autonomy for Pekanbaru Public Health Center employees. This situation was influenced by the status of the Public Health Centers, which are agencies under the auspices of the government, so it is obliged to implement the provisions set by the center through the Pekanbaru City Government.

Job Autonomy: Women's Leadership Characteristics and Employee Innovation Performance

Women's personality characteristics and advantages, such as flexible charismatic leadership, individualized caring ability in the perspective of career development and personal life care, the ability to motivate and communicate a vision, as well as the ability to provide stimulation (by being patient, guiding employees, and providing empathy), refer to the transformational leadership style (Jing et al., 2022). Women leaders with these characteristics have the potential to develop high-quality leadership-employee relationships based on trust (Jaskiewicz & Tulenko, 2012; Khalili et al., 2016). This foundation will encourage employees to work beyond expectations with a reduced risk of vulnerability so that employees have the freedom and control to determine ways, methods, activities, scheduling, and procedures for completing work and have an impact on eliminating employee doubts about sharing ideas with leaders and growing employee innovation performance without fear (Gmach et al., 2015).

Conclusion

The research results indicate that the level of job autonomy plays a significant role in fully mediating the relationship between women's leadership characteristics and the performance of employees in terms of innovation. It implies that granting employees greater autonomy in their tasks can enhance their ability to innovate at a higher level. This study has the potential to bolster the principles of self-determination theory, in which employee behavior is not only the result of encouragement from outside (leadership characteristics). However, it is also formed from motivation within the employee (job autonomy). In this case, employees are inherently more active in innovating when they have confidence because of freedom, control, and authority over all work.

This study also provides a valuable practical contribution to the management of healthcare organizations. These findings explain how and why job autonomy mediating mechanisms affect the functioning of women's leadership characteristics that support employee innovation performance while providing a new way for healthcare organization management to design strategies for employee innovation performance development. Management of health organizations can improve the implementation of work autonomy, such as providing profound freedom, independence, and expertise when employees carry out work to support innovation performance. The women leaders who dominated this study were stated to be capable and reliable in managing health organizations. Even with their characteristics, women can increase innovation behavior, which is much needed in this digitalization era. Therefore, in carrying out their functions, duties, and responsibilities, organizations can pay more attention to women. In other words, the status of men and women is equal, equal partners, supporting and helping each other in a "harmonious gender partnership."

This study has several limitations, such as using a cross-sectional approach, so it was unknown whether the women's leadership characteristics and job autonomy would

continue to support employee innovation performance in the long term. These limitations indicate directions for future research: to benefit from using a longitudinal design to assess theory constructs at different points in time or reflect current research findings. In addition, research was only relevant to the health sector, and future researchers are advised to analyze different characteristics using the same theoretical framework in other sectors (business, private, sports, public, and education) and then compare them. Future research also calls for larger sample sizes, more sophisticated analytical techniques, and extending this research by developing antecedents of employee innovation performance or the impact of other women's leadership characteristics.

References

- AlNuaimi, B. K., Khan, M., & Ajmal, M. M. (2021). The role of big data analytics capabilities in greening e-procurement: A higher order PLS-SEM analysis. *Technological Forecasting and Social Change*, *169*, 120808. <https://doi.org/10.1016/j.techfore.2021.120808>
- Alviani, D., Handayani, R., & Hadiyati, H. (2023). Determinants of organizational citizenship behavior on the influence of personality traits on leadership style of public sector officials in Riau province: a gender perspective review. *Jurnal Psikologi Teori dan Terapan*, *14*(2), 174–192. <https://doi.org/10.26740/jptt.v14n2.p174-192>
- Augusty, F. (2006). *Metode penelitian manajemen*. Badan Penerbit Universitas Diponegoro.
- Becker, J.-M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: guidelines for using reflective-formative type models. *Long Range Planning*, *45*(5–6), 359–394. <https://doi.org/10.1016/j.lrp.2012.10.001>
- Bilal, A., Ahmad, W., Jan, M. F., Huseynov, R., & Nagy, H. (2021). How women's transformational leadership induces employees' innovative behaviour through trust and connectivity: a sequential mediation model. *Global Business Review*, 097215092098276. <https://doi.org/10.1177/0972150920982760>
- Bono, J. E., Hooper, A. C., & Yoon, D. J. (2012). Impact of rater personality on transformational and transactional leadership ratings. *The Leadership Quarterly*, *23*(1), 132–145. <https://doi.org/10.1016/j.leaqua.2011.11.011>
- Chai, L., & Xiao, Y. (2018). High-performance work system and employee innovation performance: the role of obse and power distance orientation. *Proceedings of the Third International Conference on Economic and Business Management (FEBM 2018)*. <https://doi.org/10.2991/febm-18.2018.93>
- Dai, X. (2015). Research on development of female leadership from the perspective of flexible leadership. *Liaoning Normal University, Dalian, China*.
- De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2016). Innovative work behaviour and performance-related pay: rewarding the individual or the collective? *The International Journal of Human Resource Management*, *29*(12), 1900–1919. <https://doi.org/10.1080/09585192.2016.1216873>
- De Spiegelaere, S., Van Gyes, G., De Witte, H., Niesen, W., & Van Hootegem, G. (2014). On the relation of job insecurity, job autonomy, innovative work behaviour and the mediating effect of work engagement. *Creativity and Innovation Management*, *23*(3), 318–330. <https://doi.org/10.1111/caim.12079>
- Denizci Guillet, B., Pavesi, A., Hsu, C., & Weber, K. (2019). What can educators do to better prepare women for leadership positions in the hospitality industry? the perspectives of women executives in Hong Kong. *Journal of Hospitality & Tourism Education*, *31*(4), 197–209. <https://doi.org/10.1080/10963758.2019.1575751>

- García-Machado, J. J., & Martínez-Ávila, M. (2019). Environmental performance and green culture: the mediating effect of green innovation. an application to the automotive industry. *Sustainability*, 11(18), 4874. <https://doi.org/10.3390/su11184874>
- Gmach, I., Melek, G., Sidhom, S., & Khrifish, L. (2015). Towards an approach of trust-based recommendation system. *2015 6th International Conference on Information Systems and Economic Intelligence (SIIIE)*. <https://doi.org/10.1109/isei.2015.7358738>
- Hair, J. F., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2017). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd Edition. Sage Publications Inc., Thousand Oaks, CA.
- Hartanto, F. M. (2009). *Paradigma baru manajemen Indonesia*. Bandung: Mizan.
- Henseler, J. (2018). Partial least squares path modeling: quo vadis? *Quality & Quantity*, 52(1), 1–8. <https://doi.org/10.1007/s11135-018-0689-6>
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/imds-09-2015-0382>
- Hui, C. (2017). Research on women leadership in organizational performance management. *Entrepreneur Technology Development*, 1, 129-132.
- Iman, A., Nazarov, Z., & Obydenkova, A. (2022). Female leadership, democratization, and firm innovation: social inequalities and gender issues in post-communist economies. *Eastern European Economics*, 60(2), 149–170. <https://doi.org/10.1080/00128775.2021.2024440>
- Jain, P., & Duggal, T. (2018). Transformational leadership, organizational commitment, emotional intelligence and job autonomy. *Management Research Review*, 41(9), 1033–1046. <https://doi.org/10.1108/mrr-01-2018-0029>
- Jaskiewicz, W., & Tulenko, K. (2012). Increasing community health worker productivity and effectiveness: a review of the influence of the work environment. *Human Resources for Health*, 10(1). <https://doi.org/10.1186/1478-4491-10-38>
- Jing, Z., Hou, Q., Zhang, Y., & Zhao, Y. (2022). The relationship between female leadership traits and employee innovation performance—the mediating role of knowledge sharing. *Sustainability*, 14(11), 6739. <https://doi.org/10.3390/su14116739>
- Khalili, A. (2016). Linking transformational leadership, creativity, innovation, and innovation-supportive climate. *Management Decision*, 54(9), 2277–2293. <https://doi.org/10.1108/md-03-2016-0196>
- Lee, W. R., Choi, S. B., & Kang, S.-W. (2021). How leaders' positive feedback influences employees' innovative behavior: the mediating role of voice behavior and job autonomy. *Sustainability*, 13(4), 1901. <https://doi.org/10.3390/su13041901>
- Marvel, M. R., Lee, I. H., & Wolfe, M. T. (2015). Entrepreneur gender and firm innovation activity: A multilevel perspective. *IEEE Transactions on Engineering Management*, 62(4), 558–567. <https://doi.org/10.1109/tem.2015.2454993>
- Mayer, C.-H., Oosthuizen, R. M., & Surtee, S. (2017). Emotional intelligence in South African women leaders in higher education. *SA Journal of Industrial Psychology*, 43(0). <https://doi.org/10.4102/sajip.v43i0.1405>
- Mubin, M. I., Widayati, T., & Hikmah, H. (2022). Women's leadership style and motivation on ship child performance with work discipline intervening (Study on ship crew with female seafarers). *Proceeding of The International Conference on Business and Economics*, 1(1), 32–40. <https://doi.org/10.56444/icbeuntagsmg.v1i1.283>
- Nasution, N. R., Siregar, Z. M. E., & Pristiyono, P. (2021). The effect of job autonomy on employee innovative behavior: the role of job satisfaction as intervening variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2846–2853. <https://doi.org/10.33258/birci.v4i2.1994>

- Pattnaik, S. C., & Sahoo, R. (2021). Transformational leadership and organizational citizenship behaviour: the role of job autonomy and supportive management. *Management Research Review*, 44(10), 1409–1426. <https://doi.org/10.1108/mrr-06-2020-0371>
- Reutzler, C. R., Collins, J. D., & Belsito, C. A. (2018). Leader gender and firm investment in innovation. *Gender in Management: An International Journal*, 33(6), 430–450. <https://doi.org/10.1108/gm-05-2017-0066>
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: a critical look at the use of PLS-SEM in "MIS Quarterly." *MIS Quarterly*, 36(1), 3-14. <https://doi.org/10.2307/41410402>
- Robertson, J., Caruana, A., & Ferreira, C. (2023). Innovation performance: the effect of knowledge-based dynamic capabilities in cross-country innovation ecosystems. *International Business Review*, 32(2), 101866. <https://doi.org/10.1016/j.ibusrev.2021.101866>
- Saragih, S. (2011). The effects of job autonomy on work outcomes: self efficacy as an intervening variable. *International Research Journal of Business Studies*, 4(3), 203–215. <https://doi.org/10.21632/irjbs.4.3.203-215>
- Sarstedt, M., Hair, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Savovic, S. (2012). The importance of post-acquisition integration for value creation and success of mergers and acquisitions. *Ekonomski Horizonti*, 14(3), 193–205. <https://doi.org/10.5937/ekonhor1203193s>
- Silva, R., Barbosa, R. A. P., Siena, O., Bernardo, C. de P., & Filho, E. A. S. (2018). Leadership styles among genders of retail managers. *International Journal of Advanced Engineering Research and Science*, 5(9), 61–74. <https://doi.org/10.22161/ijaers.5.9.7>
- Siregar, Z. M. E., Sujana, F. R., Pranowo, A. S., & Supriadi, Y. N. (2021). Job autonomy and innovative work behavior of marketing employees in the automotive industry in Indonesia: the mediating role of organizational commitment. *Quality - Access to Success*, 22(180), 97-102.
- Swaroop, P., & Dixit, V. (2018). Employee engagement, work autonomy and innovative work behaviour: An empirical study. *International Journal of Innovation, Creativity and Change*, 4(2), 158-176.
- Tohidi, H., & Jabbari, M. M. (2012). The important of innovation and its crucial role in growth, survival and success of organizations. *Procedia Technology*, 1, 535–538. <https://doi.org/10.1016/j.protcy.2012.02.116>
- Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42(5), 1195–1229. <https://doi.org/10.1177/0149206316632058>
- van Dorssen-Boog, P., van Vuuren, T., de Jong, J. and Veld, M. (2022). Healthcare workers' autonomy: testing the reciprocal relationship between job autonomy and self-leadership and moderating role of need for job autonomy. *Journal of Health Organization and Management*, 36(9), 212-231. <https://doi.org/10.1108/JHOM-04-2022-0106>
- Wenjing, C., Wei, S., & Shuliang, Z. (2013). An empirical study on the effects of creative personality and job autonomy on individual innovation performance of knowledge workers. *International Business Management*, 6, 24-30.
- Xiang, H., Chen, Y., & Zhao, F. (2017). Inclusive leadership, psychological capital, and employee innovation performance: the moderating role of leader-member exchange. *DEStech Transactions on Social Science, Education and Human Science, hsmet*. <https://doi.org/10.12783/dtssehs/hsmet2017/16465>