INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN ECONOMICS & MANAGEMENT SCIENCES

OPEN ACCESS JOURNAL

Vol 12, Issue 2, (2023) E-ISSN: 2226-3624

The Conceptual Framework of the Mediating Effects of Knowledge Sharing on Employees' Psychological Empowerment and Innovative Behavior

Jiang Ming Di, Nor Intan Adha Hafit, Suhaila Mohamed

UiTM Selangor, Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor

Corresponding Author Email: intan520@uitm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJAREMS/v12-i2/17179 DOI:10.6007/IJAREMS/v12-i2/17179

Published Online: 12 May 2023

Abstract

This study will investigate the association between knowledge sharing (KS), psychological empowerment (PE), and employees' innovative behavior (EIB), and the effect of psychological empowerment (PE) on employees' innovative behavior (EIB) among Chinese Cultural and Creative Sector (CCS) SME with knowledge sharing as a mediator. For this study, a quantitative methodology will be employed to test four hypotheses, and the sample consisted of 384 employees from small and medium-sized enterprises (SMEs) operating in the cultural and creative sector (CCS) in China. This is preliminary research of the theoretical model. The results of this study will be analyzed with the help of SPSS after collecting data through a convenient sampling method. Improving employee innovation behavior (EIB) is crucial for China's cultural and creative sector (CCS) SMEs. This is one of the few research projects to investigate the mediating function of knowledge sharing (KS) in the link between psychological empowerment (PE) and employees' innovative behavior (EIB), as well as one of the first studies conducted in Chinese CCS. Future research can further investigate and evaluate other driving factors in SMEs.

Keywords: Knowledge Sharing, Psychological Empowerment, Employee Innovative Behavior and Chinese Cultural and Creative Sectors (CCS) SMEs

Introduction

Enterprises can provide the necessary resources and take various strategies and processes to promote employee innovative behavior (EIB) and achieve maximum productivity and efficiency (Ali, 2019; Janssen, 2003). Tang et al (2019) stated that employee innovative behavior benefits enterprises in developing new and valuable insights and solutions for related products, services, and workflow, etc. Used a non-parametric method, they found that the survival possibility of newly started SMEs increased by 23% if their employees implemented innovative behavior. According to Bao's (2016) study, if an enterprise implements innovative activities, it will perform better than other enterprises at resisting risks, its chances of survival will increase by 12%, and life expectancy will increase by 0.84 years.

According to the NBSC, there were 50 million SMEs operating in China in 2022. SMEs account for over 95% of all enterprises in China and contribute over 60% of the GDP. Meanwhile, SMEs have provided the country with 65% of patents, 75% of technical progress, and 80% of the latest products (Song, 2022). However, the failure rate of SMEs is very high, and SMEs in China barely survive for an average of 2.5 years (Bao, 2016). SMEs' innovative capabilities depend on employees' knowledge, especially in a knowledge-intensive industry. The knowledge and experience possessed by employees are valuable assets for any organization's human resources (Fritz et al., 2011). These innovative employees will be motivated to achieve great goals and help enterprises improve their products, services, and operations.

Various previous research has demonstrated a strong association between psychological empowerment and employees' innovative behavior, and have suggested that the cultivation of EIB is significantly influenced by psychological empowerment (Helmyet al., 2019; Seibertet al., 2011; Singh & Sarkar, 2012). Empowered employees are more willing to exhibit innovative behaviors and take on more tasks to achieve higher performance outcomes (Afsaret al., 2018; Spreitzer, 1995). However, Kmieciaket al (2012) found no connection between workers' innovative behavior in SMEs and psychological empowerment, contrary to the belief that psychological empowerment positively affects innovative behavior. Junget et al (2003) discovered that it can have a negative or marginal impact. This may be due to the different cultural characteristics of each sample, which necessitates the addition of a new variable to mediate the relationship between psychological empowerment and innovative behavior.

Therefore, by examining prior research literature, this study additionally addresses the mediating role of knowledge sharing as a management strategy to amplify the impact of psychological empowerment on employees' innovative behavior. To the best of our knowledge, there hasn't been any research conducted on the function of knowledge sharing from this viewpoint in SMEs. Knowledge sharing, as a mode of communication, involves the dissemination and exchange of knowledge and ideas between individuals and teams. It is also a process of producing new knowledge or ideas through the collision of knowledge and ideas (van den Hooff & de Ridder, 2004). Cheng (2002) pointed out that one of the benefits of knowledge sharing is that it can help employees to become more knowledgeable about their work and to gain personal recognition within the company or department. In general, empowered employees will actively share knowledge and promote innovative work behaviors, thus bringing a good atmosphere to the company (Kang et al., 2017).

There are two main purposes of this research, one is to establish a connection between psychological empowerment and innovative behavior, and the other to explore how knowledge sharing affects the link between psychological empowerment and employees' innovative behavior as a mediator. The Chinese Cultural and Creative Sector (CCS) was the subject of this research, with private SMEs serving as the case study.

The Study's Problem

Studies have shown that the implementation effect of most SMEs' innovation strategies could not be ideal, and the main reasons lie in two aspects. First, the innovation strategy ultimately needs employees' behavior to be achieved, but most SMEs' innovation is limited to the conceptual and planning level. There is no way to transform it into the expected performance of SMEs (Parnellet al., 2015; Sadiqet al., 2022). In fact, the number of employees willing to

participate in innovative behavior is limited, especially in SMEs. Many employees are reluctant to submit creative ideas, even though they can receive appropriate rewards. At HCL Technologies Limited, for example, only 2% of its 200,000 employees submitted new ideas. In Large companies, employees are reluctant to submit new ideas to their superiors, let alone SMEs. This lack of innovative behavior from employees makes us look at how we can encourage employees to generate and exchange their innovative ideas and be bold enough to implement their innovative behavior.

Due to the lack of funds for Chinese SMEs, there is less investment in innovation and R&D, so Chinese SMEs face serious homogeneous competition. This situation will weaken the profitability of enterprises and lead to the long-term low-level application of Chinese SMEs. Due to low profits, SMEs have long faced management difficulties, deficiencies in their management system, and low salary levels, with less attraction of high-quality talents, which are relatively small. Therefore, the vicious circle of various factors, so it is urgent for Chinese SMEs to stimulate the innovative behavior of employees.

Moreover, the research on employees' innovative behavior that exists in China is mostly focused on large enterprises such as manufacturing, banking, and telecommunications (Farrukhet al., 2022; Kwon & Kim, 2020; Weiet al., 2019), while research on the determinants of employees' innovative behavior in Chinese SMEs is relatively scarce. In addition, some scholars have taken the post-'80s and post-'90s as the main sample of innovative employee behavior and the previous era as the main research object, which shows the gap between theory and practice. The post-90s and post-00s comprise 30% of the total population and are predicted to be 75% of the workforce by 2025. They actively balance work, life, and personal well-being (Hunsaker & Ding, 2022; Xiao & Cooke, 2012; Zouet al., 2022). For SME managers, figuring out how to stimulate their innovative behavior is a challenging management task.

In this study, we conduct a thorough investigation at the individual employee level, encompassing extensive and detailed analysis of the psychological mechanisms influencing employees and the effect of KS on their innovation. Employees are more likely to engage in innovative behavior when they have the liberty to plan and modify their work processes (Wang & Ritchie, 2012).

Development of Literature and Hypotheses

Chinese Cultural and Creative Sectors (CCS) private SMEs

The Cultural and Creative Sector (CCS) plays an important part in the economy of any nation, as it is the driving force behind many cities' development around the world. In China, CCS is also one of the main impetuses for economic growth. According to the classified by the 2018 CCS industry of classification details, including news information services, creative design services, and cultural communication channels. According to an internal data report of China CCS, the output value of CCS is estimated to be RMB 4624.2 billion in the year 2021. Liang and Wang (2020) found that the growth of CCS enterprises in the country is directly related to urban redevelopments, such as establishing the CCS park as an external factor affecting the performance of enterprises. According to the data feedback from the Chinese Cultural Creative Park website, there are about 65,000 SMEs in CCS and nearly 1.4 million employees.

However, all these positive developments in CCS face an unstable future. The outbreak of COVID-19 in 2020 quickly turned from a public health crisis into a real financial and economic problem. CCS has also been affected and is one of the industries most affected by the pandemic. CCS industries are based on creativity and innovation as fundamental elements, and competitiveness and creativity come from employees' wisdom and creative thinking. The competition for creativity depends on the competition for innovative talents. The research now focuses on ways to encourage employees' innovative behavior.

Factors Affecting Employee Innovative Behavior

Scott and Bruce (1994) discussed the EIB (employees' innovative behavior) from a process perspective, suggesting that its innovative behavior is triggered when employees explore more efficient ways of doing things. Individual innovation is the behavioral tendency to overcome path dependence or deny inherent beliefs (Litchfield et al., 2015). Nowadays, research on EIB usually examines the reaction, production processes, or effects of individuals in the workplace (Zhang et al., 2021). In this study, we believe that EIB is a way of exploring the process. They must emphasize the working self-direction, chase the forefront of professional knowledge through continuous learning to adapt their behavioral habits to the requirements of technological updates, enhance the company's output or services, and put imaginative measures into practice to achieve a certain objective.

The researcher analyzed and summarized the previous related literature and found that the factors affecting EIB include organization and individual elements. Individual factors such as self-cognition and emotional factors will also be associated with EIB. Many scholars analyzed the influence process of individual variables on EIB, including self-efficacy, socio-emotional support, work autonomy, and work engagement (Gu & Peng, 2010; Farmeret et al., 2003; George & Zhou, 2001; Shalley et al., 2009; Tierney & Farmer, 2011 Bednall et al., 2018). From the organizational point of view, the organizational climate affects the outcomes of EIB. Having a fault-tolerant organizational climate will greatly stimulate EIB. Training systems are a factor that supports EIB Freel (2006); Johnson et al (1996), which can create a relaxed organizational atmosphere, because it can share and absorb new knowledge within the organization, allowing individuals to improve their skills. Hirstet al (2009) concluded how teams' training systems moderated the connection between learning orientation and EIB. Therefore, the researcher selected independent variables that affected EIB, including two factors: 1) psychological empowerment (PE), which is chosen from the individual level, and 2) knowledge sharing (KS) as a mediator, which will connect individuals and organizations.

Psychological Empowerment (PE) and EIB

Due to the characteristics of SMEs, small size, and relatively limited human, financial and material resources, they will face more environmental uncertainties. Under the fates of the environment, psychological empowerment (PE) will have an impact on EIB. Psychological empowerment can provide employees a greater sense of control over their life and work, thereby increasing the intrinsic motivation for such a process (Spreitzer, 1995). PE refers to complex psychological states experienced by individuals authorized to be and be defined as a psychological experience of longing for career opportunities and a feeling of internal control. On the other hand, psychological empowerment refers to an individual's perception of their work's significance, self-efficacy, self-determination, and the influence of their work (Thomas & Velthouse, 1990). This is because when a task provides a sense of personal self-

determination and capability, there is a higher likelihood of performing better when motivated.

When companies give employees high PE, they feel more confident and meaningful in their work. Because only when employees has the capacity and conviction to make their own decision, they will be stronger to believe that they have control over the course and result of their work (Kong & Qian, 2015). An employee receives a high level of PE, they feel less constrained than other employees and therefore have more autonomy and influence over their work. Improving their sense of self-efficacy will strengthen their internal motivation and autonomy, showing more actively in innovative behavior (van den Hooff & de Ridder, 2004). Therefore, employees' self-needs in autonomy ability have been met, so when employees get higher PE, they will show higher intrinsic motivation, thus more likely to put forward new ideas and implement innovative behavior (Liang et al., 2022; Ryan & Deci, 2000; Singh & Sarkar, 2012). Some evidence suggests that employees who are empowered and have a high impact are more inclined to explore new ideas, and those who demonstrate a meaningful commitment exhibit increased innovative behavior (Bass, 1985; Schermuly et al., 2013; Singh & Sarkar, 2012). Employees with confidence in their abilities tend to be more self-assured and creative (Liang et al., 2022; Zhou, 1998). As a result, drawing from the existing literature, we propose the following hypothesis:

H1: A significant relationship exists between psychological empowerment (PE) and employee innovative behavior (EIB).

Knowledge Sharing (KS) and EIB

Knowledge is often individual learning and experience, which is the very ground on which individuals engage in innovative activities (Reuvers et al., 2008). Knowledge sharing (KS) is a process of communication and learning. In this process, people exchange information, collide ideas, and improve the knowledge system to jointly update knowledge, and it is an effective means of personal knowledge exchange and integration (van den Hooff et al., 2012; van den Hooff & de Ridder, 2004). CCS industries are knowledge-intensive organizations. Organizations that prioritize knowledge-intensive activities are distinguished by their ability to tackle complex problems through the implementation of innovative solutions. To achieve this goal, such organizations rely on the knowledge, productivity, and innovative commitment of their workforce (Bos-Nehles et al., 2017). The capability to utilize and transform knowledge through knowledge sharing is a determining factor in innovation competitiveness (du Plessis, 2007).

KS is a knowledge-sharing behavior, but also a kind of personal intention. Employees are inclined to assist individuals and their colleagues in completing tasks. Knowledge sharing (KS) facilitates knowledge acquisition, expands knowledge reserves, refines knowledge structures, and improves the efficiency of tackling challenges. The frequency of employees' innovative work behaviors is positively impacted by their knowledge-sharing behavior, according to a study on high-tech enterprises in Iran (Akhavan et al., 2015). Similarly, research by Akram et al (2018) in China demonstrated that the behavior of KS includes both knowledge donation and collection, which have a positive and important impact on the EIB in the telecommunication industry. Therefore, employees can expand their innovative vision through KS, explore innovative opportunities, provide innovative ideas, and put innovative ideas into practice. The following hypothesis is

H2: A significant connection exists between KS and EIB.

Psychological Empowerment (PE) and Knowledge Sharing (KS)

KS is a type of initiative behavior that cannot be pushed, but ways can be found to encourage and facilitate the behavior (Al-Kurdi et al., 2020; Bock et al., 2005; Kang et al., 2017). Many studies have also addressed personal incentives for KS, including the role of intrinsic incentives such as intrinsic self-efficacy or altruism, or that assisting others can bring happiness to oneself (Zhao et al., 2016). The basic essence of PE is to go beyond the traditional concept, not just to give employees rights. It encourages employees to increase self-efficacy and autonomy, to improve their desire to complete the task, so that they can make and implement their own decisions (Spreitzer, 1995; Xue et al., 2011). To produce voluntary and active KS behavior, personal motivation is essential, and PE can increase the personal internal task motivation of KS (Zeraati et al., 2019).

According to empowerment theory, PE can ultimately influence active work orientation (Kim & Gupta, 2014). PE is an incentive and orientation is very positive (Kang et al., 2017) due to personal interpretations or assessments of the meaning of work, which can help the individual to consistently achieve the goal set by the organisation (Spreitzer, 1995; Thomas & Velthouse, 1990). Recognizing and defining the meaning of work can serve as a motivating factor for employees in CCS SMEs, driving them to achieve organizational goals at various levels (Spreitzer, 1995; Thomas & Velthouse, 1990).

At the same time, empowered employees may believe that they have a strong feeling of self-efficacy, which increases the autonomy of their decision-making, willing to take more responsibility for their work, and more inspired in the process of advancing their work and willing to move up for better positions (Caniëlset al., 2017; Naqshbandi & Jasimuddin, 2018). It is widely believed that having a high level of empowerment enables employees to control their own work environment and significantly impact their colleagues and the outcome of the task during its execution, so this can motivate them to improve their problem-solving ability and improve their task performance (Khan et al., 2020; Kim & Gupta, 2014). When employees experience empowerment, they tend to be more motivated to participate in activities that benefit their organization, such as knowledge sharing, thus fostering a positive atmosphere within the organization. This environment offers more possibilities for employees to exchange ideas and knowledge, and encourages or nurtures knowledge sharing (Kang et al., 2017).

H3: There is a significant relationship between PE and KS.

Knowledge Sharing (KS) mediates the relationship between PE and EIB

In general, individuals with psychological empowerment are more likely to feel that freedom and autonomy can effectively and efficiently carry out, organize and participate in the development of new ideas (Ramamoorthy et al., 2005). Previous studies have also emphasized the positive influence of psychological empowerment on innovative work (Faraz et al., 2019; Liu et al., 2019; Aldabbas et al., 2021). Knowledge sharing encompasses the sharing of knowledge and experiences among employees. It can improve the information, knowledge, methods, and new ideas that employees have in the workplace, and it will tend to innovative behavior, so knowledge sharing can positively affect the EIB (Al-Kurdi et al.,

2020; Elrehail et al., 2018). Furthermore, prior studies have indicated that psychological empowerment has a strong impact on knowledge sharing, which can further promote innovative work behaviors (Kang et al., 2017; Yasir et al., 2023).

Knowledge sharing (KS), according to Foss et al (2010), is a procedure whereby individual experience and knowledge are transformed into the organization's own competitiveness. Therefore, knowledge sharing is used as a variable to link psychological empowerment with EIB. One of the dimensions of PE is job meaning, which gives employees the perception that their work is very important so that they have the desire to share their knowledge to enhance innovative work behavior (Wei & He, 2022). While the influence of psychological empowerment (PE) on employee innovative behavior (EIB) is direct, knowledge sharing acts as a catalyst by offering opportunities for mutual learning, growth, and innovation that are beneficial at both the individual and organizational levels (Radaelli et al., 2014; Yu et al., 2013). In a dynamic business environment full of continuous change, the age of the labor force is also constantly changing. As we mentioned earlier, the post-90s and with the new labor force after the 00s will be occupied for a majority. How to stimulate the potential of employees, knowledge sharing and psychological empowerment are crucial abilities for management. As a result, given the argument above, a hypothesis can be put forth

H4: The relationship between psychological empowerment and employees' innovative behavior is mediated through knowledge sharing.

Conceptual Framework

The purpose of this study is to determine whether employee innovation behavior (EIB), as a dependent variable, is significantly related to knowledge sharing and psychological empowerment. Knowledge sharing is also a mediator in the conceptual model. The conceptual basis for this research is shown in Figure 1.

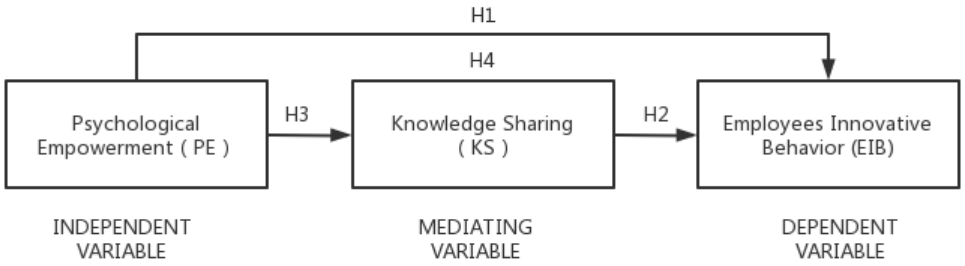

Figure 1. Research Framework

Research Methodology

Method

In this study, a quantitative multiple regression analysis approach is employed, drawing upon a literature review. In the initial phase, the dependent variable is regressed against the control variables, which include gender, organizational tenure, and education level. In the second stage, the independent variable was regressed against the research variables (such as psychological empowerment). The hypothesized mediating roles of knowledge sharing were further assessed using multiple regression analyses. Many data analysis methods can be used to test hypothesized mediation theories. The Baron-Kenny approach is one of the most widely used. Moreover, the strategy has been cited over nine thousand times (Gelfand et al., 2009).

As a result, the methods proposed by the scholar (Baron & Kenny, 1986) should be used to investigate mediating effects.

Sampling Methods

The researcher will use a convenience sampling strategy to obtain data. The study sample consisted of private SME employees in China's cultural and creative sectors (CCS) randomly selected from the QCC. Based on the data feedback from the Chinese Cultural and Creative Park website, there are approximately 65,000 cultural and creative sector SMEs employing nearly 1.4 million people. Based on a sample size calculator developed by Raosoft Incorporation, the researcher will distribute 384 questionnaires to China's cultural and creative sector (CCS) SMEs. Determining the sample size from a given population is shown in Figure 2.

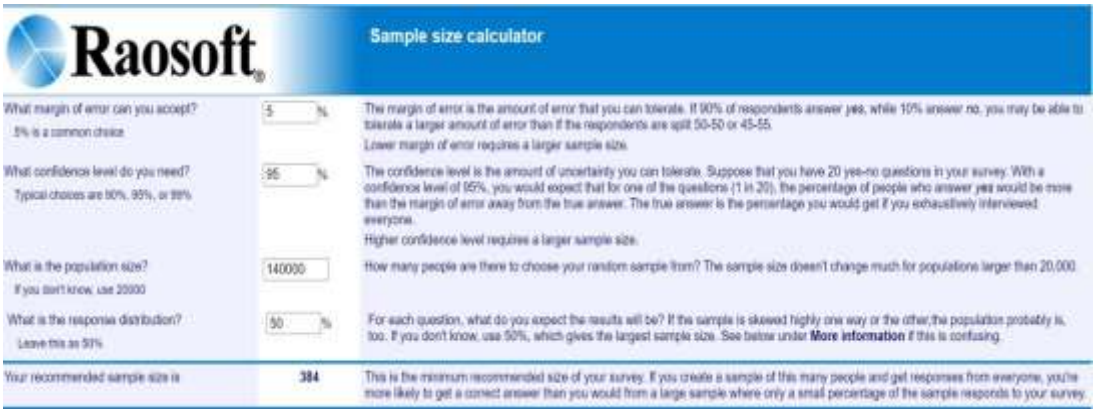

Figure 2: High-quality web survey software is produced by Raosoft, Inc. Calculate sample size. http://www.raosoft.com/samplesize.html

Measure

Each questionnaire consists of Parts I and II. The questions in Part I are related to demographic information, and Part II covers questions on employees' innovative behavior, collected data, and information about this investigation's independent, mediator, and dependent variables. This study employed structured questions to guarantee that respondents offered clear and accurate responses by selecting the answer that best reflected their perspective.

Measurement

The dependent variable of the EIB scale is taken from (Janssen, 2000, 2003). The 9-item scale he completed was used to evaluate EIB. In this research, a scale comprising nine items was developed using Scott and Bruce (1994); Kanter (1988) as references, encompassing three dimensions: idea generation, promotion, and implementation. The Cronbach's alpha for this scale is 0.92, indicating the instrument's reliability (Janssen, 2004, p. 206). Psychological empowerment will be assessed using a 12-item instrument created by Spreitzer (1995), consisting of a 5-point Likert scale with four subdimensions: meaning, competence, self-determination, and impact. he original overall scale had a reliability coefficient of 0.81 (Jaleh et al., 2014). Knowledge sharing (KS) serves as the mediator in this study. An instrument designed by Chow and Chan (2008) was chosen to measure attitude, subjective norm, and intention towards KS for this research. The instrument comprises 13 items, each scored on a Likert scale from 1 to 5. The average Cronbach's alpha for this scale is 0.853 (Aslam et al., 2013; Chow & Chan, 2008). All measurements will employ a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

Significance of the Study

This study combines Chinese private SME employees' innovative behavior and will use the data supported by empirical evidence to extract the key factors suitable for the development of the Chinese context. These results will help enterprises to adjust limited resources to find key successful variables to encourage employees' innovative behavior. At the same time, this study will bring new perspectives, because it focuses on the combination of internal and external factors of EIB, as well as the intermediary factors of knowledge sharing, which help to open a gap for other studies. It can also be used as a guide for the human resources department, policymakers, or planners in SMEs to ensure that new policies or working processes can stimulate EIB. Therefore, SMEs can maintain their competitiveness by stimulating EIB, which can indirectly help increase the expansion of SMEs in China and contribute to the economy.

Conclusion

Based on large employees' innovative behavior (EIB) literature review, and the researchers found this conceptual framework of psychological empowerment (PE), knowledge sharing (KS) and employees' innovative behavior (EIB) for Chinese cultural and creative sector (CCS) SMEs. The CCS itself depends on employees' innovative behavior, especially in SMEs, which always lack technology or financial support, relying only on innovation from within. In this industry, employees need to be given some psychological empowerment so that they can feel autonomy to stimulate their innovative behavior. But relying only on psychological empowerment is certainly far from enough, their competence or technical level is not enough to meet the challenges. Therefore, a mediating variable is added, which is knowledge sharing to cultivate their innovative competence. At the same time, knowledge sharing also creates a positive learning atmosphere for SMEs. With the learning atmosphere, employees are more willing to implement innovative behavior. So far, this is the first study on the EIB of SMEs in China's CCS. In the future, researchers will use a large amount of empirical data to provide relevant support for this theoretical framework.

References

Afsar, B., Cheema, S., & Bin Saeed, B. (2018). Do nurses display innovative work behavior when their values match with hospitals' values? *European Journal of Innovation Management*, *21*(1), 157–171. https://doi.org/10.1108/EJIM-01-2017-0007

Akhavan, P., Hosseini, S. M., Abbasi, M., & Manteghi, M. (2015). Knowledge-sharing determinants, behaviors, and innovative work behaviors: An integrated theoretical view and empirical examination. *Aslib Journal of Information Management*, *67*(5), 562–591. https://doi.org/10.1108/AJIM-02-2015-0018

Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2018). Exploring the Impact of Knowledge Sharing on the Innovative Work Behavior of Employees: A Study in China. *International Business Research*, *11*(3), 186. https://doi.org/10.5539/ibr.v11n3p186

Aldabbas, H., Pinnington, A., & Lahrech, A. (2021). THE MEDIATING ROLE OF PSYCHOLOGICAL EMPOWERMENT IN THE RELATIONSHIP BETWEEN KNOWLEDGE SHARING AND INNOVATIVE WORK BEHAVIOUR. *International Journal of Innovation Management*, *25*(02), 2150014. https://doi.org/10.1142/S1363919621500146

Ali, I. (2019). Personality traits, individual innovativeness, and satisfaction with life. *Journal of Innovation & Knowledge*, *4*(1), 38–46. https://doi.org/10.1016/j.jik.2017.11.002

Al-Kurdi, O. F., El-Haddadeh, R., & Eldabi, T. (2020). The role of organisational climate in

managing knowledge sharing among academics in higher education. *International Journal of Information Management*, *50*, 217–227. https://doi.org/10.1016/j.ijinfomgt.2019.05.018

Amabile, T. M. (1988). From individual creativity to organizational innovation. 收入 *Innovation: A cross-disciplinary perspective* (页 139–166). Norwegian University Press.

Bao, Z. (2016). Innovative behavior and the Chinese enterprise survival risk: An empirical research. *China Finance and Economic Review*, *4*(1), 18. https://doi.org/10.1186/s40589-016-0044-9

Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics*, *13*(3), 26–40. https://doi.org/10.1016/0090-2616(85)90028-2

Bock, Zmud, Kim, & Lee. (2005). Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate. *MIS Quarterly*, *29*(1), 87. https://doi.org/10.2307/25148669

Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behaviour: A systematic literature review. *Personnel Review*, *46*(7), 1228–1253. https://doi.org/10.1108/PR-09-2016-0257

Caniels, M. C. J., Neghina, C., & Schaetsaert, N. (2017). Ambidexterity of employees: The role of empowerment and knowledge sharing. *Journal of Knowledge Management*, *21*(5), 1098–1119. https://doi.org/10.1108/JKM-10-2016-0440

du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of Knowledge Management*, *11*(4), 20–29. https://doi.org/10.1108/13673270710762684

Elrehail, H., Emeagwali, O. L., Alsaad, A., & Alzghoul, A. (2018). The impact of Transformational and Authentic leadership on innovation in higher education: The contingent role of knowledge sharing. *Telematics and Informatics*, *35*(1), 55–67. https://doi.org/10.1016/j.tele.2017.09.018

Faraz, N. A., Mughal, M. F., Ahmed, F., Raza, A., & Khalid Iqbal, M. (2019). The Impact of Servant Leadership on Employees' Innovative Work Behaviour-Mediating Role of Psychological Empowerment. *INTERNATIONAL JOURNAL OF MANAGEMENT SCIENCE AND BUSINESS ADMINISTRATION*, *5*(3), 10–21. https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.53.1002

Farmer, S. M., Tierney, P., & Kung-McIntyre, K. (2003). EMPLOYEE CREATIVITY IN TAIWAN: AN APPLICATION OF ROLE IDENTITY THEORY. *Academy of Management Journal*, *46*(5), 618–630. https://doi.org/10.2307/30040653

Farrukh, M., Ansari, N. Y., Raza, A., Meng, F., & Wang, H. (2022). High-performance work practices do much, but H.E.R.O does more: An empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management*, *25*(3), 791–812. https://doi.org/10.1108/EJIM-11-2020-0448

Foss, N. J., Husted, K., & Michailova, S. (2010). Governing Knowledge Sharing in Organizations: Levels of Analysis, Governance Mechanisms, and Research Directions. *Journal of Management Studies*, *47*(3), 455–482. https://doi.org/10.1111/j.1467-6486.2009.00870.x

Freel, M. (2006). Characterising Innovation in Knowledge-Intensive Business Services. 收入 *Advances in Entrepreneurship, Firm Emergence and Growth* (卷 9, 页 147–174). Emerald (MCB UP). https://doi.org/10.1016/S1074-7540(06)09006-4

Fritz, C., Lam, C. F., & Spreitzer, G. M. (2011). It's the Little Things That Matter: *Academy of Management Perspectives*.

George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, *86*, 513–524. https://doi.org/10.1037/0021-9010.86.3.513

Helmy, I., Adawiyah, W. R., & Banani, A. (不详). *Linking Psychological Empowerment, Knowledge Sharing, and Employees' Innovative Behavior in Indonesian SMEs*.

Hirst, G., Van Knippenberg, D., & Zhou, J. (2009). A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behavior, and Individual Creativity. *Academy of Management Journal*, *52*(2), 280–293. https://doi.org/10.5465/amj.2009.37308035

Hunsaker, W. D., & Ding, W. (2022). Workplace spirituality and innovative work behavior: The role of employee flourishing and workplace satisfaction. *Employee Relations: The International Journal*, *44*(6), 1355–1371. https://doi.org/10.1108/ER-01-2021-0032

Janssen, O. (2003). Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co-workers. *Journal of Occupational and Organizational Psychology*, *76*(3), 347–364. https://doi.org/10.1348/096317903769647210

Johnson, J., Baldwin, J. R., & Diverty, B. (1996). The implications of innovation for human resource strategies. *Futures*, *28*(2), 103–119. https://doi.org/10.1016/0016-3287(95)00083-6

Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The Leadership Quarterly*, *14*(4–5), 525–544. https://doi.org/10.1016/S1048-9843(03)00050-X

Kang, Y. J., Lee, J. Y., & Kim, H.-W. (2017). A psychological empowerment approach to online knowledge sharing. *Computers in Human Behavior*, *74*, 175–187. https://doi.org/10.1016/j.chb.2017.04.039

Khan, J., Malik, M., & Saleem, S. (2020). The Impact of Psychological Empowerment of Project-Oriented Employees on Project Success: A Moderated Mediation Model. *Economic Research-Ekonomska Istraživanja*, *33*(1), 1311–1329. https://doi.org/10.1080/1331677X.2020.1756374

Kim, H.-W., & Gupta, S. (2014). A User Empowerment Approach to Information Systems Infusion. *IEEE Transactions on Engineering Management*, *61*(4), 656–668. https://doi.org/10.1109/TEM.2014.2354693

Kmieciak, R., Michna, A., & Meczynska, A. (2012). Innovativeness, empowerment and IT capability: Evidence from SMEs. *Industrial Management & Data Systems*, *112*(5), 707–728. https://doi.org/10.1108/02635571211232280

Kong, M., & Qian, X. (2015). Mr. Right & Superman: Effect of Implicit Followership on Employee's Behaviors. *Acta Psychologica Sinica*, *47*(9), 1162. https://doi.org/10.3724/SP.J.1041.2015.01162

Kwon, K., & Kim, T. (2020). An integrative literature review of employee engagement and innovative behavior: Revisiting the JD-R model. *Human Resource Management Review*, *30*(2), 100704. https://doi.org/10.1016/j.hrmr.2019.100704

Liang, S., & Wang, Q. (2020). Cultural and Creative Industries and Urban (Re)Development in China. *Journal of Planning Literature*, *35*(1), 54–70. https://doi.org/10.1177/0885412219898290

Liang, W., Lv, C., Yu, Y., Li, T., & Liu, P. (2022). Leader's Implicit Followership and Employees' Innovative Behavior: Chain Mediation Effect of Leader–Member Exchange and Psychological Empowerment. *Frontiers in Psychology*, *13*, 815147. https://doi.org/10.3389/fpsyg.2022.815147

Litchfield, R. C., Ford, C. M., & Gentry, R. J. (2015). Linking Individual Creativity to

Organizational Innovation. *The Journal of Creative Behavior*, *49*(4), 279–294. https://doi.org/10.1002/jocb.65

Liu, Y., Wang, W., & Chen, D. (2019). Linking Ambidextrous Organizational Culture to Innovative Behavior: A Moderated Mediation Model of Psychological Empowerment and Transformational Leadership. *Frontiers in Psychology*, *10*, 2192. https://doi.org/10.3389/fpsyg.2019.02192

Naqshbandi, M. M., & Jasimuddin, S. M. (2018). Knowledge-oriented leadership and open innovation: Role of knowledge management capability in France-based multinationals. *International Business Review*, *27*(3), 701–713. https://doi.org/10.1016/j.ibusrev.2017.12.001

Parnell, J. A., Long, Z., & Lester, D. (2015). Competitive strategy, capabilities and uncertainty in small and medium sized enterprises (SMEs) in China and the United States. *Management Decision*, *53*(2), 402–431. https://doi.org/10.1108/MD-04-2014-0222

Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge Sharing and Innovative Work Behaviour in Healthcare: A Micro-Level Investigation of Direct and Indirect Effects: Knowledge Sharing and IWB in Healthcare. *Creativity and Innovation Management*, *23*(4), 400–414. https://doi.org/10.1111/caim.12084

Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardessai, R. (2005). Determinants of Innovative Work Behaviour: Development and Test of an Integrated Model. *Creativity and Innovation Management*, *14*(2), 142–150. https://doi.org/10.1111/j.1467-8691.2005.00334.x

Reuvers, M., van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational Leadership and Innovative Work Behaviour: Exploring the Relevance of Gender Differences. *Creativity and Innovation Management*, *17*(3), 227–244. https://doi.org/10.1111/j.1467-8691.2008.00487.x

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, *25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020

Schermuly, C. C., Meyer, B., & Dämmer, L. (2013). Leader-Member Exchange and Innovative Behavior: The Mediating Role of Psychological Empowerment. *Journal of Personnel Psychology*, *12*(3), 132–142. https://doi.org/10.1027/1866-5888/a000093

Scott, S. G., & Bruce, R. A. (1994). DETERMINANTS OF INNOVATIVE BEHAVIOR: A PATH MODEL OF INDIVIDUAL INNOVATION IN THE WORKPLACE. *Academy of Management Journal*, *37*(3), 580–607. https://doi.org/10.2307/256701

Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of Applied Psychology*, *96*(5), 981–1003. https://doi.org/10.1037/a0022676

Shalley, C. E. (1995). EFFECTS OF COACTION, EXPECTED EVALUATION, AND GOAL SETTING ON CREATIVITY AND PRODUCTIVITY. *Academy of Management Journal*, *38*(2), 483–503. https://doi.org/10.2307/256689

Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive Effects of Growth Need Strength, Work Context, and Job Complexity On Self-Reported Creative Performance. *Academy of Management Journal*, *52*(3), 489–505. https://doi.org/10.5465/amj.2009.41330806

Singh, M., & Sarkar, A. (2012). The Relationship Between Psychological Empowerment and Innovative Behavior: A Dimensional Analysis With Job Involvement as Mediator. *Journal of Personnel Psychology*, *11*(3), 127–137. https://doi.org/10.1027/1866-5888/a000065

Song, Y. (2022). How do Chinese SMEs enhance technological innovation capability? From the

perspective of innovation ecosystem. *European Journal of Innovation Management*. https://doi.org/10.1108/EJIM-01-2022-0016

Spreitzer, G. M. (不详). PSYCHOLOGICAL EMPOWERMENT IN THE WORKPLACE: DIMENSIONS, MEASUREMENT, AND VALIDATION. *Academy of Management Journal*.

Spreitzer, G. M. (1995). PSYCHOLOGICAL, EMPOWERMENT IN THE WORKPLACE: DIMENSIONS, MEASUREMENT AND VALIDATION. *Academy of Management Journal*, *38*(5), 1442–1465. https://doi.org/10.2307/256865

Tang, Y., Shao, Y.-F., & Chen, Y.-J. (2019). Assessing the Mediation Mechanism of Job Satisfaction and Organizational Commitment on Innovative Behavior: The Perspective of Psychological Capital. *Frontiers in Psychology*, *10*, 2699. https://doi.org/10.3389/fpsyg.2019.02699

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive Elements of Empowerment: An "Interpretive" Model of Intrinsic Task Motivation. *Academy of Management Review*, *15*(4), 666–681. https://doi.org/10.5465/amr.1990.4310926

Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *Journal of Applied Psychology*, *96*, 277–293. https://doi.org/10.1037/a0020952

van den Hooff, B., & de Ridder, J. A. (2004). Knowledge sharing in context: The influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, *8*(6), 117–130. https://doi.org/10.1108/13673270410567675

van den Hooff, B., Schouten, A. P., & Simonovski, S. (2012). What one feels and what one knows: The influence of emotions on attitudes and intentions towards knowledge sharing. *Journal of Knowledge Management*, *16*(1), 148–158. https://doi.org/10.1108/13673271211198990

Wang, J., & Ritchie, B. W. (2012). Understanding accommodation managers' crisis planning intention: An application of the theory of planned behaviour. *Tourism Management*, *33*(5), 1057–1067. https://doi.org/10.1016/j.tourman.2011.12.006

Wei, X., & He, Y. (2022). Exploration on the Role of Transformational Leadership Linkage Psychological Empowerment in Stimulating Employees' Innovation Behavior in an Uncertain Environment: Based on Entrepreneurship Perspective. *Occupational Therapy International*, *2022*, 1–11. https://doi.org/10.1155/2022/9259180

Wei, X., Liu, X., & Sha, J. (2019). How Does the Entrepreneurship Education Influence the Students' Innovation? Testing on the Multiple Mediation Model. *Frontiers in Psychology*, *10*, 1557. https://doi.org/10.3389/fpsyg.2019.01557

Xiao, Y., & Cooke, F. L. (2012). Work-life balance in China? Social policy, employer strategy and individual coping mechanisms: Asia Pacific Journal of Human Resources 50. *Asia Pacific Journal of Human Resources*, *50*(1), 6–22. https://doi.org/10.1111/j.1744-7941.2011.00005.x

Xue, Y., Bradley, J., & Liang, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, *15*(2), 299–312. https://doi.org/10.1108/13673271111119709

Yasir, M., Majid, A., Yousaf, Z., Nassani, A. A., & Haffar, M. (2023). An integrative framework of innovative work behavior for employees in SMEs linking knowledge sharing, functional flexibility and psychological empowerment. *European Journal of Innovation Management*, *26*(2), 289–308. https://doi.org/10.1108/EJIM-02-2021-0091

Yu, C., Yu, T.-F., & Yu, C.-C. (2013). Knowledge Sharing, Organizational Climate, and Innovative

Behavior: A Cross-Level Analysis of Effects. *Social Behavior and Personality: An International Journal*, *41*(1), 143–156. https://doi.org/10.2224/sbp.2013.41.1.143

Zeraati, H., Rajabion, L., Molavi, H., & Navimipour, N. J. (2019). A model for examining the effect of knowledge sharing and new IT-based technologies on the success of the supply chain management systems. *Kybernetes*, *49*(2), 229–251. https://doi.org/10.1108/K-06-2018-0280

Zhang, S., Liu, X., & Du, Y. (2021). When and how authoritarian leadership influences employee innovation behavior in the context of Chinese culture. *Leadership & Organization Development Journal*, *42*(5), 722–734. https://doi.org/10.1108/LODJ-08-2020-0342

Zhao, L., Detlor, B., & Connelly, C. E. (2016). Sharing Knowledge in Social Q&A Sites: The Unintended Consequences of Extrinsic Motivation. *Journal of Management Information Systems*, *33*(1), 70–100. https://doi.org/10.1080/07421222.2016.1172459

Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. *Journal of Applied Psychology*, *83*, 261–276. https://doi.org/10.1037/0021-9010.83.2.261

Zou, W. C., Houghton, J. D., & Li, J. J. (2022). Workplace spirituality as a means of enhancing service employee well-being through emotional labor strategy choice. *Current Psychology*, *41*(8), 5546–5561. https://doi.org/10.1007/s12144-020-01069-5