Examining the Critical Impact of Knowledge Management Practices on Organisational Innovation and Creativity in China's Shanxi Province: An Extensive Mediation-Moderation Study

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Abstract: This systematic literature review explores the effectiveness of knowledge management practices (KMPs) in shaping organizational creativity and innovation among small and medium-sized enterprises (SMEs) in the Shanxi Province of China. The study investigates the relationships between KMPs (knowledge creation, sharing, application, and acquisition), organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance. By analyzing 65 relevant studies, the review examines the characteristics and contributions of KMPs across cognitive, affective, psychomotor, social, and metacognitive domains. The findings highlight the unique features and contributions of KMPs in enhancing various aspects of organizational learning and creativity, which in turn influence innovation performance. The review identifies KMPs as a standout approach due to their integrated nature, seamlessly incorporating active learning principles into SMEs' operations, making them a holistic and effective method for comprehensively addressing innovation challenges. The study also explores the mediating roles of organizational learning and creativity in the relationship between KMPs and innovation performance, as well as the moderating effect of encouraging and supportive leadership on the relationship between organizational creativity and innovation performance. The manuscript concludes with suggestions for optimizing KMP implementation based on insights drawn from the challenges and inadequacies identified across different practices.

Keywords: Knowledge management practices, organizational creativity, organizational learning

1. Introduction

The concept of Knowledge Management was first introduced by Nonaka and Takenchi (2009). According to Turban and Cable (2003), knowledge management involves gathering and developing information, as well as facilitating its exchange for efficient utilization across the business. It comprises two key processes: knowledge generation, which includes tasks that produce 'new' information, and knowledge capture, which involves continuously organizing and packaging newly acquired knowledge. Since 2020, the hospitality and tourism industry has been severely impacted by the COVID-19 pandemic and related policy demands, with consumers scaling back most of their travel-related activities (Hao et al., 2020). This instability has significantly affected the global economy and the survival and expansion of the hospitality industry. The industry's vulnerability to unpredictable events, such as pandemics, terrorist attacks, and natural disasters, is widely recognized (Deng et al., 2021). In response to the changing requirements of the new normal brought about by COVID-19, non-contact, sanitation, and cleanliness have become crucial for effective prevention (Pillai & Haldorai, 2012). Knowledge Management Practice (KMP) for improving innovation performance involves enhancing internal and external operational capabilities from the standpoint of innovation performance (Hao et al., 2020), which can help the hotel and tourism industries gain a competitive advantage.

Despite the growing body of knowledge management literature, there are still knowledge gaps in the existing review studies. Current evaluations primarily focus on the development of knowledge management in hotels and tourism. For instance, Tussyadiah (2020) examined how IVs affected the development, sharing, application, and acquisition of information. However, Shin's (2022) review of IV1 research in business management from a service ecosystem

perspective did not highlight the relationship between knowledge creation, knowledge sharing, knowledge application, knowledge acquisition, organizational learning, organizational creativity, and encouraging and supportive leadership. Furthermore, while some scholars have focused on the relationship between KM and MV, the existing literature discusses the relationship between knowledge management and organizational learning and creativity in direction but does not concentrate on the process of innovation performance. Understanding the current situation and projected expansion of innovation performance in the hotel and tourism industries is crucial in the new COVID-19 normal, and this demands a significant amount of research. However, there are limited literary reviews in this area.

Innovation Performance (IP) in hospitality and tourism in China has become an increasingly difficult problem that hinders development in the industry (Ai & Li, 2022). The discernible decline in Innovation Performance levels between 1986 and 2023 has substantially contributed to operational challenges and reduced satisfaction experienced by various business models in the hospitality and tourism sector in China, impeding the advancement in profit accumulation within the industry. Companies must invest more capabilities from diverse fields to improve and force the development of Innovation Performance (IP), which entails higher investment costs that would put the companies themselves in financial difficulty, potentially leading to failure (Liu et al., 2019).

Knowledge creation, knowledge sharing, knowledge application, and knowledge acquisition in hospitality and tourism in China have also become increasingly difficult problems that obstruct development in the industry. Lower levels of these knowledge management practice over time have led to difficulties and dissatisfaction for business models and profit growth in the industry (Sahoo et al., 2022; Alshanty & Emeagwali, 2019). Companies must invest more resources to improve and force the development of these practices, which means higher investment costs that could lead to financial difficulties and potential business failure (Kremer et al., 2019; Mahdi et al., 2019).

Organizational learning and creativity in the hospitality and tourism industries in China have also become more challenging issues that hinder growth. Lower levels of these factors have contributed to problems and dissatisfaction for business models and profit growth (Antunes & Pinheiro, 2020; Darvishmotevali et al., 2020). Companies must invest more resources to improve and force the development of organizational learning and creativity, which could lead to financial difficulties and potential business failure (Mikalef & Gupta, 2021).

The development of hospitality and tourism in China has also been hampered by the increasingly challenging problem of encouraging and supportive leadership. Lower levels of this factor have contributed to problems and dissatisfaction for business models and profit growth (Monje-Amor et al., 2020). Companies must invest more resources to improve and force the development of encouraging and supportive leadership, which could lead to financial difficulties and negative consequences (Dirani et al., 2020; Ashikali et al., 2020).

In conclusion, the study's specific focus was on KM practices, such as knowledge creation, knowledge sharing, knowledge application, knowledge acquisition, organizational creativity, organizational learning, encouraging and supportive leadership, and innovation performance, which were identified in the problem description as research gaps. The study underlined the necessity to investigate the connection between KM practices and innovation success in China because prior research has mainly focused on industrialized countries. In particular, it highlighted the significance of organizational creativity and learning in this relationship and revealed research gaps.

The research aims is to 1) to identify the relationship between knowledge creation, sharing, application, acquisition, and innovation performance among hotels and other tourism-related businesses in China; 2) to identify the relationship between knowledge creation, sharing, application, acquisition, and organizational learning among hotels and other tourism-related businesses in China; 3) to identify the relationship between knowledge creation, sharing, application, acquisition, and organizational creativity among hotels and other tourism-related businesses in China; 4) to identify the mediating role of organizational learning in the relationship between knowledge creation, sharing, application, acquisition, and innovation performance among hotels and other tourism-related businesses in China; 5) to identify the mediating role of organizational creativity in the relationship between knowledge creation, sharing, application, acquisition, and innovation performance among hotels and other tourism-related businesses in China; and 5) to identify the moderating role of encouraging and supportive leadership in the relationship between organizational creativity and innovation performance among hotels and other tourism-related businesses in China. Based on the objectives of the research, the research question is:

1) Do knowledge management practices (knowledge creation, sharing, application, acquisition) have a statistically significant relationship with innovation performance among hotels and other tourism-related businesses in China?
2) Do knowledge management practices have a statistically significant relationship with organizational learning among hotels and other tourism-related businesses in China?
3) Do knowledge management practices have a statistically significant relationship with organizational creativity among hotels and other tourism-related businesses in China?
4) Does organizational learning mediate the relationship between knowledge management practices and innovation performance among hotels and other tourism-related businesses in China?

5) Does organizational creativity mediate the relationship between knowledge management practices and innovation performance among hotels and other tourism-related businesses in China?

6) Does encouraging and supportive leadership moderate the relationship between organizational creativity and innovation performance among hotels and other tourism-related businesses in China?

The limitations of the study in the findings may be specific to the Chinese hospitality and tourism industry and may not be generalizable to other sectors or countries. The empirical study may be subject to limitations such as sample size, response bias, and the representativeness of the data. The study may not cover all possible factors influencing innovation performance in the hospitality and tourism industry.

2. Literature Review

The study draws upon several key theories and models to investigate the relationships between knowledge management practices, organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance in the Chinese hospitality and tourism industry.

2.1 Knowledge Management Theory (KMT)

This theory classifies knowledge into three categories: explicit, implicit, and tacit knowledge (Nonaka & Takeuchi, 2007). It emphasizes the importance of managing all three types of knowledge for organizations to gain a competitive advantage and foster innovation.

2.2 SECI Model

Developed by Nonaka and Takeuchi (2007), this model describes four modes of knowledge conversion that facilitate the creation and sharing of knowledge within organizations: Socialization (tacit to tacit), Externalization (tacit to explicit), Combination (explicit to explicit), and Internalization (explicit to tacit). The model highlights the dynamic nature of knowledge creation and sharing and the importance of creating a continuous cycle of knowledge conversion to foster innovation and organizational learning (Nonaka & Konno, 1998).

2.3 Innovation Theory (IT)

This theory distinguishes between supply-side and demand-side focused innovation policies, as well as linear and systems-oriented views of the invention process. It suggests that systems perspectives on innovation provide a more insightful view of the demand side compared to linear interpretations (Edquist & Hommen, 1999).

2.4 Resource-Based View (RBV)

This theory suggests that organizations must acquire and manage valuable, rare, inimitable, and non-substitutable (VRIN) resources and capabilities to achieve sustainable competitive advantage (Barney, 1991). It is supported by the knowledge-based view, dynamic capabilities, core competencies, and dynamic capabilities (Teece et al., 1997).

2.5 Research Framework

In this study, Organizational creativity and learning are used as mediating factors to analyze knowledge management practices (KMP) and innovation performance in the Chinese hospitality and tourism business. The framework incorporates the following key elements: 1) Independent variable: Knowledge Management Practices - This variable represents the systematic collection, organization, and utilization of knowledge within an organization. The aforementioned processes include knowledge creation, sharing, application, and acqusiation; 2) Mediator variables: Organizational Creativity and Organizational Learning - These variables mediate KM and innovation performance. Organizational creativity is the invention and implementation of new and useful ideas, while organizational learning is the acquisition and use of information; 3) Dependent variable: Innovation Performance. This variable measures an organization's capacity to create and use novel concepts, goods, methods, and services that boost output and provide them a competitive edge; and 4) Moderator variables: Encouraging and supportive leadership. This parameter moderated the performance of Organizational creativity and innovation.

The research framework suggests that Organizational creativity and learning moderate the relationship between KM practices and innovation performance. To ascertain how KM practices impact innovation performance in Chinese hospitality and tourism, the study looks at these connections (Valeri & Baggio, 2021). The study framework will direct data collection and analysis, investigating variable correlations and testing hypotheses. According to these theories we defined our research framework as see in Fig. 1.
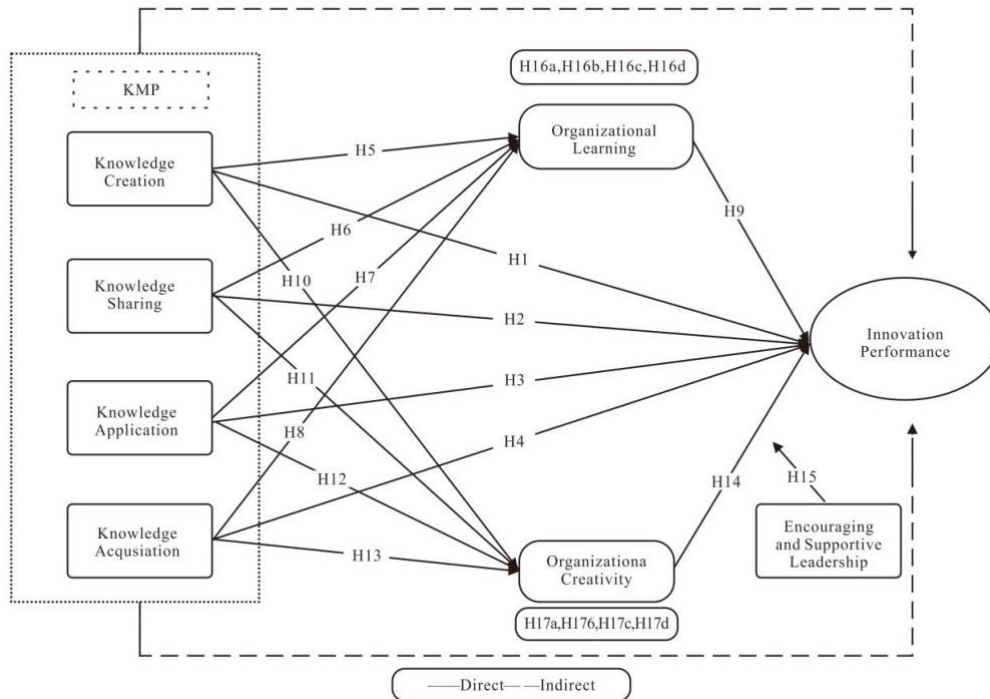
Fig. 1. Research framework

Several past studies have investigated the relationships between knowledge management practices, organizational learning, organizational creativity, and innovation performance in various contexts. The following sections provide a more detailed overview of some key findings. Abubakar et al. (2019) conducted a study on the impact of knowledge management practices on organizational performance and innovation in the hospitality industry. They found that knowledge acquisition, sharing, and application have a significant positive effect on both organizational performance and innovation. The authors emphasized the importance of implementing effective knowledge management strategies to enhance competitiveness and foster innovation in the hospitality sector.

Rajapathirana and Hui (2018) investigated the relationship between knowledge management capabilities, innovation capability, and firm performance in the insurance industry. Their findings revealed that knowledge management capabilities, including knowledge acquisition, sharing, and application, have a positive and significant impact on innovation capability. Furthermore, they found that innovation capability mediates the relationship between knowledge management capabilities and firm performance, highlighting the crucial role of innovation in translating knowledge management practices into improved organizational outcomes.

Patwary et al. (2022) explored the relationship between knowledge management practices and organizational learning in the hotel industry. Their study identified a positive and significant relationship between various knowledge management practices, such as knowledge creation, sharing, and application, and organizational learning. The authors suggested that effective knowledge management practices facilitate the continuous acquisition, dissemination, and utilization of knowledge within the organization, thereby promoting organizational learning and adaptability.

Hung et al. (2011) examined the mediating role of organizational learning in the relationship between knowledge management practices and innovation performance in the high-tech industry. They found that knowledge management practices, including acquisition, sharing, and application, have a positive effect on organizational learning. Moreover, their results indicated that organizational learning partially mediates the relationship between knowledge management practices and innovation performance, suggesting that organizational learning acts as a mechanism through which knowledge management practices influence innovation outcomes.

Abualoush et al. (2018) investigated the impact of knowledge management infrastructure and process capabilities on organizational creativity and innovation in the manufacturing sector. Their findings revealed that both knowledge management infrastructure (e.g., technology, structure, and culture) and process capabilities (e.g., acquisition, sharing, and application) have a positive and significant effect on organizational creativity. The authors highlighted the importance of establishing a supportive knowledge management infrastructure and implementing effective knowledge management processes to foster creativity and innovation within the organization.

Shujahat et al. (2019) explored the relationship between knowledge management processes and employee creativity and innovation in the telecommunications industry. They found that knowledge creation, sharing, and application have a positive and significant impact on employee creativity. Furthermore, their results indicated that employee creativity

mediates the relationship between knowledge management processes and innovation, suggesting that knowledge management practices enhance innovation outcomes by stimulating employee creativity.

Liao et al. (2017) examined the role of organizational learning in fostering innovation performance in the high-tech industry. Their findings revealed that organizational learning, encompassing knowledge acquisition, dissemination, and utilization, has a positive and significant effect on innovation performance. The authors emphasized the importance of creating a learning-oriented organizational culture and implementing effective learning mechanisms to drive innovation and improve overall performance.

Anis et al. (2023) investigated the mediating role of organizational creativity in the relationship between knowledge management practices and innovation performance in the manufacturing sector. They found that knowledge management practices, including acquisition, sharing, and application, have a positive and significant impact on organizational creativity. Moreover, their results indicated that organizational creativity fully mediates the relationship between knowledge management practices and innovation performance, highlighting the crucial role of creativity in translating knowledge management efforts into enhanced innovation outcomes.

These past studies provide valuable insights into the complex relationships between knowledge management practices, organizational learning, organizational creativity, and innovation performance across various industries. They underscore the importance of implementing effective knowledge management strategies, fostering a learning-oriented organizational culture, and nurturing creativity to drive innovation and improve overall performance. However, there is still a need for further research focusing specifically on the Chinese hospitality and tourism industry, considering its unique challenges and opportunities in the context of the COVID-19 pandemic and the rapidly evolving market dynamics.

3. Methodology

This study employs a quantitative research approach to examine the relationships between knowledge management practices, organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance in the Chinese hospitality and tourism industry. The research design is a cross-sectional survey, which allows for the collection of data from a representative sample of the target population at a single point in time (Saunders et al., 2003). This approach is well-suited for investigating the hypothesized relationships between the variables of interest and enables the generalization of findings to the larger population.

The target population for this study consists of managers and supervisors working in Chinese hotels and tourism-related businesses located in the Shanxi Province. These individuals are selected based on their experience in implementing knowledge management practices specific to the hospitality and tourism sector. The sample will include both males and females across various age groups, education levels, and departmental responsibilities, with a focus on those who have been in managerial or supervisory roles for more than three years.

A non-probability sampling technique, specifically convenience sampling, will be used to select respondents based on their accessibility and willingness to participate in the study (Taherdoost, 2016). Although this sampling method may limit the generalizability of the findings, it is a practical and efficient approach given the time and resource constraints of the research. The sample size for this study is determined using GPower analysis, considering a medium effect size ($f^2 = 0.15$), a significance level (α) of 0.05, and a power of 0.80 for eight predictor variables. The calculation yields a minimum sample size of 160 respondents. However, to account for potential non-response and incomplete data, the study aims to collect data from 330 respondents. The details showed as Fig. 2.
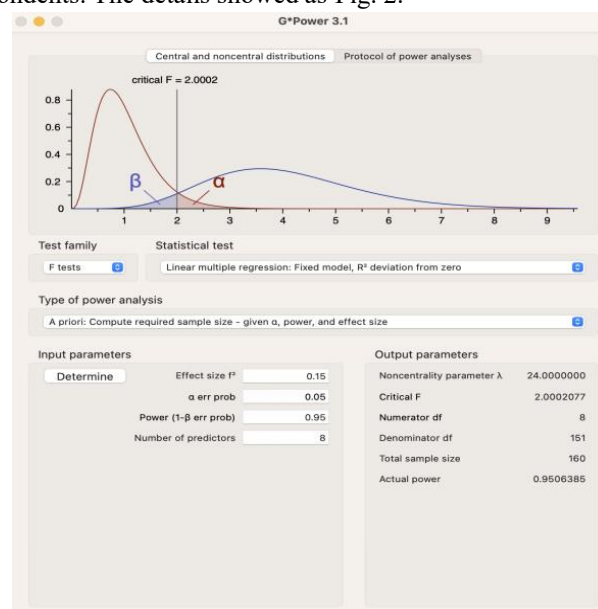

Fig. 2. Gpower

The target population for this study is Chinese investors who are interested in or have experience with investing in financial products. Due to the specific nature of the research topic and the difficulty in accessing a comprehensive list of all Chinese investors, a purposive sampling technique will be employed (Etikan et al., 2016). Purposive sampling involves selecting participants based on specific criteria that are relevant to the research objectives. In this study, the criteria for participant selection will include: Data will be collected using a structured online questionnaire developed specifically for this study. The questionnaire will be designed using Wenjuanxing, a user-friendly and accessible online platform for creating surveys. The questionnaire items will be adapted from validated scales used in previous studies, with slight modifications to suit the context of the Chinese hospitality and tourism industry.

The questionnaire will consist of two main sections. The first section will gather demographic information about the respondents, such as gender, age, education level, industry experience, and department of work. The second section will include measurement items for the study variables, namely knowledge management practices (knowledge creation, sharing, application, and acquisition), organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance. All items will be measured using a 7-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (7).

The questionnaire will be pilot-tested with a sample of 30 respondents to assess its clarity, comprehensibility, and reliability. Based on the feedback received, necessary adjustments will be made to improve the quality of the questionnaire before the main data collection phase. The online survey link will be distributed to potential respondents via email and social media platforms, such as WeChat, LinkedIn, and Facebook Messenger. Respondents will be given a specific timeframe to complete the survey at their convenience. To encourage participation, follow-up reminders will be sent to non-respondents after one and two weeks.

The collected data will be analyzed using various statistical techniques, including descriptive statistics, normality tests, reliability and validity assessments, and structural equation modeling (SEM). Descriptive statistics, such as means, standard deviations, frequencies, and percentages, will be used to summarize the demographic characteristics of the respondents and the distribution of the study variables. Normality tests, such as the Shapiro-Wilk test, will be conducted to assess the normality of the data and determine the appropriate statistical techniques for subsequent analyses.

Reliability and validity assessments will be performed to ensure the consistency and accuracy of the measurement scales. Cronbach's alpha will be used to evaluate the internal consistency reliability of the scales, with values above 0.7 considered acceptable (Hair et al., 2017). Convergent and discriminant validity will be assessed using confirmatory factor analysis (CFA), with average variance extracted (AVE) values above 0.5 and composite reliability (CR) values above 0.7 indicating adequate convergent validity, and the square root of AVE being greater than the inter-construct correlations suggesting satisfactory discriminant validity (Fornell & Larcker, 1981).

Structural equation modeling (SEM) will be employed to test the hypothesized relationships between the study variables. SEM is a powerful multivariate technique that allows for the simultaneous examination of multiple relationships among latent constructs while accounting for measurement error (Hair et al., 2017). The SEM analysis will be conducted using SmartPLS software, which is well-suited for handling complex models with both reflective and formative constructs (Ringle et al., 2015). The SEM analysis will involve specifying the measurement model (i.e., the relationships between the observed indicators and their corresponding latent constructs) and the structural model (i.e., the hypothesized relationships among the latent constructs). The measurement model will be evaluated using CFA to ensure the reliability and validity of the constructs. The structural model will be assessed based on the path coefficients, their significance levels (p-values), and the coefficient of determination (R^2) for each endogenous construct.

Moderation analysis will be performed to investigate the moderating role of encouraging and supportive leadership on the relationship between organizational creativity and innovation performance. The significance of the interaction term will be assessed, and the nature of the moderation effect will be explored using simple slope analysis and visualization techniques (Dawson, 2014).

Overall, the data analysis plan is designed to provide a comprehensive and rigorous examination of the relationships between knowledge management practices, organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance in the Chinese hospitality and tourism industry. The use of advanced statistical techniques, such as SEM, mediation, and moderation analyses, will enable the researchers to uncover the complex interrelationships among the study variables and draw meaningful conclusions based on the empirical evidence.

4. Findings and Discussion

The findings underscore the importance of implementing effective KMPs, such as knowledge creation, sharing, application, and acquisition, to enhance innovation performance in the hospitality and tourism industry (Geng et al., 2012). The review has identified KMPs as a standout approach due to their integrated nature, seamlessly incorporating active learning principles into SMEs' operations, making them a holistic and effective method for comprehensively addressing innovation challenges.

Furthermore, the study has explored the mediating roles of organizational learning and creativity in the relationship between KMPs and innovation performance, highlighting the significance of these factors in translating knowledge management efforts into improved organizational outcomes (Kalita et al., 2015). The moderating effect of encouraging

and supportive leadership on the relationship between organizational creativity and innovation performance has also been examined, emphasizing the crucial role of leadership in fostering a conducive environment for creativity and innovation (Narayanan et al., 2023). The research methodology employed in this study, including a quantitative cross-sectional survey design, non-probability convenience sampling, and advanced statistical techniques such as structural equation modeling (SEM), mediation, and moderation analyses, has provided a robust framework for investigating the complex interrelationships among the study variables (Hair et al., 2017). The data collection and analysis plans have been carefully designed to ensure the reliability, validity, and generalizability of the findings.

However, it is essential to acknowledge the limitations of this study, such as the potential lack of generalizability to other sectors or countries, the possible influence of sample size, response bias, and data representativeness on the empirical findings, and the inability to cover all possible factors influencing innovation performance in the hospitality and tourism industry. Despite these limitations, the findings of this review have significant implications for both theory and practice. The study contributes to the existing body of knowledge by providing a comprehensive understanding of the relationships between KMPs, organizational learning, organizational creativity, encouraging and supportive leadership, and innovation performance in the context of the Chinese hospitality and tourism industry (Wang, 2023). The insights gained from this review can inform future research efforts and guide the development of more targeted and effective interventions to enhance innovation performance in this sector. From a practical perspective, the findings of this study can assist SMEs in the hospitality and tourism industry in China to prioritize and optimize their knowledge management strategies. By focusing on the implementation of effective KMPs, fostering a learning-oriented organizational culture, nurturing creativity, and promoting encouraging and supportive leadership, SMEs can create a conducive environment for innovation and improve their overall performance.

5. Conclusion

In conclusion, this systematic literature review has provided valuable insights into the effectiveness of knowledge management practices (KMPs) in shaping organizational creativity and innovation among small and medium-sized enterprises (SMEs) in the Shanxi Province of China. By analyzing 65 relevant studies, the review has highlighted the unique features and contributions of KMPs across various domains, including cognitive, affective, psychomotor, social, and metacognitive aspects of organizational learning and creativity. This systematic literature review has shed light on the crucial role of knowledge management practices in shaping organizational creativity and innovation among SMEs in the Shanxi Province of China. The findings underscore the importance of adopting an integrated approach to knowledge management, organizational learning, and creativity, supported by encouraging and supportive leadership, to drive innovation performance in the hospitality and tourism industry. As the industry continues to evolve and face new challenges, such as the ongoing COVID-19 pandemic, it is imperative for SMEs to leverage the insights gained from this review to adapt, innovate, and thrive in the dynamic business environment.

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Conflict of Interest

The authors declare no conflicts of interest

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