SERVANT LEADERSHIP, ORGANIZATIONAL INNOVATION CLIMATE, AND INNOVATION PERFORMANCE: THE MEDIATING ROLE OF INNOVATION CAPABILITY

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Abstract
This study aims to explore the mechanism through which service-oriented leadership and organizational innovation climate influence innovation performance via innovation capability. A literature review initially constructed a theoretical model based on social exchange theory and dynamic capability theory, delineating the relationships among service-oriented leadership, organizational innovation climate, innovation capability, and innovation performance. Subsequently, a survey was conducted among employees of service-oriented enterprises in Jiangxi Province, China, resulting in a sample of 200 responses. Statistical analysis was then performed using the mathematical programming software R, encompassing tests for reliability, validity, goodness of fit, common method bias, and multicollinearity. Descriptive statistics, analysis of variance, correlation analysis, regression analysis, confirmatory factor analysis, and structural equation modeling were subsequently conducted, along with the use of Preacher and Hayes techniques and Bootstrap techniques to verify the mediating effects. The research findings reveal a significant positive correlation between service-oriented leadership, organizational innovation climate, innovation capability, and innovation performance. Innovation capability acts as a mediator between service-oriented leadership and innovation performance, as well as between organizational innovation climate and innovation performance. In practical terms, the study provides actionable guidance for enterprise managers, emphasizing the critical roles of innovation capability, service-oriented leadership, and organizational innovation climate in innovation performance. These findings are of paramount importance for enhancing both the innovation capability and innovation performance of enterprises, while also offering new perspectives and methods for management practices.
Keywords: Servant Leadership, Organizational Innovation Climate, Innovation Capability, Innovation Performance

Introduction
Innovation serves as an effective means for enterprises to cope with market volatility and complexity (Le & Do, 2023) as well as to gain competitive advantage and ensure long-term sustainability (Al-Sharif, Ali, Jaharuddin, Abdulsamad, & Jandab, 2023). Innovation performance is one of the pivotal factors contributing to a company's competitive edge and organizational prosperity (Le & Do, 2023). Innovation performance refers to the company's efficacy in engaging in innovative activities concerning both products and processes (Hurtado-Palomino, De la Gala-Velásquez, & Ccorisapra-Quintana, 2022). According to (Al-Sharif et al., 2023), innovation performance is regarded as the pinnacle of outputs generated

by an organization's efforts to renew and improve ideas, services, or products at various stages within the innovation system. The pursuit of antecedents of innovative performance has been the central focus of numerous scholars (Andersson, Moen, & Brett, 2020; Le & Do, 2023). Among these antecedents, it is noteworthy that innovative capability holds a pivotal position in exerting influence over innovation performance (Hurtado-Palomino et al., 2022; Zhao, Song, & Li, 2018). This capability enables firms to adapt and thrive amidst dynamic market environments, thereby augmenting their competitive prowess (Hernandez-Perlines & Araya-Castillo, 2020) and contributing significantly to innovation success (Ferreira, Coelho, & Moutinho, 2020). The investigation of how to enhance the innovation capability of enterprises to achieve superior innovative performance warrants exploration and consideration. Nevertheless, there is a lack of research that explores the underlying intrinsic mechanisms connecting these variables. Building upon existing literature, the present study endeavors to explore the inherent interrelationships among servant leadership, organizational innovation climate, innovation capability, and innovation performance.

Innovation capability has been defined as an organization's capacity to effectively adopt and implement novel ideas, processes, or products (Sangeeta et al., 2020; Hernandez-Perlines & Araya-Castillo, 2020; Hult, Hurley, & Knight, 2004; Hurley & Hult, 1998; Yu & Ibrahim, 2020; Zhang, et al 2023a). The definition in question has garnered significant acceptance and utilization among scholars within the respective academic discipline. Over time, the scope of innovation capability has expanded to encompass business models (Andersson et al., 2020; Zawislak et al., 2012a) and services (Yusof et al., 2022).

Servant leadership is acknowledged as a holistic leadership approach (Liden et al., 2015; Saleem et al., 2022) that prioritizes the needs of followers (Greenleaf, 1970), facilitates their development and growth (Saleem et al., 2022), encourages the full realization of their potential, provides both material and emotional support (Liden, Wayne, Liao, & Meuser, 2014), and ultimately contributes to organizational success (Ahmad et al., 2021). Numerous studies have provided evidence of the positive impact of different leadership styles on innovation performance. These styles include transformational and transactional leadership (Cui, Lim, & Song, 2022), knowledge-oriented leadership (Gürlek & Çemberci, 2020; Le & Do, 2023), ethical leadership (Ullah, Mirza, & Jamil, 2021), and ambidextrous leadership (Gerlach, Hundeling, & Rosing, 2020). Nevertheless, the correlation between servant leadership and the performance of innovation has not been thoroughly investigated. Several scholars have posited that the implementation of servant leadership within an organization can yield favorable outcomes in terms of organizational performance (Hernandez-Perlines & Araya-Castillo, 2020; Huang et al., 2016; Li et al., 2014) and employee innovation performance (Sun, 2016). However, there remains a dearth of research that specifically examines the impact of servant leadership on enhancing innovation performance at the organizational level. In light of this, the present study seeks to delve deeper into the underlying mechanism linking servant leadership and organizational innovation performance, with the purpose of contributing novel insights to the existing literature on leadership and organizational theory.

Organizational innovation climate refers to employees' perceptions of the level of support for innovation within the work environment (Amabile, 1997). Expanding on the aforementioned basis, organizational innovation climate is defined as an individual's subjective perception of

the level of support for innovation provided by organizational policies, management behaviors, organizational processes, and other elements within the organizational environment. Essentially, organizational innovation climate represents the social support employees receive in their work environment, encompassing support from colleagues, supervisors, and the organization itself (Ding et al, 2022a; Liu & Shi, 2009). Despite numerous scholars having confirmed the positive correlation between innovation climate and innovation performance (Shuang & Chen, 2022; Ling, 2021), there remains a need for additional investigation into the underlying mechanisms that explain how the innovation climate exerts its influence on innovation performance. Thus, this research endeavors to consider the innovation climate as a crucial predictor variable affecting innovation performance, with the intention of providing additional insights to the extant scholarly literature.

In essence, this study aims to examine the direct effects of servant leadership, organizational innovation climate, and innovation capability on innovation performance. Furthermore, the research seeks to delve into the potential mediating role of innovation capability in the linkages between servant leadership and innovation performance, as well as between organizational innovation climate and innovation performance.

Research Objectives

1: To investigate the presence and nature of the impact of servant leadership on corporate innovation performance.

2: To explore whether the organizational innovation climate affects corporate innovation performance and, if so, the nature of this effect.

3: To assess the influence of innovation capability on innovation performance and to delineate the characteristics of this influence.

4: To determine whether innovation capability acts as a mediating factor between servant leadership and innovation performance.

5: To ascertain whether innovation capability mediates the relationship between organizational innovation climate and innovation performance.

Conceptual Framework

In conducting a literature review of servant leadership, organizational innovation climate, innovation performance, and innovation capability, this study has discerned interrelationships among these constructs. Grounded in the literature review, this research draws upon empirical findings about the influences of servant leadership on innovation capability and innovation performance, as well as the impact of organizational innovation climate on innovation capability and performance. Following the logic of “servant leadership - innovation capability - innovation performance and organizational innovation climate - innovation capability - innovation performance,” this study primarily investigates the mechanisms through which servant leadership and organizational innovation climate affect innovation performance via innovation capability. It explores the mediating role of innovation capability between servant leadership and innovation performance, as well as between organizational innovation climate and innovation performance. By delineating the logical connections among these variables, the theoretical framework of this research is proposed. The conceptual framework can be shown in Figure 1.

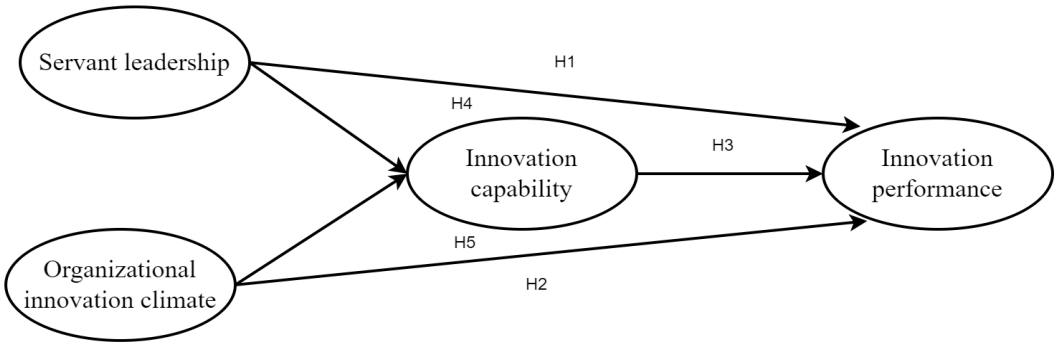

Figure 1 Conceptual Framework

Literature Reviews

Servant leadership

The roots of servant leadership can be traced back to ancient philosophical and religious traditions. For instance, the concept of leaders as servants is evident in Taoist texts like Lao-Tzu's "Tao Te Ching," where leadership is portrayed as an act of service. Similarly, Jesus' teachings in the Christian Gospels emphasize leading by serving others (Matthew 20:26, New Testament). Robert K. Greenleaf's Formulation Servant leadership first appeared in Herman Hesse's 1960 novel "Journey to the East". "Journey to the East", a 1960 novel by Herman Hesse. Journey to the East tells the story of Leo, a servant, who serves as a group leader during his journey to the East in order to maintain the "religious order" (Greenleaf, 1970).

Greenleaf (1970) was inspired by this book and first proposed the concept of "servant leadership", the core principle of servant leadership theory is that servant leaders prioritize the interests of their followers and put the needs of their subordinates first. and prioritize the needs of their subordinates over their own. The main reason for the focus on the leadership model is because in the late 1960s and early 1970s, American college campuses were in turmoil. It was an anti-authority, anti-establishment era and universities were relentlessly critical of all establishment leaders. As a consultant who advised corporations and universities on organizational management, Greenleaf was deeply troubled by faltering institutions that could not repair themselves. Like many writers of the period, the fear was that rebellious young people would be too preoccupied with dissecting mistakes and too caught up in the passion for instant perfection to add any lasting value to society. He recognized the need for students to be given hope and suggested that a better world could be created through a change in leadership patterns. Thus, he longed for a future in which "leaders will strive to serve with skill, understanding, and spirit, and followers will respond only to competent servants who will lead them" (Greenleaf, 1997, p. 4). The new servant leader must be a servant first and a leader second. The servant is motivated by "…… making sure that the highest priority needs of others are met" (Greenleaf, 1997, p. 13) (Page & Wong, 2000). From this point on, the concept of servant leadership formally entered the academic arena. Subsequently, Greenleaf published two books, "The Institution as Servant" (1972) and "Trustees as Servants" (1974).

In summary, the empirical research on servant leadership provides a comprehensive picture of its impact across various dimensions of organizational performance. From enhancing individual performance and employee satisfaction to fostering team collaboration and driving

organizational success, servant leadership emerges as a pivotal factor in shaping positive workplace environments and driving organizational growth and innovation.

Organizational Innovation Climate

The concept of organizational innovation climate (OIC) originates from the broader notion of "climate." Initially, the term was metaphorically used to describe the "atmosphere" employees perceive in their work environment (Lewin & Cartwright, 1953; McGregor, 1960). This early concept laid the foundation for a more structured notion of organizational climate. The roots of organizational climate can be traced back to the early 20th century, particularly in the work of industrial psychologists and organizational theorists who began recognizing the significance of psychological and social aspects in the workplace. (Lewin & Cartwright, 1953) is often credited with laying the groundwork for this concept, introducing the idea of examining organizations through a 'psychological atmosphere.' His field theory posited that individual behavior is a function of both the person and their environment. McGregor's Theory X and Theory Y contributed to understanding how managerial beliefs about human nature shape the organizational climate.

Forehand & Von Haller (1964) provided one of the first structured definitions of organizational climate, emphasizing its impact on individual behavior within organizations. (Litwin & Stringer, 1968)'s research led to the development of models linking organizational climate to motivation and job satisfaction. In the 1970s and 1980s, researchers began exploring the various dimensions of organizational climate and its relationship with specific outcomes like employee motivation, satisfaction, and performance (Schneider, 1975).

For instance, Schneider (1975) played a crucial role in operationalizing the concept, developing instruments for measuring organizational climate, and examining its impact on employee behavior. James & Sells (1981) expanded the study of organizational climate to include various sub-climates like safety, service, and innovation climate, highlighting the multifaceted nature of organizational environments. During this period, researchers started recognizing the specific impacts of different dimensions of organizational climate on various organizational outcomes. This led to the identification of different sub-climates, one of which is the innovation climate. As organizations increasingly viewed innovation as a key factor for competitiveness and growth, the need to understand specific environmental factors that foster innovation became more important. This led to a more focused study of the internal innovation climate within organizations. The organizational innovation climate began to be defined by aspects of the organizational environment that specifically encourage or support innovation.

Innovation Performance

The concept of innovation performance originates from the connotations of innovation and performance. In the early 19th century, Croitoru, 2012; Schumpeter & Opie (1934) first explicitly defined the concept of innovation, stating that it involves the creation of new knowledge or the transformation of existing knowledge into new products, technologies, methods, markets, supply sources, or organizational structures. Building upon this foundation, scholars have defined the concept of innovation from various perspectives. Van de Ven (1986) posited that innovation fundamentally concerns the creation and pursuit of opportunities to develop new products, services, or work practices. Similarly, Hurley & Hult (1998b) emphasized the capacity for innovation, defining it as an aspect of organizational

openness to new ideas and conceptualizations, denoting an organization's ability to successfully adopt or implement new ideas, processes, or products. Damanpour (1991) suggested that innovation can manifest as new products or services, production processes, structures or management systems, or plans relevant to organizational members. (Amabile, 1997) regarded innovation as a process involving creative thinking and the implementation or execution of these creative ideas. Robert (2004) viewed innovation as the process of combining novel elements of production factors and applying them to the process of production creation. Innovation has been defined as the process of transforming opportunities into new ideas (Drucker & Maciariello, 2014; Tidd & Bessant, 2020).

Deming (2018) considered the generation of new knowledge as innovation. (Borins, 2002) characterized innovation as the novel ideas and perspectives initially introduced by organizations. According to the Oslo Manual, innovation involves the implementation of new and significantly improved products (goods or services) or processes, new marketing methods, or new organizational methods in business practices, workplace organization, or external relationships.

Crossan & Apaydin (2010) defined innovation as the production or adoption, assimilation, and exploitation of novelty in the economic and social domains, renewing and enlarging products, services, and markets, developing new production methods, and establishing new management systems. (Garud, Tuertscher, & Van de Ven, 2013) broadly defined innovation as the invention, development, and implementation of new ideas. (Damanpour & Wischnevsky, 2006; Lai, Hsu, Lin, Chen, & Lin, 2014; Slater, Mohr, & Sengupta, 2014) viewed innovation as the creation or implementation of new, unique ideas, products, processes, or services that provide meaningful value to adopting firms. (Satalkina & Steiner, 2020) defined innovation as the tendency of enterprises to support new ideas, research and development, experiments, etc., to bring new products and processes to the market. Innovation is a comprehensive concept with rich content. Scholars in the field of innovation have diverse definitions of the concept of innovation, each emphasizing a particular aspect.

To date, a unified definition of innovation has not been achieved. However, from the existing definitions of the concept of innovation, it can be seen that there are two main perspectives: a process perspective and a result perspective. From a process perspective, the main considerations include whether the innovation subject is an organization or an individual, whether the driving force of innovation is market-driven or technology-driven, or other factors, and whether the innovation method is internal R&D or external acquisition. From a result perspective, the main considerations include whether the form of innovation is product innovation, process innovation, service innovation, or model innovation, and whether the type of innovation is management innovation, technological innovation, or process innovation. These provide valuable reference for defining the concept of innovation performance.

Performance is perceived as the operational results of a company, with various scholars defining it from different perspectives. (Bernardin & Beatty, 1984) proposed that performance could be delineated from results, behavior, and capability directions. (Brumbrach, 1988) saw the performance as a combination of behavior and results. (Steers, 1975) noted that performance's inherent connotations should be revealed through feasible measurements. (Kaplan et al., 1992) emphasized the role of outcome indicators in

performance evaluation through the Balanced Scorecard. (Campbell, 1990) defined performance as the quality of work behavior. (Campbell, 1999) argued that defining performance from behavior and capability perspectives could effectively supplement the outcome-oriented definitions. Yet, the concept of performance lacks a unified definition.

Research Methodology

This study utilizes quantitative research methodology, employing a questionnaire as the major instrument for data collection. The collected data underwent several statistical analyses, such as correlation, regression, and structural equation modeling (SEM) approaches. To investigate the mediating role of innovation capability, the methodology proposed by (Preacher & Hayes, 2004, 2008) was employed, utilizing 5000 Bootstrap replicated samples. The selection of this analytical methodology was made to enhance the precision and accuracy of the evaluation of the relationships and effects under investigation in the study.

Population and Sample

The study's population includes organizations that actively engage in innovative practices and highlight the importance of servant leadership, representing the multifaceted nature of the service industry in Jiangxi. This selection aims to provide a comprehensive understanding of how servant leadership influences the organizational innovation climate and, consequently, innovative performance. Jiangxi's strategic focus on developing unique industries based on its natural resources and cultural heritage aligns with the study's objective to assess innovation within regional Chinese enterprises. The province's economic goals and the service sector's evident growth underscore the suitability of this population for the present research, intending to offer relevant conclusions that can be generalized across similar economic settings.

In the pursuit of assessing the influence of leadership and organizational innovation climates within service-oriented enterprises on innovation performance, our research adopted a cluster sampling strategy. The methodology was employed to facilitate efficient data collection across a diverse, service-oriented workforce segmented into three distinct categories: state-owned enterprises, private enterprises, and mixed-ownership enterprises.

To commence the sampling process, a comprehensive list of service-oriented enterprises across the nation was assembled. The enterprises were then categorized into three primary clusters corresponding to their ownership type. This stratification served to reflect the structural diversity within the service sector.

Each cluster was then treated as an individual sampling unit from which a random sample could be drawn. The intention behind this stratification was to ensure that each category of enterprise ownership was fairly represented in the study, thus allowing for a more nuanced analysis of the variables in question.

Given the vast number of enterprises, a random starting point within each cluster was determined. Subsequently, a systematic sampling method was applied within each cluster to select participants. This was conducted until the target sample size for each cluster was achieved, ensuring equal representation across the different ownership types.

Ultimately, after the sampling process, the data collection proceeded with a final sample size of 200 respondents. This number was determined to be statistically sufficient to reflect the population's attitudes and behaviors, providing a 95% confidence level with a 5% margin of

error for the study's conclusions.

This cluster sampling approach ensured an efficient sampling process, mitigating potential biases that could arise from uneven distribution of the population. The final aggregation of data across different clusters facilitated a robust comparative analysis between state-owned, private, and mixed-ownership enterprises, thus enriching the study's findings on how varying organizational structures influence innovation performance.

Results

1) Results of hypothesis of H1, H2, and H3

The data presented in Table 1 regarding the hypothesized relationships between servant leadership (SL), organizational innovation climate (OIC), innovation capability (IC), and innovation performance (IP) offer robust support for the proposed model.

The standardized path coefficients presented in Table 4-14 are indicative of the strength and direction of the relationships between the variables within the hypothesized model. Specifically:

The path from servant leadership (SL) to innovation performance (IP) has a standardized coefficient (Beta) of 0.172. The corresponding z-value of 3.036, along with a p-value of 0.002, substantiates the statistical significance of this relationship. The confidence interval (CI), ranging from 0.061 to 0.284, does not cross zero, further solidifying the positive direction of this relationship, thus affirming Hypothesis H1.

The path from organizational innovation climate (OIC) to innovation performance (IP) yields a Beta of 0.168, with a z-value of 2.382 and a p-value of 0.017. This result surpasses the conventional alpha level of 0.05 for statistical significance. The CI for this estimate (0.030 to 0.306) also precludes the null value, which confirms the positive influence of OIC on IP, thereby providing support for Hypothesis H2.

The relationship between innovation capability (IC) and innovation performance (IP) is particularly strong, evidenced by a Beta of 0.500. This path's statistical significance is profound, with a z-value of 6.240 and a p-value less than 0.001. The CI for this effect (0.343 to 0.658) is well above zero, indicating a robust positive effect. This underscores IC as a substantial determinant of IP, leading to the acceptance of Hypothesis H3.

In synthesizing these results, it is evident that both servant leadership and organizational innovation climate positively contribute to innovation performance, with innovation capability acting as a powerful mediating factor. This finding is critical as it elucidates the mechanisms through which leadership and organizational climate exert their influence on an enterprise's innovative outcomes. The effect sizes are sufficiently large to be considered practically significant within the context of organizational studies, and the statistical robustness of these findings lends credibility to the proposed theoretical framework.

Overall, these results support the notion that fostering a supportive leadership style and a conducive climate for innovation are vital for enhancing an organization's innovative capabilities and outcomes. The documented effects reinforce the importance of strategic organizational behaviors and resources in nurturing the innovative potential that leads to performance gains.

Standardized path coefficient significance output results can be seen in Table 4-14.

Table 1 Results of Hypothesis of H1, H2, and H3

Details	Beta	se	z	p	ci.lower	ci.upper	Results
SL -> IP	0.172	0.057	3.036	0.002	0.061	0.284	H1-Supported
OIC -> IP	0.168	0.070	2.382	0.017	0.030	0.306	H2-Supported
IC -> IP	0.500	0.080	6.240	0.000	0.343	0.658	H3-Supported

Note(s): SL = servant leadership; OIC = organizational innovation climate; IC = innovation capability; IP = innovation performance.

2) Results of hypothesis of H4, H5

The study employed the technique proposed by (Preacher & Hayes, 2004, 2008) and conducted 5000 bootstrap analyses at a 95% confidence level to test hypotheses H4 and H5. Table 2 presents the path coefficients used to test H4. The specific results are as follows: Path a (SL→IC) supports that servant leadership predicts innovation capability (Beta = 0.488, $p < 0.05$). Path b (IC→IP) supports the direct effect of innovation capability on innovation performance (Beta = 0.500, $p < 0.05$), controlling for servant leadership. Path c (SL→IP) demonstrates the total effect of servant leadership on innovation performance (Beta = 0.416, $p < 0.05$). Path c' (SL→IP) shows the direct effect of servant leadership on innovation performance after controlling innovation capability (Beta = 0.172, $p < 0.05$). This direct effect is reduced and significant, suggesting that innovation capability partially mediates the relationship between servant leadership and innovation performance. Path ab (SL→IC→IP) results show that innovation capability plays a significant indirect role in the mediation model (Beta = 0.244, Lower = 0.152, Upper = 0.336). Based on the aforementioned data, H4 is proven to show the link between servant leadership and innovation performance is mediated through innovation capability. Results of hypothesis of H4 can be seen in Table 2.

Table 2 Results of H4 (Path a, b, c and c')

Label	Beta	Se	z	p-value	ci.lower	ci.upper
Path a (SL -> IC)	0.488	0.063	7.758	0.000	0.364	0.611
Path b (IC -> IP)	0.500	0.080	6.240	0.000	0.343	0.658
Path c (SL -> IP)	0.416	0.057	7.323	0.000	0.305	0.528
Path c' (SL -> IP)	0.172	0.057	3.036	0.002	0.061	0.284
Path ab (SL -> IC-> IP)	0.244	0.047	5.215	0.000	0.152	0.336

Note(s): SL = servant leadership; OIC = organizational innovation climate; IC = innovation capability; IP = innovation performance

Similarly, Table 3 presents the path coefficients used to test hypothesis H5. The results are as follows: Path a (OIC→IC) supports that organizational innovation climate predicts innovation capability (Beta = 0.184, $p < 0.05$). Path b (IC→IP) supports the direct effect of innovation capability on innovation performance (Beta = 0.500, $p < 0.05$). Path c (OIC→IP) shows the overall effect of organizational innovation climate on innovation performance (Beta = 0.260, $p < 0.05$). Path c' (OIC→IP) shows that the inclusion of the mediating variable innovation capability reduces the effect of organizational innovation climate on innovation performance, confirming the partial mediating effect (Beta = 0.168, $P < 0.05$). Path ab (OIC→IC→IP) supports the mediating role of innovation capability between organizational innovation climate and innovation performance (Beta = 0.092, Lower = 0.003,

Upper = 0.181). Therefore, hypothesis H5 is accepted. Results of hypothesis of H5 can be seen in Table 3.

Table 3 Results of H5 (Path a, b, c and c')

Label	Beta	Se	z	p-value	ci.lower	ci.upper
Path a (OIC -> IC)	0.184	0.087	2.124	0.034	0.014	0.355
Path b (IC -> IP)	0.500	0.080	6.240	0.000	0.343	0.658
Path c (OIC -> IP)	0.260	0.080	3.233	0.001	0.102	0.417
Path c' (OIC -> IP)	0.168	0.070	2.382	0.017	0.030	0.306
Path ab (OIC -> IC-> IP)	0.092	0.045	2.035	0.042	0.003	0.181

Note(s): SL = servant leadership; OIC = organizational innovation climate; IC = innovation capability; IP = innovation performance

All path coefficients and the results of the hypotheses are also presented in Figure 2.

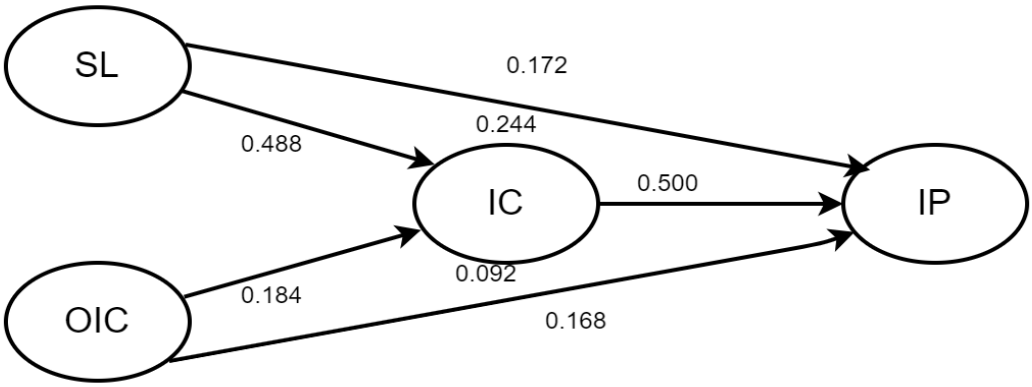

Figure 2. Results of H1, H2, H3, H4 and H5

Discussion

This study investigates the interplay and intrinsic mechanisms among servant leadership, organizational innovation climate, innovation capability, and innovation performance. The findings confirm the significant positive impact of innovation capability on innovation performance, consistent with the research by (Al-Sharif et al., 2023) and (Hurtado-Palomino et al., 2022), further emphasizing the critical role of innovation capability in organizational performance.

Moreover, the study discovered a positive correlation between servant leadership and organizational innovation performance, providing new evidence for the application of servant leadership theory in the field of innovation management and extending the research results of (Hernandez-Perlines & Araya-Castillo, 2020; Sun, 2016).

Additionally, the organizational innovation climate was found to positively impact innovation performance, aligning with findings by (Shuang & Chen, 2022; Yihua et al., 2021), highlighting the significance of the innovation climate in stimulating organizational innovation activities.

Furthermore, this research reveals the mediating role of innovation capability in the relationship between servant leadership and innovation performance, as well as between the organizational innovation climate and innovation performance, offering a new perspective to understand the complex relationships among these variables.

Conclusion

This study provides empirical evidence for the relationships among servant leadership, organizational innovation climate, innovation capability, and innovation performance. Firstly, this research confirms that innovation capability is a key factor in driving organizational innovation performance. Secondly, the results demonstrate that servant leadership has a direct and indirect (through innovation capability) positive impact on organizational innovation performance. Furthermore, the positive effect of the organizational innovation climate on innovation performance, along with its mediating effect through innovation capability, offers insights into how organizations can create an environment conducive to innovation. These findings not only enrich the theoretical research in the relevant fields but also provide guidance for management practices, emphasizing the importance of cultivating servant leadership and optimizing the organizational innovation climate. In summary, this study constructs and validates a comprehensive model, revealing the mechanisms through which servant leadership and organizational innovation climate impact innovation performance via innovation capability. Future research could further explore the roles of these variables across different industries and cultural contexts, as well as examine other potential mediating or moderating variables, to gain a deeper understanding.

Recommendations

Enhancing corporate innovation capabilities necessitates the combined influence of servant leadership and an innovative atmosphere. Servant leaders, by focusing on employee growth and needs, as well as empowerment and support, can ignite employees' intrinsic motivation and innovative spirit. This leadership style not only boosts employee satisfaction and engagement but also strengthens team cohesion and innovative capacity. Initially, servant leaders should advocate for innovation, encouraging team members to propose new ideas and try new methods, providing support and learning opportunities in the face of failure. Leaders should listen to employee feedback, recognize, and reward innovative behavior to foster an environment that encourages exploration and experimentation.

Secondly, creating a positive organizational innovation atmosphere is crucial. It involves establishing an open, supportive, and collaborative work environment where employees feel their innovations are valued and encouraged. Organizations should provide necessary resources and tools, support cross-departmental cooperation, and facilitate knowledge sharing and collective intelligence formation.

Furthermore, businesses should regularly assess and optimize innovation processes to ensure their flexibility and efficiency. By setting clear innovation goals and metrics, companies can track progress, identify challenges, and adjust strategies timely. Lastly, enterprises should advocate a culture of learning and adaptation, encouraging employees to engage in continuous learning and self-improvement. In the ever-changing market environment, by nurturing leaders with servant leadership traits and fostering a positive innovation atmosphere, businesses can effectively enhance employees' innovative abilities, thereby strengthening the overall innovation capability of the enterprise.

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