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**Adapting to the New Era: Paradoxical Leadership to Manage
the Paradox of Service Innovation in the Tourism and
Hospitality Industry**

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Adapting to the New Era: Paradoxical Leadership to Manage the Paradox of Service Innovation in the Tourism and Hospitality Industry

Abstract

Purpose: This study aims to explain the paradoxical nature of service innovation behavior (SIB) in the tourism and hospitality industry by examining how paradoxical leadership behavior (PLB), growth mindset (GMS), and personal innovativeness (PINN) influence innovation outcomes.

Methodology: Using structural equation modeling, the study analyzes two-wave, six-week time-lagged survey data from 341 frontline employees (FLEs) in Pakistan’s tourism and hospitality industry.

Findings: The results show that PLB significantly enhances SIB by fostering GMS, which mediates the relationship between leadership behavior and innovation. Additionally, PINN moderates the effect of GMS on SIB, amplifying innovation for employees with higher PINN levels. These findings contribute to paradox theory by demonstrating how PLB reconciles the tension between stability and adaptability, fostering a mutually reinforcing environment for innovation.

Practical Implications: The study suggests that managers in tourism and hospitality settings should create leadership environments that balance creativity with service standards while encouraging employees’ individual innovativeness. Specifically, PLB can drive innovation by fostering GMS among employees while recognizing that PINN can amplify the effect of GMS on SIB.

Originality/Value: This research introduces an improved framework for understanding how leadership can guide employees to thrive within the paradoxical demands of modern service innovation. It expands paradox theory by empirically demonstrating how leadership can manage conflicting demands to enhance service innovation in the tourism and hospitality industry.

Keywords: Innovativeness; Paradox; Service Innovation; Leadership; Mindset; Innovation

1. Introduction

The service industry has emerged as a dominant force in the global economy, contributing significantly to the gross domestic product (GDP) (Tajeddini et al., 2020). Many economies, particularly those in developed nations, have transitioned from production-oriented to service-oriented models, with service organizations becoming central to innovation-driven strategies (Dang-Van et al., 2024). In Pakistan, for instance, the services sector accounts for over 50% of the country’s GDP (Government of Pakistan, 2023), marking a transformative phase in the nation’s economic structure. As Pakistan transitions from a primarily manufacturing-based economy to a service-driven one, the tourism and hospitality industry is a key sector in this transformation, contributing to the economy’s growth by catering to local and international demands. According to Moore and Phillips (2024), the tourism industry in Pakistan has shown an improvement of 20 points in the World Economic Forum’s Travel & Tourism Development Index, recovering remarkably from the impacts of COVID-19.

However, the tourism and hospitality industry in Pakistan is grappling with a series of entrenched challenges that hinder the effective management of service innovation (Ambreen et al., 2025). These challenges are exacerbated by the country's extreme institutional voids, including political instability, inadequate infrastructure, and regulatory inefficiencies, all of which add complexity to the task of fostering service innovation (Arshad et al., 2018). For instance, Pakistan's National Tourism Strategy (launched in 2020) aimed to boost tourism in the country but was slow to implement due to bureaucratic delays and regulatory bottlenecks. It created uncertainty because managers had to deal with delayed permits, unclear policies, and inconsistent regulatory enforcement. Similarly, a manager may wish to introduce an AI-based service that personalizes guest experiences, but the lack of reliable internet access in remote tourist locations could undermine the successful implementation of this technology (Buhalis et al., 2019). In such paradoxical situations, managers in the tourism and hospitality sector need to be adaptable and respond quickly to changing regulations and political climates (Madaan et al., 2025). PLB allows leaders to remain grounded in operational stability (e.g., adhering to service standards and regulations) while also maintaining flexibility to innovate as needed (Ambreen et al., 2025; Arshad et al., 2018). They need to encourage frontline employees (FLEs) to find creative solutions within the confines of the regulatory changes, maintaining service standards while responding to the political shifts (Liu et al., 2024).

Service innovation in the tourism and hospitality industry requires navigating a complex paradox: employees are expected to innovate, but they must do so while maintaining strict adherence to operational consistency and service standards (Han & Bai, 2020). This paradox is rooted in the broader theoretical framework of paradox theory, which explores how organizations can manage contradictory demands simultaneously (Smith & Lewis, 2011). Paradox theory asserts that organizations must embrace the coexistence of opposites, such as stability and change, to foster resilience and adaptability (Smith & Tracey, 2016). In the context of service innovation, employees must simultaneously innovate and maintain the reliability and consistency that customers expect in service delivery. This duality often leads to friction, with employees torn between maintaining established procedures and embracing new ideas (Rasheed et al., 2024). These paradoxes are particularly pronounced in the tourism and hospitality sectors, where the demands for both standardized service quality and continuous innovation create tensions that hinder effective service innovation (Baum et al., 2020).

While it is found in the literature that leadership plays a role in innovation, we do not really know how leaders handle these conflicting demands, especially in cultures where power differences are large and institutions are weak. Furthermore, much of the literature fails to account for the unique challenges faced by emerging markets like Pakistan, where institutional voids and cultural factors significantly shape how service innovation is implemented and managed (Van Riel et al., 2019). This oversight is significant because existing research provides an incomplete picture, failing to integrate this duality into theoretical frameworks. It offers solutions that may succeed under one set of conditions (e.g., encouraging creativity) but falter under others (e.g., maintaining service consistency). Moreover, the applicability will be significantly difficult in less stable environments.

In this context, paradoxical leadership behavior (PLB) offers a promising framework for managing the tension between innovation and stability. Drawing on paradox theory, PLB is a leadership approach that embraces contradictory demands, enabling leaders to create an environment in which

both innovation and operational consistency can coexist (Zhang et al., 2015). Incorporating PLB into the management of service innovation, leaders can support employees in balancing creativity with operational consistency, thus fostering a culture of innovation within the constraints of standardized service delivery (Zhang et al., 2022). The question arises: How can PLB resolve the service innovation paradox in a high-power-distance, resource-constrained culture like Pakistan's, where traditional leadership models often fail to bridge the gap between stability and change?

This study aims to address this critical gap by examining how PLB influences SIB in Pakistan's tourism and hospitality industry, specifically through its impact on employees' growth mindset and personal innovativeness. According to paradox theory, employees with a growth mindset are better equipped to manage paradoxes, as they see challenges as opportunities for learning and development (Dweck, 2016). Additionally, personal innovativeness allows employees to embrace change and contribute to innovation, further helping to mitigate the tension between stability and innovation. Therefore, this research addresses how PLB influences SIB in Pakistan's tourism and hospitality industry.? How do growth mindset and personal innovativeness mediate and moderate the relationship between PLB and SIB? This is the first study to empirically test how paradoxical leadership, mediated by a growth mindset and moderated by personal innovativeness, resolves service innovation paradoxes in a resource-constrained, high-power-distance culture.

The contribution of this study is twofold: First, it enhances paradox theory by empirically examining how PLB can bridge the tension between stability and adaptability in the context of service innovation. Second, it provides actionable insights for tourism and hospitality managers in Pakistan, illustrating how leadership can create an environment that supports both creativity and operational consistency. Given the unique challenges posed by Pakistan's political instability, infrastructure gaps, and regulatory complexities, the study provides a novel approach to leadership in a resource-constrained, high-power-distance culture, offering a blueprint for managing service innovation in such contexts. By investigating these dynamics, this research offers a deeper understanding of how paradoxical leadership can guide employees in navigating the complexities of service innovation in the tourism and hospitality sector. This study, therefore, holds disruptive potential by introducing a new perspective on how PLB can bridge the gap between innovation and stability in a rapidly transforming sector.

2. Theoretical Framework

Paradox theory offers a unique perspective on managing the inherent tensions between conflicting demands, such as the need to maintain service reliability while fostering creativity in service innovation (Smith & Lewis, 2011). The existing frameworks, like ambidexterity, treat exploration and exploitation as separate, sometimes competing activities (O'Reilly & Tushman, 2013). Ambidextrous leadership assumes that organizations must choose to either focus on innovation or maintain operational consistency (Tajeddini et al., 2024; Thanh et al., 2020). This approach can limit organizations in tourism and hospitality, where there is constant pressure to innovate while maintaining high standards of service reliability. Ambidextrous leadership may struggle to reconcile these dual imperatives in real-time, as it often requires shifting focus between innovation and efficiency, potentially leading to strategic dissonance and organizational friction (Smith et al., 2016). Similarly, contingency theory posits that the best way to manage tensions depends on the alignment between organizational strategies and external environmental conditions. It suggests

that the fit between the two dictates the effectiveness of handling conflicting demands (Dang-Van et al., 2024). Unlike these frameworks, paradox theory presents these tensions as inherent and valuable, viewing them as complementary forces that can coexist and even drive growth when managed effectively (Smith & Tracey, 2016; Zha et al., 2024). It encourages leaders to embrace contradictory demands (e.g., stability vs. adaptability) and find ways for them to coexist within organizational practices.

Studies in tourism and hospitality have shown that firms within the sector face continual pressure to innovate while upholding the service quality standards that customers expect (Baum et al., 2020; Han & Bai, 2020). The tourism industry, by nature, involves standardized service procedures (such as hotel check-ins, guided tours, and flight operations) that require reliability and consistency to ensure customer satisfaction (Tajeddini et al., 2024). Yet, innovation is increasingly demanded to meet the evolving expectations of travelers who seek unique, personalized experiences (Kabangire & Korir, 2023). In this regard, paradox theory offers an invaluable framework for managing these competing demands in ways that are not only manageable but can result in a more resilient and adaptable organizational approach. PLB, drawing on paradox theory, provides a leadership approach that embraces these contradictions, allowing leaders to manage both creativity and control within their organizations (Smith & Tracey, 2016; Zhang et al., 2015). In the tourism and hospitality industry, this can manifest in the form of leaders who encourage employees to innovate within the bounds of organizational procedures and quality standards, ensuring that new ideas do not disrupt the core competencies of the business (Shehata et al., 2023).

In leveraging these tensions, PLB fosters a growth mindset among employees, enabling them to view challenges as opportunities for learning and growth (Dweck, 2016; Wang et al., 2025). The business environment in the tourism and hospitality sector is constantly evolving with new travel trends, customer demands, and technological advancements. Employees with a growth mindset are better equipped to view challenges as opportunities for development and innovation (Dweck & Yeager, 2019; Han & Stieha, 2020; Yodchai et al., 2022). In addition, personal innovativeness further enhances the effectiveness of this framework by empowering employees to leverage their creative potential, turning growth-oriented perspectives into actionable outcomes, which drives sustained innovation (Caniëls et al., 2018; Hateftabar, 2023). Therefore, integrating PLB to frame the tensions, a growth mindset to motivate psychological engagement, and personal innovativeness to enable behavioral execution, this model provides a multi-level, dynamic explanation of how employees can successfully navigate the inherent tensions of SIB. It offers a more actionable framework than merely identifying or contextualizing the paradox. The conceptual framework based on paradox theory is presented in Figure 1.

3. Hypothesis Development

3.1. Paradoxical Leadership Behavior and Service Innovation Behavior

The tourism and hospitality industry is inherently dynamic and service-intensive, requiring organizations to balance the paradox of delivering customized services while maintaining operational efficiency (Tajeddini et al., 2024). SIB encompasses generating, promoting, and implementing novel solutions to address these needs within established operational frameworks (Hu et al., 2009). It often involves reconciling the tension between standardization and personalization, such as creating unique travel itineraries while adhering to standardized protocols.

Paradox theory posits that such tensions can act as catalysts for creativity and innovation when effectively managed (Smith & Lewis, 2011; Wei et al., 2024). PLB exhibits that integrating innovation with operational discipline is possible, empowering employees to navigate complexity and fostering a culture where SIB thrives (Shehata et al., 2023).

Khan and Ullah (2025) highlighted that employees' creative performance is enhanced by embracing paradoxes. It enables them to excel under competing demands. Zhang et al. (2022) argue that PLB creates an environment where employees feel supported in exploring innovative solutions while maintaining disciplined execution. Similarly, Zhang and Liu (2022) demonstrate that PLB fosters employee ambidexterity, allowing them to balance exploration (creativity) and exploitation (efficiency). Moreover, Khan and Ullah (2025) suggest that leaders who effectively manage contradictory demands can significantly enhance their team's ability to engage in both explorative and exploitative activities, leading to higher levels of innovation. A paradoxical leader might, for example, encourage FLEs to personalize customer experiences using advanced digital tools while adhering to safety protocols and corporate guidelines (Rescalvo-Martin et al., 2021; Tan et al., 2024). This dual focus not only enhances the innovative capabilities of employees but also ensures the sustainability of service delivery. Therefore, PLB plays a pivotal role in the tourism and hospitality industry, where service innovation often requires integrating customer feedback with digital tools and operational guidelines. Hence, it can be hypothesized that:

H₁: Paradoxical leadership behavior positively and significantly affects service innovation behavior

3.2. Mediating Role of Growth Mindset

The GMS is a belief that abilities and intelligence can be developed through effort, persistence, and effective strategies (Dweck, 2016). The core of a growth mindset is the view of failure not as evidence of unintelligence but as a heartening springboard for growth and for stretching existing abilities. The literature highlights the role of leaders in shaping employees' beliefs about effort and achievement (Khan et al., 2025; Wei et al., 2024). PLB reinforces the core tenets of GMS by empowering employees to believe in their potential for improvement through deliberate effort and practice (Sigmundsson & Haga, 2024b). Yang et al. (2024) highlighted that leaders who practice PLB empower employees to view failures as part of the learning process, which is a key characteristic of a GMS. Fürstenberg et al. (2021) have shown that employees exposed to paradoxical leadership demonstrate higher motivation to set and pursue challenging goals as they are encouraged to shift their focus from fixed outcomes to developmental pathways. In dynamic industries like tourism and hospitality, where innovation and adaptability are vital, PLB helps employees reconcile the paradox of meeting high operational standards while experimenting with new approaches to service delivery (Madaan et al., 2025).

Unlike those with a fixed mindset, who may seek external validation or avoid challenges to protect their self-image, GMS intrinsically motivates employees to develop their capabilities and embrace challenges as opportunities to grow (Dweck, 2016; Wang et al., 2025). This intrinsic motivation is crucial in the context of SIB, which often involves navigating complex customer needs, rapidly changing market demands, and ambiguous problem-solving scenarios (Abuelhassan et al., 2024). Dweck (2016) highlights that organizational environments that foster GMS encourage appropriate

risk-taking and reward employees for important lessons learned, even if a project does not meet its original goals. This organizational support is critical for fostering a culture of innovation, as it reduces the fear of failure and encourages employees to experiment with new ideas (Kabangire & Korir, 2023). Krskova and Breyer (2023) found that GMS is a critical predictor of innovative behavior, as it facilitates a culture where individuals are motivated to pursue challenges and develop their competencies continuously. It underscores the importance of how personal attributes, such as a GMS, interact with workplace dynamics, including leadership styles and personal strengths utilization, to foster innovative behaviors.

Thus, GMS provides a critical psychological mechanism for navigating cognitive tension and stress created by conflicting demands of SIB in its paradoxical sense (Krskova & Breyer, 2023). PLB reduces the fear of failure and fosters a psychological environment where GMS can flourish, ultimately enhancing employees' capacity for SIB (Wei et al., 2024; Zhang et al., 2022). Sigmundsson and Haga (2024a) supports the role of GMS in fostering motivation, achievement, and well-being. Their findings indicate that individuals with a GMS are more likely to engage in mastery-oriented strategies and view challenges as opportunities for growth, aligning with SIB's demands. Therefore, GMS enhances individual resilience and fosters a culture of continuous learning and improvement, which is essential for driving innovation in service contexts. Hence, it can be hypothesized that:

Therefore, it can be hypothesized that:

H₂: Paradoxical leadership behavior has a positive impact on the growth mindset of employees.

H₃: Growth mindset positively affects the service innovation behavior of employees

H₄: Growth mindset mediates the relationship between paradoxical leadership behavior and employee service innovation behavior.

3.3. Moderating Role of Personal Innovativeness

Personal innovativeness (PINN), as conceptualized by Steenkamp et al. (1999), is defined as the individual's predisposition to not only engage with new ideas but also to seek out and embrace new challenges, products, and processes. This disposition is characterized by higher levels of optimum stimulation, openness to change, independence, risk-taking, venturesomeness, and a lower tendency toward dogmatism and conservation (Steenkamp & Gielens, 2003). In an organizational setting, PINN serves as a critical catalyst for innovation, ensuring that the ideas generated through learning are not only creative but also practically viable (Hateftabar, 2023). However, in cultures with strong hierarchical norms, such as Pakistan, PINN can be significantly constrained without proper leadership support (Abubakre et al., 2022). In high power distance cultures, employees at lower levels feel less empowered to take risks or challenge existing norms (Tang et al., 2020). This cultural dynamic can suppress PINN, as employees may fear repercussions for proposing unconventional ideas, particularly if such suggestions challenge established processes or authority figures. PLB, grounded in paradox theory, provides a novel way to overcome these barriers (Khan & Ullah, 2025). Unlike traditional leadership models, PLB embraces contradictions and manages conflicting demands, such as innovation and stability, simultaneously (Smith & Lewis, 2011). Thus, in the context of high power-distance cultures like

Pakistan, PLB offers a dynamic approach that enables leaders to empower employees while still maintaining respect for authority and hierarchical norms.

Caniels et al. (2018) found the importance of personal traits (like a proactive personality) in magnifying the impact of a growth mindset. This analogy supports the notion that employees high on PINN are naturally inclined to embrace and drive new ideas and will likely benefit more from GMS. This is because their inherent willingness to innovate makes them more receptive to the growth and learning opportunities a GMS offers. Janapati and Vijayalakshmi (2024) found that employees with high levels of PINN were more likely to translate their strengths into innovative actions, suggesting that PINN acts as a catalyst for innovation. Also, Chao et al. (2017) showed that when individuals with a GMS were provided with performance-based incentives, they were more likely to translate their mindset into action and achieve better outcomes. Just as incentives provide an external push to translate GMS into action, PINN provides an internal drive to act on a GMS by encouraging individuals to take risks, experiment with new ideas, and embrace change. In this sense, PINN can be seen as a psychological incentive that amplifies the positive effects of GMS on SIB. Therefore, it can be hypothesized that:

H₅: Personal innovativeness amplifies the effect of a growth mindset on service innovation behavior.

3.4. Mediated Moderation

PINN moderates the mediating pathway by influencing how effectively GMS translates the enabling effects of PLB into SIB. Employees with higher PINN are naturally inclined to generate, refine, and implement creative ideas. Their natural predisposition toward creativity and implementation complements the resilience and learning orientation provided by GMS, strengthening the indirect effect of PLB on SIB. Thus, the mediating role of GMS is contingent on PINN, which dynamically shapes how the mindset translates into SIB. Therefore, it can be hypothesized that:

H₆: Personal innovativeness moderates the mediated effect of paradoxical leadership behavior on service innovation behavior through a growth mindset.

[Please, place Figure 1 around here]

4. Research Methodology

4.1. Sampling Data Collection

The data was collected from FLEs in tourism and hospitality organizations in Pakistan. The tourist hotspots, including Murree, Gilgit, Hunza, Skardu, Kashmir, Naran, Swat, Lahore, Multan, Islamabad, Karachi, Peshawar, and Quetta, were targeted for data collection. These areas are renowned for their scenic beauty and cultural heritage, attracting local and international tourists, and hold significant importance in Pakistan’s tourism and hospitality industry (Arshad et al., 2018). High visitor volumes characterize the tourism industry in these areas, and employees in these locations face diverse and often contradictory customer demands, making them ideal settings for examining PLB and service innovation paradoxes. These employees must balance competing

expectations, such as providing personalized services while adhering to standardized practices, creating a dynamic context for studying the tensions inherent in service innovation.

The survey followed a time-lagged design, using a two-wave survey approach. This method allows for separating predictors and criterion variables, reducing the likelihood of common method bias and ensuring that the data collected at different times can provide a clearer understanding of causal relationships. The rationale for using this two-wave approach is based on the need to gather distinct sets of data regarding PLB in the first wave, followed by self-assessments of growth mindset, personal innovativeness, and SIB in the second wave, allowing for a temporal gap that strengthens the validity of the inferences drawn from the data. Specifically, separating these measurements helps mitigate the risk of respondents answering the questions in a way that could be influenced by social desirability bias or the influence of prior responses, thereby improving the robustness of the results.

Social desirability bias was minimized by ensuring participant anonymity and guaranteeing the confidentiality of their responses. Additionally, reverse-coded items were included in the questionnaire to reduce the risk of participants answering questions in socially desirable ways. This strategy compelled respondents to carefully consider their answers, reducing the likelihood of them providing uniformly positive or favorable responses. Furthermore, to ensure that participants were attentive and consistent in their responses, two check statements were embedded in the survey, requiring participants to select a specific answer for certain questions. This mechanism further ensured that responses were thoughtful and deliberate, contributing to the overall reliability and accuracy of the data.

Wave 1: The data collection started on August 15, 2024, when the researchers contacted the HR departments of the targeted organizations to solicit their cooperation in the study. The HR departments provided contact information for potential respondents, from which 1,058 FLEs were selected through convenience sampling. After several reminders, data were collected from 439 respondents, achieving a response rate of 42%. The first wave measured employee perceptions of PLB exhibited by their supervisors, which is essential for understanding how leadership behavior impacts employee innovation and performance.

Wave 2: The data collection started on September 26, 2024. Participants from the first wave were invited to complete a follow-up questionnaire measuring their self-assessments of growth mindset, personal innovativeness, and SIB. The unique ID system ensured that responses from Wave 1 could be matched with those from Wave 2. In this time-lagged approach, 341 responses were received, which were used for further analysis. This follow-up approach ensures that the data from both waves can be effectively linked, allowing for the examination of how PLB influences GMS, PINN, and ultimately SIB over time.

The sample characteristics reflect a diverse and representative group of FLEs within Pakistan's tourism and hospitality sector. As reported in Table 1, the respondents were diverse in gender, with 41.64% female and 58.36% male participants. The age profile, heavily weighted towards younger employees (over 40% aged 25 or below), suggests a workforce that may be more adaptable and open to innovative practices, yet possibly less experienced, which could influence

their responsiveness to paradoxical leadership styles. Educational qualifications varied, with 37.54% holding undergraduate degrees, 28.15% intermediate level education, 21.11% matriculation, and 13.20% postgraduate qualifications. Employee tenure with their organizations showed that 33.73% had been with their employer for over one year, 28.15% for one to three years, and 31.67% for three to five years, indicating a mix of relatively new and experienced employees within the sample.

[Please, place Table 1 around here]

4.2. Ethical Approval and Consent to Participate

Prior to starting the survey, participants were informed of the study's aims/objectives and the right to refuse participation or withdraw from the study at any time. The authors confirm that this study adheres to the relevant ethical guidelines for human subjects and that the anonymity and confidentiality of the participants were maintained throughout the study. The procedures for this study were reviewed and approved by the university's Ethics Review Board.

4.3. Measurement Instrument

A five-point Likert scale ranging from 1 (strongly disagree) to 5 (completely agree) was used. The constructs were measured by adapting established scales from prior studies in management literature. However, the instrument was shared with five academic experts to get feedback on the face validity and language of the instrument. Minor changes were made to the statements to incorporate the suggestions of experts. The improved instrument was pilot-tested through 30 respondents from the industry. The values of Cronbach's alpha and composite reliability were higher than the 0.70 threshold, and factor loadings were higher than 0.60 for all items, supporting the validity and reliability of the instrument for further data collection (Hair et al., 2020). We controlled for the effects of employee and leader characteristics on the proposed relationships in the study. Demographic characteristics, including gender, age, level of education, employee tenure, supervisor gender, and time working under the present supervisor, were used as control variables.

Paradoxical leadership behavior is defined as "the ability to embrace and manage competing organizational demands (Zhang et al., 2015). It was measured with a 22-item scale adapted from Zhang et al. (2015). Sample items are "My supervisor shows a desire to lead, but allows others to share the leadership role" and "My supervisor keeps distance from subordinates, but does not remain aloof".

The growth mindset is a belief that abilities and intelligence can be developed through effort, persistence, and effective strategies (Dweck, 2016). It was measured with an 8-item scale adapted from Sigmundsson and Haga (2024a). The sample items are "I know that with effort, I can improve my skills and knowledge," and "I like to take challenges and try new things."

Personal innovativeness is defined as "an individual's predisposition to embrace new ideas, technologies, or methods (Steenkamp et al., 1999). It was measured with an 8-item scale adapted from Steenkamp and Gielens (2003). Sample items are "I enjoy taking chances to buy new products", and "I am very cautious when trying new and different products".

Service innovation behavior is defined as “the extent to which employees generate, promote, and implement new ideas for service improvement” (Hu et al., 2009). It was measured with a 6-item scale adapted from Hu et al. (2009). The sample items include “At work, I seek new service techniques and methods within present conditions”, and “At work, I sometimes come up with innovative and creative notions without violating existing policies”.

5. Results

5.1. Model Validation

In structural equation modelling (SEM) through AMOS 26, the measurement model estimates were used to determine internal consistency, model goodness of fit, and convergent and discriminant validity. The model fit indices reported under Table 2 indicated an excellent fit between the specified structural model and the observed data. The ratio of χ^2 to degrees of freedom (χ^2/df) was 2.21, falling well below the recommended threshold of 3.0. The Comparative Fit Index (CFI) was 0.954, and the Tucker-Lewis Index (TLI) was 0.964, both exceeding the recommended cutoff of 0.90, suggesting excellent incremental fit. The Root Mean Square Error of Approximation (RMSEA) was 0.057, which is below the acceptable maximum of 0.06, confirming a good model fit.

PLB was measured as a second-order construct with five dimensions, while other constructs were first-order. The values of factor loadings reported in Appendix I were greater than the 0.7 threshold, proving convergent validity (Hair et al., 2020). The composite reliability and Cronbach’s Alpha values, reported in Table 2, in the range of 0.824 to 0.868 and 0.809 to 0.842, respectively, were higher than the threshold value of 0.70, supporting the internal consistency of the dataset. The results reported in Table 2 show an excellent fit of a specified structural model to the data. The values of AVE ranged between 0.548 and 0.588, which were higher than the threshold value of 0.50, providing convergent validity of the model (Hair et al., 2020). Fornell and Larcker (1981) criterion, reported in Table 2, suggested that the values of AVE square root are greater than inter-construct correlation, satisfying the conditions for discriminant validity. Harman’s single-factor test shows that a single factor explains 29.31% variation and fulfils the <50% value criteria by Podsakoff et al. (2003). This supports the reliability and validity of data for further analysis.

[Please, place Table 2 around here]

5.2. Structural Path Analysis

Table 3 demonstrates the results derived from the structural model. The values of regression coefficients and R^2 are also presented in Figure 2. Hypothesis 1 (H_1) posited a direct positive relationship between PLB and SIB, which was confirmed with an estimate of 0.258 ($p < 0.001$), showcasing that PLB significantly influences SIB. Similarly, H_2 revealed a strong direct impact of PLB on GMS with an estimate of 0.228 ($p < 0.001$). It suggests the particularly strong need for cognitive reframing in Pakistan’s tourism sector, where FLEs face acute service paradoxes daily and thus are more responsive to “both-and” leadership cues. H_3 demonstrated that GMS significantly predicts SIB, with an estimate of 0.292 ($p < 0.001$). The magnitude of effect aligns with studies conducted in Western countries, emphasizing the positive role of GMS in driving innovation in service-related contexts. Following Preacher and Hayes (2008) approach, the indirect

effect of PLB → GMS → SIB (H_4) was found significant, with an estimate of 0.288 ($p < 0.001$), underscoring the mediating role of GMS in this relationship. The moderating effect of PINN (H_5) on the relationship between GMS and SIB was also supported, with an estimate of 0.339 ($p < 0.001$). This magnitude of effect is higher than what Steenkamp and Gielens (2003) found in Western countries, signaling a stronger potentiating role of PINN in our Pakistani service context. When external resources are scarce, employees depend more on PINN to translate learning into action.

The moderated mediation analysis further examined the conditional indirect effects of PLB on SIB through GMS at different levels of PINN. At one standard deviation below the mean (low PINN), the indirect effect was significant but smaller (0.185, $p < 0.01$). At the mean level of PINN, the effect increased to 0.279 ($p < 0.001$), and at one standard deviation above the mean (high PINN), it reached 0.368 ($p < 0.001$). These results confirm that PINN strengthens the mediating pathway between PLB and SIB through GMS, supporting H_6 . The model's explanatory power is notable, with R^2 values of 0.421 for GMS and 0.681 for SIB, indicating that the predictors account for substantial variance in these constructs. Collectively, these findings highlight the central role of PLB and GMS in fostering SIB, particularly when coupled with high levels of PINN.

[Please, place Table 3 around here]

6. Discussion and Conclusions

This study offers new insights into the paradoxical nature of SIB and the role of PLB, GMS, and PINN in facilitating innovation within the tourism and hospitality industry. The findings confirm that PLB is pivotal in enabling FLEs to navigate the inherent tensions between creativity and operational consistency, a paradox central to service innovation in dynamic and customer-centric environments. It extends the work of Baum et al. (2020), who largely focused on the challenges of maintaining service standards and operational consistency, but overlooked the role of innovation in achieving competitive advantage. This research contributes to bridging this gap by demonstrating how PLB enables employees to balance the inherent tensions between creativity and operational stability. The findings challenge the traditional view that creativity and operational consistency are mutually exclusive. Instead, we show that these elements can be interdependent, with effective management through PLB enabling employees to innovate while maintaining service reliability. PLB supports this balance by creating an environment where employees feel safe exploring new ideas without compromising quality or standards. This supports the notion that adaptability and stability are not contradictory but mutually reinforcing when managed well, especially in high-demand environments like tourism and hospitality (Madaan et al., 2025; Tajeddini et al., 2024).

A key extension of this study lies in its cultural contextualization, particularly in the context of Pakistan's high-power-distance culture. As highlighted in previous studies, high-power-distance cultures are characterized by hierarchical organizational structures and clear authority gradients (Islam et al., 2024). In such settings, leadership behaviors that embrace paradoxes provide employees with a structured yet flexible framework to reconcile competing demands, thus enhancing the impact of PLB on employee attitudes and behaviors (Luo et al., 2023; Zhang et al.,

2015). PLB provides a clear and legitimate model for navigating contradictions, which is particularly valuable in contexts where employees may be less accustomed to exercising independent initiative without explicit leadership endorsement. In contrast, in more egalitarian cultures where power is distributed more evenly and employees are encouraged to self-manage, the relative effect of PLB may be moderated by greater employee autonomy and less hierarchical control (Luo et al., 2023; Zhang & Liu, 2022). This suggests that PLB's effectiveness may be culturally contingent, with stronger effects in contexts where leadership is more central to shaping employee behavior.

Further, this study extends the literature on leadership and innovation by integrating GMS as a crucial mediator between PLB and SIB. Unlike many Western contexts, where organizations routinely invest in structured innovation workshops and leadership development programs, FLEs in Pakistan often receive minimal ongoing training. GMS becomes especially critical in this setting as it fosters cognitive reframing. It provides employees with the resilience to view setbacks not as failures but as opportunities for growth, which is vital for driving service innovation in the face of operational constraints (Krskova & Breyer, 2023; Sigmundsson & Haga, 2024b). Thus, GMS compensates for organizational shortfalls, allowing FLEs to use on-the-job challenges as learning opportunities.

The role of PINN further amplifies this dynamic by acting as a moderator that enhances the relationship between GMS and SIB. This finding contrasts with previous studies, such as Chao et al. (2017), which focused on external incentives for innovation. The studies in developed countries have often focused on the role of organizational culture and resources in driving innovation (e.g., Tajeddini et al., 2020). This study, however, emphasizes the internal drive provided by PINN as a key determinant in translating GMS into SIB of FLEs in the tourism and hospitality sector. This insight is particularly valuable for organizations in developing countries like Pakistan, where resources for incentive programs may be limited. Thus, paradoxical leaders must not only foster individual traits but also create psychological safety by normalizing productive dissent and explicitly rewarding boundary-spanning behaviors. When leaders signal that failure in pursuit of service innovation is an expected and shared learning experience, they attenuate cultural barriers to risk-taking and enable PINN to translate into creative outcomes.

6.1. Conclusion

This study addresses the paradoxical nature of service innovation in the tourism and hospitality industry, where employees must balance creativity with operational consistency. While building on the foundation of paradox theory, our primary theoretical contribution is the delineation of a specific psychological mechanism and a crucial boundary condition that explain how PLB enhances SIB. PLB, which fosters both creativity and discipline, plays a pivotal role in enabling employees to innovate while adhering to service standards. The findings based on self-reported data of FLEs in the tourism and hospitality industry in Pakistan show that PLB balances the need for operational consistency with the imperative for creativity, thus enhancing service innovation outcomes. The mediating role of GMS shows that employees who perceive their abilities as improvable through effort are more likely to embrace challenges and innovate within the constraints of their roles. Furthermore, PINN was shown to amplify the effects of GMS on SIB,

indicating that personal traits play a crucial role in how effectively employees can translate growth-oriented perspectives into innovative actions. While the study presents PLB as a new approach within the tourism and hospitality sector, we recognize that the framework is incremental, building on existing theories, particularly Zhang et al. (2015). The study’s value lies in applying PLB in the specific context of Pakistan’s tourism industry, which is a relatively underexplored area, and highlighting how PLB, GMS, and PINN can enhance SIB in resource-constrained, high-power-distance cultures.

6.2. Theoretical Implications

The study enriches paradox theory by empirically demonstrating how PLB resolves the tension between creativity and operational consistency in the tourism and hospitality industry. First, this study builds on Smith and Lewis (2011) and Zhang et al. (2015) foundational work on organizational paradoxes, highlighting how conflicting demands can drive innovation and adaptability. It operationalizes these ideas within the tourism and hospitality industry, a setting often overlooked in paradox theory literature. This advances Smith and Lewis's (2011) notion of learning paradox in their dynamic equilibrium model by empirically illustrating how, in a resource-constrained service context, PLB activates GMS pathways that continuously cycle between experimentation and mastery, rather than treating exploration and exploitation as sequential phases. This empirical demonstration of how PLB enables FLEs to balance the dual demands of exploration (innovation) and exploitation (operational efficiency), validates and extends paradox theory’s relevance beyond manufacturing or technology sectors into highly regulated and customer-centric service industries.

Second, this research advances leadership theory by integrating traditionally disparate views on leaders’ roles in innovation. Existing leadership and innovation scholarship typically positions leaders as either facilitators of creativity, encouraging experimentation and change, or as custodians of stability, ensuring adherence to standards and routines (Tajeddini et al., 2024; Zha et al., 2024). This study synthesizes these perspectives through the lens of paradoxical leadership, revealing that effective leadership in service innovation requires embracing and managing contradictory demands simultaneously. The findings reframe leadership not as a choice between creativity and control but as a dynamic capability to balance both, thus expanding the theoretical understanding of leadership behaviors that foster innovation in complex service environments.

Third, this study contributes to the growing literature on service innovation by reconceptualizing innovation as inherently paradoxical. Drawing on service-dominant logic, which emphasizes co-creation and customer-centricity, the study adds specificity to how service innovation unfolds in regulated, frontline-driven sectors like tourism and hospitality. Our integration of GMS and PINN under PLB refined the concept of operant resources in service-dominant logic. We demonstrate that GMS and PINN, when nurtured by PLB, become service resources that employees deploy in real time to co-create personalized solutions, turning customer constraints (e.g., budget, time, or regulatory limits) into scaffolds for joint innovation rather than barriers. It reframes GMS and PINN from individual psychological traits into relational assets whose value emerges only through customer interactions. In doing so, we extend service-dominant logic by showing how leadership helps FLEs develop the skills they need, and how those skills then allow employees and customers to work together to create value in complex service settings.

6.3. Practical Implications

This study provides several actionable recommendations for managers, particularly those in the tourism and hospitality industry, aiming to foster a culture of innovation while maintaining high service standards. First, the managers should adopt PLB and demonstrate how to balance the tension between innovation and consistency. To operationalize this, managers can start by adopting micro-innovations during shift handovers or brief “line-up” meetings, where staff can suggest small improvements in processes, customer interactions, or service delivery. This approach allows employees to contribute their ideas without disrupting daily operations, creating space for innovation while maintaining service standards. To ensure wider participation and sustain momentum, low-cost, scalable communication tools like WhatsApp-based idea-sharing groups can be established, enabling real-time feedback and collaboration across teams. This shifts the innovation load away from busy face-to-face slots into employees’ pockets of downtime, making it practical even without dedicated innovation hours. On the other hand, family-run properties naturally practice close-knit PLB. Owners can invite FLE for input directly over a tea break or during a quick post-service debrief. These personal, approachable settings allow employees to share their ideas without feeling threatened by authority, fostering a sense of ownership and involvement in innovation.

Second, managers should prioritize cultivating a growth mindset among employees, given its strong mediating role in fostering innovation. It can be done through peer-led learning and informal mentorship programs. Given the resource constraints, digital platforms for idea-sharing (such as a simple WhatsApp group or internal Facebook group) can serve as low-cost vehicles to stimulate innovation. Third, in Pakistan, where communal relationships and family ties play a significant role in business culture, PINN can be fostered through existing communal networks, especially in family-owned hotels or small tourism operations. PINN thrives in environments that encourage informal learning and social interaction. Therefore, leveraging these networks can be a powerful tool for cultivating innovation without needing significant financial investment. Managers can create informal brainstorming sessions over meals or breaks, where employees are encouraged to share ideas for improvements, innovations, or new services. Family-run properties are ideally suited to implementing this strategy because they naturally foster strong interpersonal bonds.

6.4. Limitations and Future Research Directions

First, the exclusive focus on FLEs in the tourism and hospitality industry limits the direct applicability of results to other sectors such as manufacturing, healthcare, or IT services, which may have different operational dynamics and innovation challenges. Future research should consider replicating and extending this model using multi-source data, such as manager-employee dyads, across diverse industries and cultural contexts (e.g., healthcare, retail) to assess the universality and boundary conditions of the PLB-growth mindset-personal innovativeness framework. Secondly, Pakistan’s unique macroeconomic and socio-political environment introduces contextual complexities that may influence the effectiveness of PLB. Factors such as political turbulence, currency fluctuations, and infrastructural instability create an uncertain operating environment that can affect organizational priorities, resource allocation, and employee psychological states. However, these macro-level instabilities amplify the need for paradoxical leadership as a crisis-response mechanism. Hence, future studies should explicitly examine how macroeconomic volatility and political instability moderate the relationship between PLB, growth mindset, and service innovation. Such research would deepen understanding of leadership efficacy

under crisis conditions common in many emerging economies. Thirdly, although the design separates the predictor from the mediator/outcome, measuring GMS and SIB simultaneously means there is still a chance for bias caused by how the data were collected. Future studies could use three waves of data collection to make stronger claims about cause and effect. Finally, this study did not consider the accelerating role of technology adoption, particularly digital and AI-driven service platforms, in shaping service innovation behavior. With global tourism increasingly digitalized, through chatbots, AI concierge services, virtual tours, and personalized recommendation engines, the interaction between PLB and technology adoption warrants focused investigation. Specifically, future research could examine how AI and other digital tools moderate or mediate the PLB-SIB relationship, potentially enhancing FLEs' capacity to balance creativity and operational consistency. Integrating technology adoption into the model aligns with ongoing global digital transformation trends and emphasizes the proactive relevance of paradoxical leadership in modern tourism contexts.

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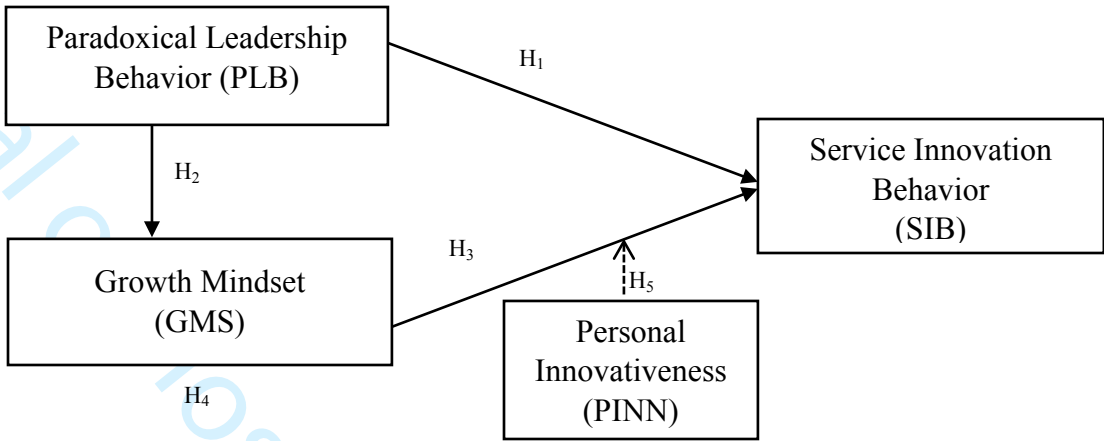
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Figure 1: Conceptual framework of the study



Source: Developed by authors

Table 1: Respondents' profile

Indicators	Frequency (%)	Indicators	Frequency (%)
<i>Gender</i>		<i>Supervisor Gender</i>	
Female	142(41.64)	Male	271 (79.47)
Male	199 (58.36)	Female	70 (20.53)
<i>Age (in years)</i>		<i>Time Working Under Present Supervisor</i>	
=>25	138 (40.46)	>1 year	123 (36.07)
26-35	98 (28.73)	1-2	102 (29.91)
36-45	86 (25.21)	2-3	85 (24.93)
46-55	54 (15.54)	<3	31 (09.09)
<56	35 (10.26)	<i>Employee Tenure with Organization</i>	
<i>Education</i>		>1	115 (33.73)
Matriculation	72 (21.11)	1-3	96 (28.15)
Intermediate	96 (28.15)	3-5	108 (31.67)
Undergraduate	128 (37.54)	<5	22 (06.45)
Postgraduate	45 (13.20)		

Source: Developed by authors

Table 2: Model fit indices, reliability, and discriminant validity estimates

Variables	Mean	SD	CA	CR	AVE	PLB	GMS	PINN	SIB
PLB	4.02	0.108	0.842	0.868	0.581	0.785			
GMS	4.19	0.099	0.818	0.824	0.559	0.532	0.827		
PINN	3.99	0.089	0.833	0.851	0.588	0.507	0.574	0.789	
SIB	4.18	0.111	0.809	0.832	0.548	0.417	0.517	0.574	0.790

Note(s): N=341, model fit indices: $\chi^2/df = 2.21$, CFI=0.954, TLI=0.964, NNFI=0.974, RNI=0.928, RMSEA=0.057

Bold italic numbers in the diagonal show the square root of the AVE

Source: Developed by authors

Table 3: Structural path estimates in SEM

Variables	Hypothesis	Estimates	Coefficient Interval	Status
PLB → SIB	H ₁	0.258***	[0.138,0. 351]	Supported
PLB → GMS	H ₂	0.228***	[0.181,0. 389]	Supported
GMS → SIB	H ₃	0.292***	[0.199,0. 401]	Supported
PLB → GMS → SIB	H ₄	0.288***	[0.168,0. 418]	Supported
GMS*PINN → SIB	H ₅	0.339***	[0.211,0. 495]	Supported
PLB→GMS→SIB				
PINN -1SD		0.185**	[0.168,0. 212]	
PLB→GMS→SIB				
PINN Mean	H ₆	0.279***	[0.213,0. 313]	Supported
PLB→GMS→SIB				
PINN +1SD		0.368***	[0.314,0. 418]	

Note(s) N= 341, *p<0.05, **p<0.01, ***p<0.001, R² GMS = 0.421, R² SIB = 0.681

PLB=Paradoxical Leadership Behavior, SIB=Service Innovation Behavior, GMS=Growth Mindset, PINN=Personal Innovativeness

Source: Developed by authors

Appendix I

Items	Factor Loadings
Paradoxical Leadership Behavior (PLB) (Zhang et al., 2015)	
Uniformity vs. Individualization	0.858
My supervisor takes a fair approach to treating all subordinates uniformly but also as individuals.	0.798
My supervisor treats all subordinates equally but considers their individual traits or personalities.	0.786
My supervisor communicates with subordinates uniformly without discrimination but varies his or her communication style depending on individual characteristics or needs.	0.799
My supervisor manages subordinates uniformly but considers their individualized needs.	0.808
My supervisor assigns equal workloads but considers individual strengths and capabilities to handle different tasks.	0.785
Self-centeredness vs. Other-Centeredness	0.824
My supervisor shows a desire to lead but allows others to share the leadership role.	0.779
My supervisor likes to be the center of attention but also allows others to share the spotlight.	0.781
My supervisor insists on getting respect but also shows respect toward others.	0.800
My supervisor has a high self-opinion but is aware of personal imperfections and the value of other people.	0.821
My supervisor is confident regarding personal ideas and beliefs but acknowledges that he or she can learn from others.	0.828
Decision control vs. Autonomy	0.849
My supervisor controls important work issues but allows subordinates to handle details.	0.792
My supervisor makes final decisions for subordinates but allows subordinates to control specific work processes.	0.786
My supervisor makes decisions about big issues but delegates lesser issues to subordinates.	0.818
My supervisor maintains overall control but gives subordinates appropriate autonomy.	0.844
Enforcing requirements vs. Flexibility	0.852
My supervisor stresses conformity in task performance but allows for exceptions.	0.803
My supervisor clarifies work requirements but does not micromanage work.	0.728
My supervisor is highly demanding regarding work performance but is not hypercritical.	0.765
My supervisor has high requirements but allows subordinates to make mistakes.	0.823
Maintaining distance vs. Closeness	0.815
My supervisor recognizes the distinction between supervisors and subordinates but does not act superior in leadership.	0.742
My supervisor keeps a distance from subordinates but does not remain aloof.	0.768
My supervisor maintains position differences but upholds subordinates' dignity.	0.758
My supervisor maintains distance from subordinates at work but is also amiable toward them.	0.825
Growth Mindset (Sigmundsson & Haga, 2024)	
I know that with effort, I can improve my skills and knowledge	0.810
I can influence and change my development in general	0.799
I can change my skills and knowledge through practice	0.808
I like to take challenges and try new things	0.764
I see learning as my goal	0.821

Effort makes me stronger	0.800
I want to spend more time and work more on an area/theme/skill to develop my skills and knowledge	0.823
I have faith in my own skills and my possibilities	0.781
Innovativeness (Steenkamp & Gielens, 2003)	
When I see a new product on the shelf, I am reluctant to try it. [Reversed]	0.799
In general, I am among the first to buy new products when they appear on the market.	0.812
If I like a brand, I rarely switch from it just to try something new. [Reversed]	0.805
I am very cautious when trying new and different products. [Reversed]	0.762
I am usually among the first to try new brands.	0.811
I rarely buy brands about which I am uncertain how they will perform. [Reversed]	0.807
I enjoy taking chances to buy new products.	0.816
I do not like to buy a new product before other people do. [Reversed]	0.791
Service Innovation Behavior (SIB) (Hu et al., 2009)	
At work, I seek new service techniques and methods within present conditions	0.828
At work, I sometimes come up with innovative and creative notions while still respecting operational protocols and guidelines	0.794
At work, I propose creative ideas that balance innovation with current operational requirements and try to persuade others to implement them	0.832
At work, I try to secure resources for implementing innovations while ensuring alignment with current operational practices	0.858
At work, I provide structured plans and workable processes to develop new ideas while respecting current operational standards	0.822
Overall, I consider myself a creative member of my team, able to innovate within the constraints of established procedures and standards	0.795