

Ambidextrous Leadership: A Systematic Review of Leadership Dimensions for Innovation and Efficiency in Modern Organizations

Boy Chandra Nababan^{1*}, Prihatin Lumbanraja², and Elisabet Siahaan³

¹Magister Student of Management Science Department, Faculty of Economic and Business, University of North Sumatera, Medan, Indonesia

^{2,3} Magister Lecturer of Management Science Department, Faculty of Economic and Business, University of North Sumatera, Medan, Indonesia

*Corresponding author: boynababan.106@gmail.com

ABSTRACT

Ambidextrous leadership has emerged as the imperative concept against the dual demands of exploration and exploitation in dynamic and competitive organizational settings. This sort of leadership emphasizes the potential to foster innovation while gaining operational efficiency, enabling organizations to adapt to fast-changing conditions. This study synthesizes the findings of recent academic studies using SLR methodology, starting with 2019 up to 2024. Out of 118 articles from major academic databases, an initial pool of articles were subjected to a careful screening process with the help of predefined inclusion and exclusion criteria. As such, 24 articles went into the depth of analysis. The results suggest that ambidextrous leadership provides huge scope for organizational success because of the balanced conduct that exists between exploratory activities and exploitative activities in the realms of process optimization and resource efficiency. Some key dimensions, related to dynamic switching between exploration and exploitation, were assessed as central to the nature of its effectiveness. Finally, it identifies practical uses that ambidextrous leadership could have among a wide array of technological, healthcare, and manufacturing contexts. This paper concludes by recommending further areas of research in terms of improving the theoretical approach surrounding ambidextrous leadership across various organizational contexts.

Keywords: Ambidextrous leadership, exploration, exploitation, innovation.

JEL Classification: [D20, L00, M12]

1. INTRODUCTION

Ambidexterity is such a leadership capability that balances the exploration-innovative and future-oriented activities-with the exploitation of efficiency-focused activities of routine optimization (Gerlach et al., 2020; Jia et al., 2021; Luu et al., 2019). This dual focus underlines the relevance of ambidextrous leadership to contemporary management practice (Matusek, 2023; Wu et al., 2021). It would be important for organizations desiring to adapt and excel within rapidly changing markets. Thus, leaders must balance how much to pursue innovation versus the optimization of existing operations due to continuous disruptions within each industry caused by technological change, globalization, and moving consumer demands (Gong et al., 2021; Karimi et al., 2023; Mascareño et al., 2021). While exploration offers the possibility of long-term adaptation and growth through creative problem-solving and the development of new ideas, exploitation ensures short-term efficiency and stability through the refinement of processes and maximization of resources. The ability to pursue

these dual goals at the same time is the defining challenge facing leaders today, hence making ambidextrous leadership a cornerstone of contemporary leadership studies (Matusek, 2023).

Ambidextrous leaders easily switch between exploration-oriented and exploitation-oriented behaviors, depending on the situational demands that press upon them (Kafetzopoulos, 2022; Mueller et al., 2020). This capability is paramount in environments characterized by rapid decision-making and a need for strategic agility. Ambidextrous leadership has attracted scholars to investigate its applications in a wide range of industries, from technology to healthcare, manufacturing, and education, in which it would assure innovation, efficiency, and building resilience (Gerlach et al., 2020; Kafetzopoulos, 2022; Luu et al., 2019; Mueller et al., 2020). However, even as the literature on the concept of ambidextrous leadership is growing, the development of its contextual drivers, measurement methods, and practical enactments remains a challenge. For instance, questions persist regarding how leaders develop the skills necessary for dynamic switching, the influence of organizational culture on ambidextrous behaviors, and the long-term implications of prioritizing exploration versus exploitation (Berraies & Zine El Abidine, 2019; Haider et al., 2023; Ma et al., 2019).

It has attempted to gain a deep understanding of ambidextrous leadership through a systematic literature review of the latest available studies on the subject, published from 2019 to 2024. The SLR methodology allows for a structured and objective synthesis of the extant knowledge, thereby outlining dominant themes, practical applications, and gaps in the literature. The purposes of this review are threefold: (1) to identify the key dimensions and mechanisms of ambidextrous leadership, (2) to analyze its implementation across industries and organizational contexts, and (3) to suggest future research directions that address the limitations and emerging trends.

The nature of ambidextrous leadership presents unique challenges for leadership development and training programs. Traditional leadership models often emphasize either innovation or efficiency, neglecting the interplay between these dimensions. Ambidextrous leadership, however, requires a holistic approach that integrates both perspectives. Developing this capability involves cultivating cognitive flexibility, emotional intelligence, and strategic qualities that enable leaders to adapt their behaviors to changing circumstances (Cunha et al., 2019; Duc et al., 2020; Hafeez et al., 2019; Kung et al., 2020; Luu et al., 2019; Zuraik et al., 2020).

On a theoretical level, ambidextrous leadership advances the cause of leadership theory since it dismantles the dominant dichotomy between innovation and efficiency which underpins most previous leadership models. This shift in perspective represents a broader trend in organizational studies toward embracing complexity and the interdependence of forces that have conventionally been considered opposing. Effective exploration is often based on a sound platform of efficient processes, while successful exploitation can provide the resources to underpin innovative efforts (Jiang et al., 2023; Wang et al., 2021; Zhao et al., 2023).

The decision to focus on recent studies in this review reflects the evolving nature of ambidextrous leadership research. Over the past five years, scholars have increasingly

emphasized the role of digital technologies, global interconnectivity, and environmental sustainability in shaping leadership practices. These developments highlight the need for updated frameworks that account for emerging trends and challenges. For instance, the trend of working remotely and virtual teams has recomposed the traditional dynamics of leading, with leaders needing to find new ways of collaborating and holding teams together. Similarly, the increasing need for sustainability has meant that economic, social, and environmental objectives have to be carefully balanced, further complicating ambidextrous leadership.

This study contributes by trying to bridge the gap between theory and practice. While theoretical frameworks provide valuable insights into the conceptual underpinnings of ambidextrous leadership, practical applications often require nuanced adaptations to specific organizational settings. For instance, a technology startup may lean toward exploration to innovate quickly enough to have an advantage over others, whereas a manufacturing firm may lean toward exploitation in order to optimize production efficiency and maintain quality standards. Knowing how leaders navigate these varied demands is crucial for the development of actionable strategies that improve organizational performance.

The aim of this paper is to contribute to ambidextrous leadership by synthesizing current research, determining best practices, and projecting future inquiry. In understanding how leaders balance exploration and exploitation within various organizational settings, the review adds value in theoretical and practical advances pertaining to the study of leadership. The findings will go toward academic discourse as well as strategies being set forth by practitioners desiring to take advantage of or avoid some pitfalls of contemporary organizational environments.

2. LITERATURE REVIEW

2.1 Concept of Ambidextrous Leadership

The concept of ambidextrous leadership stems from the broader theoretical framework of ambidexterity in organizational studies. Ambidexterity, as a term, has its roots in the Latin word "ambidexter," meaning "able to use both hands equally well," and its organizational application reflects the ability to balance two seemingly opposing strategies exploration and exploitation. While exploration emphasizes innovation, creativity, and new opportunities, the focus of exploitation is on operational efficiency, discipline, and optimization of existing processes. Both approaches are quintessential for organizations to adapt to cope with, and continue their growth in, the continuously changing environment (Kafetzopoulos, 2022; Mehdi & Ahmed, 2017; Mueller et al., 2020).

The theoretical foundation of ambidextrous leadership can be traced back to March seminal work on exploration and exploitation in organizational learning. March argued that organizations must allocate resources effectively between these two activities to maintain long-term viability. Over time, scholars expanded this framework to include structural ambidexterity, which involves creating separate organizational units for exploration and exploitation, and contextual ambidexterity, which focuses on fostering an organizational culture that supports both (Kassotaki, 2019).

Ambidextrous leadership, as a distinct concept, emerged as researchers recognized the critical role of leaders in managing this balance. Unlike structural and contextual approaches, which primarily emphasize organizational design, ambidextrous leadership focuses on individual leaders behaviors and abilities. Specifically, it highlights the dynamic capability of leaders to switch between exploration and exploitation depending on situational demands. This perspective is in line with increasing concern for the processual nature of the leadership concept, emphasizing switching and situational sensitivity (Kassotaki, 2019; Luu et al., 2019; Martínez-Climent et al., 2019).

2.2 Key Dimensions of Ambidextrous Leadership

Three dimensions are at the center of ambidextrous leadership: exploration leadership and exploitation leadership. These dimensions are complementary rather than mutually exclusive. Exploration leadership can be defined as one that evokes a set of behaviors and practices that excite creativity, experimentation, and risk-taking. The leaders high on this dimension allow employees to feel empowered in generating new ideas, challenging the existing norms, and exploring uncharted territories. Leadership under the auspice of exploitation focuses on how best to ensure that a process is efficiently done, disciplined, and optimized. In this dimension, leaders will focus on stability, reliability, and the ability always to deliver quality consistently. This kind of leadership style is important in mature industries where operational excellence and control of costs are a vital driver of success. The leadership of exploitation is seen to bring about stability and profitability at the organization level (Klonek et al., 2023; Zacher et al., 2016).

2.3 Theoretical Bases of Ambidexterity in Leadership

Ambidextrous leadership derives its foundation from a number of theoretical underpinnings that have influenced the study and application in the provision of mechanisms and outcomes of the concept. One of the very important foundations involves the Upper Echelons Theory, which presumes that the characteristics and actions of top leaders highly influence the direction of the organization. This also coincides with ambidextrous leadership, since both stress the leader's crucial role in strategy formulation and the development of culture that supports the balance between exploration and exploitation (Tian, 2022).

Another key framework is the Dynamic Capabilities Theory, which has emphasized an organization's agility and adaptability toward environmental changes as a source of competitive advantage. The Ambidextrous Leadership accommodates such dynamic capabilities in equipping the leader to effectively manage two very demanding requirements of innovation and efficiency (Bleady et al., 2018).

The Paradox Theory is an analytical window for understanding how the contradictory, yet interdependent elements in the organizations coexist. This again, ambidextrous leadership befits as a paradox thinking through an integrated opposing strategies harmonious and synergistic combination (Cunha & Putnam, 2019). Put together, these theoretical underpinnings enrich the understanding of ambidextrous leadership in navigating organizational complexities. The aforementioned knowledge, therefore, provides the

essential theoretical basis that will allow an understanding of antecedents, processes, and outcomes of ambidextrous leadership.

2.4 Applications of Ambidextrous Leadership across Industries

Ambidexterity has been studied in-depth within various industries, with their unique challenges and opportunities. Within the technology industry, ambidexterity drives innovation while scaling current products and services. Leaders must balance the pursuit of disruptive technologies with optimizing legacy systems (Haider et al., 2023; Kassotaki, 2019). In the health care industry, the integration of patient-centered innovation into evidence-based clinical practices can be facilitated through ambidextrous leadership. They are supposed to embrace new medical technologies while upholding the set regulatory standards (Mutonyi et al., 2024). In manufacturing, this means a trade-off between the efficiency of the process and state-of-the-art techniques of production, which requires the leaders to manage the tension between cost control and investments in automation (Bettiol et al., 2023; Jiang et al., 2023; Pertheban et al., 2023).

2.5 Research Gaps and Future Directions

Although significant strides have been made in the increasing ambidexterity literature, a number of information gaps still exist. Among the key gaps, one important issue concerns the moderation of the ambidextrous leadership-performance outcome by cultural, industrywide, and organizational contexts. Second, the use of longitudinal studies that capture the long-term effects of ambidextrous leadership on firm performance is essential. The second gap in the literature involves the need to develop measurement tools and methods for ambidextrous leadership. And finally, there is a need for research to understand how leaders develop the ambidextrous capability to give an insight into the enabling processes that balance exploration and exploitation with success. In each of these areas, future research should adopt interdisciplinary approaches drawing on psychology, sociology, and management studies.

To clarify the relationships among the core concepts emerging from this literature review, Figure 1 presents a conceptual model illustrating the role of ambidextrous leadership in shaping organizational outcomes. The model shows how two seemingly opposing leadership approaches, exploration and exploitation, are managed dynamically through adaptive switching behavior. This switching behavior is central to balancing innovation and efficiency, ultimately influencing key organizational outcomes such as enhanced innovation performance, adaptability, and sustainable competitive advantage. The model also provides a preliminary framework for future research to explore potential mediating or moderating roles of contextual factors such as culture, organizational structure, and industry dynamics.

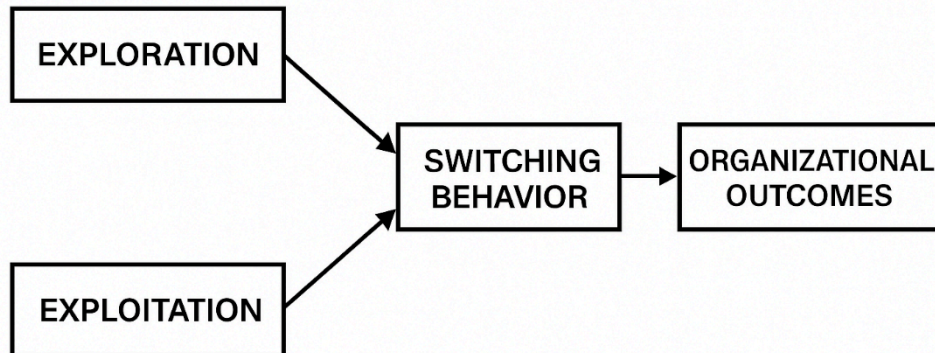


Figure 1. Conceptual model illustrating the relationship between exploration, exploitation, switching behavior, and organizational outcomes within the framework of ambidextrous leadership

3. METHODS

This study adopts the SLR methodology, following the PRISMA guidelines. The major phases of the process involved in this study include the identification of literature, screening and selection, and data extraction and analysis. The identification phase included a literature search using major academic databases indexed Scopus. The keywords used for searching include "ambidextrous leadership," "exploration and exploitation," and "organizational innovation." The search has been done for a range of 2019-2024 and retrieved a sum of 118 articles in total.

Screening and selection are based on a well-structured systematic procedure for the refinement of the article. It is the selection criteria that the papers were to be published in peer-reviewed journals, clearly focus on ambidextrous leadership in organizational settings, and be written in English. Articles conducted in a non-organizational context, such as personal leadership or non-business settings, will also be excluded, including those whose full texts are not accessible. After this, a total of 10 articles were selected to be relevant and of high quality (Figure 1).

Data extraction and analysis involved a systematic review of the selected articles in order to identify key themes, variables, and findings. A thematic analysis approach was used whereby data extraction sought to capture recurring patterns and insights. It focused on key variables of interest, such as dimensions of ambidextrous leadership, balancing exploration and exploitation, organizational outcomes of ambidextrous leadership, innovation performance, adaptability, and contextual factors such as cultural, industry-specific, and organizational moderators.

Themes were derived through iterative comparison across studies, identifying convergence in patterns related to (1) the dimensions of ambidextrous leadership (e.g., opening and closing behaviors), (2) mechanisms for balancing exploration and exploitation, (3) organizational outcomes such as innovation and adaptability, and (4) contextual moderators including organizational culture, industry environment, and national context.

The thematic structure was refined through repeated cross-validation among the articles to ensure coherence and analytical robustness.

Although the final number of articles (10) may appear relatively limited compared to the initial pool, this reflects a stringent quality and relevance filter to ensure methodological rigor. While this may influence the generalizability of the findings, the selected studies represent diverse organizational settings and offer depth in theoretical and empirical insight, which supports the review's analytical strength. Synthesis of results into coherent themes was made in order to provide an overall picture of the implications of ambidextrous leadership across different organizational settings.

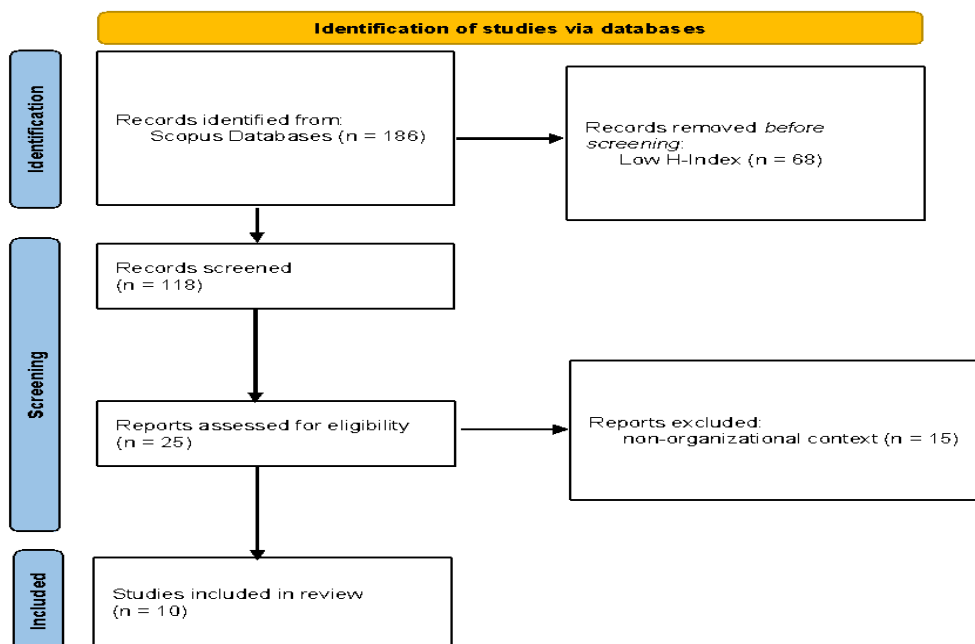


Figure 2. PRISM Flow Diagram

4. RESULTS

Analysis of the 10 selected articles resulted in a few key findings that add depth to understanding ambidextrous leadership in several broad areas, including key dimensions of ambidextrous leadership, applications across industries, and impact on organizational outcomes. Each is elaborated on Table 1.

The study of Ma et al. (2019) contributes to the development of ambidextrous leadership, showing that it can affect work crafting—a mechanism through which employees' contributions are combined in order to fulfill organizational goals—therefore, providing evidence that ambidextrous leadership is a dynamic capability that enables leaders to change their style of functioning according to the demands imposed on their organization so that it functions ambidextrously. The mediational findings about harmonious and obsessive passion add a psychological perspective to the discussion of ambidextrous leadership. The harmonious passion, which is nurtured through leadership behaviors, encourages employees

to proactively redesign their tasks and environments in concert with both personal values and organizational objectives. Such a perspective is in line with the suggestion that dimensions of ambidextrous leadership-opening, closing, and switching behaviors-are basic for the stimulation of innovation along with operational stability (Ma et al., 2019).

The decrease in obsessive passion underlines the role of ambidextrous leadership in reducing counterproductive work behavior, which ensures a focus on meaningful and productive task engagement. In this respect, the investigation into perceived work significance as a moderator variable underlines the relevance of contextual factors for the effectiveness of ambidextrous leadership. Employees with higher perceived work significance are more likely to engage in proactive behaviors like work crafting, which leads to improved individual and organizational outcomes. This finding chimes with the broader focus of this research, emphasizing that ambidextrous leadership success does not depend on leadership behaviors alone but also on the contextual and environmental factors of the organization. These insights allow for a better systematic review with empirical evidence on how ambidextrous leadership functions at both the individual and organizational levels, thus setting a comprehensive understanding of its role in fostering innovation and efficiency within modern organizations (Ma et al., 2019).

The study by Cunha et al. (2019) identified inherent paradoxes in the dynamics of organization and leadership; in that direction, leaders will have to balance exploration and exploitation with ambidexterity capabilities. The study findings underlined cultural, institutional, and economic idiosyncrasies that influence leadership paradoxes from the Angolan context. For instance, Angolan leaders have to balance the coexistence of formal versus informal institutional logics and reconcile foreign management practices with local cultural norms, such as those emanating from Ubuntu communal humanism. These contributions broaden the view on ambidextrous leadership by illustrating its contingency-dependent nature, where the manifestation of paradoxical demands differs across different cultural and economic environments. This directly contributes to the greater discussion of how ambidextrous leadership enables innovation and efficiency, all while being sensitive to the contextual terms (Cunha et al., 2019).

The second idea of "ambidextrous paradox work" from this study is that leaders not only need to be aware of the paradoxes but also work their way through them toward productive outcomes. This supports the systematic review focus on those dimensions of leadership that enhance organizational adaptability and resilience. The findings further indicate that a synthesis between contingency theory and paradox theory, through the mediating role of ambidextrous leadership, is necessary to address the unique challenges faced by modern organizations in various contexts (Cunha et al., 2019).

The study by Liu et al. (2019) investigates the psychological mechanisms linking ambidextrous organizational culture to employees' innovative behavior. Ambidextrous organizational culture, which supports both exploration and exploitation simultaneously, is conceptualized as a pro-innovation culture. Drawing on the motivational perspective of self-determination theory, the study identifies psychological empowerment as a mediator and transformational leadership as a moderator in this relationship.

Ambidextrous organizational culture consists of two important dimensions: organizational diversity and shared vision. Organizational diversity encourages and rewards differences among employees' knowledge, skills, and viewpoints, which stimulates exploration. Shared vision then aligns these diverse perceptions into concentrated actions toward exploitation. In combination, these dimensions allow the integration of exploration and exploitation, enabling organizational innovation. However, this study stresses how employees perceive this culture and how their perceptions influence their innovative behavior (Liu et al., 2019).

The proposed model suggests that employees' perceptions of ambidextrous organizational culture fulfill their psychological needs, such as autonomy, competence, and relatedness, thereby enhancing psychological empowerment. The intrinsically motivated empowered employee engages in innovative behavior as intentionally generating, promoting, and implementing new ideas and processes at work. It further postulates that transformational leadership influences positively the ambidextrous organizational culture and psychological empowerment relationship. These effects are magnified in cases where the transformational leaders provide individualized support, foster shared goals, and enhance employees' perceptions of understanding and alignment with the organizational culture. It follows from the results that ambidextrous organizational culture has an indirect positive effect on innovative behavior through psychological empowerment. Also, the positive indirect relationship is significantly stronger at a high level of transformational leadership. These business outcomes underpin the interactions of organizational culture and leadership in facilitating innovation (Liu et al., 2019).

This research examines the influence of authoritarian-benevolent leadership, a form of ambidextrous leadership, on unethical pro-organizational behavior, considering the mediating role of moral disengagement. Based on social cognitive theory, this study explores how such a dual leadership style affects the followers' cognitive mechanism and behavioral outcomes and thus contributes to new insights into the dynamics underlying the leader-follower relationship in organizational contexts. The authoritarian-benevolent leadership styles are the meeting points of two opposing styles: authoritarianism, which is defined by control, discipline, and authority, and benevolence evocative of concern for followers' well-being. The study positions ambidextrous leadership as a key determinant in managing the paradoxical situations of organizations whereby 'control and flexibility, simultaneously, are required in order to cope with the different kinds of demands' (Liu et al., 2019).

Research by Shaw et al. (2020) addresses the followers' unethical pro-organizational behavior, which refers to "unethical actions intended to benefit the organization." While UPB is good for the organization, it is an unethical behavior that involves a complex interplay of altruistic motives and moral disengagement. Moral disengagement is a process through which people allow themselves to do bad acts by diffusing or displacing responsibility or redefining the behavior as acceptable. In this study, moral disengagement mediates the relationship between leadership style and UPB. Thus, moral disengagement is a significant psychological mechanism in this study (Shaw et al., 2020).

Using data from 175 participants at two time points, the results indicate that authoritarian-benevolent leadership influences followers' levels of moral disengagement. Followers under high authoritarian-benevolent leadership perceive their leaders' strictness as necessary for achieving organizational goals, leading to greater moral disengagement. Moral disengagement thereafter mediates the relationship between the authoritarian-benevolent leadership and UPB, inasmuch as the latter is the result of the internalization of cognitive processes of unethical behavior rationalization by how followers perceive and internalize the ambidexterity of their leaders. Congruency in the leadership style has an effect on moral disengagement; that is, low authoritarian-benevolent leader dyads reveal higher perceived moral disengagement levels of followers compared to high authoritarian-benevolent leaders (Shaw et al., 2020).

The study by Klonek et al. (2023) seeks to validate ambidexterity leadership theory through a conceptual replication using experimental methods. Ambidexterity leadership theory suggests that leaders who balance opening-closing behaviors enable their followers to be more exploratory and exploitative, thus driving innovation. However, most prior studies rely on either correlational survey designs that make no explicit claims of causality or be susceptible to endogeneity.

The study tries to address these limitations by constructing a more rigorous test of the theory with two experiments. The participants for Study 1 were recruited online and included 395 workers via MTurk and Prolific, whereas Study 2 was a lab experiment with 229 participants residing in Australia and Germany. These researchers manipulated opening, closing, ambidextrous, and transformational leadership through scenarios and videos. Dependent variables were self-reported exploration and exploitation behaviors of participants and external ratings of innovation outcomes. They also controlled for individual traits like openness and conscientiousness, and advanced analytical techniques like 2SLS to address the concerns of endogeneity (Klonek et al., 2023).

Results partly supported the ambidextrous leadership theory: Opening behaviors significantly influenced the exploration behaviors in Study 2, while ambidextrous leadership showed partial effects on the innovation outcomes only under some conditions. However, the results were not consistent across studies, and therefore the assumptions of this theory, with respect to when switching between opening and closing behaviors is performed, may need further refinement. The study contributes to the literature on two important counts: through stronger causal evidence for ambidextrous leadership and by focusing on the importance of experimental designs when the theories are widely accepted. It also calls on practitioners to more critically evaluate leadership theories before widespread application (Klonek et al., 2023).

The research by Carla Martínez-Climent et al. (2019) investigates the role of ambidextrous leadership in combination with SEO on operational performance. In this knowledge-and-innovation-based competitive era, ambidextrous leadership, which maintains a balance between opening behaviors-that is, fostering creativity-and closing behaviors-that is, with a focus on adherence to goals and norms-is considered a significant approach for managers. It also seeks to establish the degree to which ambidextrous

leadership contributes to the development of SEO and consequently to improved operational performance.

Social entrepreneurship, which is the main focus of this study, employs business principles in solving social problems. The concept of SEO combines entrepreneurial orientation-such as proactiveness, innovativeness, and risk-taking-with reciprocity-sustainable practices that involve giving back to society. The article also points out that SEO enables organizations to create competitive advantages by combining innovation with social responsibility. Ambidextrous leadership is found to be one of the prime enablers, encouraging both exploration and exploitation behavior in employees, which in turn are crucial for harnessing innovation. This study adopts a critical literature review based on the WoS-SSCI database to investigate the theoretical and empirical evidence that links ambidextrous leadership with SEO and operational performance. From the results, ambidextrous leaders, through switching states between opening and closing, enhance employee innovativeness, creativity, and proactive problem-solving. These qualities are highly needed by organizations which balance economic goals with social impact and thus result in superior operational performance (Martínez-Climent et al., 2019).

The article by Kassotaki (2019) points out the relationship between the styles of leadership and organizational ambidexterity, especially in such industries as aerospace and defense. Ambidexterity describes an ability of organizations to balance exploration against exploitation simultaneously, both being equally incompatible in their nature. While both processes can seem incompatible, proper management of ambidexterity leads to superior performance and long-term organizational success. The study does reveal, however, that the behaviors and leadership styles that create this balance are not yet clearly understood.

The article expresses the view that ambidextrous leadership is best effected by a blend of transformational and transactional leadership styles. While transformational leadership encourages exploration, hence creativity and innovation, transactional leadership focuses on exploitation, hence efficiency and cost-effectiveness. Research in aerospace and defense organizations indicates that top management relies mainly on transactional leadership because of structural and environmental constraints, with limited use of transformational leadership for exploratory activities. The study has underlined that the leadership styles are both influenced by micro-level behaviors, that is, individual acts of the leaders, and macro-level factors, organizational structure, and environmental conditions. While the growing body of research into organizational ambidexterity remains incomplete without understanding how specific leadership behaviors and environmental factors interact in shaping ambidextrous leadership. This study addresses this gap by linking leadership styles to the organizational context, especially in the aerospace and defense industries, whereby leaders tend to focus more on exploitative activities while giving less attention to exploration (Kassotaki, 2019).

Research by Mascareño et al. (2021). The approach used for this study was based on the ambidexterity theory of leadership for innovation emphasizing opening (fostering exploration) and closing (fostering exploitation) behaviors as necessary behaviors for effective innovation. This article provides an immense contribution in distinguishing each

stage of the innovation process, though interdependent but requires different approaches and resources.

First, there are the opening behaviors by leaders that are particularly useful during the idea generation phase of encouraging exploration and intrinsic motivation. During the idea promotion phase, the necessary interpersonal and political skills-social influence and networking-are reinforced by the leadership behaviors of engendering collaboration. In the idea realization phase, a structured process should be in place through planning, control, and extrinsic motivation supported by the closing behaviors set forth by the leaders. Results show that opening behaviors directly affect idea generation, which again affects the promotion and realization of ideas. Furthermore, closing behaviors enhance the impact of idea generation on idea realization, but they do not strongly relate to the promotion of ideas (Mascareño et al., 2021).

Practical implications of the study stress leadership flexibility in a trade-off between exploration and exploitation. The different demands at each stage of the innovation process would call for leaders to adjust their behavior in light of those. This would mean that during the idea generation stage, leaders can be more creative and flexible, while they are structured and controlled during the realization phase. The article also addresses training for leaders regarding how to spot and switch between styles according to the dynamics of innovation (Mascareño et al., 2021). Cunha et al. (2019), for instance, emphasize the need to understand ambidextrous leadership within specific cultural logics. Their study in Angola shows how leaders must navigate formal-informal institutional tensions and reconcile imported managerial practices with indigenous values such as Ubuntu. This highlights the culturally contingent nature of paradox management. Similarly, studies in sectors such as aerospace and defense (Kassotaki, 2019) show that ambidextrous leadership may be limited by structural rigidity and high operational risk, leading to a heavier reliance on transactional leadership. These findings illustrate that while ambidextrous behaviors are conceptually universal, their real-world expression is highly sensitive to industry norms, institutional constraints, and cultural expectations.

In addition to theory-building, this review offers meaningful insights for leadership practice. Rather than treating ambidextrous leadership as a static set of traits, the findings suggest it should be viewed as a dynamic process that requires continuous situational assessment and behavioral adjustment. In highly innovative environments, for example, leaders may need to exercise more opening behaviors during the idea generation phase, fostering autonomy, experimentation, and intrinsic motivation, before shifting toward closing behaviors to ensure discipline, resource alignment, and implementation success, as illustrated by Mascareño et al. (2021). Meanwhile, in contexts with high ethical ambiguity or pressure to deliver organizational outcomes at all costs, leaders must be aware of the risks of moral disengagement among employees. Shaw et al. (2020) demonstrate how certain combinations of authoritarian and benevolent behaviors, if misread by followers, can inadvertently encourage unethical pro-organizational behavior. This underscores the need for leadership development programs to train leaders not only in flexible behavioral switching, but also in ethical awareness and emotional intelligence.

Further, in social enterprises or purpose-driven organizations, ambidextrous leadership appears particularly valuable for balancing business efficiency with social responsibility. Martínez-Climent et al. (2019) show how the interplay between entrepreneurial orientation and sustainable social goals is strengthened by leaders who can alternate between nurturing creativity and enforcing performance standards. This context-specific expression of ambidextrous leadership suggests that leadership development strategies should be tailored to organizational missions and stakeholder expectations.

The paper by Ahmad et al. explores how ambidextrous leadership influences service recovery performance in the business-to-business sales environment. This study focuses on the role of opening and closing leadership behaviors in driving service innovation capability and their subsequent effects on SRP, value-based selling, and adaptive selling strategies. By combining the use of structural equation modeling with the data of 286 pharmaceutical salespeople, this study puts forward some new insights relating to leadership styles, innovation, and sales performance. The results identified that opening leader behaviors notably affect SRP, whereas the closing leader behaviors do not directly impact SRP. However, both opening and closing leader behaviors positively influence the service innovation capability, acting as a critical mediator. In turn, service innovation capability is strongly influenced by value-based selling, adaptive selling, and SRP. This indicates that service innovation capability has the potential to play a pivotal role in the nexus between leadership behaviors and sales performance outcomes. This study also extends the COR theory by underlining how ambidextrous leadership supports employees in acquiring and utilizing resources effectively toward increasing productivity and SRP (Ahmad et al., 2022).

The research investigates ambidextrous leadership in a B2B selling context that was under-explored in previous literature. The mediation effect of service innovation capability between leadership behaviors and SRP has also been expanded upon in this research to extend the practical implications of this study to organizations. For that, managers working in a B2B context are recommended to adapt to an ambidextrous kind of leadership style-exploration (opening) and exploitation (closing)-which could influence innovation and enhancement in the quality of service to improve sales performances (Ahmad et al., 2022).

The article by Akıncı et al. (2022) examines the relationship between ambidextrous leadership and innovative work behavior (IWB) in a military organization, specifically NATO's Allied Command Transformation (ACT). Ambidextrous leadership, which combines opening (exploratory) and closing (exploitative) leader behaviors, is analyzed to see how these behaviors impact innovation. It also explores the role of climate for innovation in moderating the above relationship. Opening leader behaviors supporting exploration were positively related to innovative work behavior, pointing out that leaders supporting creativity and exploration are more successful in encouraging innovation. In contrast, leader behaviors of closing to exploitation did not significantly influence innovative work behavior, thus suggesting that leadership directed at the management of existing processes or goals is not beneficial for innovation. However, combining these two kinds of leader behaviors into one ambidextrous leadership-positive influence on innovative work behavior means that a balance between exploration and exploitation can be more effective in fostering innovation (Akıncı et al., 2022).

The study further discusses the role of climate for innovation as a potential moderator to further strengthen the already positive relationship between ambidextrous leadership and innovative work behavior. A supportive climate for innovation within an organization can strongly heighten ambidextrous leadership effects on innovation. This result is important because the challenge facing the long-held belief of innovation not working well but in more flexible and less formal organizations was able to establish that innovation was possible and could be grown within the hierarchical environment; in fact, the military itself. Key results derived from this study provide insight into how innovation even within more rigid environments-military organizations-can be developed with a balance between the elements of exploration and exploitation within leadership. Additionally, this study has found evidence indicating an innovative climate is the driver that significantly influences a leading towards full impact on innovation. This is to say, practically, that military organizations and other similar public sector organizations should consider the importance of integrative leadership that combines both approaches in enhancing innovation (Akıncı et al., 2022).

4.1 Synthesis of Key Findings

These reviewed articles show that leaders foster an environment that can help nurture innovation and at the same time sustain operational stability-for example, risk-taking and experimenting-exploring-while ensuring that the essential business processes are as functional and efficient as possible. Switching between the leadership styles turns out to be a motif in the literature. Every situational demand makes a leader switch from an appropriate approach, shifting smoothly either from exploratory to exploitative behavior or vice-versa. Dynamic capability thus enables the firms to effectively respond to external changes regarding market discontinuity or technological advancement. Moreover, ambidextrous leaders are often characterized by emotional intelligence, which is marked by understanding and managing both their emotions and those of their teammates to create a setting where innovation and efficiency can be pursued.

Another important dimension of ambidextrous leadership is the role of vision and communication. The leaders who provide a clear vision as to how exploration and exploitation should be balanced give a shared sense of purpose to their teams. Effective communication means that employees understand the logic behind strategic shifts and are more likely to engage both in innovative and routine tasks. This alignment of vision and action forms the very foundation of organizational ambidexterity.

The selected articles describe in detail applications across multiple industries. A central theme across the selected articles is the influence of ambidextrous leadership on organizational outcomes. Especially relevant are the findings related to how exploratory leadership practices improve innovation performance. Exploratory leaders encourage a culture of creativity and experimentation that allows organizations to create innovative products and services. Emphasis on innovation is particularly paramount in dynamic industries where, through eternal run-race competition, businesses have to constantly adapt and renew themselves.

Ambidextrous leadership also drives operational efficiency and process optimization through the use of exploitative practices besides driving innovation. Leaders focus on the fine-tuning of existing processes to maximize resources with which their organizations

remain efficient and profitable. The interplay between exploration and exploitation has been seen in many examples highlighted by these articles as leading to superior organizational performance. Companies that balance innovative projects with the optimization of their core operations, for example, achieve a balance that will drive both short- and long-term results and growth.

The findings from the selected articles underline the multidimensional nature of ambidextrous leadership and its consequences for organizations across different contexts. By integrating exploration and exploitation, ambidextrous leaders enable their organizations to achieve a balance driving innovation, efficiency, and resilience. Ambidextrous leadership has been applied to various industries, proving its versatility and relevance in response to a variety of challenges emanating from the rapid business environment. Ambidextrous leadership has a positive influence on all kinds of organizational outcomes, such as innovation performance, operational efficiency, and employee engagement; hence, it is one of the most important approaches a leader can use in these modern times. In all, the review selected articles provided a profound understanding of ambidextrous leadership in developing organizational success. Such findings have pointed out the ability of flexibility, adaptability, and dynamic switching between leadership styles to achieve organizational ambidexterity. The application of these principles thus enables leaders to cope with the challenges of a business landscape and achieve growth that is sustainable.

Table 1. Literature Review Outlining Selected Ambidextrous Leadership Research

Author	Year	Title	Result
Jianfeng Ma et al.	2024	Does ambidextrous leadership motivate work crafting?	Ambidextrous leadership enhances work crafting through increased harmonious passion and reduced obsessive passion. The relationship is moderated by perceived work significance.
Miguel Pina e Cunha et al.	2024	Ambidextrous leadership, paradox and contingency: Evidence from Angola	Ambidextrous leadership is vital for addressing paradoxical challenges in Angolan organizations transitioning to market economies. Highlights four interrelated paradoxes in HRM and leadership.
Yanbin Liu et al.	2024	Linking Ambidextrous Organizational Culture to Innovative Behavior	Ambidextrous organizational culture impacts innovative behavior indirectly through psychological empowerment, amplified by transformational leadership. Proposes strategies

Author	Year	Title	Result
			for improving innovation outcomes.
Kang-Hwa Shaw et al.	2024	Authoritarian-Benevolent Leadership, Moral Disengagement, and Follower UPB	Ambidextrous leadership style (authoritarian-benevolent) affects unethical pro-organizational behavior via moral disengagement. High authoritarian-benevolent leadership reduces moral disengagement and follower UPB.
Florian E. Klonek et al.	2024	A conceptual replication of ambidextrous leadership theory: An experimental approach	Ambidextrous leadership supports exploration and exploitation behaviors but shows partial support for innovative outcomes. Suggests refinement of the theory and highlights timing as a key aspect for effectiveness.
Carla Martínez-Climent et al.	2019	Ambidextrous Leadership, Social Entrepreneurial Orientation, and Operational Performance	Ambidextrous leadership positively links to social entrepreneurial orientation, which in turn affects operational performance. Highlights that a social orientation does not contradict operational performance measures other than profitability.
Olga Kassotaki	2019	Explaining ambidextrous leadership in the aerospace and defense organizations	Ambidextrous leadership, combining transformational and transactional leadership, is more focused on exploitative activities due to structural and environmental constraints. However, a limited amount of transformational leadership is used for exploration.
Jesus Mascareño et al.	2019	Ambidextrous leadership: opening and closing leader	Opening leader behaviors positively influence idea generation, promotion, and

Author	Year	Title	Result
		behaviors to facilitate idea generation, idea promotion, and idea realization	realization, while closing behaviors strengthen the relationship between idea generation and realization. Findings support the role of ambidextrous leadership in fostering innovation.
Bilal Ahmad et al.	2019	Ambidextrous Leadership and Service Recovery Performance Under B2B Selling Context: An Examination Through Service Innovation Capability	Opening leader behaviors positively affect service recovery performance and innovation capability, whereas closing behaviors have no significant impact on service recovery performance. Service innovation capability mediates the relationship between opening behavior and recovery performance.
Gökhan Akıncı et al.	2019	The Link between Ambidextrous Leadership and Innovative Work Behavior in a Military Organization: The Moderating Role of Climate for Innovation	Opening leader behavior is positively related to innovative work behavior, while closing behavior shows no significant effect. The combined effect of ambidextrous leadership and the climate for innovation moderates the relationship between leadership and innovative work behavior.

5. DISCUSSION

This research points to ambidextrous leadership as a dynamic capability of great consequence in leading an organization through complex, uncertain, and rapidly changing environments. Balancing the forces of exploration-in promoting innovation and creativity-with those of exploitation, which hone the focus on efficiency and refinement-emerges as one of the most central leadership competencies in the context of technology-intense disruptions and unfolding market dynamics. Ambidextrous leadership is not only a theoretical concept but also a pragmatic approach to enabling sustainable competitive advantages because both adaptability and operational stability are assured.

Ambidextrous leadership extends the basic theories of organizational ambidexterity, which stress the need to manage the competing demands for exploration and exploitation. It extends these logics to the level of the individual leader, who has to act as a catalyst in

driving both innovation and operational excellence. Results show that leaders who can switch dynamically between these two modes of operation are best positioned to lead their organizations through times of volatility and change (Duc et al., 2020; Jiang et al., 2023; Kafetzopoulos, 2022). The concept also closely echoes the dynamic capabilities theory, which states that organizations need adaptive processes to thrive in turbulent environments (Bleady et al., 2018).

Ambidextrous leaders are very much the embodiment of that theory in practice, enabling their teams to change between innovation and efficiency depending on contextual needs. Leaders who could switch dynamically between exploratory approaches, such as the adoption of remote work technologies, and exploitative practices, such as maintaining consistent service delivery, were able to show a greater capacity for resilience and sustained performance (Zacher et al., 2016). Also, the findings add to leadership theory by underscoring that effective leadership is multidimensional. Whereas the mainstream models of leadership focus predominantly on a few key traits or styles, ambidextrous leadership emphasizes the need for adaptability according to circumstances and the integration of seemingly oppositional approaches into one harmonious strategy.

The ambidextrous way of leading finds practical applications in many industries. For instance, in the technology industry, ambidextrous leadership has to do with how organizations balance the development of disruptive innovations with the optimization of legacy systems. This is indispensable in maintaining relevance in the market and driving long-term growth. Similarly, leaders in healthcare have to integrate patient-centered innovations such as telemedicine with evidence-based practices that ensure safety and compliance. These priorities all balance with each other in direct relation to the quality of care and organizational efficiency (Mutonyi et al., 2024).

Ambidextrous leadership is helpful in facilitating a shift toward advanced production techniques at a lower cost. Leaders within the industry face a dual challenge related to managing process improvements and investing in automation to remain competitive in the global marketplace. The ambidextrous culture fostered by leaders supports them in the management of such tensions in pursuit of both short-term efficiency and long-term innovation (Akinci et al., 2022; Berraies & Zine El Abidine, 2019; Haider et al., 2023).

Despite its potential benefits, ambidextrous leadership presents several challenges that must be addressed for its successful implementation. One of the big problems is how to measure the effectiveness of ambidextrous leadership. Where other styles may have some clear-cut ways to quantify their results, with ambidextrous leadership, outcomes are naturally complex and rooted in many contextual factors. Cultural and organizational factors further complicate the implementation of ambidextrous leadership. Where organizations have deeply ingrained practices or hierarchies, resistance against exploratory initiatives may emerge since these approaches could be seen by employees and stakeholders as disruptors of stability or too risky to deal with. In similar respect, cultural aspects-included high uncertainty avoidance of particular regions-may inhibit leaders to take exploratory approach and, hence, hinder effectiveness towards ambidextrous leadership.

Resource constraints are yet another challenge, where "organizations might not have various resources-financial, technological, or human-once to support both exploratory and

exploitative activities". For leaders, the need to switch between such activities requires strategically prioritizing resource allocation so that neither innovation nor efficiency nor organizational stability suffers.

The key area of interest, through which ambidextrous leadership can be made effective, is leadership development programs. The findings underline the need to develop dynamic switching capabilities in leaders so that they will be able to switch between the two approaches depending on situational demands. Dynamic switching capabilities involve not only cognitive but also emotional abilities since leaders have to manage tensions and trade-offs between exploration and exploitation (Belhadi et al., 2022; Pertheban et al., 2023).

Development programs should focus on experiential learning where the leader gets to apply knowledge of dynamic switching in practical life. Organizations should also support ambidextrous leadership through open communication, collaboration, and a tolerance for calculated risk-taking. For example, in an atmosphere of psychological safety, organizations might give leaders the right to try exploratory approaches without immediate punishment for failure and thus develop their dynamic switching capabilities (Karimi et al., 2023; Liu et al., 2019).

Although this study represents a critical exploration into ambidextrous leadership, there was a number of elements to suggest avenues for further research. One key next step in the development of metrics with which to measure ambidextrous leadership performance is to establish reliable and valid measurement tools that capture the multi-dimensional nature of this leadership style. Longitudinal studies will be needed to evaluate long-term effects of ambidextrous leadership on organizational performance (Gerlach et al., 2020). These can yield much deeper insights into questions concerning sustainability of ambidextrous practices and implications thereof for organizational growth and resilience.

Future research should also focus more on the role of contextual moderators in order to see how organizational culture, industry characteristics, and market conditions shape the outcomes of ambidextrous leadership. Understanding these contextual dependencies allows researchers to make more focused recommendations on how ambidextrous leadership might be implemented under different conditions. Finally, there is a need to explore the processes by which leaders will develop ambidextrous capabilities. Understanding how leaders acquire the competencies and skills required for dynamic switching can inform a more effective design of leadership development programs that enhances both the adoption and impact of ambidextrous leadership.

6. CONCLUSION

This study contributes to the growing body of literature on ambidextrous leadership by reinforcing its role as a dynamic capability that enables organizations to navigate the competing demands of exploration and exploitation. Drawing from a synthesis of recent empirical studies, it becomes clear that ambidextrous leadership is not merely a static trait, but a context-responsive process that involves deliberate behavioral switching, shaped by industry constraints, cultural norms, and organizational structures.

From a theoretical perspective, the findings extend ambidextrous leadership beyond its traditional conceptualization by integrating insights from paradox theory, contingency theory, and self-determination theory. The review reveals that the success of ambidextrous leadership hinges not only on the leader's ability to balance innovation and efficiency but also on how these behaviors interact with contextual variables such as organizational culture, psychological empowerment, and institutional environments. This highlights the need for future theoretical models to more explicitly account for the mediating and moderating mechanisms that influence leadership effectiveness across diverse settings.

On the managerial front, the review offers several practical takeaways. First, leadership development programs should move beyond promoting singular leadership styles and instead train leaders to develop situational awareness and switching agility, recognizing when to foster creativity and autonomy, and when to enforce structure and alignment. Second, organizations should cultivate a culture that supports both experimentation and operational discipline, as such an environment reinforces the effectiveness of ambidextrous leadership behaviors. Third, in sectors where ethical ambiguity or social purpose is central, leaders must also be trained to navigate the unintended consequences of ambidextrous behavior, such as moral disengagement or the overemphasis on exploitation, which can undermine organizational integrity in the long run. Nevertheless, with the right combination of theoretical clarity, contextual sensitivity, and managerial support, ambidextrous leadership holds strong potential for driving innovation, adaptability, and sustainable competitive advantage in today's complex organizational landscapes.

The research is also limited in terms of time-the sources have been collected within the period of 2019-2024. Besides, the paper includes only an English-language literature review, which limits the ability to reach a more profound perception about ambidextrous leadership. Further researches should expand their scope in time and geography. Empirical evidence using case studies or meta-analyses may yield a deeper insight into these findings.

REFERENCES

- Ahmad, B., Liu, D., Asif, M. H., Ashfaq, M., & Irfan, M. (2022). Ambidextrous Leadership and Service Recovery Performance Under B2B Selling Context: An Examination Through Service Innovation Capability. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221096454>
- Akinci, G., Alpan, L., Yıldız, B., & Karacay, G. (2022). The Link between Ambidextrous Leadership and Innovative Work Behavior in a Military Organization: The Moderating Role of Climate for Innovation. *Sustainability (Switzerland)*, 14(22). <https://doi.org/10.3390/su142215315>
- Belhadi, A., Kamble, S. S., Mani, V., Jose, C., Jabbour, C., & Benkhati, I. (2022). Building supply chain resilience and efficiency through additive manufacturing: An ambidextrous perspective on the dynamic capability view. *International Journal of Production Economics*, 249. <https://doi.org/10.1016/j.ijpe.2022.108516>

- Berraies, S., & Zine El Abidine, S. (2019). Do leadership styles promote ambidextrous innovation? Case of knowledge-intensive firms. *Journal of Knowledge Management*, 23(5), 836–859. <https://doi.org/10.1108/JKM-09-2018-0566>
- Bettiol, M., Capestro, M., Di Maria, E., & Micelli, S. (2023). Ambidextrous strategies in turbulent times: the experience of manufacturing SMEs during the COVID-19 pandemic. *International Journal of Physical Distribution and Logistics Management*, 53(2), 248–272. <https://doi.org/10.1108/IJPDLM-10-2021-0422>
- Bleady, A., Hafiez, A., & Hasaballah, A. (2018). Dynamic capabilities theory: Pinning down a shifting concept. In *Article in Academy of Accounting and Financial Studies Journal*. <https://www.researchgate.net/publication/325257001>
- Cunha, M. P. e., Fortes, A., Gomes, E., Rego, A., & Rodrigues, F. (2019). Ambidextrous leadership, paradox and contingency: evidence from Angola. *International Journal of Human Resource Management*, 30(4), 702–727. <https://doi.org/10.1080/09585192.2016.1201125>
- Cunha, M. P. e., & Putnam, L. L. (2019). Paradox theory and the paradox of success. *Strategic Organization*, 17(1), 95–106. <https://doi.org/10.1177/1476127017739536>
- Duc, L. A., Tho, N. D., Nakandala, D., & Lan, Y.-C. (2020). Team innovation in retail services: the role of ambidextrous leadership and team learning. *Service Business*, 14(1), 167–186. <https://doi.org/10.1007/s11628-020-00412-x>
- Gerlach, F., Hundeling, M., & Rosing, K. (2020). Ambidextrous leadership and innovation performance: a longitudinal study. *Leadership & Organization Development Journal*, 41(3), 383–398. <https://doi.org/10.1108/LODJ-07-2019-0321>
- Gong, L., Liu, Z., Rong, Y., & Fu, L. (2021). Inclusive leadership, ambidextrous innovation and organizational performance: the moderating role of environment uncertainty. *Leadership & Organization Development Journal*, 42(5), 783–801. <https://doi.org/10.1108/LODJ-06-2020-0253>
- Hafeez, M., Panatik, S. A., Rahman, A. A. A., Rajab, A., Abu Bakar, S., & Norazman, I. (2019). Ambidextrous leadership and innovative work behavior: Mediating role of emotional intelligence. *International Journal of Recent Technology and Engineering*, 8(2 Special Issue 9), 906–910. <https://doi.org/10.35940/ijrte.B1186.0982S919>
- Haider, S. A., Zubair, M., Tehseen, S., Iqbal, S., & Sohail, M. (2023). How does ambidextrous leadership promote innovation in project-based construction companies? Through mediating role of knowledge-sharing and moderating role of innovativeness. *European Journal of Innovation Management*, 26(1), 99–118. <https://doi.org/10.1108/EJIM-02-2021-0083>

- Jia, R., Hu, W., & LI, S. (2021). Ambidextrous leadership and organizational innovation: the importance of knowledge search and strategic flexibility. *Journal of Knowledge Management*, 26(3), 781–801. <https://doi.org/10.1108/JKM-07-2020-0544>
- Jiang, Y., Asante, D., Zhang, J., & Ampaw, E. M. (2023). The influence of ambidextrous leadership on the employee innovative behavior: an empirical study based on Chinese manufacturing enterprises. *Current Psychology*, 42(11), 9452–9465. <https://doi.org/10.1007/s12144-021-02233-1>
- Kafetzopoulos, D. (2022). Ambidextrous leadership: a narrative literature review for theory development and directions for future research. *Baltic Journal of Management*, 17(2), 206–232. <https://doi.org/10.1108/BJM-01-2021-0001>
- 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 (Switzerland)*, 15(2). <https://doi.org/10.3390/su15021267>
- Kassotaki, O. (2019). Explaining ambidextrous leadership in the aerospace and defense organizations. *European Management Journal*, 37(5), 552–563. <https://doi.org/10.1016/j.emj.2019.04.001>
- Klonek, F. E., Gerpott, F. H., & Parker, S. K. (2023). A conceptual replication of ambidextrous leadership theory: An experimental approach. *Leadership Quarterly*, 34(4). <https://doi.org/10.1016/j.leaqua.2020.101473>
- Kung, C.-W., Uen, J. F., & Lin, S.-C. (2020). Ambidextrous leadership and employee innovation in public museums. *Chinese Management Studies*, 14(4), 995–1014. <https://doi.org/10.1108/CMS-05-2018-0523>
- Liu, Y., Wang, W., & Chen, D. (2019). Linking Ambidextrous Organizational Culture to Innovative Behavior: A Moderated Mediation Model of Psychological Empowerment and Transformational Leadership. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02192>
- Luu, T. T., Dinh, K., & Qian, D. (2019). Ambidextrous leadership, entrepreneurial orientation and job crafting. *European Business Review*, 31(2), 260–282. <https://doi.org/10.1108/EBR-06-2015-0061>
- Ma, J., Zhou, X., Chen, R., & Dong, X. (2019). Does ambidextrous leadership motivate work crafting? *International Journal of Hospitality Management*, 77, 159–168. <https://doi.org/10.1016/j.ijhm.2018.06.025>
- Martínez-Climent, C., Rodríguez-García, M., & Zeng, J. (2019). Ambidextrous leadership, social entrepreneurial orientation, and operational performance. *Sustainability (Switzerland)*, 11(3). <https://doi.org/10.3390/su11030890>

- Mascareño, J., Rietzschel, E. F., & Wisse, B. (2021). Ambidextrous leadership: opening and closing leader behaviours to facilitate idea generation, idea promotion and idea realization. *European Journal of Work and Organizational Psychology*, 30(4), 530–540. <https://doi.org/10.1080/1359432X.2021.1872544>
- Matusek, M. (2023). Exploitation, Exploration, or Ambidextrousness—An Analysis of the Necessary Conditions for the Success of Digital Servitisation. *Sustainability (Switzerland)*, 15(1). <https://doi.org/10.3390/su15010324>
- Mehdi, M., & Ahmed, S. (2017). Ambidextrous Supply Chain : The New Model for Supply Chain Excellence. *Pacific Business Review International*, 10(2). <https://www.researchgate.net/publication/330703328>
- Mueller, J., Renzl, B., & Will, M. G. (2020). Ambidextrous leadership: a meta-review applying static and dynamic multi-level perspectives. *Review of Managerial Science*, 14(1), 37–59. <https://doi.org/10.1007/s11846-018-0297-9>
- Mutonyi, B. R., González-Piñero, M., Slåtten, T., & Lien, G. (2024). Driving innovation in health care: exploring the impact of ambidextrous leadership on creative performance among frontline health professionals in Norway. *BMC Health Services Research*, 24(1). <https://doi.org/10.1186/s12913-024-10641-9>
- Pertheban, T. R., Thurasamy, R., Marimuthu, A., Venkatachalam, K. R., Annamalah, S., Paraman, P., & Hoo, W. C. (2023). The Impact of Proactive Resilience Strategies on Organizational Performance: Role of Ambidextrous and Dynamic Capabilities of SMEs in Manufacturing Sector. *Sustainability (Switzerland)*, 15(16). <https://doi.org/10.3390/su151612665>
- Shaw, K. H., Tang, N., & Liao, H. Y. (2020). Authoritarian-Benevolent Leadership, Moral Disengagement, and Follower Unethical Pro-organizational Behavior: An Investigation of the Effects of Ambidextrous Leadership. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.00590>
- Tian, Y. (2022). A Literature Review on Upper Echelons Theory. *Proceedings of the 2022 2nd International Conference on Enterprise Management and Economic Development (ICEMED 2022)*.
- Wang, S., Eva, N., Newman, A., & Zhou, H. (2021). A double-edged sword: the effects of ambidextrous leadership on follower innovative behaviors. *Asia Pacific Journal of Management*, 38(4), 1305–1326. <https://doi.org/10.1007/s10490-020-09714-0>
- Wu, T., Chen, B., Shao, Y., & Lu, H. (2021). Enable digital transformation: entrepreneurial leadership, ambidextrous learning and organisational performance. *Technology Analysis & Strategic Management*, 33(12), 1389–1403. <https://doi.org/10.1080/09537325.2021.1876220>

- Zacher, H., Robinson, A. J., & Rosing, K. (2016). Ambidextrous Leadership and Employees' Self-Reported Innovative Performance: The Role of Exploration and Exploitation Behaviors. *Journal of Creative Behavior*, 50(1), 24–46. <https://doi.org/10.1002/jocb.66>
- Zhao, F., Hu, W., Ahmed, F., & Huang, H. (2023). Impact of ambidextrous human resource practices on employee innovation performance: the roles of inclusive leadership and psychological safety. *European Journal of Innovation Management*, 26(5), 1444–1470. <https://doi.org/10.1108/EJIM-04-2021-0226>
- Zuraik, A., Kelly, L., & Perkins, V. (2020). Gender differences in innovation: the role of ambidextrous leadership of the team leads. *Management Decision*, 58(7), 1475–1495. <https://doi.org/10.1108/MD-01-2019-0054>