

The Role of Inclusive Leadership and Organizational Learning Capacity in Enhancing Employees' Innovation Performance in the Manufacturing Industry of Guangzhou City, China

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Abstract: The manufacturing industry in Guangzhou, China, faces increasing pressure to enhance innovation capabilities in response to rapid technological advancements and intense global competition. This study aims to examine the impact of inclusive leadership on employees' innovation performance, focusing on the mediating role of organizational learning capacity. Using a quantitative research approach and Structural Equation Modeling (SEM) for data analysis, the study collected data from 400 employees in Guangzhou's manufacturing sector. The findings indicate that inclusive leadership has a significant positive effect on employees' innovation performance, both directly and indirectly through organizational learning capacity. The results highlight the importance of inclusive leadership practices in fostering a supportive and psychologically safe environment that promotes knowledge sharing and creative problem-solving. The study contributes to the literature by providing empirical evidence on the critical role of inclusive leadership and organizational learning in driving innovation, offering practical implications for managers seeking to boost organizational adaptability and long-term competitiveness in dynamic industrial contexts.

Keywords: Inclusive leadership, organizational learning capacity, employees' innovation performance, manufacturing industry, Guangzhou city

1. Introduction

The manufacturing industry plays a significant role in the economic development of Guangzhou, one of China's most dynamic industrial hubs (Li et al., 2022). As global competition intensifies and technological advancements accelerate, companies in the manufacturing sector must continuously innovate to maintain their competitive edge (Ninduwezuor-Ehiobu et al., 2023). Innovation performance, particularly among employees, has emerged as a crucial factor in achieving sustained growth and operational efficiency (Ren & Shen, 2024). In the context of the Fourth Industrial Revolution, characterized by smart manufacturing, artificial intelligence, and digitalization, the pressure on organizations to enhance their innovation capabilities has reached unprecedented levels (Ledford et al., 2024). To foster this environment of continuous innovation, leadership practices must adapt. Inclusive leadership, which emphasizes valuing diverse perspectives and actively encouraging employee participation, has been identified as a key driver of organizational innovation (Mogaji & Dimingu, 2024).

Organizational learning capacity also plays a vital role in shaping innovation performance. As a process of creating, retaining, and transferring knowledge within an organization, organizational learning facilitates the adaptation to changing environments and the development of new products and services (Tripathi & Kalia, 2024). In Guangzhou's manufacturing industry, where rapid technological shifts and market demands prevail, a strong organizational learning culture can help companies stay agile and innovative.

Despite the significance of innovation for the manufacturing sector, many companies in Guangzhou continue to face challenges in fostering a culture that supports continuous innovation at the employee level. The need for innovation is further amplified by rapid technological advancements and shifting market dynamics, which require organizations to respond quickly and effectively to external changes (Tidd & Bessant, 2020). Although previous research has highlighted the importance of leadership in influencing employee behaviors, much of this work has been limited to traditional

leadership styles like transformational and transactional leadership. Inclusive leadership, a more recent concept that focuses on valuing diverse perspectives and promoting a sense of belonging among employees, remains underexplored in the context of employee innovation performance in the manufacturing industry of Guangzhou.

Similarly, the role of organizational learning capacity as a mediator between leadership styles and employee innovation performance has not been adequately investigated. Organizational learning capacity refers to an organization's ability to recognize and absorb new knowledge, adapt to changes, and foster an environment of continuous improvement (Elahi, 2024). While studies have shown that organizational learning can positively influence innovation performance, there is limited empirical evidence linking it with inclusive leadership practices, especially in the manufacturing industry of China, where traditional hierarchical structures and centralized decision-making often prevail. Thus, there is a need to explore whether inclusive leadership, when combined with strong organizational learning capabilities, can better drive employees' innovation performance, helping companies achieve long-term sustainability and competitiveness.

Given the competitive landscape, manufacturing companies in Guangzhou are increasingly focusing on strategies that can enhance employees' innovation performance. However, existing management practices may not sufficiently emphasize the importance of inclusive leadership and organizational learning as mechanisms that foster an innovative organizational climate. While the Chinese manufacturing sector has seen growth due to increased investments in technology and infrastructure, the softer aspects of leadership and organizational culture, which are crucial for boosting innovation at the employee level, often remain underemphasized. This calls for a deeper investigation into how inclusive leadership and organizational learning capacity can collectively influence the innovation outcomes of employees within this industrial context. While previous studies have examined the impact of various leadership styles on innovation performance, the specific influence of inclusive leadership within the manufacturing context of Guangzhou has not been extensively studied. Additionally, the role of organizational learning capacity as a mediating factor remains insufficiently explored, particularly in the Chinese manufacturing industry, where unique cultural and structural factors may influence these relationships. This gap in the literature suggests a need for a comprehensive study that examines the interplay between inclusive leadership, organizational learning capacity, and employees' innovation performance.

The study aims to address these gaps by investigating the impact of inclusive leadership on employees' innovation performance in the manufacturing industry of Guangzhou. Specifically, it seeks to determine whether organizational learning capacity mediates this relationship, providing insights into how these elements can be integrated to foster a more innovative workforce. By focusing on the manufacturing sector in Guangzhou, the research aims to contribute to the broader understanding of leadership practices and organizational culture in enhancing innovation performance, offering practical implications for managers and policymakers in similar industrial settings.

2. Literature Review

2.1 Studies on Inclusive Leadership and Employees' Innovation Performance

Inclusive leadership has been recognized as a critical factor in enhancing employees' innovative behavior and performance. Numerous studies have explored the relationship between inclusive leadership and employees' innovation, consistently highlighting a positive influence.

Zhang & Zhao (2024) conducted a quantitative study to examine the impact of inclusive leadership on employees' innovation performance, revealing a significant positive relationship between these two constructs. The study defined inclusive leadership as a style of leadership characterized by openness, accessibility, and a willingness to consider diverse perspectives. According to the findings, employees under inclusive leaders reported higher levels of idea generation, creative problem-solving, and innovative output. The study argued that inclusive leadership fosters an environment where employees feel valued and respected, which encourages them to express their creativity and share novel ideas without fear of criticism. The sense of psychological safety provided by inclusive leaders was identified as a key mechanism that facilitates employees' willingness to engage in innovative behaviors. By creating a supportive environment, inclusive leaders empower employees to experiment, take risks, and implement new ideas, leading to improved innovation performance.

Zafar et al. (2024) explored the effects of inclusive leadership on employees' innovation performance through a survey-based approach. The research demonstrated a strong positive link between inclusive leadership and enhanced innovation outcomes among employees. The study highlighted that inclusive leaders actively solicit input from all team members, value diverse viewpoints, and involve employees in decision-making processes. This inclusive behavior was found to enhance employees' intrinsic motivation and foster a culture of trust, which are crucial for innovation. The study noted that when employees perceive their leaders as inclusive, they are more likely to engage in proactive behaviors, including seeking new ways to improve processes and products. The findings indicated that inclusive leadership not only encourages employees to voice their ideas but also provides the necessary support and resources for the implementation of these ideas, ultimately boosting innovation performance at the individual level.

Gupta et al. (2022) confirmed that inclusive leadership has a positive and enduring influence on employees' capacity to innovate. The study argued that inclusive leadership goes beyond simply recognizing the value of diversity; it actively involves creating an inclusive climate where every employee feels a sense of belonging and is encouraged to contribute

their unique insights. The findings revealed that inclusive leaders play a crucial role in reducing barriers to innovation, such as fear of failure or resistance to change, by cultivating an open, supportive, and collaborative work environment. Furthermore, the study found that the positive effects of inclusive leadership on innovation performance were sustained over time, suggesting that the continuous engagement and support from inclusive leaders have a lasting impact on employees' creative capacities and innovative output.

In summary, these studies provide compelling evidence of the positive impact of inclusive leadership on employees' innovation performance. By promoting psychological safety, encouraging diverse perspectives, and actively involving employees in the innovation process, inclusive leaders create an environment conducive to creativity and innovation. The consistent findings across these studies underscore the importance of inclusive leadership as a vital organizational practice that enhances innovation by unlocking the full potential of employees' creative capabilities.

2.2 Studies on Inclusive Leadership and Organizational Learning Capacity

The relationship between inclusive leadership and organizational learning capacity has garnered increasing attention in recent research. Inclusive leadership, characterized by leaders who actively involve and value diverse perspectives, is seen as a key driver in fostering an environment conducive to continuous learning and development within organizations. Scholars have focused on exploring how inclusive leadership enhances the capacity of an organization to learn, adapt, and innovate in response to an evolving landscape.

Aboramadan et al. (2022) examined the connection between inclusive leadership and organizational learning capacity. The research focused on how the behaviors of inclusive leaders, such as active listening, recognition of diverse viewpoints, and open communication, contribute to creating a supportive environment that nurtures organizational learning. Findings from the study indicated a strong, positive relationship between inclusive leadership and the enhancement of organizational learning capacity. The study found that when leaders exhibited inclusiveness by actively engaging employees, encouraging diverse inputs, and valuing all team members' contributions, it resulted in a more open and collaborative learning environment. This inclusive atmosphere not only facilitated the exchange of ideas and knowledge among employees but also led to a higher capacity for organizational learning, as employees felt more empowered to share information and experiment with new approaches.

Nejati & Shafaei (2023) explored the impact of inclusive leadership on organizational learning capacity and provided empirical evidence supporting the positive influence of inclusive leadership behaviors. The study focused on the role of inclusive leadership in fostering a culture of psychological safety, which they posited as a critical mediator for enhancing learning capacity. The study used a mixed-method approach, combining quantitative surveys with qualitative interviews to capture a comprehensive picture of the relationship. The findings revealed that inclusive leaders, through their behaviors of openness, transparency, and encouragement of diverse viewpoints, significantly contributed to an organizational culture where employees felt safe to share their ideas, question the status quo, and take risks without fear of negative repercussions. This sense of psychological safety was identified as a key factor that enhanced the organization's ability to learn and adapt, as it encouraged continuous dialogue and knowledge sharing among team members. The study concluded that inclusive leadership, by creating an environment of psychological safety, directly boosts organizational learning capacity, allowing for better adaptation to changes and improved overall performance.

Do & Mai (2020) also highlighted the positive effects of inclusive leadership on organizational learning capacity, focusing on the mechanisms through which inclusive leadership behaviors facilitate the learning process. The study conducted a comprehensive cross-sectional study that analyzed the perceptions of employees regarding their leaders' inclusiveness and the subsequent impact on organizational learning. The results demonstrated a clear positive correlation between inclusive leadership and enhanced learning capacity, underscoring the importance of inclusive behaviors such as soliciting feedback, acknowledging diverse contributions, and fostering collaborative decision-making. The study argued that inclusive leaders play a pivotal role in breaking down silos within organizations, encouraging cross-departmental knowledge sharing, and facilitating a culture of continuous learning. By actively involving all employees and valuing diverse insights, inclusive leaders were shown to create an environment where individuals are more willing to engage in reflective thinking, share new ideas, and experiment with innovative solutions. The study concluded that the presence of inclusive leadership significantly elevates organizational learning capacity, as it promotes a shared commitment to learning and collective growth.

These studies provide strong evidence of the positive influence of inclusive leadership on organizational learning capacity. Through behaviors that emphasize inclusiveness, open communication, and the appreciation of diverse perspectives, inclusive leaders can foster an environment that is conducive to learning and knowledge sharing. By creating psychological safety and facilitating the active involvement of all employees, inclusive leaders enhance the organization's ability to learn, adapt, and innovate effectively.

2.3 Studies on Organizational Learning Capacity and Employees' Innovation Performance

The connection between organizational learning capacity and employees' innovation performance has garnered significant attention in the research landscape, reflecting the importance of knowledge acquisition, shared learning, and adaptability in fostering an innovative workforce.

Cabrilo & Dahms (2020) conducted a comprehensive study to assess how the internal mechanisms of organizational learning contribute to fostering innovation at the employee level. The study focused on organizations that actively cultivated a learning environment characterized by an openness to new ideas, knowledge sharing, and continuous improvement practices. The findings highlighted a strong positive relationship between organizational learning capacity and employees' innovation performance. The study argued that when organizations emphasize learning as a core competency, employees are better equipped to generate new ideas and solutions. This is because the continuous acquisition and integration of new knowledge enhance cognitive flexibility, allowing employees to adapt their thinking and approach problems creatively. As a result, the organization's overall innovative output is elevated, driven by the individual creativity and problem-solving abilities of its employees.

Farzaneh et al. (2020) explored the influence of organizational learning capacity on innovation performance by examining the role of structured learning practices and shared knowledge within teams. The study found that organizations with a high capacity for learning tend to develop a culture that encourages experimentation, feedback, and the constant refinement of skills. These practices were shown to directly enhance employees' innovation performance by providing them with the necessary tools and confidence to engage in creative problem-solving. The study concluded that organizational learning capacity serves as a critical foundation for employees to develop innovative capabilities, as it fosters a sense of psychological safety where employees feel comfortable proposing novel ideas. This environment, combined with the support for continuous learning, was found to significantly boost the frequency and quality of innovative contributions from employees.

Moreover, Tian et al. (2021) provided empirical evidence supporting the positive impact of organizational learning capacity on employees' innovation performance. The study observed that organizations that consistently invested in building a strong learning culture experienced sustained improvements in their employees' innovative behaviors. The study emphasized that organizational learning capacity is not just about acquiring knowledge but also about effectively applying it in a way that enhances creative outputs. The study found that when employees are immersed in an environment where learning is prioritized, they are more likely to engage in exploratory behaviors and take calculated risks, leading to higher levels of innovation performance. The study concluded that fostering a robust learning capacity is a strategic approach that organizations can leverage to enhance the innovative potential of their workforce, as it directly influences employees' ability to think outside the box and devise novel solutions.

These studies highlight a strong link between organizational learning capacity and employees' innovation performance, emphasizing the role of a supportive learning environment in fostering creativity. This supportive atmosphere boosts cognitive flexibility, promotes exploratory behavior, and increases confidence in creative problem-solving. In conclusion, developing organizational learning capacity emerges as a critical strategy for improving innovation performance by equipping employees with the skills and mindset needed to innovate effectively.

3. Research Methodology

The study utilizes a quantitative research method to investigate the complex interplay between inclusive leadership, organizational learning capacity, and innovation performance among employees in the manufacturing sector. Quantitative research, characterized by the collection of numerical data and the application of statistical analysis, was chosen for its ability to objectively measure the constructs of interest and assess the relationships between them. This approach allows for a systematic examination of how inclusive leadership influences employees' innovative behaviors, as well as the mediating role of organizational learning capacity in this process.

The choice of a quantitative method is underpinned by its strengths in providing generalizable and replicable results, especially when dealing with a large and diverse sample size. It offers a more structured way of data collection and analysis, enabling the researcher to test specific hypotheses and quantify the degree of relationships between the variables under investigation. In the context of the manufacturing industry in Guangzhou, where the workforce is extensive and heterogeneous, quantitative analysis provides a clear, statistically reliable means of drawing inferences about leadership practices and their effects on innovation performance.

The decision to employ a quantitative research method was guided by several factors. Firstly, the objective nature of quantitative research is well-suited for examining the impact of inclusive leadership on employee innovation performance, as it allows for the precise measurement of constructs through established scales. This is crucial for providing empirical evidence and validating the theoretical framework proposed in the study. Secondly, the study aims to explore causal relationships between inclusive leadership, organizational learning capacity, and innovation performance. Quantitative methods, particularly those involving statistical techniques like Structural Equation Modeling (SEM), are capable of handling complex relationships and testing mediation effects, which are central to the research hypotheses. Moreover, the large sample size targeted in this study necessitates a method that can efficiently handle and analyze extensive data, offering insights that are statistically significant and representative of the broader population.

The research focuses on the manufacturing industry in Guangzhou, a major industrial hub in China known for its dynamic economic environment and substantial contributions to the country's GDP. As of 2023, the manufacturing sector in Guangzhou employed approximately 1.167 million individuals, according to the "Research Report on the Reform of the Construction of Workers in the Manufacturing Industry in Guangzhou". Given the size and diversity of the workforce, a representative sample was essential for drawing valid conclusions about the broader population. For this study, random

sampling was employed to ensure that every employee in the target population had an equal chance of being selected, minimizing potential biases and enhancing the generalizability of the findings. Based on statistical considerations and the Raosoft sample size calculation tool, a sample size of 400 employees was determined to be appropriate. This sample size provides a balance between statistical power and practical feasibility, allowing for a robust analysis of the relationships among the study variables. To facilitate the distribution and collection of the questionnaires, the research makes use of WENJUANXING, a widely used and reputable online platform in China for designing, distributing, and gathering survey data. After distributing the initial set of 400 questionnaires to employees in manufacturing companies of Guangzhou city for a month from October 21 to November 21, 2024, the study collected 391 responses. Upon reviewing the collected data, 4 of these questionnaires were found to be invalid and were excluded from the analysis. This resulted in a final sample of 387 valid responses, which were used for the subsequent stages of analysis.

The study adopts a Likert-5 scale for data collection, utilizing survey items adapted and designed from previous validated scales used by scholars in the fields of leadership, organizational learning, and innovation performance. The Likert-5 scale ranges from “strongly disagree (1)” to “strongly agree (5)”, enabling the measurement of participants’ perceptions and attitudes towards inclusive leadership practices, their organization’s learning capacity, and their own innovation performance.

For data analysis, the study employs a combination of descriptive statistics and Structural Equation Modeling (SEM). Descriptive statistics are used to summarize the demographic characteristics of the sample and provide an initial overview of the responses. This includes measures such as mean, standard deviation, and frequency distribution, which help in understanding the general trends in the data. The core of the analysis utilizes SEM path analysis, a powerful statistical technique that allows for the simultaneous examination of multiple relationships between variables. SEM is suitable for this study as it can assess the direct and indirect effects of inclusive leadership on employees’ innovation performance, while also testing the mediating role of organizational learning capacity. This method provides a comprehensive framework for testing the hypothesized model, evaluating the strength and significance of each path, and validating the theoretical constructs proposed.

The study conducts the investigation based on the research process presented in Fig. 1, aiming to examine the impact of inclusive leadership, organizational learning capacity on employees’ innovation performance in manufacturing industry of Guangzhou city, China.



Figure 1. Flow of process

4. Data Analysis

The study employs the SEM path analysis to check the relationship between inclusive leadership, organizational learning capacity and employees’ innovation performance in the manufacturing industry of Guangzhou city, China. The detailed SEM path analysis results are presented in Fig. 2. and Table 1.

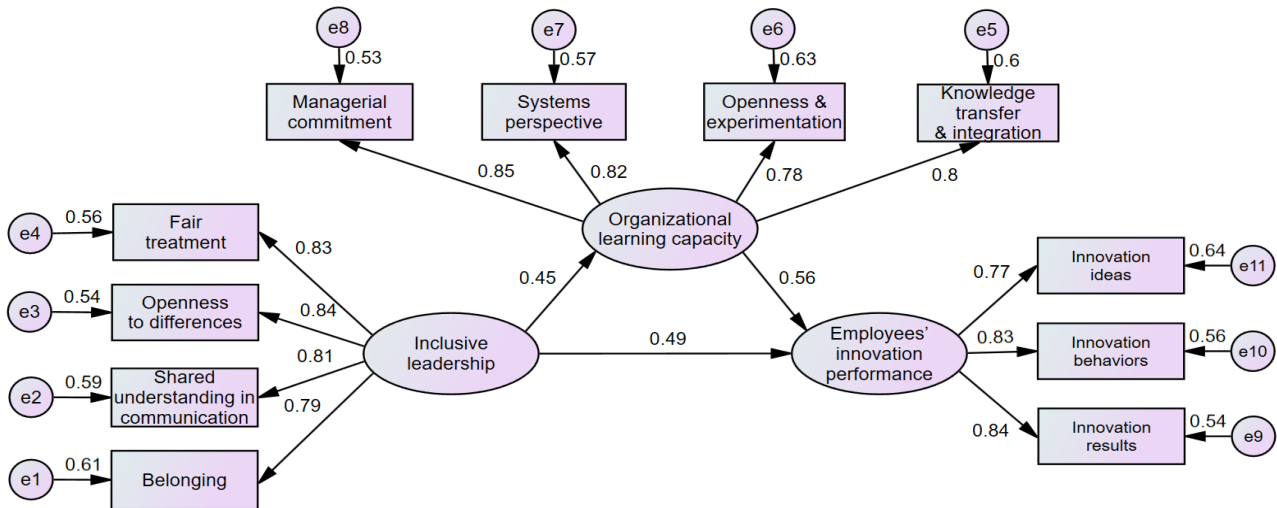


Figure 2. SEM path analysis results

Table 1. Path analysis results

Path	Estimate	S.E.	C.R.	P-value	Std Path coefficient
Inclusive leadership--->Employees' innovation performance	0.596	0.059	10.102	***	0.494
Inclusive leadership--->Organizational learning capacity	0.555	0.057	9.737	***	0.451
Organizational learning capacity--->Employees' innovation performance	0.667	0.060	11.117	***	0.564

According to data in Table 1, the direct path from inclusive leadership to employees' innovation performance has an estimated value of 0.596. The p-value (< 0.001) indicates that this relationship is statistically significant at the 0.001 level. The standardized path coefficient of 0.494 suggests a strong positive effect of inclusive leadership on employees' innovation performance. This result implies that inclusive leadership behaviors directly enhance employees' ability to generate innovative ideas and solutions. The significant positive coefficient indicates that as inclusive leadership practices increase, employees' innovation performance also improves, highlighting the critical role of leaders who foster a supportive and inclusive environment.

The direct relationship between inclusive leadership and organizational learning capacity is also positive and statistically significant, with an estimate of 0.555. The p-value (< 0.001) confirms the significance of this relationship. The standardized path coefficient of 0.451 shows that inclusive leadership has a moderately strong direct impact on enhancing organizational learning capacity. This suggests that leaders who practice inclusiveness by encouraging open communication, active listening, and recognition of diverse contributions effectively contribute to an organizational culture that supports continuous learning capacity. As inclusive leadership behaviors increase, the organization's ability to learn, adapt, and share knowledge also improves, creating a foundation for sustained innovation and growth.

The direct path from organizational learning capacity to employees' innovation performance has the strongest effect among the relationships analyzed, with an estimated value of 0.667. The p-value (< 0.001) again indicates a highly significant relationship. The standardized path coefficient of 0.564 suggests a robust positive impact of organizational learning capacity on employees' innovation performance. This finding highlights the critical role of organizational learning capacity in driving innovation, as employees are more likely to engage in creative problem-solving and generate new ideas when they operate in an environment that supports learning and knowledge exchange. The high standardized coefficient reflects that a strong learning culture directly boosts employees' creative outputs and innovative behaviors, reinforcing the importance of fostering an environment that prioritizes continuous learning and adaptation.

In summary, the SEM analysis results indicate significant direct effects of inclusive leadership on both organizational learning capacity and employees' innovation performance. Furthermore, organizational learning capacity itself has a strong positive direct effect on innovation performance. These findings suggest a chain of influence where inclusive leadership directly enhances organizational learning capacity, which in turn further boosts employees' innovation performance.

Besides, bootstrapping method was employed to check the mediating effect of organizational learning capacity in the relationship between inclusive leadership and employees' innovation performance with detailed analysis results

shown in Table 2.

Table 2. Mediating effect analysis results of organizational learning capacity

Standard effect	Path	Effect coefficient	95% confidence interval		S.E.	P-value
			Lower	Upper		
Total effect	Inclusive leadership--->Employees' innovation performance	0.748	0.697	0.799	0.026	***
Direct effect	Inclusive leadership--->Employees' innovation performance	0.494	0.447	0.541	0.024	***
Indirect effect	Inclusive leadership--->Organizational learning capacity--->Employees' innovation performance	0.254	0.213	0.295	0.021	***

According to data in the Table 2, the total effect of inclusive leadership on employees' innovation performance was found to be substantial, with an effect coefficient of 0.748. This suggests that inclusive leadership practices have a strong, positive influence on the innovation performance of employees, confirming that leaders who value diverse perspectives, engage in active listening, and foster an inclusive environment can effectively boost innovative behaviors among employees.

The direct effect of inclusive leadership on employees' innovation performance has an effect coefficient of 0.494, which is statistically significant ($p < 0.001$). This finding indicates that a considerable portion of the relationship between inclusive leadership and innovation performance can be attributed to the direct impact of inclusive leadership behaviors. Inclusive leaders, by creating a supportive and open climate, directly enhance employees' ability to generate creative ideas and implement innovative solutions. The significant direct effect underscores the importance of inclusive leadership in cultivating an environment that encourages creativity and risk-taking.

In addition to the direct effect, the study also identified a significant indirect effect of 0.254 through organizational learning capacity, as evidenced by the bootstrapping analysis ($p < 0.001$). This indirect effect highlights the role of organizational learning capacity as a mediating factor in the relationship between inclusive leadership and innovation performance. The confidence interval for the indirect effect (0.213, 0.295) does not include zero, further confirming the statistical significance of this mediating role. The positive indirect effect suggests that inclusive leadership enhances organizational learning capacity, which in turn facilitates greater innovation performance among employees. When leaders promote inclusive behaviors, they contribute to building a culture that emphasizes continuous learning, knowledge sharing, and adaptation, all of which are critical components of a learning-oriented organization. This enhanced learning capacity provides employees with the cognitive flexibility and resources necessary for creative problem-solving, thus leading to improved innovation outcomes.

In summary, the mediating effect analysis reveals that organizational learning capacity serves as an essential mediator through which inclusive leadership enhances employees' innovation performance.

5. Discussion of Findings

The purpose of this study was to examine the impact of inclusive leadership on employees' innovation performance in the manufacturing industry of Guangzhou, with a focus on the mediating role of organizational learning capacity. The results of the Structural Equation Modeling (SEM) path analysis and mediating effect analysis offer valuable insights into the relationships among these variables, reinforcing previous research findings while also providing new evidence specific to the context of Guangzhou's manufacturing sector.

5.1 Direct Effect of Inclusive Leadership on Employees' Innovation Performance

The analysis revealed a significant positive direct effect of inclusive leadership on employees' innovation performance, with an estimated path coefficient of 0.596 and a standardized path coefficient of 0.494 ($p < 0.001$). This result confirms that inclusive leadership behaviors, such as valuing diverse perspectives, fostering open communication, and creating a psychologically safe environment, play a critical role in enhancing employees' ability to generate innovative ideas and solutions. The findings align with previous research by Xiang et al. (2017), who also observed a strong positive relationship between inclusive leadership and innovation performance. In the study by Xiang et al. (2017), inclusive leaders were noted for their capacity to build a supportive environment that encourages risk-taking and creative problem-solving, which in turn leads to higher levels of innovative output among employees.

The significant impact observed in this study highlights the importance of inclusive leadership within the unique cultural and industrial context of Guangzhou. As a major manufacturing hub in China, Guangzhou's industry is often characterized by hierarchical structures and centralized decision-making. However, the strong positive effect of inclusive leadership on innovation performance suggests that leaders who adopt more inclusive practices may effectively counterbalance these traditional structures. By creating a more participatory and open environment, inclusive leaders

facilitate the expression of novel ideas and diverse viewpoints, which are essential for driving innovation. This finding contributes to the growing body of literature emphasizing the need for modern leadership approaches that prioritize inclusiveness and employee engagement, particularly in industries undergoing rapid technological changes.

5.2 Direct Effect of Inclusive Leadership on Organizational Learning Capacity

The study also found a significant positive relationship between inclusive leadership and organizational learning capacity, with a path estimate of 0.555 and a standardized coefficient of 0.451 ($p < 0.001$). This result underscores the crucial role that inclusive leadership plays in enhancing an organization's capacity to learn, adapt, and innovate. By actively engaging employees, encouraging open communication, and valuing diverse inputs, inclusive leaders help create a culture that supports continuous learning and knowledge sharing. These findings are consistent with the research conducted by Tran & Choi (2019), who also demonstrated that inclusive leadership behaviors contribute to a more collaborative and psychologically safe environment, which is conducive to organizational learning.

The positive impact of inclusive leadership on organizational learning capacity can be particularly significant in the context of Guangzhou's manufacturing industry, where rapid technological advancements and evolving market demands require companies to remain agile and adaptive. Traditional leadership styles may not be sufficient in environments characterized by frequent change and complexity. In contrast, inclusive leaders who emphasize listening, recognition, and participation help cultivate an atmosphere of trust and psychological safety, which are critical components for fostering a strong learning culture. This result supports the notion that inclusive leadership can be an effective strategy for overcoming organizational inertia and promoting the continuous development of new knowledge and skills.

5.3 Direct Effect of Organizational Learning Capacity on Employees' Innovation Performance

The strongest direct relationship observed in this study was between organizational learning capacity and employees' innovation performance, with a path estimate of 0.667 and a standardized coefficient of 0.564 ($p < 0.001$). This finding highlights the pivotal role of organizational learning capacity in driving innovation at the employee level. The results indicate that when organizations foster a strong learning culture, employees are more likely to engage in creative problem-solving and demonstrate higher levels of innovative behavior. This aligns with the findings of Kalmuk & Acar (2015), who emphasized that organizational learning capacity enhances cognitive flexibility and exploratory behavior, which are essential for generating new ideas and innovative solutions.

In the context of the manufacturing industry in Guangzhou, where rapid shifts in technology and market conditions are common, the ability of an organization to learn and adapt quickly becomes a critical determinant of innovation performance. The positive relationship between organizational learning capacity and innovation performance observed in this study suggests that fostering a learning-oriented culture may be a key strategy for manufacturing companies aiming to enhance their innovative capabilities.

5.4 Mediating Role of Organizational Learning Capacity

The analysis also revealed a significant mediating effect of organizational learning capacity in the relationship between inclusive leadership and employees' innovation performance. The indirect effect was estimated at 0.254, with a confidence interval of (0.213, 0.295), and was statistically significant ($p < 0.001$). This result indicates that inclusive leadership influences innovation performance not only directly but also indirectly by enhancing the organization's capacity for learning. The mediating role of organizational learning capacity supports the findings of Zhong & Luo (2022), who highlighted the importance of a learning-oriented environment as a bridge between leadership practices and innovative outcomes.

The significant indirect effect observed in this study suggests that when leaders adopt inclusive behaviors, they help build an organizational culture that prioritizes learning and knowledge sharing. This enhanced learning capacity provides employees with the necessary cognitive resources and psychological safety to experiment with new ideas and take creative risks, thereby boosting their innovation performance. The finding reinforces the idea that inclusive leadership and organizational learning capacity are complementary elements that, when combined, create a synergistic effect on innovation. It highlights the importance of integrating leadership practices that foster inclusiveness with strategies that promote a strong learning culture, particularly in industries facing dynamic and complex external environments.

6. Conclusion

This study provides valuable insights into the relationship between inclusive leadership, organizational learning capacity, and employees' innovation performance within the manufacturing sector of Guangzhou, China. The findings reveal that inclusive leadership significantly enhances employees' innovation performance, both directly and indirectly through its positive impact on organizational learning capacity. The direct effect highlights inclusive leaders, who emphasize diverse perspectives, open communication, and psychological safety, create an environment where employees feel valued and are encouraged to contribute novel ideas. Additionally, the strong mediating role of organizational learning capacity underscores its importance as a mechanism that amplifies the positive influence of inclusive leadership on innovation performance. Organizations that prioritize continuous learning foster a supportive climate where knowledge is shared,

and employees are empowered to engage in creative problem-solving. The findings suggest that by adopting inclusive leadership practices and cultivating a robust learning culture, manufacturing companies can effectively respond to the rapid technological changes and competitive pressures prevalent in Guangzhou's industrial landscape. The integration of inclusive leadership and organizational learning strategies emerges as a key pathway for driving sustained innovation, enabling firms to enhance their agility, adaptability, and long-term growth. These insights offer practical implications for managers and policymakers seeking to boost innovation performance, advocating for leadership approaches that align with the evolving needs of the modern workforce.

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Conflict of Interest

The authors declare no conflicts of interest.

References

- Aboramadan, M., Dahleez, K. A., & Farao, C. (2022). Inclusive leadership and extra-role behaviors in higher education: does organizational learning mediate the relationship?. *International Journal of Educational Management*, 36(4), 397-418.
- Cabrilo, S., & Dahms, S. (2020). The role of multidimensional intellectual capital and organizational learning practices in innovation performance. *European Management Review*, 17(4), 835-855. <https://doi.org/10.1111/emre.12396>
- Do, T. T., & Mai, N. K. (2020). Review of empirical research on leadership and organizational learning. *Journal of Knowledge Management*, 24(5), 1201-1220.
- Elahi Qara Papaq, I. (2024). Investigating the Interactive Role of Human Resource Development Activities and Job Self-Efficacy on Organizational Learning Capacity and Job Performance of Primary Education Teachers in Miandoab City. *Journal of Managing Education in Organizations*, 0-0.
- Farzaneh, M., Ghasemzadeh, P., Nazari, J. A., & Mehralian, G. (2020). Contributory role of dynamic capabilities in the relationship between organizational learning and innovation performance. *European Journal of Innovation Management*, 24(3), 655-676.
- Gupta, S., Nawaz, N., Tripathi, A., Arif Chaudhry, S., & Agrawal, K. (2022). Impact of inclusive leadership on innovation performance during coronavirus disease 2019 outbreak: Mediating role of employee innovation behavior and moderating role of psychological empowerment. *Frontiers in Psychology*, 13, 811330.
- Kalmuk, G., & Acar, A. Z. (2015). The mediating role of organizational learning capability on the relationship between innovation and firm's performance: A conceptual framework. *Procedia-Social and Behavioral Sciences*, 210, 164-169.
- Ledford, A. B., Hyre, A., Harris, G., Purdy, G., & Hedberg Jr, T. (2024). Origin of the Fourth Industrial Revolution: manufacturing predictions preceding Industrie 4.0. *Journal of Science and Technology Policy Management*.
- Li, X., Tan, Y., & Xue, D. (2022). From world factory to global city-region: the dynamics of manufacturing in the Pearl River Delta and its spatial pattern in the 21st century. *Land*, 11(5), 625.
- Mogaji, I. M., & Dimingu, H. (2024). A Conceptual Exploration of the Impact of Leadership Styles on the Innovative Culture of Organizations. *Open Journal of Leadership*, 13(2), 136-153.
- Nejati, M., & Shafaei, A. (2023). The role of inclusive leadership in fostering organisational learning behaviour. *Management Research Review*, 46(12), 1661-1678.
- Ninduwezuor-Ehiobu, N., Tula, O. A., Daraojimba, C., Ofonagoro, K. A., Ogunjobi, O. A., Gidiagba J. O., ... & Bansa, A. A. (2023). Exploring innovative material integration in modern manufacturing for advancing us competitiveness in sustainable global economy. *Engineering Science & Technology Journal*, 4(3), 140-168.
- Ren, L., & Shen, H. (2024). The relationship between servant leadership and team innovation performance: Mediating effect of self-efficacy. *Heliyon*, 10(6).
- Tian, H., Dogbe, C. S. K., Pomegbe, W. W. K., Sarsah, S. A., & Otoo, C. O. A. (2021). Organizational learning ambidexterity and openness, as determinants of SMEs' innovation performance. *European Journal of Innovation Management*, 24(2), 414-438.
- Tidd, J., & Bessant, J. R. (2020). *Managing innovation: integrating technological, market and organizational change*. John Wiley & Sons.
- Tran, T. B. H., & Choi, S. B. (2019). Effects of inclusive leadership on organizational citizenship behavior: the mediating roles of organizational justice and learning culture. *Journal of Pacific Rim Psychology*, 13, e17.
- Tripathi, A., & Kalia, P. (2024). Examining the effects of supportive work environment and organisational learning culture on organisational performance in information technology companies: The mediating role of learning agility and organisational innovation. *Innovation*, 26(2), 257-277.
- 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*, 111-115.

Zafar, S., Raziq, M. M., Igoe, J., Moazzam, M., & Ozturk, I. (2024). Inclusive leadership and innovative work behavior: Roles of autonomous motivation and horizontal and vertical trust. *Current Psychology*, 43(14), 12680-12695.

Zhang, G., & Zhao, W. (2024). The impact of inclusive leadership on employees' innovative behavior—an intermediary model with moderation. *Leadership & Organization Development Journal*, 45(1), 64-81.

Zhong, J., Li, Y., & Luo, J. (2022). The trickle-down effects of inclusive leadership on employees' innovative behavior: the joint moderating effects of vicarious learning and organizational inclusion climate. *Journal of leadership & organizational studies*, 29(3), 342-358.