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Influence of Organizational Innovation Climate on Creativity and the Mediating Role of Feedback-Seeking Behavior – A Case Study of University Teachers in Hebei, China

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Abstract. The organization of an innovative climate is essential for the development of creativity. This study investigated the impact of an innovative climate on creativity among university teachers in Hebei, China, and examined feedback-seeking behavior as a mediating variable. An intermediary model was built to test the mediating role of feedbackseeking behavior in the relationship between an innovative climate and creativity, using AMOS software to analyze the questionnaire data of 356 university teachers in Hebei. The mediating model consists of three variables, which are an innovative climate, feedback-seeking behavior, and creativity. This study examines the relationship between an innovative climate, feedback-seeking behavior, and creativity among university teachers in Hebei, China. The study found that a positive innovative climate was significantly associated with higher levels of creative teaching and research skills among university teachers in Hebei, and that this relationship was partially mediated by feedback-seeking behavior. In conclusion, this study highlights the crucial role of an innovative climate and feedback-seeking behavior in promoting creativity among university teachers in Hebei and offers practical implications for higher education institutions to cultivate a more innovative and creative culture.

Keywords: university teachers; organizational innovation climate; development of creativity; feedback-seeking; mediation

1. Introduction

The context of this study is the higher education system in Hebei, China. In recent years, the Chinese government has emphasized the importance of innovation in

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driving economic and social development (xiu, 2022). As part of this, the Hebei province has implemented innovation-driven development strategies where the development of "double first-class" colleges and universities has become a major priority (Lian et al., 2021). However, to achieve this goal, the presence of creative teachers who can effectively promote innovation in teaching and research are required (Deng et al., 2020). Furthermore, in the context of higher education, creativity is not only important to drive innovation and development but also to promote the quality of education (Lian et al., 2021). Creativity is rooted in a complex interaction between environmental factors and personal characteristics (Thatrak, 2021). Compared to a creative personality and mindset, environmental factors such as management practices produce perceptible effects in a short period of time. Through this, they considerably impact the generation and development of innovative behaviors (Corradini et al., 2022). Therefore, university administrators should create an environment that promotes organizational innovation and strive to improve teachers' creative teaching and research capabilities.

An organizational innovation climate is comprised of innovative orientation and internal organizational support for innovation (Schindler & Lilienthal, 2022). It can cultivate innovative thinking, trigger work motivation, and improve the creativity of members (Shen et al., 2021). It plays a significant role in supporting and promoting the creative activities of individuals and organizations (Nwangwu et al., 2021) and also connects individual and organizational creativity (Chen & Li, 2010). A robust organizational innovation climate encourages mutual collaboration, information exchange, and interaction among members, in addition to providing adequate guidance for members to participate in organizational innovation (Aldabbas et al., 2021). Furthermore, the sense of psychological security generated among members under an organizational innovation climate can help provide the mental and emotional support required for creative activities (Emery et al., 2021).

The lack of a favorable environment that inspires creativity limits the creative behavior of individuals (Zhang et al., 2011). This highlights the significance of creating an organizational innovation climate in the context of increasingly fierce competition in higher education (Muftahu & Jamil, 2021; Sharma et al., 2021). A friendly (Stinkeste et al., 2021), tolerant (Y. Wang et al., 2021), cooperative (Thomas & Khalil, 2022), and safe organizational climate (Whlert, 2020) can enhance knowledge sharing and generate a stronger sense of psychological security (Whlert, 2020), help realize the objectives of workplace excellence and exceptionality, and encourage teachers to pursue innovation in education and research (Dean et al., 2021).

Although the majority of studies have focused on the outcomes of creativity (Daikoku et al., 2021; Kumar & Shukla, 2022; Thomas, 2022), knowledge about specific strategies during the creative process is limited (Mavri et al., 2021) and the key variables for the generation and development of creativity are poorly understood (Atatsi et al., 2022; Baker et al., 2022; Marín et al., 2022). Further, there is currently no effective interpretation of the process that produces creative results

(Thomas, 2022). Therefore, exploring the individual self-regulation process in creativity development is crucial to understand the development of creativity among organizational members (Kaufman & Sternberg, 2020). According to Son and Kim (2016), feedback-seeking behavior is a valuable resource, a constant search for self-evaluation and improvement (Krasman, 2010) through information exchange (Kumar & Shukla, 2022), and considerably influences the relationship between organizational innovation climate and creativity.

2. Literature Review

A supportive organizational innovation climate that is agile, open, and innovative can facilitate individuals' proactive responses to creativity requirements, leading to idea generation for innovation (Lv et al., 2021). Therefore, sustained and focused efforts should be made towards fostering creative development within the organization.

2.1 Theoretical Basis

Theoretical foundations play a crucial role in understanding the factors that contribute to creativity in teacher education and higher education institutions. According to Kozbelt et al. (2020), motivation for creativity is key to the transformation of potential creativity into actioned creative behavior and outcomes. Creative motivation is essential for generating novel ideas and content, solving problems, and achieving targets in teaching and research activities (Kime, 2015). Additionally, creative motivation can enhance interest in educational activities and tasks and influence engagement levels in the classroom and in research projects (Sternberg, 2020). Therefore, creative outcomes in education depend not only on creative ability and skill, but also on creative motivation (Kozbelt et al., 2020).

According to Thomas (2022), synergistic extrinsic motivation is an external factor for creativity development (Cerasoli et al., 2014). In the organizational innovation climate, various factors support individual autonomy, ability, and task commitment (Chaubey et al., 2021). Thus, according to Kaufman and Sternberg (2020), an organizational climate supportive of innovation facilitates individual creativity. Deng et al. (2020) determined that in an excellent organizational innovation climate, teachers exhibit increased creative teaching and research capabilities. Further, during the preparation and confirmation stages of creativity development, feedback-seeking behavior can provide constructive information, encourage creative consciousness, and improve creative ability (Minnikin et al., 2021). Thus, feedback-seeking behavior can help inspire creative thinking and promote the development of creativity (Trudeau et al., 2021). According to the theory of creative motivation, the incentive to be creative and external collaborative motivation can drive creative behavior and outcomes. Hence, research on organizational innovation environment, creativity, and feedbackseeking offer relevant theoretical foundations and guidance to help foster teachers' creative development, improve educational quality, and increase innovation capacity.

2.2 Organizational Innovation Climate and Creativity

Studies have shown that individuals perceive an external organizational environment to conclude whether it is conducive to facilitate creative activities (Lv et al., 2021). Individuals also examine the perception of innovation orientation, features of and support for innovation in the organization (Schindler & Lilienthal, 2022), as well as the results of interactions between individuals and the environment (Phankhong et al., 2020). An environment that lacks creativity limits individuals' creative behavior (Zhang et al., 2011). One way to enhance creativity is to reduce the effect of external constraints (Kaufman & Sternberg, 2020).

In the specific organizational context, an organizational innovation climate offers a strong and supportive environment for developing individual creativity and innovation (Chaubey et al., 2021). In addition, it positively influences intrinsic motivation and is a synergistic extrinsic motivator (Kaufman & Sternberg, 2020). Creativity is attributed to the interactions between an individual's qualities and the surrounding environment Thomas (2022). Thus, an organization's innovation climate can significantly impact its members' creative activities and ultimately lead to success in innovation (Aldabbas et al., 2021). In colleges and universities, creating an innovative climate has a significant and positive impact on the improvement of teachers' creativity (Deng et al., 2020). Specifically, such a climate can reduce external constraints, provide a supportive environment, and positively influence teachers' intrinsic motivation, thereby encouraging their participation in creative activities. Therefore, it can be concluded that an organizational innovation climate significantly enhances the creativity of university teachers in the Hebei province.

2.3 Feedback-Seeking Behavior and Creativity

Feedback-seeking behavior is essential, allowing individuals to obtain valuable information from their peers and supervisors and regulate their behavior in specific contexts (Déprez et al., 2021). By seeking feedback, individuals can avoid uncertainty and ambiguity and enhance role clarity, thereby correcting wrong behaviors and improving their overall performance (Minnikin et al., 2021). This behavior modification tool and motivation strategy can also promote individual and organizational development by facilitating knowledge transfer (Wang et al., 2021) and generating innovative thinking through reflective thinking (Rdulescu, 2013).

Research has shown that feedback-seeking behavior is associated with better creative performance and is especially significant in a creative environment where members actively seek feedback and have a lower risk perception (Stobbeleir et al., 2011). In addition, individuals who take initiatives for self-adjustment tend to exhibit better creative performances (Dygert & Jarosz, 2020), and the significance of reflective thinking increases with the accumulation and complexity of knowledge (Cho & Seo, 2021; Mavri et al., 2021; Minnikin et al., 2021).

Therefore, actively seeking feedback is a valuable tool that can significantly improve teachers' creativity. It not only helps individuals obtain useful information but also facilitates knowledge transfer and generates innovative thinking. Overall, feedback-seeking behavior is a crucial aspect of individual and organizational development that should be encouraged and fostered in a creative and supportive environment.

2.4 Organizational Innovation Climate and Feedback-Seeking Behavior

An innovative climate can promote a culture of feedback and support feedbackseeking behavior (Prilop et al., 2021). Organizational support is a critical factor that can influence an individual's willingness to seek feedback (Minnikin et al., 2021). It can encourage individuals to feel confident in seeking feedback and improve their ability to clarify work standards, job cognition, and judgment (Phankhong et al., 2020; Zhang et al., 2021; Zhao & Wu, 2021).

Moreover, an innovative climate can also alleviate psychological pressure and enhance autonomous motivation, which empowers individuals to engage more in creative activities (Saraf et al., 2021) This environment provides a space for individuals to adjust their emotional states, feel relaxed and safe, and share new ideas (Bledow et al., 2013; Chaubey et al., 2021). The feedback obtained from a robust organizational innovation climate is usually credible, high-quality, accurate, and useful, which helps strengthen the confidence and kinetic energy of an individual when seeking feedback (Saraf et al., 2021).

In summary, an innovative climate can positively influence feedback-seeking behavior by promoting a feedback culture and providing organizational support. Organizational support can encourage individuals to seek feedback, clarify work standards, and improve their job cognition and judgment. A robust organizational innovation climate can also alleviate psychological pressure, enhance autonomous motivation, and provide a relaxed and safe environment for sharing new ideas.

2.5 Mediating Role of Feedback-Seeking Behavior

The literature suggests that organizational innovation climate plays a critical role in enhancing individuals' perception of creativity and their creative performance (Sun & Tao, 2020). However, the mechanisms underlying the generation and development of individual creativity remain poorly understood (Chaubey et al., 2021). To this end, Saraf et al. (2021) proposed that feedback-seeking behavior can serve as a means to promote personal and organizational development. As an important context variable, organizational climate can convey information about innovation expectations, clarify roles and tasks, and motivate individuals to seek feedback, thereby promoting their creative abilities and development (Brycz, 2021; Whitaker & Levy, 2012).

In particular, the exchange of information and knowledge among university teachers can lead to the establishment of communication, relationships, mutual trust, and support within an organization (Garivani et al., 2016). Such a process not only meets fundamental psychological needs but also creates a sense of belonging among teachers, ultimately promoting creativity (Carmeli et al., 2015). In summary, organizational innovation climate can enhance creativity by encouraging feedback-seeking behavior, helping one clarify roles and tasks, motivating individuals, and promoting individual creative abilities. Through the exchange and sharing of information and knowledge, teachers can establish

communication and trust, meet their psychological needs, and create a sense of belonging. Therefore, feedback-seeking behavior serves as a crucial factor linking organizational innovation climate and creativity.

3. Methodology

3.1 Research Objective

The aim of this study is to assess the current state of creativity among university teachers in Hebei and to identify effective development strategies to improve their competitiveness. The study intends to promote innovation and reform in teacher management to meet the challenges of changing times. The research participants were selected using convenience sampling from three universities in Hebei, and a total of 356 university teachers took part. The findings of this study will aid in cultivating teachers' creativity, integrating their skills, abilities, and mindsets into teaching reform, and promoting innovation-driven development in Hebei's universities. Ultimately, this study aims to cultivate more talented individuals with creative mindsets to address the evolving needs of the education sector.

3.2 Research Tools

A questionnaire survey was conducted to analyze the collected sample data. The research tools utilized were the Organizational Innovation Climate Scale, Creativity Scale, and Feedback-Seeking Behavior Scale.

3.2.1 Organizational Innovation Climate Scale

The Organizational Innovation Climate Scale developed by Wang et al. (2017) was used in this study to measure teachers' perceptions of the organizational innovation climate (refer to Table 1). The scale consists of 10 items that measure three dimensions: job autonomy, teamwork, and organizational motivation. Respondents were asked to rate each item on a 5-point Likert scale (1 = "totally disagree", 2 = "disagree", 3 = "uncertain", 4 = "agree", and 5 = "totally agree"). The total score of the scale was obtained through the sum of the scores of each item. A higher score indicated a higher perception of organizational innovation climate.

To establish the validity and reliability of the scale, Cronbach's alpha coefficient was calculated, and indicated good internal consistency at 0.867. The deletion of any item did not significantly improve the Cronbach's alpha coefficient, suggesting that 10 items contributed to the scale's reliability. A confirmatory factor analysis was conducted to assess the construct validity of the scale. The results showed satisfactory fitting indices, with $\chi 2/df = 3.654$, which is below the threshold of 5. Other fitting indicators, including RMSEA = 0.086 (below the standard value of 0.1), SRMR = 0.053 (below the standard value of 0.8), and CFI = 0.962, NFI = 0.936, GFI = 0.944, TLI = 0.955, all exceeded the recommended threshold of 0.8 (Watkins, 2018).

Overall, the results indicate that the Organizational Innovation Climate Scale has good validity and reliability and is a suitable tool for measuring teachers' perceptions of organizational innovation climate.

Dimension	Question item					
Autonomous working	1. I can arrange my work schedule freely					
	2. I was able to decide how to execute the work plan					
	3. I have room for independent play in my work					
Teamwork	4. Colleagues often communicate and discuss the problems at work					
	5. My colleagues will actively help me to complete my tasks					
	6. I feel the support and care from my colleagues					
Organizational incentive	7. Schools will reward teachers who have innovative ideas					
	8. The incentive system of schools makes teachers innovative and					
	enthusiastic					
	9. Schools encourage teachers to develop creative ideas					
	10. The school's incentive system effectively enhances the work innovation					

 Table 1: Organizational Innovation Atmosphere Scale

3.2.2 Creativity Scale

The Creativity Scale developed by Zhou and George (2001) has 13 items and comprises one dimension (refer to Table 2). Each item was scored on a 5-point Likert scale (1 = "totally disagree", 2 = "disagree", 3 = "uncertain", 4 = "agree", and 5 = "totally agree"). To assess its reliability, Cronbach's alpha coefficient was computed. The value of Cronbach's α for this scale was found to be 0.924, indicating a high internal consistency among the items. The deletion of any item did not significantly improve the Cronbach's alpha coefficient, suggesting that all 13 items contributed to the scale's reliability. Additionally, confirmatory factor analysis was conducted to assess the scale's validity. The fitting indices were satisfactory, with $\chi 2/df = 2.331$, RMSEA = 0.061, SRMR = 0.034, CFI = 0.996, NFI = 0.990, GFI = 0.991, and TLI = 0.993.

Table 2: Creativity Scale

Question item

- 1. I am able to propose a way to achieve a purpose or goal
- 2. I am able to come up with new and practical ideas to improve my performance
- 3. I am able to search for new ideas related to technology, procedures, and products
- 4. I am able to propose new ways to improve quality
- 5. I am a great source of ideas
- 6. I am not afraid to take risks
- 7. I am able to promote and support the ideas of others
- 8. I am able to show my creativity at the right time at work
- 9. I am able to make appropriate plans and schedules to achieve new ideas
- 10. I often have new ideas
- 11. I am able to propose creative solutions
- 12. I often have new ways to solve problems
- 13. I am able to propose new ways to perform work tasks

3.2.3 Feedback-Seeking Behavior Scale

The Feedback-Seeking Behavior Scale, developed by VandeWalle et al. (2000), is a unidimensional scale consisting of five items scored on a 6-point Likert scale (1 = "totally disagree", 2 = "disagree", 3 = "uncertain", 4 = "agree", 5 = "comparatively agree", and 6 = "totally agree") (refer to Table 3). A higher score indicates a greater need for seeking feedback. To assess the reliability of the scale, Cronbach's alpha coefficient was calculated and found to be 0.894, indicating good internal consistency. The deletion of any item did not significantly improve the Cronbach's alpha coefficient, suggesting that all 5 items contributed to the scale's reliability. Furthermore, confirmatory factor analysis was conducted to examine the construct validity of the scale. The results indicated that the scale had a good model fit with $\chi 2/df = 2.747$, RMSEA = 0.070, SRMR = 0.019, CFI = 0.991, NFI = 0.986, GFI = 0.985, and TLI = 0.983.

Table 3: Feedback-seeking Behavior Scale

Question item

1. I often ask my superiors and colleagues about my professional skills

2. I often ask my superiors and colleagues about my role orientation and expectations for my work

3. I often ask my superiors and colleagues about my views on my overall work performance

4. I often ask my superiors and colleagues about my social behavior

5. I often ask my superiors and colleagues if my behavior and attitude align with the school values

3.3 Statistical Analysis Method

In the present study, structural equation modeling (SEM) was adopted to analyze the relationship among organizational innovation climate, creativity, and feedback-seeking behavior, which helped better understand the research results. SEM is a comprehensive statistical method that combines linear regression between dependent variables, the correlation between covariates, and the structural relationship between variables, and it helps quickly and accurately analyze the relationship between different variables (Roger et al., 2021). In SEM analysis, the structural equation model was first checked for conformance to the general fitting indices. Then, the relationship between the three variables was identified depending on whether the path coefficient was significant, and the Bootstrap method was used to test the mediating effect. The Bootstrap method is a simulated sampling method that estimates the distribution of certain statistics through repeated sampling to accurately analyze the mediating effect. The confidence interval was set to 95%, and if the confidence interval was not 0, the mediating effect was considered to be significant (Hayes, 2013).

4. Results

A total of 400 questionnaires were distributed and 384 were collected, of which 356 were valid, resulting in an effective response rate of 89%. Data collation and analysis were carried out on the collected research samples. The sample

comprised 227 men (63.76%) and 129 women (36.24%); 143 had a bachelor's degree (40.17%), 177 had a master's degree (49.72%), and 36 had a PhD (10.11%).

Variable Descriptive Statistics and Correlation Analysis

Table 4 shows the mean and standard deviation for each variable. The results are as follows: organizational innovation climate (M = 3.672, SD = 0.594), creativity (M = 3.647, SD = 1.027), and feedback-seeking behavior (M = 3.617, SD = 0.687). Each variable was in the upper middle performance level, and there were significant positive correlations among all the variables. The coefficients of correlation among the observed variables were in the range 0.547–0.638, with all being significant (p < 0.001), and there was no problem of collinearity (Adewoye et al., 2021).

Variable	Μ	SD	OAI1	OAI2	OAI3	OAI	CA	SFB
OAI1	3.577	0.769	1					
OAI2	3.793	0.641	0.487**	1				
OAI3	3.617	0.770	0.497**	0.407**	1			
OAI	3.672	0.594	0.810**	0.730**	0.850**	1		
CA	3.647	1.027	0.465**	0.445**	0.473**	0.574**	1	
SFB	3.617	0.687	0.441**	0.412**	0.459**	0.547**	0.638**	1

Table 4: Variable descriptive statistics and correlation analysis

Note: ** *p* < 0.01; *OAI, CA, and SFB denote Organizational Innovation Climate, Creativity, and Feedback-Seeking Behavior, respectively. OAI1, OAI2, and OAI3 refer to independent learning, teamwork, and organizational motivation, respectively.*

A structural equation model was constructed to examine the relationships among organizational innovation climate, creativity, and feedback-seeking behavior. The model fit indices presented were satisfactory and in line with general SEM research standards, indicating a good fit: χ^2 / df=0.207, RMSEA=0.076, SRMR=0.047, CFI=0.915, NFI=0.969, GFI=0.988, TLI=0.983.

As shown in Figure 1 and Table 5, organizational innovation climate has a significant positive impact on creativity (β =0.302, p<0.001), i.e., as the teachers' perception of the organizational innovation climate improves, their creativity is enhanced. Feedback-seeking behavior also has a significant positive effect on creativity, i.e., with higher feedback-seeking behavior among teachers, their creativity is higher. Further, organizational innovation climate has a significant positive effect on feedback-seeking behavior (β =0.545, p<0.001), i.e., as the teachers' perception of organizational innovation climate improves, their feedback-seeking behavior is enhanced.

Path	SE	CR	р	SPC
OAI→SFB	0.066	14.211	0.000	0.545
SFB→CA	0.027	11.154	0.000	0.453
OAI→CA	0.047	7.431	0.000	0.302

 Table 5: Summary of model regression coefficients

Note: \rightarrow *indicates the path influence relationship* ; ***p < 0.001.



Figure 1: Structural Model of Organizational Innovation Climate, Creativity, and Feedback-seeking Behavior

Referring to the study by Xie (2021), the Bootstrap sampling method was used for repeated sampling (5,000 times) to test the mediating effect of feedback-seeking behavior. As shown in Table 6, the 95% confidence interval (0.200, 0.308) of the indirect effect of organizational innovation climate on creativity did not include 0, which indicated that the mediating effect was significant. The total effect was 0.645 and the mediating effect accounted for 44.01%, thus verifying the partial mediating effect of feedback-seeking behavior to imply that the organizational innovation climate of university teachers in Hebei significantly and positively affects creativity and can indirectly affect teachers' creativity through feedback-seeking behavior.

Path Effect		Result	S. E.	95% LLCI	95% ULCI
OAI→SFB→CA	Direct effect	0.361***	0.047	0.260	0.462
	Indirect effect	0.284***	0.023	0.200	0.308
	Total effects	0.645***	0.044	0.549	0.740

Table 6: Bootstrap mediating effect analysis

*** *p* < 0.001

5. Discussion

The results of our study showed that the organizational innovation climate of universities has a significant positive impact on teachers' creativity, which is consistent with previous research results (Aldabbas et al., 2021; Daniel et al., 2021). Further, Zelenski and Desrochers (2021) opined that a dynamic and interactive relationship exists between behavior and the environment, and that synergistic extrinsic motivation can enhance creativity (Daikoku et al., 2021). Innovation involves continuous attempts to bring about change and break monotony, and these actions carry risks by increasing unpredictability for an organization (Michael et al., 2012). Organizations should allow individuals to make mistakes and encourage them to engage in risky creative activities; this can improve their willingness to take risks and engage more in creative activities (Peng et al., 2021). An organizational innovation climate encourages the diversity of opinions through the flow of information, which may lead to a higher probability of conflicts in terms of beliefs, assumptions, possibilities, and new facts (Chaubey et al., 2021). Through feedback-seeking behavior, increased interactions are more likely to generate more creative ideas and solve practical problems at work (Thatrak, 2021). Therefore, organizations' focus on job autonomy, teamwork, and organizational motivation can strengthen the sense of psychological security of their members to break away from convention and creatively solve problems, which is conducive to innovation.

Our results reveal the mediating role of feedback-seeking behavior between organizational innovation climate and creativity. This aligns with previously reported research which found that feedback-seeking behavior significantly affects creativity (Cho & Seo, 2021; Mavri et al., 2021; Minnikin et al., 2021). According to the creative motivation theory, synergistic extrinsic motivation can enhance intrinsic motivation by improving engagement in tasks (Lin & Wang, 2021). The relationship between feedback acceptance and individual creativity is strengthened when the organization has a better innovation climate (Chaubey et al., 2021). Synergistic extrinsic motivations such as individual rewards, welldefined work objectives, constructive work feedback allowing individuals to engage in activities of their interest, and increased autonomy can facilitate the development of creativity (Thomas, 2022). Therefore, feedback-seeking behavior can help realize collaboration between teachers, build robust relationships, and generate mutual trust (Garivani et al., 2016), thus meeting the fundamental psychological need of innovation and improving teachers' creative motivation (Carmeli et al., 2015).

6. Conclusions

This study investigated the impact of innovation culture on the development of creativity among university teachers in Hebei. The survey research revealed that a strong innovation culture is critical to developing creativity among Hebei university teachers, as it positively affects feedback-seeking behavior and has a significant positive impact on creativity development. Specifically, feedbackseeking behavior has a large and statistically significant effect on the development of creativity among Hebei university teachers and partially mediates the relationship between innovation culture and creativity. Moreover, our findings suggest that organizational motivation is a more important factor than job autonomy and teamwork in inspiring teachers to be creative, explore new avenues and methods, and enhance their confidence in innovation within the organizational innovation climate of Hebei universities. These results highlight the need for specific institutions to emphasize the importance of organizational motivation and create a positive work environment that encourages innovation to inspire feedback-seeking behaviors among teachers, which can facilitate the generation and development of creativity. Overall, this study contributes to a better understanding of the factors that promote creativity among university teachers and provides insights that help develop effective strategies to cultivate creativity in higher education institutions.

7. Limitations

This study selected university teachers in Hebei as the research object. The geographical location and questionnaire distribution method limited the universality of the research result. To improve external validity, future research can expand the sample scope to different regions. Moreover, the research results may be biased as the research is based on cross-sectional data, lacks regular follow-up with the participants, and does not involve periodic follow-ups. Future studies may consider using periodic and phased long-term follow-up research to collect sample data. Qualitative research and experiments can also be used to explore the mediating role of other variables between organizational innovation climate and creativity.

8. Recommendations

8.1 Practical Recommendations:

Managers of Hebei universities should establish an innovation platform that allows teachers to share their ideas, learn from each other, and cultivate their creativity. This platform can serve as a resource for teachers to access innovation models, tools, and techniques.

Managers of Hebei universities should encourage creativity from teachers by providing a space for innovation, empowering teachers to implement their ideas, and creating an enjoyable experience harvested from innovation. This can be achieved by creating a favorable climate for promoting innovation and teachers' creative consciousness and replacing the traditional discipline-based culture with a relaxed environment for teachers that can facilitate their creativity development.

Managers of Hebei universities should establish a reward mechanism to encourage university teachers to seek feedback. A performance appraisal environment can also be created to recognize and reward teachers for their feedback-seeking behaviors, which can help enhance the development of their creativity. Furthermore, communication with teachers should be strengthened to enable them to have a comprehensive understanding of their work and share their experiences with their peers, thereby enhancing creativity.

8.2 Research Recommendations

To improve external validity, future research can expand the sample scope to different regions of China or even other countries. Future studies may consider implementing periodic or phased long-term follow-up research to collect sample data. This would help capture the dynamic relationship between organizational innovation climate and creativity over time and provide a more comprehensive understanding of the underlying mechanisms surrounding this strategy. Qualitative research and experiments can also be used to explore the mediating role of other variables between organizational innovation climate and creativity. For example, future studies could investigate the role of psychological safety, leadership, or team dynamics in facilitating creativity among university teachers.

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