



INNOVATIVE WORK BEHAVIOR IN HIGHER EDUCATION: A SYSTEMATIC LITERATURE REVIEW

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Abstract

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Many studies have aimed to identify the factors influencing Innovative Work Behavior (IWB). However, there is still a lack of comprehensive research on these factors, particularly in the context of higher education. This research aims to identify the key factors affecting IWB within the higher education environment. Using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method, three relevant studies were selected and analyzed. This paper uses a literature review methodology, drawing from various sources. The findings suggest that five critical factors influence IWB in higher education: Innovation Culture, Collaborative Work Environment, Leadership Support, Resources and Facilities, and Student Engagement. These findings can help higher education institutions, academic researchers, and policymakers understand and promote innovative work behavior among faculty members. This study also contributes to bridging the research gap regarding IWB in higher education and offers insights for future research and interventions to enhance innovation among faculty members.

Keywords: Higher Education; Systematic Literature Review; Innovative Work Behavior

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INTRODUCTION

Innovation has been central to the evolution of businesses and organizations throughout history, from the invention of the steam engine in the 18th century to the information technology revolution of the 21st century. New ideas, creativity, and a willingness to try unprecedented approaches have consistently driven major advancements. Organizations, especially those facing rapid changes, must rely on employees to contribute innovative ideas, with Innovative Work Behavior (IWB) considered crucial for organizational success, effectiveness, and sustainability (Bos-Nehles et al., 2017; Ahmed et al., 2020; Nurisman et al., 2024; Umair et al., 2023).

Higher education, as a key driver of social advancement and economic growth, holds an essential role in fostering innovation. However, the lack of innovation capacity among higher education faculty has emerged as a significant challenge (Wu et al., 2022). Faculty members, as knowledge providers and innovators, play a pivotal role in shaping students' creative thinking and practical skills. Their innovative efforts not only inspire students but also drive advancements in academic research and societal progress (Prasetyono et al., 2024). Despite extensive research on innovative behavior, most studies have focused on corporate employees (Elsetouhi et al., 2023; Kwon & Kim, 2020; Wang et al., 2022), with

limited attention to faculty members in higher education (Thurlings et al., 2015). This gap hinders our understanding of innovation in academia and limits efforts to improve higher education standards. To address this, fostering faculty innovation is essential to promoting the qualitative advancement of higher education (Findikoğlu & İlhan, 2016; Lašáková et al., 2017). Therefore, identifying efficient methods to encourage faculty innovation remains a crucial undertaking for universities.

Promoting faculty innovation remains a vital task for universities. Scholars have extensively researched individual innovative behavior, examining it from various angles and employing diverse theoretical frameworks. These investigations draw from multiple fields such as psychology, organizational behavior, and sociology, utilizing theoretical models like motivation theory, social cognitive theory, and emotion regulation theory (Kwon & Kim, 2020; Montani & Staglianò, 2022; Thurlings et al., 2015). As stated by previous researchers on Innovative Work Behavior (IWB) in higher education indicates that most studies have focused on the corporate and public sectors, while the education sector, especially higher education, has received less attention. These studies tend to explore factors such as personal competencies, motivation, organizational support, and external factors like family support or social networks. However, the main focus remains on corporate work environments rather than academic settings. Furthermore, most prior research utilizes common theories applied in business contexts, which may not necessarily align with the unique conditions in higher education. Another limitation is the lack of multidimensional approaches and in-depth methodological analysis, leaving a limited understanding of innovation among faculty members and academic staff. This research addresses these gaps by specifically focusing on innovation in higher education, particularly among faculty, through the use of a systematic PRISMA methodology. It highlights five key factors: innovation culture, collaborative work environment, leadership support, resources and facilities, and student engagement. This study also emphasizes the role of student engagement as a driving force for innovation, a factor not widely discussed in previous studies. By adopting a multidimensional approach that integrates these various factors, this research offers new contributions that are more relevant to higher education and provides practical guidance for enhancing innovation in teaching, curriculum development, and academic research.

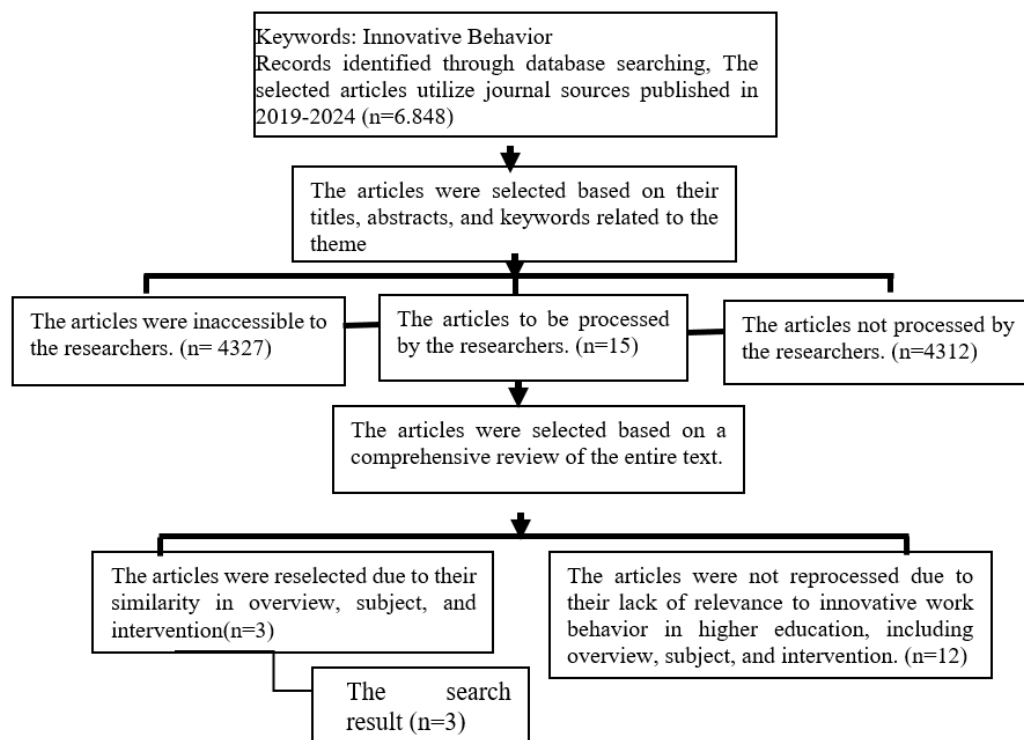
Based on the aforementioned explanation, the primary aim of this Systematic Literature Review (SLR) is to firstly track the evolution of research and secondly to ascertain the factors impacting Innovation Work Behavior (IWB) in higher education.

METHODS

The methodology employed in this study entails utilizing a literature review approach. This approach is construed as a systematic, replicable, and transparent method aimed at identifying or assessing research outcomes previously generated by scholars, with the objective of scrutinizing existing knowledge pertaining to the subject under investigation to identify research gaps for future exploration (Rahayu et al., n.d.). Besides the above definition, systematic review studies that have been conducted also refer to guidelines for conducting systematic reviews (Carvalho et al., 2019). The literature sources are based on the keywords mentioned below, using guidelines for searching scientific data through ScienceDirect.

The process involves several key steps: first, formulating a clear and specific research question, such as "What are the factors influencing innovative work behavior in higher education?" Second, developing a detailed SLR protocol to ensure a transparent and

replicable process, which includes inclusion and exclusion criteria, search strategies, and data analysis methods. Next, literature sources are identified through searches in relevant scientific databases like ScienceDirect or Google Scholar using appropriate keywords. Inclusion and exclusion criteria are established to filter relevant articles, such as only including those discussing IWB in educational settings and published in reputable journals. Article screening is conducted in two stages: first, based on titles and abstracts, and then by reading the full text of articles that pass the first stage. Data from the selected articles is extracted and analyzed, covering the authors, publication year, research objectives, main findings, as well as conclusions and recommendations.



Picture 1.
Grafic PRISMA

RESULTS & DISCUSSION

Results

Tabel 1.
Analysis Development of research and Factors that influence IWB in higher education

No	Articles	Finding	The context of higher education
1	Srirahayu et al., 2023	The study identified three key domains that influence Innovative Work Behavior (IWB) in public organizations: Personal factors: These include personal	The factors mentioned in the study can also apply in the context of higher education environments. Let's take a closer look: Personal Factors: In higher education environments,

competencies, characteristics, traits, psychological aspects, well-being, motivation, commitment, and job embeddedness.

- Organizational factors: Encompassing leadership, HRM practices, organizational culture, and other behaviors that shape the work environment and influence employee innovation.
- External factors: External influences from outside the organization, such as family and social support, which indirectly impact IWB by moderating relationships between various factors and innovative behavior.

These three domains play crucial roles in shaping the innovative behavior of employees within public organizations. Understanding and effectively managing these factors can lead to a more conducive environment for fostering innovation and creativity among employees, ultimately contributing to organizational success and competitiveness.

students, faculty, and administrative staff possess different personal competencies, characteristics, and motivations. For example, students with a high level of curiosity or creative thinking abilities may be more inclined to generate innovative ideas in research or learning. Motivated faculty members with a commitment to knowledge development can also drive innovation in teaching methods and research.

- Organizational Factors: In higher education institutions, organizational factors such as academic leadership, human resource management practices, organizational culture, and reward policies also play a crucial role in influencing innovative behavior. For instance, supportive leadership, a collaborative culture, and reward systems that encourage experimentation and innovation can enhance motivation for innovation among faculty and staff.
- External Factors: External influences such as support from family, peers, and the community can also impact innovative behavior in higher education environments. For example, students receiving full support from their families or faculty members engaged in strong professional networks may feel more motivated to explore new ideas and innovate.

In the context of higher education, understanding and proficiently handling these factors can also establish an atmosphere supportive of innovation and creativity,

2	Saether, 2019	The factors influencing innovative work behavior in this study are: • Organizational Support for Creativity: Perceptions of organizational support for creativity can influence employees' innovative behavior. Organizations that foster creativity and are responsive to change tend to have employees who are more inclined to behave innovatively. • Pay Justice: Perceptions of fairness in compensation can also affect employees' innovative behavior. Fairness in compensation can be a factor influencing employees' perceptions of organizational fit and their work motivation. • Person-Organization Fit: The level of fit between individuals and organizational values and culture can also affect employees' innovative behavior. Employees who feel a better fit with the organization tend to have higher work motivation and behave more innovatively. • Autonomous Motivation: Autonomous motivation, particularly in the form of intrinsic and identified motivation, also plays a crucial role in driving innovative behavior. Employees with autonomous motivation tend to be more engaged in innovative behavior.	ultimately enhancing the quality of education, research, and the institution's contribution to society. The statement "Pay Justice" is not aligned with innovative behavior in higher education. While fair compensation is important for employee satisfaction and motivation, innovative behavior in academia is more strongly influenced by factors such as organizational support for creativity, person-organization fit, and autonomous motivation. In higher education, the pursuit of knowledge, research, and creative thinking often transcends financial incentives, making pay justice less relevant to fostering innovation compared to other factors mentioned.
3	Xu et al., 2024	Based on the research findings, the factors influencing	The statement "Challenge Stress" may not align well with innovative

innovative work behavior include: • Challenge Stress: Challenge stress can motivate individuals to explore new methods and resources to cope with stress, thus encouraging innovative behavior. • Social Support: Social support can aid in integrating different knowledge, skills, and experiences, thereby providing more opportunities for innovation. • Participative Work Practices: Participative work practices can also influence employees' innovative work behavior. • Resource Management: The Conservation of Resources (COR) theory emphasizes individual behavior and psychological reactions when faced with resource threats, which can influence individuals' decisions and behavioral patterns in the workplace. • Supportive Work Climate: A positive work climate and good working relationships can also facilitate innovative work behavior. Therefore, these factors can play a significant role in influencing innovative work behavior, particularly among educators in higher education.	work behavior in higher education. While some level of stress can indeed stimulate creativity and innovation, excessive or overwhelming stress may hinder individuals' ability to think creatively and engage in innovative problem-solving. In the academic setting, where individuals are often required to engage in complex intellectual tasks, too much stress might lead to burnout rather than fostering innovation. Therefore, while challenge stress can sometimes spur innovation, it's important to maintain a balance to ensure that stress levels do not become counterproductive.
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The findings from the three main articles indicate that Innovative Work Behavior (IWB) in the context of higher education is influenced by various interconnected factors, including personal, organizational, and external factors. Organizational support for creativity, autonomous motivation, person-organization fit, and a supportive work climate are key drivers of innovative behavior. External factors, such as social support, also play a role in fostering innovation. While pay justice is considered less relevant in the academic

context, intrinsic motivation, participation in work practices, and good resource management are crucial. Overall, a collaborative work environment and supportive leadership are essential factors in fostering innovation within higher education institutions.

Discussion

Based on the analysis of the three articles, the current development of research on innovative work behavior shows several trends and significant findings. One major trend is the increased interest in the psychological and organizational factors influencing employees' innovative behavior (Vhalery et al., 2024). Researchers are paying more attention to how motivation, personality, organizational support, and work climate can shape innovative behavior in the workplace. This is in line with Afsar & Umrani (2020); Zhao et al., (2022) the employee motivation to learn enables them to pay more attention to acquiring new knowledge and skills, expanding their cognitive pathways, and ultimately leading to enhanced innovative behavior. Subsequent psychological capital, including self-efficacy, hope, optimism, and resilience, positively influences innovative work behavior by enhancing employees' self-confidence, perseverance, positive outlook, and ability to overcome challenges (Purwanto et al., 2020).

Moreover, there is also a growing interest in multidimensional studies of innovation in the workplace. Researchers are not only focusing on individual or organizational aspects but also considering the interaction between them and other external factors that can influence innovation (Ramdayana & Prasetyono, 2022; Prasetyono, 2022). Such as flexible human resource management which plays a crucial role in shaping a culture of innovation within organizations by facilitating employee motivation, autonomy, and resource availability (Wen et al., 2021). Furthermore, the use of more advanced methodological approaches is also a trend in research on innovative work behavior. Researchers are increasingly adopting sophisticated statistical approaches and complex data analysis techniques to understand the relationships between variables involved in innovation.

In terms of significant findings, recent research indicates that organizational support, autonomous motivation, and supportive work climates are key factors influencing employees' innovative behavior. Managers and organizational leaders are expected to pay attention to these factors in designing strategies and policies to boost innovation within the work environment. Overall, the current development of research on innovative work behavior reflects an increased interest in understanding the dynamics of innovation in the workplace and efforts to identify factors that can enhance innovation and creativity across organizations.

From various previous studies, which have not specifically explained the factors influencing innovative work behavior in higher education, examining the conditions in higher education and referring to the development of research related to innovative work behavior, researchers reformulated that the main factors influencing innovative work behavior in higher education include: Innovation Culture, Collaborative Work Environment, Leadership Support, Resources and Facilities, and Student Engagement.

Innovation culture an organizational culture that actively promotes innovation and experimentation can be a key factor in influencing innovative work behavior in higher education. A culture that values new ideas, creative problem-solving, and exploration of new concepts will stimulate staff and faculty to be innovative. As conveyed Naveed, et al (2022) an organizational culture that supports fosters positive relationships among team members, cultivating an environment conducive to the development of innovative ideas. By promoting a strong culture of innovation within higher education institutions, such as encouraging collaboration, facilitating the exchange of ideas, and valuing new concepts,

institutions can create an environment that stimulates staff and faculty to be more innovative. This can result in improvements in the development of new curricula, the development of more effective teaching methodologies, and impactful research initiatives.

Collaborative work environment, having a work environment that supports collaboration, open communication, and idea exchange among staff and faculty can foster innovative work behavior. Collaboration among individuals with diverse backgrounds and expertise can generate new ideas and innovative approaches to addressing the challenges faced by higher education institutions. In their research Udin, et al (2022) states that a conducive work environment motivates employees to engage in innovative work behavior, which is crucial for the organization's success and long-term sustainability. Establishing a collaborative and open communication work environment, higher education institutions can facilitate improved collaboration among staff, faculty, and students. This can stimulate more productive idea sharing, enhance teamwork effectiveness, and foster the creation of innovative solutions for complex issues.

Leadership Support, support from higher education leadership, both directly and through policies and initiatives, can be crucial in shaping innovative work behavior. Leaders who provide encouragement, resources, and space for experimentation can increase the motivation and confidence of staff and faculty to generate new solutions. The research findings (Suprpti et al., 2020) also provide additional evidence that leadership also influences IWB, especially transformational leadership. Policymakers need to recognize the importance of strong leadership support in promoting innovative work behavior in higher education institutions. Through supportive policies and initiatives, leaders can provide encouragement, resources, and space for staff and faculty to generate and implement new ideas in educational and research practices.

Resources and Facilities, the availability of resources and facilities that support innovation, such as research laboratories, advanced equipment, and research funding, can also influence innovative work behavior in higher education. Easy access to these resources can encourage staff and faculty to undertake innovative projects and pursue new ideas. Adequate resources and facilities provided through Flexible Human Resource Management (FHRM) enhance employee engagement, job satisfaction, and production efficiency, leading to a more innovative work environment (Wen et al., 2021). Leaders can ensure that higher education institutions have adequate access to resources and facilities that support innovation, such as well-equipped research laboratories, advanced equipment, and sufficient research funding. This can promote improvements in research productivity, the development of new technologies, and the introduction of best practices in education.

Student Engagement in the learning and research process can be a significant factor in stimulating innovative behavior in higher education. Students actively involved in research projects, industry internships, or collaborative projects with staff and faculty have the opportunity to provide fresh perspectives, new ideas, and different viewpoints in solving complex problems. Student engagement can also encourage staff and faculty to seek innovative approaches to teaching and learning. This factor indicates that student engagement is not only beneficial for their skill development but also can be a source of inspiration and motivation for staff and faculty to exhibit innovative behavior in the context of higher education. Lecturers may feel motivated to explore new approaches, techniques, and technologies to sustain and enhance student engagement in the classroom (Cents-Boonstra et al., 2021). Higher education institutions can enhance student engagement in the learning and research process by providing more opportunities to participate in collaborative projects, industrial internships, or independent research. This will not only improve students' learning experiences but also generate innovative ideas that can be utilized by staff and faculty in educational and research practices.

By effectively addressing these factors, higher education institutions and policymakers can create a more innovative and adaptive environment, capable of generating creative solutions to the challenges faced in higher education and contributing to the advancement and transformation of educational institutions.

CONCLUSION

Based on multiple prior studies that did not explicitly detail the determinants of innovative work behavior in higher education, scrutinizing the higher education landscape and consulting the evolution of research concerning innovative work behavior, scholars deduce that pivotal factors affecting innovative work behavior in higher education might encompass: Innovation Culture, Collaborative Work Environment, Leadership Support, Resources and Facilities, and Student Engagement. This research faces limitations, including the challenge of accessing the complete texts of all articles, which means that not every article related to IWB in higher education was incorporated into this study. Subsequent research could broaden its timeframe and incorporate additional articles to achieve more thorough outcomes. Qualitative inquiry may serve as one of the methodologies for further exploration to comprehend how innovative employees conduct themselves in workplace settings across various scenarios. Moreover, longitudinal investigation is essential to explore causality using integrated methods, thus gaining insight into cognitive, emotional, and other pertinent aspects that could be necessary in work environments.

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