



Innovative behavior and leadership: A systematic literature review and future research direction

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Article Info:

Received : Nov 2024
Revised : Dec 2024
Accepted : Dec 2024
DOI : [10.21067/mbr.v8i2.10899](https://doi.org/10.21067/mbr.v8i2.10899)
Copyright : Management and
Business Review

Keywords : Innovative behavior,
leadership,
management, literature
review

Abstract: This study explores the relationship between innovative work behavior and leadership within organizations through a systematic literature review. Using a systematic review approach, this study analyzes 66 relevant articles from the Scopus database. The findings reveal that leadership styles such as transformational, spiritual, and authentic leadership positively impact innovative behavior. Additionally, mediating and moderating factors, such as job satisfaction and psychological capital, significantly contribute to the leadership-innovation link. However, the literature review is limited by its reliance on the Scopus database, which may exclude relevant studies from other databases or non-indexed sources, potentially introducing selection bias. Despite this, the research lays a solid foundation for future studies and provides practical insights for leaders aiming to promote innovation within their organizations.

Abstrak: Penelitian ini mengeksplorasi hubungan antara perilaku kerja inovatif dan kepemimpinan dalam organisasi melalui tinjauan literatur sistematis. Penelitian ini menganalisis 66 artikel relevan dari basis data Scopus. Hasil penelitian menunjukkan bahwa gaya kepemimpinan seperti transformasional, spiritual, dan otentik memiliki dampak positif terhadap perilaku inovatif. Selain itu, faktor mediasi dan moderasi seperti kepuasan kerja dan modal psikologis berkontribusi secara signifikan terhadap hubungan antara kepemimpinan dan inovasi. Namun, tinjauan literatur ini memiliki keterbatasan karena bergantung pada basis data Scopus, yang mungkin mengecualikan studi relevan dari basis data lain atau sumber non-indeks, sehingga berpotensi menimbulkan bias seleksi. Meskipun demikian, penelitian ini memberikan landasan yang kuat untuk studi lanjutan dan wawasan praktis bagi pemimpin yang ingin mendorong inovasi dalam organisasi mereka.

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Introduction

In today's rapidly changing era, innovation has become a key factor in achieving success and outperforming competitors in the market. Innovation is essential for organizations as they must adapt to rapid environmental changes (Bos-Nehles et al., 2017). Innovation is closely related to an innovative culture. Organizations that can maintain an innovative culture can create new products and services, improve operational efficiency, and gain significant competitive advantages. One key element in creating a strong innovation culture is encouraging innovative work behavior. This behavior includes the ability and willingness of employees to generate new ideas, develop them with support from others, and implement them in daily work practices (Janssen, 2000). Yuan & Woodman (2010) explain that innovative work behavior (IWB) involves the development, adoption, and application of new ideas related to products, technology, and work methods by employees, which is considered a key factor in organizational success.

Leadership plays a fundamental role in encouraging innovative work behavior. When employees feel valued and emotionally supported by their leaders, they are more likely to think creatively, take risks, and create positive changes (Podsakoff et al., 1990). Therefore, the role of leadership is crucial and cannot be ignored in stimulating innovative work behavior. Leadership is defined as a strategy or ability to influence a group towards achieving goals (Robbins & Judge, 2002). The importance of leadership in the context of human resource management is emphasized by (Cirera & Maloney, 2017), they mention that poor management quality is generally associated with low innovation. Effective leaders can create an environment that encourages innovation. They can also provide resources, support, and recognition for innovative employees. However, the specific ways in which leaders influence innovative work behavior are not fully understood. This is due to the various leadership styles, each with its own characteristics and approaches to influencing and guiding team members. There are several leadership styles commonly known and studied in management and psychology literature, including authoritarian, democratic, laissez-faire, transactional, transformational, authentic, and spiritual leadership.

Several previous studies have investigated the relationship between innovative work behavior and leadership. These studies highlight that certain leadership styles, such as transformational, servant leadership, and spiritual leadership, can positively encourage innovative work behavior (Ji & Yoon, 2021; Jun & Lee, 2023; Usmanova et al., 2023). However, despite numerous findings, the available knowledge still has certain limitations. It is challenging to draw comprehensive conclusions due to potential methodological and contextual differences between studies. Moreover, previous research tends to focus on specific leadership styles, while a deeper understanding of how different leadership styles

can holistically influence innovative work behavior is still needed. Lastly, although previous research has extensively discussed the correlation between leadership and innovative work behavior, the underlying mechanisms of this relationship are often not fully explored. These limitations highlight the need for a systematic review to synthesize existing research on leadership and innovative work behavior.

Innovative Behavior

Innovative behavior has been a central focus of organizational and behavioral research, given its critical role in driving individual, group, and organizational success. Over the years, experts have offered various definitions that highlight its intentional and strategic nature, as well as its multi-phase process. West and Farr (1990) provide a foundational definition, describing innovative behavior as a conscious effort to introduce and apply new ideas, processes, products, or procedures within an individual's role, group, or organization. The objective of this behavior is to generate substantial benefits, not only for the individual or organization but also for society at large. This early conceptualization emphasizes the proactive and deliberate essence of innovation, laying the groundwork for subsequent studies. Janssen (2000) builds upon this understanding by defining innovative behavior as the intentional creation, introduction, and application of new ideas aimed at improving role performance and achieving positive organizational outcomes. Janssen's perspective highlights innovation as a deliberate and purposeful process, underscoring its importance in fostering improvements within work and organizational contexts. Furthermore, this definition characterizes innovative behavior as a strategic activity closely tied to organizational performance. De Jong and Den Hartog (2007) offer a more nuanced perspective by conceptualizing innovative behavior as a dynamic and iterative sequence of actions, including idea generation, development, and implementation. Their definition emphasizes the continuous and purposeful nature of innovation, linking it directly to enhanced employee performance and organizational effectiveness. This view portrays innovative behavior as a process that requires sustained effort and engagement to realize its full potential.

The definition of innovative behavior has evolved from broad foundations to more detailed, process-focused perspectives. West & Farr (1990) highlight its proactive nature, Janssen (2000) emphasizes its strategic and organizational relevance, and De Jong & Den Hartog (2007) stress its dynamic and iterative process. Together, these views present innovative behavior as a deliberate, multi-phase effort essential for driving creativity, improvement, and lasting change in organizations.

Leadership

Leadership is a strategy or ability to influence a group towards achieving goals (Robbins & Judge, 2002). Leadership is also a multifaceted concept that becomes evident when individuals, particularly subordinates or followers, are motivated to act

in ways that are ethical and advantageous for both the organization and themselves (Achua & Lussier, 2010).

For an organization to thrive, it requires both robust leadership and effective management. Strong leaders inspire and guide their teams, setting a vision and fostering an environment where employees are engaged and motivated. Effective management, on the other hand, ensures that day-to-day operations run smoothly and that resources are used efficiently. The synergy between leadership and management is crucial for the overall effectiveness and success of an organization (Robbins & Judge, 2007).

Expanding on this, Yuki, (2010) defines leadership as the process of imparting purpose and meaningful direction to collective efforts. This involves not just setting goals but also ensuring that every team member understands their role in achieving these goals and feels that their contributions are valued. By providing this clear and meaningful direction, leaders help to unify the efforts of the team, which enhances motivation and drives the collective effort towards achieving the organization's objectives. There are several leadership styles commonly known and studied in management and psychology literature. Each style has different approaches to influencing and guiding team members. Some of these styles include authoritarian, democratic, authentic, laissez-faire, transactional, transformational, and spiritual leadership.

Method

This study uses the systematic review method proposed by Tranfield et al. (2003), which explains specific principles for applying systematic reviews in management research. The method argues that systematic reviews improve the quality of the review process by organizing the literature review systematically, transparently, and reproducibly. Systematic reviews help discover scientific contributions to the research area or question (Becheikh et al., 2006). This rigorous method is applied to a series of scientific publications, identifying key areas of concern and evaluating proposed ways to advance research related to Innovative Behavior and Leadership.

Systematic Review Procedure

Tranfield et al., (2003) state that systematic review procedures in management require a three-stage formula: planning, conducting, and documenting the review. Each stage includes several steps, but based on the needs of this study, these steps are adjusted to meet the review procedures. This formula has been adopted and tested by other management studies (Khan et al., 2020). These steps are explained in the following section.

Defining Research Questions

This research aims to systematically synthesize and integrate existing studies on Innovative Behavior and Leadership, starting with two research questions:

RQ1: What does the literature suggest about the concept and research of innovative behavior in the context of current leadership?

RQ2: What are the possibilities for future research to further develop and expand the existing literature in this domain?

Identification of Keywords and Search Strategy

Review papers on the subject of Innovative Behavior and Leadership were identified by exploring the Scopus database, chosen for its broad, comprehensive, and accurate search functions. Scopus is a comprehensive electronic database with over 18,000 articles from more than 5,000 international publishers, including coverage of 16,500 peer-reviewed journals in science, engineering, medical, and social fields (Phillips et al., 2015). The search strategy was determined to identify the maximum number of related studies from the selected database, describing three search criteria: scope, search method, and search string. Articles in this database were accessed through the university's learning resource center by the author. The author initially searched for papers with the titles "innovative behavior" and "leadership", "innovative work behavior" and "leadership". In the initial search, a total of 367 papers were found. All research was conducted from 2010 to 2024. The first paper meeting the selection criteria and with the highest citations was by Pieterse A.N.; van Knippenberg D.; Schippers M.; Stam D. (2010) published in the Journal of Organizational Behavior.

Selection and Quality Assessment of Primary Studies

Following guidelines (Tranfield et al., 2003) and consistent with previous review studies in various management disciplines, articles were selected that met all the outlined selection criteria: papers published in peer-reviewed journal outlets, papers discussing all or part of the variables of innovative behavior and leadership, and papers written in English. Relevance was determined by reading the titles, abstracts, and full texts of the papers. Papers not written in English were excluded, as were full-text searches of selected papers that did not meet the review criteria of innovative behavior and leadership and focused outside the business and management context or in non-open access journals. At this stage, 66 relevant articles were selected for review from an initial collection of 367 studies.

Quality Assessment

The goal of quality assessment is to evaluate the validity of the selected studies, provide appropriate justification, and give readers the necessary information to identify if this review strategy can be applied to their own research (Christofi et al., 2017). However, the main challenge in developing a systematic review methodology lies in designing and implementing high-quality studies (Tranfield et al., 2003). At

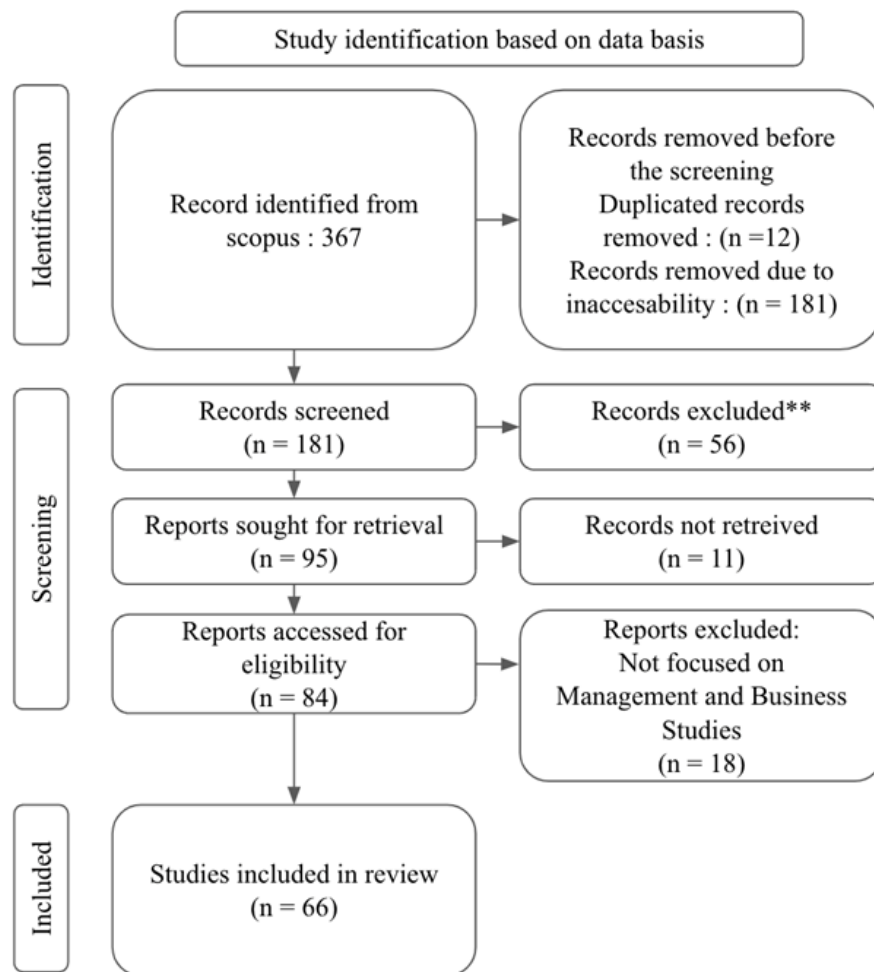


Figure 1. Prisma Diagram

this stage, the author referred to Ahmad & Omar (2016), selecting articles from Scopus-indexed journals due to its broader coverage of high-quality, relevant publications.

Data Extraction

After quality assessment, data were extracted from the selected studies to examine human errors and biases (Tranfield et al., 2003). Extracted data were transferred to an Excel sheet, recording information about authors, year of study, research objectives, study method, theory, and summary of study results.

Reporting and Dissemination of Findings

This section presents the findings from the reviewed studies, discussing responses to the first research question (RQ1). The findings reflect information on academic publication developments, variable definitions, theoretical perspectives, methodological applications, and the causes and consequences of innovative behavior in the leadership context as identified by previous research.

Result

Data were collected from a number of scientific publications in the research domain over a 17-year period. The earliest articles in this review were published in 2007. Initially, there were few publications related to Innovative Behavior in the leadership context, although this number increased in 2018 and peaked in 2023 (Figure. 2)

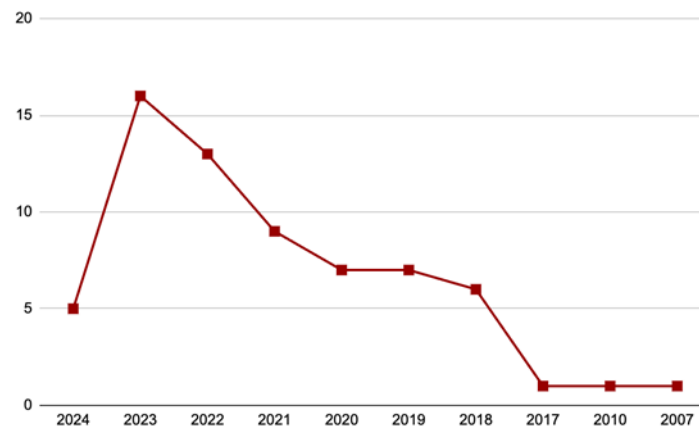


Figure 2. Number of Publication on Innovative Behavior and Leadership

Table 1 shows the journals that published articles related to IB in the context of leadership, categorized based on the Scopus ranking index. Scopus uses the term "quartile" to group journal quality, with Q1 being the highest group, followed by Q2, Q3, and Q4. The majority of journals were published in the fields of social sciences, psychology, business, and management, such as Behavioral Sciences, British Journal of Management, Business Strategy and Development, Cogent Business and Management, Educational Management Administration and Leadership, and Frontiers in Psychology.

In addition, the country of origin of the reviewed literature was identified (Table 2). The majority of the reviewed literature comes from Asian countries, with a total of 52 (78.79%) pieces of literature. The most represented Asian countries include China (19 pieces of literature), Indonesia (9 pieces of literature), and South Korea (6 pieces of literature).

Measurement Tools of Innovative Behavior

Commonly used tools for measuring innovative work behavior include scales developed by Scott and Bruce (1994), Janssen (2000), and De Jong and Den Hartog (2007). Scott and Bruce (1994) explain that innovative behavior is a motivational and cognitive procedure aimed at presenting, generating, and implementing innovative solutions (Table 3). Their scale consists of six statement items completed by leaders to assess their subordinates. The measurement tool developed by Janssen (2000) is used to assess innovative behavior, with evaluations provided by the supervisors of

Table 1. List of Journal Outlets

Scopus Index	Journal Name	Total
Q1	Baltic Journal of Management	1
	British Journal of Management	1
	Business Strategy and Development	1
	Educational Management Administration and Leadership	1
	International Journal of Economics and Business Administration	1
	International Journal of Higher Education	1
	International Journal of Manpower	1
	International Journal of Public Administration	1
	Journal of Business Research	1
	Journal of Innovation and Knowledge	1
	Journal of Leadership and Organizational Studies	1
	Journal of Management and Organization	1
	Journal of Organizational Behavior	1
	Journal of Security and Sustainability Issues	1
	Journal of Technology Transfer	1
	Leadership and Organization Development Journal	1
	Management Science Letters	1
	Personnel Review	1
	Public Administration Review	1
	Public Management Review	1
	Revista de Psicología del Trabajo y de las Organizaciones	1
	SAGE Open	3
	Sustainability (Switzerland)	7
	Uncertain Supply Chain Management	1
	VINE Journal of Information and Knowledge Management Systems	1
Q2	Administrative Sciences	1
	Behavioral Sciences	4
	Cogent Business and Management	3
	Frontiers in Psychology	11
	Journal of Entrepreneurship and Innovation in Emerging Economies	1
	Journal of Organizational Change Management	1
	Journal of Risk and Financial Management	1
	Organizacija	1
	Polish Journal of Management Studies	1
	Tourism	1

Scopus Index	Journal Name		Total
Q3	Employee Responsibilities and Rights Journal	1	7
	International Area Studies Review	1	
	International Journal of Public Leadership	1	
	International Journal of Sustainable Development and Planning	1	
	Quality - Access to Success	2	
	Revue Europeenne de Psychologie Appliquee	1	
Q4	Environment and Social Psychology	1	1
Number			66

Source: own elaboration

participating employees (Table 3). This scale consists of 16 items that measure subscales of problem recognition, idea generation or solution, building support for ideas, and idea implementation, with four items each. The scale by De Jong and Den Hartog (2007) is a nine-item Likert scale with seven points that measures several dimensions such as opportunity exploration, idea generation, championing, and application (Table 3).

Theoretical Frameworks Used

Based on the literature review, various "grand theories" have been used. Upon analysis, three grand theories were identified as widely applied in explaining innovative behavior or work innovative behavior in the context of leadership. These theories are Social Cognitive Theory, Social Exchange Theory, and Self-Determination Theory.

Social Cognitive Theory (SCT), developed by Bandura (1986), posits that learning occurs in a social context involving dynamic interactions between individuals, environments, and behaviors.

Table 2. Origin of Study-Country

Country	F	%
Asia (Yordania, India, China, South Korea, Indonesia, Arab Saudi, Pakistan, Oman, Taiwan, North Siprus, Iran)	52	78,79%
Europe (Slovenia dan Serbia, Turkey, Netherlands, Denmark, Norwegia)	6	9,09%
America (Peru, United States)	3	4,55%
Africa (Ethiopia, Ghana, South Africs)	1	1,52%
Australia	4	6,06%
Number	66	100%

Source: own elaboration

Table 3. Measurement Tools of Innovative Behavior

Author	Innovative Behavior Stage	Number Items
Scott and Bruce (1994)	- Recognition and generation of ideas - Sponsorship and Coalition - Innovation process	6 items
Janssen (2000)	- Idea generation - Idea promotion - Idea realization	16 items
De Jong and Den Hartog (2007)	- Opportunity exploration - Idea generation - Championing - Application	9 items

Source: own elaboration

Self-Determination Theory (SDT) is a broad framework for understanding human motivation and personality. SDT emphasizes the importance of autonomy, competence, and relatedness in fostering motivation to direct one's own life. Deci et al. (1989) explain that self-determination is the feeling of having a choice and the ability to initiate and control actions.

Social Exchange Theory (SET), according to Homans (1958), suggests that social behavior involves not only the exchange of property and material goods but also non-material aspects such as symbols of approval or prestige. The theory states that individuals tend to reward those who provide them with benefits, creating an obligation to respond positively and provide more valuable rewards in return. Social exchange involves a series of interdependent interactions or transactions where the actions of one party complement those of another. This theory refers to the process of two-way exchange involving two or more social groups (Rasoolimanesh et al., 2015)

Additionally, other theories are used as grand theories, such as broaden-and-build theory (Zhao et al., 2022), high-quality connection theory (Arasli et al., 2020), and social learning theory (Siswanti & Muafi, 2022; Su et al., 2020).

Methodological Application

The most commonly used method is quantitative research with survey instruments accounting for 96.97% (Table 4), while 2 other studies use mixed methods (a combination of qualitative and quantitative).

Antecedents

Based on the literature analysis conducted, the antecedent variable most frequently mentioned in the research context is Transformational leadership, mentioned 10 times. Transformational leadership is known as a leadership style that focuses on motivating and inspiring subordinates to achieve common goals by

Table 4. Most Cited Articles

Title	Author	Year	Method	Findings	Country	Cited
Paternalistic leadership and innovative behavior: Psychological empowerment as a mediator	Dedahanov A.T.; Bozorov F.; Sung S.	2019	Quantitative	Empowerment mediates the relationship between moral and authoritarian leadership and employees' innovative behavior, but it does not mediate the relationship between benevolent leadership and innovative behavior.	South Korea	35
Leadership and innovation: The moderator role of organization support for innovative behaviors	Mokhber M.; Khairuzzaman W.; Vakilbashi A.	2018	Quantitative	Transformational leadership is positively correlated with organizational innovation, and two of the expected moderating effects are also supported.	Iran	46
Empowering leadership, work group cohesiveness, individual learning orientation and individual innovative behaviour in the public sector: empirical evidence from Norway	Mutonyi B.R.; Slåtten T.; Lien G.	2020	Quantitative	Empowering leadership, individual learning orientation, and workgroup cohesiveness influence innovative behavior. Individual learning orientation mediates this relationship.	Norwegia	50
A Multilevel Examination of Benevolent Leadership and Innovative Behavior in R&D Contexts: A Social Identity Approach	Gumusluoglu L.; Karakitapoğlu-Aygün Z.; Scandura T.A.	2017	Quantitative	Effective R&D leadership facilitates innovative behavior within teams when team members strongly identify with the team.	Turkey	60
How does servant leadership influence employees' service innovative behavior? The roles of intrinsic motivation and identification with the leader	Su W.; Lyu B.; Chen H.; Zhang Y.	2020	Quantitative	Servant leadership enhances employees' innovative behavior and intrinsic motivation. Intrinsic motivation partially mediates this relationship, depending on the individual's identification with the leader.	China	76

Title	Author	Year	Method	Findings	Country	Cited
Managing employee innovative behaviour through transformational and transactional leadership styles	Hansen J.A.; Pihl-Thingvad S.	2019	Quantitative	Transformational leadership and verbal rewards from transactional leadership are positively related to innovative behavior. The combination of both enhances innovative behavior.	Denmark	82
The impact of inclusive leadership on employees' innovative behaviors: The mediation of psychological capital	Fang Y.-C.; Chen J.-Y.; Wang M.-J.; Chen C.-Y.	2019	Quantitative	Inclusive leadership is positively correlated with the innovative behavior of new-generation employees, with psychological capital acting as a mediator.	China	90
Innovative Behaviour: How Much Transformational Leadership Do You Need?	Bednall T.C.; E. Rafferty A.; Shipton H.; Sanders K.; J. Jackson C.	2018	Quantitative	Knowledge dissemination mediates the relationship between transformational leadership and innovative behavior in a curvilinear manner, being stronger at both low and high levels of transformational leadership.	US & Netherlands	97
How Leadership and Public Service Motivation Enhance Innovative Behavior	Miao Q.; Newman A.; Schwarz G.; Cooper B.	2018	Quantitative	Entrepreneurial leadership enhances innovative behavior through the meaning and impact of psychological empowerment. Public service motivation increases innovative behavior through the meaning and competence of psychological empowerment.	China	146
The effects of employees' creative self-efficacy on innovative behavior: The role of entrepreneurial leadership	Newman A.; Tse H.H.M.; Schwarz G.; Nielsen I.	2018	Quantitative	Core self-evaluation (CSE) has a stronger influence on innovative behavior under strong entrepreneurial leadership than under transformational and participative leadership.	China	245

Title	Author	Year	Method	Findings	Country	Cited
Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment	Pieterse A.N.; van Knippenberg D.; Schippers M.; Stam D.	2010	Quantitative	Transformational leadership is positively related to innovative behavior when psychological empowerment is high, whereas transactional leadership is negatively related under the same conditions.	Netherlands	563

Source: own elaboration

enhancing their vision and motivation. Transformational leaders motivate their subordinates to deepen their interests for the organization's benefit and wield significant influence over them (Robbins & Judge, 2002)

Furthermore, Spiritual Leadership is mentioned 5 times in the reviewed literature. Spiritual Leadership is a leadership concept emphasizing spiritual values, meaningful goals, and the holistic well-being of its followers. Fry (2003) describes

Table 5. Leadership as Antecedents Factors of Innovative Behavior

First Order	Second Order	Aggregate
Ethical Leadership	Ethical and Values-Based Leadership	Leadership Factors
Authentic Leadership		
Spiritual Leadership		
Responsible Leadership		
Servant Leadership		
Inclusive Leadership	Relationship and People-Centered Leadership	
Leader-member Exchange		
Empowering Leadership		
Transformational leadership		
Transactional Leadership	Performance and Task-Oriented Leadership	
Ambidextrous Leadership		
Knowledge-oriented Leadership	Self Leadership	
Self-leadership		
Self serving leadership		

Source: own elaboration

spiritual leadership as the values, attitudes, and behaviors of leaders strategically needed to motivate themselves and others through 'calling and membership,' thereby fostering spiritual well-being. This type of leadership focuses on personal growth, empowerment, and the mental and emotional well-being of employees.

Lastly, Authentic leadership is mentioned 4 times in the reviewed literature. Authentic leadership highlights the importance of honesty, consistency, and authenticity in a leader's behavior and actions. Walumbwa et al. (2008) explain authentic leadership as a pattern of leader behavior that leverages positive psychological capacities and creates a conducive work climate to promote self-awareness, morality, and self-development management.

Thus, based on the literature analysis, the most frequently used variable is Transformational leadership, followed by Spiritual Leadership and Authentic leadership, which collectively represent Leadership Factors. Additionally, there are Organizational Factors that serve as antecedent variables, including Green HRM (Shafaei & Nejati, 2024), Green organizational culture (Siswanti & Muafi, 2022), Learning climate (Vermeulen et al., 2022), Ambidextrous Organizational Culture (Y. Liu et al., 2019), Top management team boundary-spanning leadership (TMTBSL) (X. Liu et al., 2022), LMX (Leader-Member Exchange) (Sürücü et al., 2021), and Talent Management (Dang et al., 2020). On the other hand, one variable falls into the personal factor category, namely Creative Self-Efficacy (Newman et al., 2018).

Consequences of Innovative Behavior

Based on the reviewed literature, there exists a relationship between innovative behavior in an organizational context and certain consequences, such as job performance, overall performance, and emotional intelligence.

Job performance refers to how well an employee fulfills tasks and responsibilities assigned to them in the workplace (Chu & Lai, 2011). In other words, job performance is defined as the measure of how effectively employees complete their job responsibilities and achieve their goals and objectives. In the context of innovative behavior, individuals engaged in innovative behavior tend to have higher levels of job performance because they are inclined to create new solutions, improve work processes, or produce better products or services.

Performance comprises a set of tasks or work behaviors designed to meet job requirements or achieve organizational goals (Widodo & Mawarto, 2020). Innovative behavior can enhance overall performance because innovation can result in efficiency, productivity, or competitive advantage improvements that enhance the overall outcomes for individuals or organizations.

Emotional intelligence is the ability to perceive, understand, and apply emotional information about oneself to enhance performance (Boyatzis, 2009). Emotional intelligence is a common ability in identifying emotions that helps us manage emotions and cope with emotional situations effectively (Zeidner et al.,

2012). Individuals engaged in innovative behavior tend to have higher levels of emotional intelligence because innovation often involves the ability to manage challenges, respond to change, and collaborate in teams.

Moderators and Mediators

In the relationship between leadership and innovative behavior, various factors act as mediators or moderators. These mediating factors play a crucial role in bridging (mediating) the leadership variables that serve as antecedents with employees' innovative behavior. For instance, job satisfaction (Shafaei & Nejati, 2024), psychological capital (Fang et al., 2019; Li et al., 2023), psychological empowerment (Dedahanov et al., 2019; Lee et al., 2007; Pieterse et al., 2010), and workplace happiness (Kebede et al., 2024) can act as mediators between a leadership style and the level of innovation demonstrated by employees. Similarly, innovative climate can influence how much employees feel capable of innovating and contributing to workplace change (Hsu & Chen, 2017; Lecic et al., 2023; Malibari & Bajaba, 2022). Variables commonly used as mediators include knowledge sharing, organizational commitment, psychological safety, leader-member exchange, innovation climate, work engagement, and intrinsic motivation.

On the other hand, moderating factors such as organizational trust, intrinsic motivation, individual identification with the leader, psychological safety, moral identity, intrinsic motivation, and psychological empowerment can influence the strength or direction of the relationship between leadership and innovative behavior.

Conclusion

In conclusion, this research underscores the critical role of leadership in cultivating innovative behavior within organizations, especially in dynamic and competitive environments. An innovative culture empowers organizations to stay relevant by fostering creativity and adaptability. Through a systematic review approach, this study highlights the positive impact of leadership styles like transformational, servant, and spiritual leadership on fostering innovation. However, it also acknowledges the need for further exploration into lesser-studied leadership styles and their effects on innovation. Moreover, the study emphasizes the importance of considering diverse cultural and organizational contexts, employing longitudinal and mixed-method research approaches, and investigating the influence of broader organizational factors on innovation. Despite its contributions, this research also acknowledges its limitations, including database selection bias and methodological constraints, paving the way for future studies to build upon this foundation and provide actionable insights for organizational leaders aiming to foster innovation.

Based on the findings and limitations of this study, several recommendations emerge for future research endeavors. Firstly, researchers should broaden their

exploration beyond commonly studied leadership styles to include lesser-known styles such as inclusive, ethical, or ambidextrous leadership and examine their impact on innovative work behavior. Secondly, there is a need for cross-cultural and cross-sector comparative studies to understand how different contexts influence the relationship between leadership and innovation. Longitudinal studies and mixed-method approaches should be employed to capture the dynamic nature of leadership practices and innovative behaviors over time, providing deeper insights into their interaction. Additionally, given the rise of remote work, investigating the influence of leadership on innovation in virtual teams and leveraging digital tools for innovation support is crucial. Finally, future research should delve into how broader organizational factors like culture, structure, and human resource practices intersect with leadership to drive innovation, potentially through systemic interventions combining leadership development with organizational changes. By addressing these recommendations, future research can enhance our understanding of the intricate interplay between leadership and innovative work behavior, offering practical guidance for organizational leaders striving to foster a culture of innovation.

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