



### Review Article

# Contribution of Twenty-first Century Leadership to the Employees' Innovative Work Behavior: A Systematic Literature Review

\*<sup>1</sup>Muhammad Mursaleen | <sup>2</sup>Asif Shahzad | <sup>3</sup>Mahwish Parveen | <sup>4</sup>Muhammad Shoaib Aslam

<sup>1,2,3</sup>Department of Management Sciences,  
COMSATS University, Islamabad

<sup>1</sup>Email: mursaleenmursaleen@gmail.com

<sup>2</sup>Email: asif\_shehzad@comsats.edu.pk

<sup>3</sup>Email: mahwish.parveen@comsats.edu.pk

<sup>4</sup>Ministry of Information Technology &  
Telecommunication

<sup>4</sup>Email: saslam@psb.org.pk

### Correspondence

<sup>1</sup>Muhammad Mursaleen

Department of Management Sciences,  
COMSATS University, Islamabad

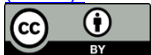
<sup>1</sup>Email: mursaleenmursaleen@gmail.com

### Citation

Mursaleen, M., Shahzad, A., Parveen, M., & Aslam, M. S. (2024). Contribution of twenty-first century leadership to the employees' innovative work behavior: A Systematic literature review. *Administrative and Management Sciences Journal*, 2(2), 111-124

This is an open access article distributed under the terms of

[Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/).



The reproduction, distributions and use in other forum is permitted provided copyright owner(s) and original author(s) are credited and original publication is cited

### ABSTRACT

Employee innovative work behavior drives the generation of new ideas, which in turn fosters organizational innovation and competitiveness. Many elements influence this behavior, the most important being the leadership. The term "innovative work behavior" has evolved, and this has led to a great deal of research looking into different leadership roles and how they affect employee innovation. The research on leadership in the context of employee creativity and innovation is extensive and encompasses more than one hundred leadership roles from various viewpoints. Undertaking a Systematic Literature Review (SLR) in this field is essential to establishing future leadership strategies that effectively tackle the intricate problems of contemporary industries. The 608 empirical studies included in the current SLR were retrieved from the reputable databases Scopus and Web of Science. These studies investigated how leadership in primary, secondary, and tertiary industries foster employee creativity and innovation. Three key themes are identified by the study: a comprehensive evaluation of various leadership studies; an industry-specific analysis that reveals a narrow focus in the primary sector; and an investigation of the transformational, transactional, and hybrid leadership styles. The SLR established taxonomies to classify previous research, identify unexplored domains, and direct the selection of variables for subsequent research. In the era of digitalization, the conventional dominance of transformational and transactional leadership is under threat from the need for novel approaches to problem-solving. The literature emphasizes the importance of adaptive leadership styles and the shortcomings of old leadership paradigms in tackling contemporary issues. The study followed five steps SLR method from formulating the research topic, carrying out an exhaustive search, putting inclusion and exclusion criteria to use, picking and extracting data from pertinent studies, and to presenting and analyzing the results. The synthesis of a large body of research in this SLR makes a substantial contribution to our knowledge of the role that leadership plays in employee creativity. The identification of underexplored industries requires targeted research efforts to address opportunities and constraints unique to the primary industry, particularly in the agriculture sector. This can be accomplished by categorizing leadership styles, recognizing market trends, and recommending taxonomies for further investigation. In conclusion, this study offers valuable insights for developing effective leadership strategies that foster innovative work behavior and accelerate organizational innovation in the twenty-first century.

### KEYWORDS

Innovative work behavior, systematic literature review, transactional leadership, transformational leadership, hybrid leadership

## 1 | INTRODUCTION

In the ever-evolving landscape of organizational dynamics, the discussion around innovation has long been dominated by traditional leadership paradigms, notably transactional and transformational leadership (Gurbuz &

Gulec, 2022; Transaction & Sun, 2024; Vo et al., 2023). These established models have served as the cornerstone of leadership discourse, guiding our understanding of how leaders influence creativity and innovation within their teams. However, the persistent pace of progress across diverse domains has led to an era where these once-dominant leadership styles find themselves at odds with the demands of the contemporary organizational landscape. The rise of technology has triggered significant changes, transforming how we work and making traditional leadership methods outdated in the age of digitalization (Erhan et al., 2022). As organizations navigate through unique challenges and ambiguous situations, the call for fresh problem-solving strategies and innovative leadership approaches becomes more urgent than ever. This includes the exploration of novel leadership styles, such as ethical leadership, prioritizing moral decision-making; servant leadership, focusing on service to others; empowering leadership, fostering autonomy; and ambidextrous leadership, striking a balance between innovation and efficiency (Alblooshi et al., 2020; Mehraein et al., 2023). Autonomous, benevolent, clinical, constructive, cultural, authentic, and inclusive leadership styles have emerged as critical components, offering diverse and holistic approaches for sustainable success in the modern organizational landscape (Lee et al., 2020; Younas et al., 2023).

Against this backdrop, the current Systematic Literature Review (SLR) endeavors to scrutinize the insights embedded in existing leadership literature concerning employee creativity and innovation. It builds upon the foundations laid by seminal SLRs conducted by Hughes et al. (2018), Shubina and Kulakli (2020), and Mehraein et al. (2023). These earlier reviews have explored different facets of leadership, from its influence on innovative behavior to a comprehensive examination of creativity and innovation trends over specific periods. Importantly, Mehraein et al. (2023) delved into the negative effects of leadership on creativity and innovation, emphasizing the necessity for a balanced approach. Questions are set the stage for an exploration of leadership roles in the twenty-first century across global industries and a detailed examination of leadership contribution to IWB in primary, secondary, and tertiary industries. To systematically address these questions, the initial literature review unearthed the absence of a systematic exploration of the relationship between leadership and employee innovative work behavior. The formulation of search queries and a preliminary assessment of their effectiveness preceded the finalization of the search query employed in databases such as Web of Science and Scopus. Encompassing the quantitative studies, the SLR focused on articles published in English language from Jan 2000 to May 2023. The rigorous inclusion and exclusion criteria ensured a thorough evaluation, encompassing research articles, books, book chapters, dissertations, and errata. The review also adhered to high-quality standards, considering only full-text, peer-reviewed publications. The subsequent elimination of duplicate articles culminated in a sample of 493 articles for further evaluation. The chosen studies underwent a comprehensive data extraction process, incorporating information such as the first author's name and publication year. This systematic approach reflects a commitment to enhancing the quality and transparency of the SLR, contributing to the construction of theoretical models based on emerging findings. As the SLR unfolded, it identified a diverse range of leadership styles influencing employee innovation, categorized into Transactional Leadership, Transformational Leadership, and Hybrid Leadership styles. Transformational leadership emerged as the dominant style, emphasizing inspiration and motivation. The prevalence of authentic and ethical leadership styles reinforced the importance of genuine self-expression and ethical decision-making. Transactional leadership, known for its focus on rewards and punishments based on performance, retained prominence, particularly in organizational contexts prioritizing task accomplishment and performance management. Hybrid leadership styles, combining transactional and transformational elements, were exemplified by empowering and servant leadership styles. The recognition of inclusive leadership and leader-member exchange in this category underscored the multifaceted nature of leadership in the twenty-first century.

In the industry-wise analysis, the SLR presented a limited exploration of leadership contributions to employee innovation in the primary industry, particularly agriculture. This scarcity may be attributed to historical emphasis on traditional farming practices or a perception that innovation is less relevant in this sector. Conversely, the secondary industry, encompassing manufacturing, technology, pharmaceuticals, and textiles, exhibited a robust body of literature, possibly driven by rapid technological changes and the competitive nature of these industries. The tertiary industry, covering higher education, healthcare, IT, banking, and public services, emerged as the most extensively studied, reflecting the dynamic nature and continuous need for improvement in service-oriented and knowledge-based industries. This SLR examines the unexplored territory by systematically reviewing the literature on leadership and employee innovative work behavior, offering a nuanced understanding of the evolving leadership landscape in the twenty-first century. The process adheres to rigorous methodology, ensuring a comprehensive evaluation of relevant studies and setting the stage for future research and theoretical development. In the face of the challenges posed by the digital age, this review provides useful insights to help organizations develop leadership

strategies that encourage innovation and navigate the complexities of the modern workplace. The objective of this research is to conduct an in-depth examination of leadership roles and their impact on employee innovative work behavior in multiple sectors. It involves investigating the dominance and effectiveness of transformational and transactional leadership in innovation. It also examines the role of transformational, transactional and hybrid leadership in fostering innovative work behavior in primary, secondary and tertiary industries, identifying sector-specific leadership challenges.

## 2 | LITERATURE REVIEW

Discussions on innovation have historically been dominated by traditional leadership paradigms, such as transactional and transformational leadership (Afsar & Umrani, 2019; Karimi et al., 2023; Khan et al., 2020; Transaction & Sun, 2024). However, the quick advancement in a variety of fields has made these traditional leadership models obsolete. Technology has drastically changed the organizational environment, and in the digital age, traditional leadership approaches are no longer effective (Erhan et al., 2022). The literature is gradually recognizing that in order to successfully manage the intricacies of the contemporary workplace, leadership approaches need to evolve (Vo et al., 2023; Zhang et al., 2020). The desire for new approaches to problem-solving is reflected in the investigation of different leadership styles that are more suited to handling the complex issues that the digital age presents. Effective leadership styles that steer organizations towards innovative solutions include ambidextrous, servant, empowering, and ethical (Alblooshi et al., 2020; Mehraein et al., 2023). These leadership philosophies are regarded as flexible and sensitive to the changing dynamics of modern work environments, providing a break from the rigidities linked to conventional paradigms. The quest for innovative leadership approaches has led to the recognition of various styles that promote diverse and holistic strategies for sustainable success. Autonomous leadership emphasizes self-governance and individual empowerment, allowing employees to take ownership of their tasks (Nishinaka & Shirahada, 2023; Reslan et al., 2021). Benevolent leadership focuses on compassionate and caring leadership behaviors, fostering positive relationships within teams (Lee et al., 2020). Clinical leadership employs a systematic and analytical approach to problem-solving, ensuring precision and efficiency in decision-making (Harsanto et al., 2023). Constructive leadership emphasizes positive reinforcement and encouragement, creating a supportive environment for innovation (Kaur & Singh, 2021). Cultural leadership recognizes and leverages the cultural diversity within an organization to drive creativity (Tian et al., 2018). Authentic leadership, characterized by transparency and genuine interactions, fosters trust and engagement (Elrehail et al., 2018). Inclusive leadership ensures that diverse voices are heard, promoting a sense of belonging and creativity among employees (Younas et al., 2023). Several SLRs have significantly contributed to our understanding of the relationship between leadership and employee innovative work behavior. Da Silva et al. (2016) delved into the dynamics of leaders influencing innovative behavior within software development teams. Hughes et al. (2018) conducted an extensive review encompassing 195 studies, elucidating trends in defining creativity, examining leadership effects, and addressing critical gaps in research. Shubina and Kulakli (2020) focused on the trends in creativity and innovation from 2010 to 2019, providing a detailed analysis of methodologies and developments during that period. According to Figueiredo et al. (2022), research on leadership and innovation has rapidly expanded, with a focus on the impact of leadership on creativity, yet a deeper understanding of its connection with innovation is needed. Transformational leadership is a dominant perspective, but there's a rising interest in Leader-member exchange (LMX), entrepreneurial, and positive leadership; however, there's a gap in comprehensive frameworks to address the complexity. The SLR by Mehraein et al. (2023) explored the negative effects of leadership on creativity and innovation, emphasizing the importance of a balanced leadership approach. The emphasis on balanced leadership draws attention to the need for leaders to consider both positive and negative outcomes in their approach to fostering creativity and innovation (Mehraein et al., 2023). This nuanced perspective underscores the complexity of the leadership landscape and highlights the importance of leaders adopting strategies that not only drive innovation but also mitigate potential negative consequences.

The literature on leadership and innovation reflects a paradigm shift from traditional transactional and transformational models to a more nuanced and adaptive approach. The evolving organizational landscape demands leaders to embrace diverse leadership styles, recognizing the unique challenges and opportunities presented by the digital age. As organizations navigate through the complexities of the modern workplace, the literature underscores the significance of leaders who can balance innovation with ethical considerations, empower individuals, and foster an inclusive and authentic organizational culture. The insights gained from systematic literature reviews provide a rich foundation for understanding the multifaceted relationship between leadership and employee innovative work behavior, paving the way for future research and the development of innovative leadership strategies.

### 3 | RESEARCH METHODS

The process of conducting a systematic review generally comprises five main components: defining a research question, conducting a thorough search of databases to gather relevant research materials for potential inclusion, employing predetermined inclusion and exclusion criteria to determine the selection of studies to evaluate, assessing the quality of the chosen studies and extracting pertinent information, performing the analysis and presenting the findings (McKibbin, 2006).

#### 3.1 | Question Formulation

- (a) What are the leadership roles in the twenty-first century that have been examined in the context of employee IWB across the globe and how they differ across the primary, secondary, and tertiary industries?
- (b) How transformational, transactional and hybrid leadership contributes to employees' IWB and is there any difference in primary, secondary, and tertiary industries?

#### 3.2 | Research Inquiry

At the beginning, an initial review of the existing literature was conducted to evaluate the extent and availability of research on the relationship between leadership and employee innovation. This investigation revealed that no systematic literature review had been previously undertaken on this subject. Before initiating the complete search, evaluating a mix of search strings can be beneficial in determining the effectiveness and appropriateness of the search query (Gusenbauer & Haddaway, 2020; Mengist et al., 2020). Following a series of adequate trials in testing different strings, the subsequent search query was developed to explore articles within the selected databases: (Leader AND creativity OR innovation OR work behavior OR work behaviour OR innovative behavior OR innovative behaviour OR innovative work behavior OR innovative work behaviour OR creative behavior OR creativity). A search was performed in two widely used databases; Web of Science and Scopus in May 2023.

#### 3.3 | Inclusion and Exclusion Criteria

The systematic literature review (SLR) incorporated both quantitative and qualitative studies that offered valuable insights into the impact of various leadership roles on employee creativity or innovation. To ensure comprehensive coverage, we focused on articles published in the twenty-first century, specifically from 2000 to May 2023. Our selection criteria included studies published in English, encompassing research articles, books, books chapters, dissertations, and erratum. We initially conducted searches based on titles, abstracts, and keywords, followed by a thorough evaluation of the full texts to determine article relevance. The initial sample underwent additional evaluation using the following exclusion criteria. Firstly, in line with previous systematic literature reviews (Alblooshi et al., 2020; Figueiredo et al., 2022; Pizzolitto et al., 2023), only full-text, peer-reviewed publications were considered for inclusion, while excluding conference papers, book reviews, editorials, extended abstracts, letters, notes, short surveys, bibliographical items, meeting abstracts, news items and retractions. Secondly, studies not published in English were also excluded from the initial search. Thirdly, our study aims to investigate empirical studies (including qualitative, quantitative, and mixed-methods studies) as well as conceptual and literature review studies, which exhibit both methodological and theoretical rigor.

**Table 1**

*Criteria of inclusion and exclusion of publications*

Sr. no	Article Type	Inclusion Criteria	Exclusion Criteria
1	Full-text, peer-reviewed publications	Studies published in English, encompassing research articles, books, books chapters, dissertations, and erratum.	Conference papers, book reviews, editorials, extended abstracts, letters, notes, short surveys, bibliographical items, meeting abstracts, news items and retractions.

### 3.4 | Study Selection and Data Extraction

The two screening stages, namely title/abstract and full text, led to the inclusion of 608 studies in this review. For each eligible study, a data extraction form was filled out to gather information such as the first author's name and publication year. Lastly, duplicate articles were removed. Consequently, the research publications included in the present systematic literature review were sourced from reputable databases, namely Scopus and Web of Science. Renowned for their rigorous selection criteria, these databases ensured the inclusion of high-quality, peer-reviewed studies. The extensive coverage of top-tier research journals within these databases contributed to the robustness and reliability of the systematic literature review, offering a comprehensive and credible foundation for insights into the complex interaction between leadership and employee innovative work behavior.

## 4 | RESULTS AND DISCUSSION

This Systematic Literature Review was performed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Mengist et al., 2020). The studies included in the systematic literature review encompass primary, secondary, and tertiary industries. The primary industry includes agriculture, forestry, fishing, mining, quarrying, and the extraction of minerals. The secondary industry includes manufacturing, construction, and energy-producing industries. However, tertiary industry provides a wide range of services, including banking, finance, insurance, retail, transportation, information, communications, education, health, and various professional and personal services.

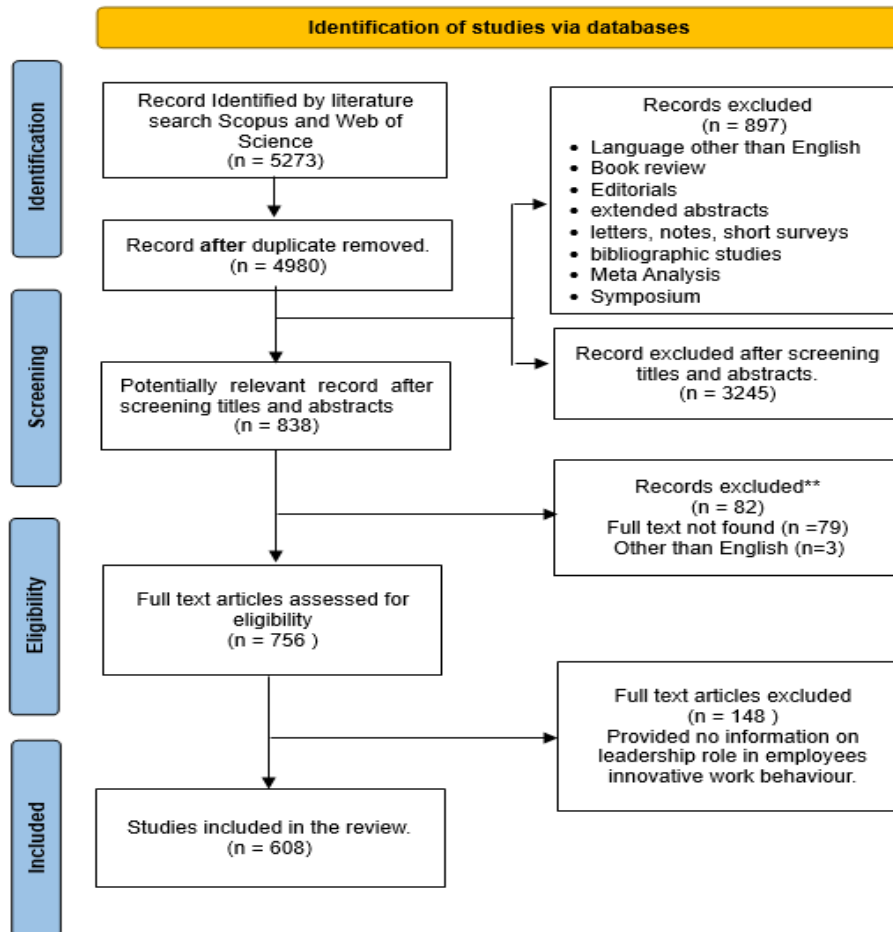


Figure 1: PRISMA Framework

#### 4.1 | Leadership Wise Analysis of Research Publication

The leadership roles identified were categorized into Transactional Leadership, Transformational Leadership, and a combination of both. The results presented the findings to address the research question regarding role of leadership in employees innovative work behavior. The key findings are as follows:



**Figure 2:** Leadership wise Publications on Innovation

##### 4.1.1 | Leader Roles within Transformational Leadership

Transformational leadership emerged as the dominant leadership style, with a total of 177 publications. Authentic leadership, ethical leadership, and shared leadership were the next most frequently mentioned styles. Green transformational leadership and entrepreneurial leadership had substantial frequencies. Transformational Leadership has consistently been acknowledged as a powerful and effective leadership style in various organizational contexts (Bass, 1985). Its emphasis on inspiring and motivating followers, fostering innovation, and promoting a shared vision resonates well with the idea that transformational leaders can positively influence employees' innovative work behavior (Kucharska & Rebelo, 2022). Moreover, the recognition of authentic leadership and ethical leadership as the next most frequently mentioned styles is consistent with the existing literature on ethical and authentic approaches to leadership. Authentic leadership emphasizes leaders' genuine self-expression, transparency, and ethical decision-making (Korku & Kaya, 2023). Similarly, ethical leadership emphasizes moral conduct, promoting trust and integrity within the organization (Bhatti, Kiyani, et al., 2021; Goswami & Agrawal, 2022). Shared Leadership, another style highlighted in the finding, is also supported by literature emphasizing the importance of distributed leadership where multiple individuals contribute to leadership functions within a team or organization (Nishinaka & Shirahada, 2023). The mention of green transformational leadership and entrepreneurial leadership in the systematic review suggests a growing awareness of the environmental and innovative aspects of leadership. This resonates with the literature on sustainable and entrepreneurial leadership, which emphasizes adaptive and creative approaches to leadership in the face of dynamic environments (Ali et al., 2023; Jansen et al., 2009). In contrast, while transformational leadership is consistently highlighted, the specific frequencies of styles such as green transformational leadership and entrepreneurial leadership provide an interesting perspective. The explicit attention to these styles indicates an evolving focus within the literature on incorporating environmentally sustainable and entrepreneurial practices into leadership approaches. To summarize, the findings align with established literature on the effectiveness of transformational leadership, authentic leadership, and ethical leadership. The inclusion of green transformational leadership and entrepreneurial leadership reflects the evolving nature of leadership research, incorporating contemporary concerns related to environmental sustainability and entrepreneurial innovation.

#### 4.1.2 | Leader Roles Within Transactional Leadership

The most frequently studied leadership style was transactional leadership, followed by paternalistic and authoritarian. Abusive supervision and directive leadership also had notable frequencies. An established and extensively researched leadership style, transactional leadership centers on exchanging incentives and punishments based on performance. The fact that it is often discussed in the literature indicates that organizational contexts continue to find it relevant. Transactional Leadership's focus on contingent rewards and clear structures resonates with organizational structures that prioritize task accomplishment and performance management (Lee et al., 2020; Udin et al., 2022). Abbas and Ali (2023) conducted a meta-analysis, affirming the positive effects of transactional leadership on followers' performance. The literature often acknowledges transactional leadership for its role in achieving short-term goals and maintaining organizational stability (Hansen & Pihl-Thingvad, 2019). The studies of paternalistic and authoritarian leadership align with studies exploring leadership styles in different cultural contexts. The meta-analysis by Bedi (2020) presented distinctive contribution of paternalistic leadership beyond the influence of transformational leadership and leader-member exchange (LMX) in predicting follower outcomes. The inclusion of authoritarian leadership echoes with studies that examine leadership styles in crisis or highly directive situations. Authoritarian leadership is often explored in contexts where quick and decisive decision-making is crucial. Systematic literature review by Pizzolitto et al. (2023), numerous authors advocate for leaders to adjust their level of authoritarian leadership based on the specific context, aiming to establish a more effective correlation between leadership strategies and performance outcomes. Consequently, the study of leadership should adopt a more nuanced perspective, considering hybrid leadership styles and their impact on overall performance. Abusive supervision is a contrasting style associated with negative outcomes. Research by Malik et al. (2023) explores the detrimental effects of abusive supervision on subordinates' emotional exhaustion, and job neglect. Directive leadership is typically linked with task-oriented behaviors and clear communication. Previous studies acknowledge its effectiveness in certain contexts, particularly when clarity and guidance are paramount (Ochieng et al., 2023). In studies of transactional leadership, paternalistic leadership, authoritarian leadership, abusive supervision, and directive leadership in the literature align with established leadership theories and research. The varied mentions of these styles indicate the multifaceted nature of leadership and its adaptability to various organizational and cultural contexts. Researchers may find these findings useful for building upon existing theories and exploring the nuanced interactions between leadership styles and outcomes.

#### 4.1.3 | Hybrid Leadership: A Blend of Transactional and Transformational Leadership

Servant leadership and empowering leadership were the most common styles in this category of hybrid leadership. Inclusive leadership, leader-member exchange (LMX), and humble leadership also had a significant number of studies. The finding that "servant leadership" and "empowering leadership" were the most common styles in the category of both transactional and transformational leadership aligns with existing literature reviews on leadership, emphasizing the relevance of these styles in contemporary organizational contexts (Pizzolitto et al., 2023). The prominence of servant leadership as a frequently discussed style is consistent with prior literature. Researchers like Kainde and Mandagi (2023) highlighted the servant leader's focus on serving others, fostering innovative work behavior, and prioritizing the needs of followers. This style is often associated with positive organizational outcomes, including innovative work behavior (Reslan et al., 2021).

Empowering leadership's prevalence is in line with studies emphasizing its positive impact on employee empowerment and innovative behavior (Kim & Beehr, 2023). Offering autonomy, delegating responsibility, and encouraging initiative from employees are all aspects of empowered leadership that support innovation inside the company. The acknowledgement of the substantial body of research on leader-member exchange (LMX) and inclusive leadership is in line with existing literature that highlights the value of inclusive leadership in advancing a diversity of ideas and cultivating an inclusive workplace culture (Younas et al., 2023). Similarly, leader-member exchange is known to influence employee creativity and innovation (Martin et al., 2023). The focus on transformative leadership is consistent with an extensive body of research acknowledging its capacity to inspire and motivate subordinates to meet or exceed expectations (S. Abbas et al., 2024). Developing a future-focused vision is frequently linked to transformational leaders, and this may be an effective strategy for fostering innovation inside the company. The discovery of a wide variety of approaches to leadership is consistent with earlier research recognizing the diverse nature of twenty-first century leadership. This supports research by Avolio et al. (2009), who make the case for a broader definition of leadership that takes into account a variety of behavioral patterns.

In conclusion, the present systematic literature review on synthesis that a blend of transactional and transformational leadership, along with other different leadership styles, is crucial in influencing workers' innovative work behavior. The complexity of leadership dynamics highlighted in this review aligns with the call for a comprehensive understanding of leadership in fostering innovation (Kucharska & Rebelo, 2022).

Finding a wide variety of leadership philosophies, this literature review highlights the complexity of twenty-first century leadership. More emphasis was placed on some leadership philosophies, like transformational leadership, indicating that these approaches are thought to be crucial for encouraging innovative work behavior among employees. The literature study concludes by pointing out that a variety of additional leadership styles and attributes, in addition to transactional and transformational leadership, are important factors that influence workers' innovative work behavior in the twenty-first century. According to M. Abbas and Ali (2023), the multiplicity of leadership methods emphasizes the intricacy of leadership dynamics and the requirement for a thorough comprehension while promoting innovation.

**Table 2**  
 Leadership role wise publication analysis

Leadership Role	Role	Frequency
Transactional Leadership	Transactional leadership, Paternalistic leadership, Authoritarian leadership etc.	84
Transformational Leadership	Transformational leadership, Authentic leadership, Ethical leadership etc.	403
Both Transactional and Transformational Leadership	Servant leadership, Empowering leadership, Inclusive leadership etc.	198

**4.2 | Industry Wise Analysis of Research Publication**

The industry wise analysis of 608 studies included for overview of leadership contribution in employee innovation. The results presented the findings to address the research question regarding contribution of transformational, transactional and hybrid leadership to employees' IWB and in primary, secondary, and tertiary industries. The key findings are as follows:



**Figure 3:** Industry Wise Publication on Leadership Contribution to Innovation

**4.2.1 | Limited Focus on Primary Industry**

Only one study explored leadership contribution to employees' innovation in the primary industry, primarily in the agriculture sector. Possible reasons for the limited exploration in this sector include historical emphasis on



traditional farming practices, limited technological advancements, or a perception that innovation is less relevant (Pan et al., 2024). Keeping in view of the fewer studies on leadership contribution in agriculture, it is essential to recognize the importance of sustainable and technological advancements in this primary industry. The perception that innovation is less relevant in the primary industry, such as agriculture, is in line with studies that discuss how industry characteristics influence leadership priorities and approaches to innovation (Kucharska & Rebelo, 2022). In contrast to the limited studies in agriculture, literature in other sectors highlights the crucial role of leadership in fostering innovation, even in traditionally perceived conservative industries (Lee et al., 2020).

The limited exploration in the primary industry indicates an opportunity for future research to delve deeper into the leadership dynamics influencing innovation in this domain. Scholars could investigate how leadership styles and strategies contribute to overcoming the perceived barriers to innovation in agriculture, considering the unique challenges faced by this primary industry. Recommendations for organizational leaders in the agriculture sector could emphasize the adoption of innovative leadership practices to leverage the potential for sustainable and technological advancements. This discussion highlights the need for a more interesting understanding of leadership's role in fostering innovation in the agriculture sector, emphasizing the potential contributions and challenges that may have been overlooked in previous literature reviews.

#### **4.2.2 | Extensive Study in Secondary Industry**

Leadership contribution in the secondary industry was more extensively explored, with 260 articles. This sector, encompassing manufacturing, technology, pharmaceuticals, and textiles, demonstrated a substantial body of literature. The higher frequency may be attributed to rapid technological changes, competitive industry nature, and the necessity for innovation to maintain competitiveness. A literature review by Alblooshi, Shamsuzzaman, and Haridy (2020) highlighted the importance of leadership, especially transformational leadership, in promoting innovation in manufacturing and technology-intensive industries. These sectors often experience rapid technological changes, requiring adaptive and visionary leadership (Candrasari et al., 2023). In the pharmaceutical industry, where research and development are paramount, the literature emphasizes the role of leadership in driving innovation. A study by Bhatti et al. (2021) discussed the influence of leadership styles on the creativity and problem-solving abilities of teams in research-driven sectors, aligning with the high frequency observed in the pharmaceutical category. While the textiles industry may not be as extensively covered in leadership literature, studies on innovation in traditional industries often stress the need for leadership to navigate challenges. The work of Harsanto et al. (2023) discussed the importance of leadership in fostering a culture of innovation, which is crucial for industries like textiles facing the need for adaptation. The higher frequency of leadership mentions in the secondary industry, as found in this review, could be connected to the dynamic nature of these sectors. The literature often highlights that industries characterized by rapid technological changes and intense competition demand proactive leadership to drive innovation (M. Abbas & Ali, 2023; Tian et al., 2018).

#### **4.2.3 | High Frequency in Tertiary Industry**

The tertiary industry exhibited the highest frequency with 477 mentions. Sectors such as higher education, healthcare, IT, banking, and public services were extensively covered in the literature. The abundance of literature in these sectors may result from their dynamic nature, the continuous need for improvement, and the influence of leadership on knowledge-based and service-oriented innovations. Tertiary industries, being more education and service-oriented, offer complex and dynamic environments that naturally encourage research on leadership and innovation.

The extensive coverage of higher education aligns with previous literature that emphasizes the unique challenges and opportunities in academic institutions (Abulibdeh et al., 2024). The healthcare sector's substantial representation is in line with existing studies that explore leadership's role in promoting innovation in healthcare organizations (Apell & Eriksson, 2023). The prominence of IT in the literature is consistent with the recognition of the fast-paced and dynamic nature of the technology sector. Previous reviews, such as those by Madhushree, Revathi, and Aithal (2019), acknowledge the importance of leadership in driving innovation in technology-related industries. Banking and public services, being service-oriented industries, have also been the focus of leadership and innovation studies. For instance, study by Vivona (2023) discusses leadership in the context of innovation in public services. The abundance of literature in these sectors can be attributed to the dynamic nature of these industries, the continuous need for improvement, and the significant influence of leadership on knowledge-based and service-oriented

innovations. This aligns with the idea that certain sectors inherently foster innovation due to their complex and dynamic environments, and leadership plays a crucial role in navigating these complexities.

Moreover, the finding supports the notion that leadership in tertiary industries is multifaceted, requiring leaders to possess skills that are uniquely suited to knowledge-intensive and service-driven environments. Researchers like Apell and Eriksson (2023) have discussed the need for adaptive leadership styles in diverse and dynamic settings, which resonates with the characteristics of tertiary industries. The emphasis on the tertiary industry in the literature review aligns with existing research on leadership and innovation in specific sectors, demonstrating a consistent recognition of the importance of leadership in shaping knowledge-based and service-oriented innovations. The literature review highlights the varying degrees of attention given to leadership's role in fostering innovative work behavior across different industries, emphasizing the importance of recognizing and addressing innovation in all sectors, including those traditionally perceived as less innovation focused. The secondary and tertiary industries attracted more research attention, possibly due to their economic significance and the rapid pace of technological changes, necessitating innovative practices.

**Table- 3**  
*Industry wise publication analysis*

Industry	Major Companies	Frequency
Primary industry	Agriculture industry	1
Secondary industry	Manufacturing, High-tech, Automobile, Electronics, Construction, Pharmaceutical, SMEs, Technology sector and Textile industry	260
Tertiary Industry	Higher education institutions (HEIs), Hospitality industry, Information technology (IT_ITeS), Healthcare industry, Banking sector, Financial services, Public sector organizations, Service-based organizations, Software companies, R&D organization	477

## 5 | CONCLUSION

This discussion synthesizes the key findings from the systematic literature review, focusing on leadership roles and industry-wise analysis to better understand their contributions to employee innovation across different sectors.

### 5.1 | Leadership Roles Analysis: Transactional vs. Transformational Leadership

Transformational Leadership emerges as the predominant style, with its established effectiveness in various organizational contexts (Korku & Kaya, 2023). The emphasis on inspiring and motivating followers, fostering innovation, and promoting a shared vision aligns well with the idea that transformational leaders positively influence employees' innovative work behavior (Kucharska & Rebelo, 2022). In line with the dynamic character of leadership studies, authentic and ethical leadership styles coexist with newer forms like green transformational leadership and entrepreneurial leadership. By highlighting adaptable and creative approaches to leadership, the focus on these styles indicates a rising awareness of environmental and innovative factors (Ali et al., 2023; Alvesson & Einola, 2019). The well-established style of transactional leadership is still extensively researched, highlighting its continued applicability in organizational settings. Transactional leadership, which emphasizes clear structures and contingent rewards, is recognized for achieving short-term goals and safeguarding stability (Hansen & Pihl-Thingvad, 2019). The emphasis on explicit structures and contingent rewards in transactional leadership is in line with organizational environments that prioritize task completion and performance management (Lee et al., 2020; Udin et al., 2022). The study examines paternalistic and authoritarian leadership styles in various cultural and crisis circumstances. Additionally, it discusses the negative consequences and task-oriented behaviors associated with directed leadership and abusive supervision, respectively.

## 5.2 | Hybrid Leadership: A Blend of Transactional and Transformational

Common leadership styles in hybrid leadership include servant and empowering leadership. Leader-member exchange (LMX) and inclusive leadership are also given consideration. According to earlier research, the popularity of servant leadership is in line with its emphasis on helping others and fostering innovative work behavior (Kainde & Mandagi, 2023). Empowering leadership's positive impact on employee empowerment and innovation aligns with its emphasis on delegation, autonomy, and encouraging initiative (Kim & Beehr, 2023). The diverse range of leadership styles reflects the multifaceted nature of leadership in the twenty-first century, supporting the call for a more inclusive understanding that incorporates various styles and traits (M. Abbas & Ali, 2023).

## 5.3 | Limited Exploration in the Primary Industry

The primary industry receives limited attention with only one study in agriculture. Potential reasons for this limited exploration include historical emphasis on traditional practices, limited technological advancements, and a perception that innovation is less relevant. Given the potential benefits of sustainable development and technological innovations, the findings highlight the need for additional research in primary industries. This aligns with the call for a more comprehensive understanding of leadership dynamics and innovation barriers in primary industries (Pan et al., 2024).

## 5.4 | Extensive Focus on the Secondary and Tertiary Industries

The secondary industry, comprising manufacturing, technology, pharmaceuticals, and textiles, attracts extensive research. The dynamic nature, rapid technological changes, and the necessity for innovation in these sectors contribute to the substantial number of studies. Leadership's role in promoting innovation in manufacturing and technology-intensive industries is highlighted, demonstrating the need for adaptive and visionary leadership (Candrasari et al., 2023). The findings also highlighted the importance of leadership in fostering a culture of innovation in traditional industries like textiles (Harsanto et al., 2023). The tertiary industry, including higher education, healthcare, IT, banking, and public services, exhibits the highest frequency. These knowledge-intensive and service-oriented sectors demand continuous improvement, contributing to a wealth of literature. The dynamic and complex nature of these industries encourages research on leadership and innovation. The findings support the idea that certain sectors inherently foster innovation due to their dynamic environments, emphasizing the multifaceted nature of leadership in tertiary industries (Apell & Eriksson, 2023; Younas et al., 2023). The dominance of Transformational Leadership, known for its effectiveness in inspiring and motivating followers and fostering innovation, underscores its positive influence on employees' innovative work behavior.

The identification of green transformational, entrepreneurial, ethical, and authentic leadership styles demonstrates the growing area of leadership research and highlights the growing awareness of environmental and innovative aspects in leadership studies. The well-known transactional leadership style is still widely used in organizational settings due to its continued applicability, particularly in achieving short-term goals and maintaining stability. The in-depth understanding of paternalistic and authoritarian styles in different industries, along with the discussion of abusive supervision and directive leadership, provides valuable insights into the wide-ranging applications and effects of these leadership styles. The popularity of inclusive leadership, leader-member exchange, and servant leadership in the field of hybrid leadership emphasizes the comprehensive nature of leadership in the twenty-first century. This emphasizes how important it is to advance a more inclusive, wide definition of leadership that considers a variety of behavioral patterns and styles. Organizations can take advantage of these insights by incorporating a combination of these leadership styles to maximize their impact on employee innovative work behavior. The limited attention given to the primary industry, demonstrated less emphasis of leadership on employee innovation, suggests a critical need for increased research focus on employee creativity and innovation. Historical reliance on traditional practices, limited technological advancements, and the perception of innovation as less relevant are identified barriers. Recommendations include recognizing the potential contributions of sustainable and technological advancements in agriculture, aligning with calls for a more comprehensive understanding of leadership dynamics in this sector (Pan et al., 2024). Conversely, extensive research in the dynamic secondary industry highlights the vital role of adaptive and visionary leadership in manufacturing, technology,

pharmaceuticals, and textiles. In the tertiary industry, characterized by continuous improvement and knowledge-intensive services, the abundance of literature emphasizes the all-round nature of leadership in fostering innovation. In future research directions, an exploration of the synergistic effects of combining various leadership styles, particularly Transformational and Transactional, can offer interesting insights into optimizing their impact on employees' innovative work behavior. Additionally, investigating the adaptability and applicability of these leadership styles in diverse cultural and organizational contexts would contribute to a more comprehensive understanding of effective leadership strategies. Lastly, addressing the identified gaps in primary industry research by delving deeper into the unique challenges and opportunities in agriculture can provide valuable insights into fostering innovation in traditionally perceived conservative industries.

## REFERENCES

- Abbas, M., & Ali, R. (2023). Transformational versus transactional leadership styles and project success: A meta-analytic review. *European Management Journal*, *41*(1), 125–142. <https://doi.org/10.1016/j.emj.2021.10.011>
- Abbas, S., Ul-Hassan, D. K. H., & Raza, S. (2024). The Role of Transformational Leadership on Employees Innovative Performance in Colleges in Punjab. *International Journal of Human and Society (IJHS)*, *4*(01), 46–63.
- Abulibdeh, A., Zaidan, E., & Abulibdeh, R. (2024). Navigating the confluence of artificial intelligence and education for sustainable development in the era of industry 4.0: Challenges, opportunities, and ethical dimensions. *Journal of Cleaner Production*, *437*(November 2023), 140527. <https://doi.org/10.1016/j.jclepro.2023.140527>
- Afsar, B., & Umrani, W. A. (2019). Transformational leadership and innovative work behavior. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-12-2018-0257>
- Alblooshi, M., Shamsuzzaman, M., & Haridy, S. (2020). The relationship between leadership styles and organisational innovation: A systematic literature review and narrative synthesis. *European Journal of Innovation Management*, *24*(2), 338–370. <https://doi.org/10.1108/EJIM-11-2019-0339>
- Ali, A., Wang, H., & Boekhorst, J. A. (2023). A moderated mediation examination of shared leadership and team creativity: a social information processing perspective. *Asia Pacific Journal of Management*, *40*(1), 295–327. <https://doi.org/10.1007/s10490-021-09786-6>
- Alvesson, M., & Einola, K. (2019). Warning for excessive positivity: Authentic leadership and other traps in leadership studies. *Leadership Quarterly*, *30*(4), 383–395. <https://doi.org/10.1016/j.leaqua.2019.04.001>
- Apell, P., & Eriksson, H. (2023). Artificial intelligence (AI) healthcare technology innovations: the current state and challenges from a life science industry perspective. *Technology Analysis and Strategic Management*, *35*(2), 179–193. <https://doi.org/10.1080/09537325.2021.1971188>
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, *60*, 421–449. <https://doi.org/10.1146/annurev.psych.60.110707.163621>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, USA: The Free Press.
- Bedi, A. (2020). A Meta-Analytic Review of Paternalistic Leadership. *Applied Psychology*, *69*(3), 960–1008. <https://doi.org/10.1111/apps.12186>
- Bhatti, S. H., Kiyani, S. K., Dust, S. B., & Zakariya, R. (2021). The impact of ethical leadership on project success: the mediating role of trust and knowledge sharing. *International Journal of Managing Projects in Business*, *14*(4), 982–998. <https://doi.org/10.1108/IJMPB-05-2020-0159>
- Bhatti, S. H., Vorobyev, D., Zakariya, R., & Christofi, M. (2021). Social capital, knowledge sharing, work meaningfulness and creativity: evidence from the Pakistani pharmaceutical industry. *Journal of Intellectual Capital*, *22*(2), 243–259. <https://doi.org/10.1108/JIC-02-2020-0065>
- Candrasari, R., Yorman, Mayasari, N., Yulia, R., & Lake, F. (2023). Visionary Leadership in Education Management: Leading Toward Optimal Achievement in the Era of Independent Learning. *Indonesian Journal of Education*, *3*(3), 451–467.
- Da Silva, F. Q. B., Monteiro, C. V. F., Dos Santos, I. E., & Capretz, L. F. (2016). How Software Development Group Leaders Influence Team Members' Innovative Behavior. *IEEE Software*, *33*(5), 106–109. <https://doi.org/10.1109/MS.2016.120>
- Elrehail, H., Emeagwali, O. L., Alsaad, A., & Alzghoul, A. (2018). The impact of transformational and authentic leadership on innovation in higher education: The contingent role of knowledge sharing. *Telematics and Informatics*, *35*(1), 55–67. <https://doi.org/10.1016/j.tele.2017.09.018>
- Erhan, T., Uzunbacak, H. H., & Aydin, E. (2022). From conventional to digital leadership: Exploring digitalization of leadership and innovative work behavior. *Management Research Review, ahead-of-print*.

- <https://doi.org/10.1108/MRR-05-2021-0338>
- Figueiredo, J. A. L., Chimenti, P., Cavazotte, F., & Abelha, D. (2022). A decade of research on leadership and its effects on creativity-innovation: A systematic and narrative literature review. *Revista Brasileira de Gestao de Negocios*, 24(1), 66–91. <https://doi.org/10.7819/rbgn.v24i1.4151>
- Goswami, A. K., & Agrawal, R. K. (2022). It's a knowledge centric world! Does ethical leadership promote knowledge sharing and knowledge creation? Psychological capital as mediator and shared goals as moderator. *Journal of Knowledge Management*. <https://doi.org/https://doi.org/10.1108/JKM-09-2021-0669>
- Gurbuz, G., & Gulec, B. (2022). How leadership style matters for innovative work behavior. *Journal of Management, Marketing and Logistic*, 9, 136–146. <https://doi.org/10.17261/pressacademia.2022.1651>
- Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research Synthesis Methods*, 11(2), 181–217. <https://doi.org/10.1002/jrsm.1378>
- Hansen, J. A., & Pihl-Thingvad, S. (2019). Managing employee innovative behaviour through transformational and transactional leadership styles. *Public Management Review*, 21(6), 918–944. <https://doi.org/10.1080/14719037.2018.1544272>
- Harsanto, B., Primiana, I., Sarasi, V., & Satyakti, Y. (2023). Sustainability Innovation in the Textile Industry : A Systematic Review. *Sustainability*, 15(2).
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *Leadership Quarterly*, 29(5), 549–569. <https://doi.org/10.1016/j.leaqua.2018.03.001>
- Jansen, J. J. P., Vera, D., & Crossan, M. (2009). Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *Leadership Quarterly*, 20(1), 5–18. <https://doi.org/10.1016/j.leaqua.2008.11.008>
- Kainde, S. J. R., & Mandagi, D. W. (2023). A Systematic Review of Servant Leadership Outcomes in Education Context. *Jurnal Pendidikan Dan Pembelajaran*, 4(2016), 2563–2574.
- Karimi, S., Ahmadi Malek, F., Yaghoubi Farani, A., & Liobikienė, G. (2023). The Role of transformational leadership in developing innovative work behaviors: The mediating role of employees' psychological capital. *Sustainability*, 15(2), 1267. <https://doi.org/10.3390/su15021267>
- Kaur, D., & Singh, R. (2021). Charismatic leadership—the double edged sword. *International Journal of Research in Engineering, Science and Management*, 4(1), 165–167. <https://www.journals.resaim.com/ijresm/article/view/489>
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019898264>
- Kim, M., & Beehr, T. A. (2023). Empowering leadership improves employees' positive psychological states to result in more favorable behaviors. *International Journal of Human Resource Management*, 34(10), 2002–2038. <https://doi.org/10.1080/09585192.2022.2054281>
- Korku, C., & Kaya, S. (2023). Relationship between authentic leadership, transformational leadership and innovative work behavior: mediating role of innovation climate. *International Journal of Occupational Safety and Ergonomics*, 29(3), 1128–1134. <https://doi.org/10.1080/10803548.2022.2112445>
- Kucharska, W., & Rebelo, T. (2022). Transformational leadership for researcher's innovativeness in the context of tacit knowledge and change adaptability. *International Journal of Leadership in Education*, 00(00), 1–22. <https://doi.org/10.1080/13603124.2022.2068189>
- Lee, A., Legood, A., Hughes, D., Tian, A. W., Newman, A., & Knight, C. (2020). Leadership, creativity and innovation: a meta-analytic review. *European Journal of Work and Organizational Psychology*, 29(1), 1–35. <https://doi.org/10.1080/1359432X.2019.1661837>
- Madhushree, L. M., Revathi, R., & Aithal, P. S. (2019). A Review on Impact of Information Communication & Computation Technology (ICCT) on Selected Primary, Secondary and Tertiary Industrial Sectors. *MPRA Paper*, 6663(95150), 1–30. <https://econpapers.repec.org/RePEc:pra:mprapa:95150>
- Malik, O. F., Jawad, N., Shahzad, A., & Waheed, A. (2023). Longitudinal relations between abusive supervision, subordinates' emotional exhaustion, and job neglect among Pakistani Nurses: The moderating role of self-compassion. *Current Psychology*, 42(31), 26945–26965. <https://doi.org/10.1007/s12144-022-03817-1>
- Martin, R., Ono, M., Legood, A., Russo, S. Dello, & Thomas, G. (2023). Leader–member exchange (LMX) quality and follower well-being: A daily diary study. *Journal of Occupational Health Psychology*, 28(2), 0–48.
- McKibbon, K. A. (2006). Systematic reviews and librarians. *Library Trends*, 55(1), 202–215. <https://doi.org/10.1353/lib.2006.0049>

- Mehraein, V., Visintin, F., & Pittino, D. (2023). The dark side of leadership: A systematic review of creativity and innovation. *International Journal of Management Reviews*, February, 67–68. <https://doi.org/10.1111/ijmr.12334>
- Mengist, W., Soromessa, T., & Legese, G. (2020). Method for conducting systematic literature review and meta-analysis for environmental science research. *MethodsX*, 7, 100777. <https://doi.org/10.1016/j.mex.2019.100777>
- Nishinaka, M., & Shirahada, K. (2023). Emergent Process of Shared Leadership for Innovative Knowledge Creation: Text-Mining Approach to Discussion Data. *International Journal of Innovation and Technology Management*, 20(3), 1–21. <https://doi.org/10.1142/S021987702350013X>
- Ochieng, L. A., Koshal, J., & Bellows, S. (2023). Directive Leadership Style and Performance of Manufacturing Small and Medium Enterprises (SMES) in Nairobi County, Kenya. *The University Journal*, 5(2), 23–39. <https://doi.org/10.59952/tuj.v5i2.191>
- Pan, Y., Zhang, S., & Zhang, M. (2024). The impact of entrepreneurship of farmers on agriculture and rural economic growth: Innovation-driven perspective. *Innovation and Green Development*, 3(1), 100093. <https://doi.org/10.1016/j.igd.2023.100093>
- Pizzolitto, E., Verna, I., & Venditti, M. (2023). Authoritarian leadership styles and performance : a systematic literature review and research agenda. In *Management Review Quarterly* (Vol. 73, Issue 2). Springer International Publishing. <https://doi.org/10.1007/s11301-022-00263-y>
- Reslan, F. Y. B., Garanti, Z., & Emeagwali, O. L. (2021). The effect of servant leadership on innovative work behavior and employee knowledge sharing in the Latvian ICT sector. *Baltic Journal of Management*, 16(5), 729–744. <https://doi.org/10.1108/BJM-09-2020-0321>
- Shubina, I., & Kulakli, A. (2020). The Research Patterns of Creativity and Innovation: The Period of 2010-2019. *International Journal of Emerging Technologies in Learning*, 15(21), 89–102. <https://doi.org/10.3991/ijet.v15i21.16101>
- Tian, M., Deng, P., Zhang, Y., & Salmador, M. P. (2018). How does culture influence innovation ? A systematic literature review. *Management Decision*, 56(5), 1088–1107. <https://doi.org/10.1108/MD-05-2017-0462>
- Transaction, W., & Sun, X. M. (2024). The influence of transactional leadership style on employees' innovation ability. *Nurture*, 18(1), 139–160. <https://doi.org/10.55951/nurture.v18i1.550>
- Udin, U., Dananjoyo, R., & Isalman, I. (2022). Transactional leadership and innovative work behavior : Testing the mediation role of knowledge sharing in distribution market. *Journal of Distribution Science*, 1(20), 41–53. <https://doi.org/http://dx.doi.org/10.15722/jds.20.01.202201.41>
- Vivona, R. (2023). The new era leadership for the public sector? Entrepreneurship, effectiveness, and democracy. *Public Management Review*, 00(00), 1–17. <https://doi.org/10.1080/14719037.2022.2162957>
- Vo, A. H. K., Nguyen, T. D., Le, Y. N., Cao, H. N. Q., Le, V. N. T., & Huynh, K. L. (2023). Is transformational leadership always good for innovation? The moderating effect of transformational leadership on the personality–innovativeness link through knowledge sharing. *International Journal of Organizational Analysis*, 32(1), 131–152. <https://doi.org/10.1108/IJOA-10-2022-3444>
- Younas, A., Wang, D., Javed, B., & Haque, A. U. (2023). Inclusive leadership and voice behavior: The role of psychological empowerment. *Journal of Social Psychology*, 163(2), 174–190. <https://doi.org/10.1080/00224545.2022.2026283>
- Zhang, X., Liang, L., Tian, G., & Tian, Y. (2020). Heroes or villains? The dark side of charismatic leadership and unethical pro-organizational behavior. *International Journal of Environmental Research and Public Health*, 17(15), 1–16. <https://doi.org/10.3390/ijerph17155546>