



EXPLORING THE SYNERGY: THE ROLE OF SHARED AND SERVANT LEADERSHIP IN THE INNOVATION PROCESS THROUGH BIBLIOMETRIC ANALYSIS

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Abstract

This study explores the intersection of shared and servant leadership in fostering innovation by using bibliometric techniques to analyze 434 scholarly publications. Using co-citation, co-word and bibliographic coupling analyses, this study identifies research trends, thematic clusters and gaps in the literature. The results show that while shared and servant leadership have a significant impact on the innovation process, their role is still under-researched and fragmented. This study contributes to leadership theory by highlighting the role of shared leadership in team-based collaboration and decentralized decision making, while extending the theoretical foundations of servant leadership in terms of ethical leadership, psychological safety and sustainability of innovation. By integrating these models, we contribute to the development of hybrid leadership approaches that promote a trust-based culture and context-sensitive strategies for innovation-driven organizations. Furthermore, we explore how the transition from hierarchical to shared and servant leadership fosters agility, knowledge sharing and innovation, especially in knowledge-intensive industries that rely on cross-functional collaboration. Future research should investigate shared and servant leadership in all phases of the innovation process, especially in the later innovation phases, to address role ambiguity and ensure alignment between people-centered leadership and strategic innovation requirements.

Keywords: Shared leadership, Servant leadership, Innovation, Bibliometric analysis

1 INTRODUCTION

Leadership plays a central role in the innovation process as it influences the conditions that foster creativity, collaboration and the implementation of new ideas (Amabile, 1996; Mumford, Scott, Gaddis & Strange, 2002). The dynamic nature of innovation requires a leadership style that goes beyond traditional hierarchical structures and enables a more inclusive, participative and service-orientated approach (Yukl, 2013). As organizations seek to improve their innovation capabilities, leadership research has evolved to explore new paradigms to meet these changing demands (Bass & Riggio, 2006).

A large body of research has examined the impact of different leadership styles on the innovation process, including transformational and transactional (Alrowwad, Abualoush, & Masa'deh, 2020; Singh, Del Giudice, Chierici, & Graziano, 2020; Pieterse, Van Knippenberg, Schippers, & Stam, 2010; Podsakoff, MacKenzie, Moorman & Fetter 1990). There has also been a growing interest in new-genre leadership models that emphasize collective and service-oriented leadership principles (Hannah, Sumanth, Lester, Cavarretta, 2014; Avolio, Walumbwa & Weber, 2009). Among these, shared leadership and servant leadership have emerged as particularly relevant for fostering an innovation-

friendly environment by distributing authority, empowering teams and prioritizing the well-being and development of followers (Wang, Waldman, & Zhang, 2014; Wu, Cormican and Chen, 2020; Van Dierendonck, 2011; Eva et al., 2019; Liden et al., 2014; Zhu, Liao, Yam, & Johnson, 2018; Pearce & Conger, 2002).

Shared leadership is characterized by a decentralized approach in which leadership tasks are distributed among team members instead of focusing on a single person (Carson, Tesluk, & Marrone, 2007). This model encourages mutual influence and collaboration and enables flexible decision-making and knowledge sharing, which are critical for innovation (Ensley, Hmieleski & Pearce, 2006). Shared leadership improves adaptability and innovation by distributing influence and decision-making among team members. In contrast to hierarchical models, it encourages collaboration, knowledge sharing and collective responsibility (Pearce & Conger, 2002; Carson et al, 2007; Hoch, 2013; D’Innocenzo et al, 2016) and leverages diverse expertise to improve problem solving and agility (Ensley et al, 2006; Wang, Waldman, & Zhang, 2014). Studies emphasize its role in fostering creative risk-taking, psychological safety and team motivation (Zhu, Song, Wang & Li, 2023; Nicolaidis et al., 2014), which drive innovation, especially in knowledge-intensive industries (Hoch & Dulebohn, 2013; Carmeli, Reiter-Palmon, & Ziv, 2010). However, research predominantly focuses on early stages of innovation such as ideation, where collaboration and idea generation thrive (Zhu, Liao, Yam, & Johnson, 2018; Day, Gronn, & Salas, 2004), while its role in implementation is only studied to a limited extent (Serban & Roberts, 2016; D’Innocenzo et al., 2016). In addition, challenges such as role ambiguity, trust deficits and coordination issues can hinder its effectiveness (Lee, Lyubovnikova, Tian & Knight, 2020; Day et al., 2004; Small & Rentsch, 2011; Nicolaidis et al., 2014).

Servant leadership, on the other hand, focuses on the leader’s role as a servant to their team, prioritizing their needs, personal growth and professional development (Liden, Wayne, Zhao, & Henderson, 2008). By cultivating a supportive environment, servant leadership fosters employee engagement, creativity, and long-term commitment

to innovative goals (Krog & Govender, 2015). Servant leadership also cultivates a supportive environment where employees feel valued, which fosters trust, empowerment and creativity (Eva et al., 2019; van Dierendonck, 2011; Greenleaf, 1977). It increases psychological safety and encourages risk-taking and knowledge sharing - important drivers of innovation in knowledge-intensive industries (Edmondson, 2018; van Dierendonck & Patterson, 2015; Liden, Wayne, Liao, & Meuser, 2014; Yoshida, Sendjaya, & Cooper, 2014; Zada, Zada, Ali, Jun, Contreras-Barraza & Castillo, 2022; Zhang, Zheng, Zhang, Xu, Liu & Chen, 2021). Research highlights its positive impact on employee creativity and organizational innovation (Liden et al., 2008; Neubert, Hunter, Tolentino, 2016; Jaiswal & Dhar, 2017) through key dimensions such as empowerment, humility, providing directions, authenticity, interpersonal acceptance and stewardship (van Dierendonck, 2011).

Both shared leadership and servant leadership are increasingly being researched as drivers of innovation. However, the broader conceptual landscape remains fragmented and the intersections of these leadership styles with innovation-related topics such as knowledge sharing, creativity, and team collaboration remain insufficiently summarized (Bunjak, Bruch, & Černe, M, 2022; Hoch, 2013; Lee, Lee, and Seo, 2015; Yang, Liu, and Gu, 2017). Despite growing evidence of their benefits, shared and servant leadership require further investigation, especially in later stages of innovation (Sousa & van Dierendonck, 2017). Challenges such as role ambiguity also need to be addressed to ensure a balance between people-centered leadership and strategic innovation requirements (Chiniara & Bentein, 2016). Future research should investigate how these leadership models integrate into structured innovation processes while mitigating potential implementation challenges (Jaiswal & Dhar, 2017; Yoshida et al, 2014; Liden et al, 2014; Neubert et al, 2016; Zada et al, 2022; Zhang et al, 2021).

This study provides a systematic overview of shared and servant leadership of the current literature, with a particular focus on their impact on the innovation process. The research is guided by the following research questions: 1) What are the key research trends and citation patterns in studies

examining the role of shared and servant leadership in innovation? 2) What are the fields of research associated with shared and servant leadership? 3) How has the scholarly discussion evolved regarding the integration of shared and servant leadership in innovation research?

We address these research questions by triangulating across three bibliometric techniques: co-citation analysis, co-word analysis and bibliographic coupling. In addition to the bibliographic analysis in VOSviewer, we manually categorized 434 articles into thematic clusters based on their abstracts, which refer to specific topics related to the innovation process in order to gain a more nuanced understanding of their relevance to the innovation process. This clustering step, which was not predefined in the search phase, allows for a more flexible and context-dependent analysis of the role of leadership in fostering innovation. By systematically analyzing the intellectual structure of the field, identifying research clusters and mapping emerging trends, this study aims to contribute to a more integrated and comprehensive understanding of shared and servant leadership in relation to innovation.

With this study, we aim to advance leadership and innovation theory by exploring how shared and servant leadership foster collaboration, ethical leadership and sustainable innovation. Through a bibliographic analysis, we aim to improve our understanding of shared leadership by highlighting its role in team-based collaboration and decentralized decision-making (D'Innocenzo et al., 2016; Nicolaides et al., 2014). Furthermore, we aim to extend the theoretical foundation of servant leadership by emphasizing its influence on ethical leadership, psychological safety and sustainability of innovation (Liden et al., 2008; Van Dierendonck, 2011). This study also aims to contribute to the development of hybrid leadership models by integrating principles of shared and servant leadership that cultivate a trust-based culture leading to the development of context-sensitive approaches tailored to innovation-driven organizations and ultimately foster their long-term sustainability (Greenleaf, 1977; Avolio et al, 2009; Hoch & Dulebohn, 2017; Eva, Robin, Sendjaya, van Dierendonck, & Liden, 2019). Our research aims to explore how the transition from hierarchi-

cal to shared and servant leadership can improve agility, knowledge sharing and innovation, especially in knowledge-intensive industries where cross-functional collaboration is critical (Tønnessen, Dhir, & Flåtten, 2021; Lafuente, Vaillant, & Rabetino, 2023; Pearce & Conger, 2002; Yukl, 2010; Chen, Zada, Khan, & Saba, 2022).

2 METHODOLOGY

In order to do justice to the complexity of leadership research, we have applied three bibliometric techniques: co-citation analysis, co-occurrence analysis and bibliographic coupling. We used the VOSviewer software for this purpose. Bibliometric analysis has become an important method for the systematic review of academic literature, enabling researchers to recognise patterns and relationships within academic fields (Kessler, 1963; Aria & Cuccurullo, 2017; Moed, 2006).

Bibliometric methods serve as essential tools for analyzing the intellectual structure of research fields, uncovering trends and mapping the development of scientific contributions (Donthu, Kumar, Mukherjee, Pandey & Lim, 2021; Zupic & Čater, 2015; Börner, Chen, & Boyack, 2003). These methods enable the identification of citation links, co-authorship networks and thematic clusters and thus provide a deeper understanding of the subject area (Small, 1973; Leydesdorff, 2007). Science mapping in particular provides insights into the evolving knowledge base and interrelationships within leadership research (Cobo, López-Herrera, Herrera-Viedma, & Herrera, 2011).

Bibliometric research consists of two primary analytical approaches: performance analysis and science mapping. Performance analysis focuses on quantitative assessments such as number of publications and citation impact, while science mapping explores relational structures by investigating citation networks, analyzing co-words and bibliographic coupling (Moral-Muñoz, Herrera-Viedma, Santisteban-Espejo, & Cobo, 2020; Waltman, van Eck, & Noyons, 2010). Given our interest in exploring conceptual relationships within leadership research, we prioritized science mapping techniques.

2.1 Database and Search Protocol

The data was extracted from the Web of Science database using the keywords “shared leadership” or “servant leadership”. These terms were applied to all fields of scholarly publications published between 1978 and 2025. The search yielded 3,338 relevant articles from disciplines such as management (1,453), business (576) and applied psychology (466). Considering the large amount of publications (N=3,338) we found in the Web of Science, we applied a citation threshold of ≥ 50 citations to prioritize particularly influential works. The number of citations is an indicator of impact and relevance in scientific discourse. Our review thus focuses on well-established contributions while maintaining methodological rigor. Subsequently, 434 documents were selected for analysis.

Figure 1: PRISMA Flow Diagram of Study Selection Process

Step 1: Identification

Records identified from
Web of Science (N = 3,338)

Step 2: Screening

Records screened based on
citation count (N ≥ 50)

Step 3: Eligibility and Inclusion

Final studies included in the
review (N = 434)

The retrieved data was analyzed using the VOSviewer software, which enables the visualization of bibliometric networks, including citation impact and thematic clusters (Van Eck & Waltman, 2010; Chen, 2016).

2.2 Co-Citation Analysis

To examine the structure of leadership research, we conducted a co-citation analysis, a method that assesses how often two articles are cited together, thus indicating thematic similarities (Small, 1973). This approach enables the identification of knowledge domains and the historical development of a research field (Leydesdorff, 2007).

We took a structured approach to our analysis and began by creating a map based on bibliographic data. We then extracted and processed data from bibliographic database files. For the analysis, we used a co-citation method with cited references as the unit of analysis, using the full count as the counting method. To refine the dataset, we set the minimum number of citations to 20 to ensure that we focused on the most important and most frequently cited works.

2.3 Co-Occurrence Analysis

To explore the conceptual structure of leadership research, we conducted a co-occurrence analysis of keywords. In contrast to citation-based approaches, co-occurrence analysis examines the actual content of documents to uncover thematic patterns and underlying research topics (Callon, Courtial, Turner, & Bauin, 1983).

For the co-occurrence analysis, we first created a map based on bibliographic data and then extracted and processed data from bibliographic database files. The analysis focused on co-occurrence, where we used authors' keywords as the unit of analysis and used full counting as the counting method. To ensure relevance, we set the minimum threshold for the occurrence of a keyword to four in order to emphasize the most frequently used terms in the dataset.

2.4 Bibliographic Coupling

To identify emerging trends and influential research contributions, we conducted a bibliographic coupling analysis, a method that links articles based on shared references. This approach enables the identification of contemporary research clusters and knowledge boundaries (Glänzel & Czerwon, 1996; Kessler, 1963).

Bibliographic coupling was used in this analysis, with the documents as the unit of analysis and the full count as the counting method. To refine the dataset, we set the threshold for the minimum occurrence of a keyword to 190 to ensure that we focused on the most important and most frequently linked documents.

2.5 Clusters related to innovation

In addition to the bibliographic analysis in VOSviewer, we manually categorized the 434 articles into different clusters based on their abstracts, which are based on specific topics related to the innovation process.

3 RESULTS

This section presents the results of the three bibliometric analyses previously carried out with VOS Viewer. Based on these results, we conducted a systematic literature search to identify and categorize important clusters. The analysis shows the relationships between the articles, represented by the number of references cited together, as well as the link strength — a positive numerical value indicating the degree of connection between the articles. A higher value for link strength indicates a stronger link. Taken together, these links and articles form a bibliographic network (Van Eck & Waltman, 2010). Our final results refer to the publications with the highest link strength within each cluster, highlighting the most influential studies.

3.1 Co-Citation Analysis

Of the 24,501 cited references, we obtained 143 articles that formed 3 clusters (Table 1), which are additionally shown in the Co-Citation map (Figure 1). The total link strength based on these images is 175,805, and there are 154 links between the cited articles.

Through network analysis, we identified three conceptual clusters: Shared and Distributed Leadership in Teams; Leadership Theories and Motivation Frameworks and Innovation Processes and Collaboration Technologies.

The co-citation analysis revealed three key conceptual clusters that illustrate the development of leadership research in relation to teamwork, motivation and innovation. These clusters provide a structured understanding of how leadership theories and frameworks contribute to organizational dynamics, particularly in fostering collaboration and innovation.

The Shared and Distributed Leadership in Teams cluster highlights the move away from hierarchical leadership models towards more collaborative and decentralized structures. Shared and distributed leadership have gained prominence in organizational research as they can improve team decision-making, collective problem-solving and adaptability in complex environments. The findings are consistent with previous research suggesting that shared leadership promotes knowledge integration, psychological safety and team innovation (Carson et al., 2007; Pearce, 2004; Klein, Ziegert, Knight, & Xiao, 2006). The studies in this cluster suggest that shared lead-

Figure 2: Co-Citation map

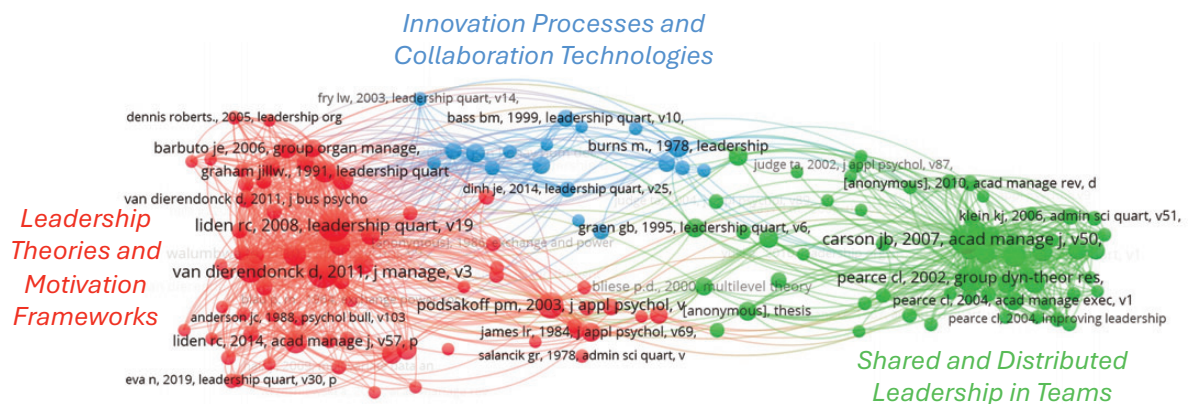


Table 1: Co-Citation Analysis: Conceptual Clusters in Shared and Servant Leadership and Innovation

Co-citation					
Cluster	Content	Main Authors	Main Theories	Number of Documents	Evolution of the Field
Shared and Distributed Leadership in Teams	This cluster focuses on team-based and distributed leadership approaches, emphasizing shared leadership, group dynamics, and collaboration in decision-making processes.	Carson et al. (2007), Pearce (2004), Klein et al. (2006), Green (1995), Ashforth (1989)	Shared Leadership Theory, Servant Leadership Theory, Theories of Group Dynamics, Decision-Making Theories, Social Comparison Theory, Theories of Organizational Behavior	58	Shift from individual leadership to collaborative, distributed approaches, fostering team innovation and adaptability.
Leadership Theories and Motivation Frameworks	Articles in this cluster focus on leadership styles, servant leadership principles, and human motivation theories.	Liden et al. (2008), Van Dierendonck (2011), Barbuto and Wheeler, (2006), Eva et al., (2019)	Servant Leadership Theory, Maslow's Theory of Human Motivation, Transformational Leadership Theory, Ethical Leadership Framework, LMX Theory	67	Development of servant leadership and its application to modern organizational settings
Innovation Processes and Collaboration Technologies	This cluster explores how leadership interacts with team collaboration, innovation processes, and communication technologies, linking leadership to organizational dynamics and innovation.	Fry (2003), Bass (1999), Burns (1978), Brown (2005, 2006), Dinh et al. (2004), Judge (2004), Green (1995), Ashforth (1989)	Transformational Leadership Theory, Transactional Leadership Theory, Shared Leadership, Servant Leadership, Social Comparison Theory, Theories of Group Dynamics, Organizational Behavior, Ethical Frameworks	18	Evolution from individual-centric leadership models to team-based, collaborative leadership approaches that drive innovation and adaptation in organizations.

ership not only promotes team cohesion, but also contributes to a sustained competitive advantage by utilizing collective intelligence.

The Leadership Theories and Motivation Frameworks cluster examines the theoretical foundations of leadership, in particular the theories of servant leadership and human motivation. Servant leadership has been linked to ethical leadership, leader-member exchange theory, and transformational leadership, suggesting a strong moral and relational foundation for leadership effectiveness (Liden, Wayne, Zhao, & Henderson, 2008; Van Dierendonck, 2011; Barbuto & Wheeler, 2006). The cluster shows how leadership approaches that emphasize trust, empowerment and ethical responsibility create a psychologically safe environment that is conducive to knowledge sharing and innovation. Furthermore, these findings emphasize the importance of motivational theories, particularly Maslow's hierarchy of needs, in understanding how leaders inspire and engage teams.

The Innovation Processes and Collaboration Technologies cluster links leadership to innovation and shows how leadership theories interact with technological advances, team collaboration and dynamic organizational processes (Parris & Peachey, 2013). Studies in this category emphasize the role of leadership in facilitating communication, managing distributed teams and fostering a climate conducive to innovation (Fry, 2003; Bass, 1999; Dinh et al., 2004).

3.2 Co-Word Analysis

In the co-occurrence analysis (co-word), the minimum number of occurrences of author keywords was set to 5, resulting in 42 elements of the 1088 keywords. The total link strength based on these keyword-related images is 1,282, and there are 44 links between keywords. These clusters are summarized in Table 2. It contains the name of each cluster, a list of the keywords with the highest frequency and the number of all keywords included.

Figure 3: Co-occurrence (co-word) map

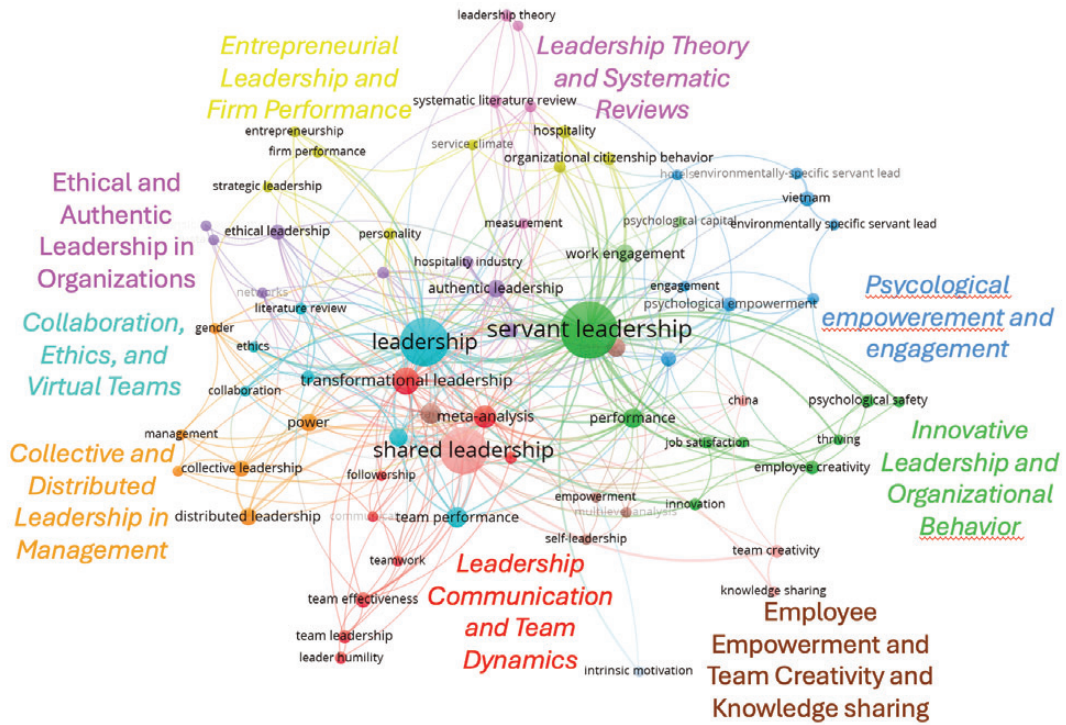


Table 2: Co-Word Analysis: Key Themes in Shared and Servant Leadership

Co-occurrence		
Cluster	Keywords	Number of authors' keywords
Psychological Empowerment and Engagement	psychological empowerment, engagement, organizational citizenship behavior, organizational identification, empowering leadership, psychological capital and work engagement	10
Employee Empowerment, Team Creativity and Knowledge sharing	empowerment, job crafting, multilevel analysis, self-leadership, teams, intrinsic motivation, knowledge sharing, shared leadership, team creativity	10
Leadership Communication and Team Dynamics	transformational leadership, meta-analysis, leader-member exchange, communication, followership, leader humility, team effectiveness, team leadership, teamwork	9
Innovative Leadership and Organizational Behavior	employee creativity, innovation, innovative behavior, job satisfaction, performance, psychological safety, thriving, trust in leader, servant leadership	9
Entrepreneurial Leadership and Firm Performance	entrepreneurship, firm performance, hospitability, organizational citizens, personality, service climate, service quality, strategic leadership	8
Ethical and Authentic Leadership in Organizations	authentic leadership, ethical leadership, hospitality industry, leadership development, networks, responsible leadership, scale development, sustainability	8
Collaboration, Ethics, and Virtual Teams	collaboration, ethics, leadership, literature review, team performance, trust, virtual teams	7
Collective and Distributed Leadership in Management	collective leadership, distributed leadership, gender, management, power, systematic review	6
Leadership Theory and Systematic Reviews	content analysis, leadership theory, measurement, review, systematic literature review	5

Using a co-word analysis, we identified conceptual clusters that characterize contemporary leadership discourse and emphasize its role in knowledge sharing, ethics and innovation. These findings reveal a shift from hierarchical models to collaborative, ethical and innovation-driven leadership paradigms and illustrate how leadership theories are evolving in parallel with technological and organizational complexity.

An important trend is the shift towards shared leadership, where leadership functions as a collective process rather than an individual attribute (Carson et al., 2007; Pearce, 2004). Cross-functional collaboration fosters team creativity and problem-solving especially in knowledge-intensive industries (Raes et al., 2011). Studies also show that servant leadership promotes shared leadership dynamics and improves team agility and project success (Zhu, Liao, Yam & Johnson, 2018; Van Dierendonck, 2011).

The effectiveness of leadership increasingly depends on ethical leadership, psychological empowerment and employee well-being (Liden et al., 2008; Van Dierendonck, 2011). Servant and transformational leadership promote trust, transparency and psychological safety and encourage employees to take creative risks (Fehr & Gelfand, 2012; Christensen et al., 2015). Psychological empowerment strengthens knowledge sharing and innovation (Miao et al., 2013; Jaiswal & Dhar, 2016) and reinforces the role of servant leadership in building ethical and sustainable cultures (Eva et al., 2019).

Leadership today is driving digital adaptation, virtual collaboration and entrepreneurial innovation (Zhang & Parker, 2019). The rise of remote work requires new competences in digital leadership and virtual team management (Morrison-Smith & Ruiz, 2019). Entrepreneurial leadership is also important to manage uncertainty and foster innovation (Trastek, Hamilton, & Niles, 2014).

3.3 Bibliographic Coupling

In this group, all 434 primary articles were analyzed, 190 of which resulted in 69 articles that formed 3 clusters (Figure 3). The total link strength was 3,926, and there were 1,243 links between these documents. These clusters are summarized in Table 3. It shows the name of each cluster, the content summary, the main authors and the number of documents included in the final representation.

The first cluster - Servant Leadership and Organizational Behavior - represents articles that focus on leaders who prioritize the growth, well-being and empowerment of their team members. The second cluster – Shared Leadership and Team Collaboration - includes articles dealing with decentralized decision-making, team-based leadership and the distribution of leadership tasks among members of an organization or team. The third cluster - Educational Leadership and Policy – contains articles dealing with leadership approaches in education, policy implications and the role of leadership in academic institutions.

Figure 4: Bibliographic coupling map

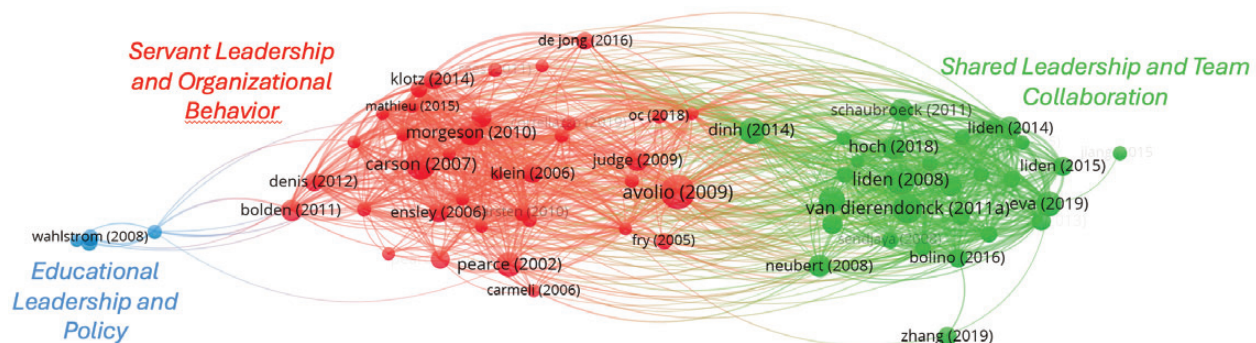


Table 3: Bibliographic Coupling Analysis: Key Studies in Shared and Servant Leadership

Bibliographic coupling					
Cluster	Content	Main Theories	Main Authors	Number of Documents	Practical Implications
Shared Leadership and Team Collaboration	This cluster examines the role of shared leadership in fostering team collaboration, how teams distribute leadership roles, and the impact on team effectiveness.	Shared Leadership Theory, Team Effectiveness Theory, Social Identity Theory	D’Innocenzo et al., (2016), Nicolaides et al. (2014), Lee (2020), Wang et al. (2014); Wu et al. (2020)	36	Teams should embrace shared leadership practices to distribute responsibilities effectively. Encouraging collaborative decision-making and leveraging team members’ diverse expertise can enhance creativity, innovation, and overall performance in complex, dynamic settings.
Servant Leadership and Organizational Behavior	This cluster focuses on how servant leadership fosters employee engagement, ethical decision-making, and positive organizational behavior.	Servant Leadership Theory, Ethical Leadership Theory, Organizational Behavior Theory	Liden et al. (2008), Liden (2014), Van Dierendonck (2011), Eva et al, (2019)	29	Organizations should foster a culture of adaptability and innovation by supporting open communication and psychological safety in teams. Developing frameworks for handling conflict and promoting learning across organizational structures can strengthen innovation capacity.
Educational Leadership and Policy	This cluster explores leadership approaches in educational settings, policy implications, and the role of leadership in academic institutions.	Educational Leadership Theory, Policy Implementation Theory	Heck & Hallinger (2010), Leithwood (2008), Wahlstrom (2008)	4	Educational institutions should integrate leadership training for administrators to improve decision-making and policy implementation.

The proximity of the first and second clusters indicates some overlap in the literature on shared and servant leadership. These overlaps may include studies that compare the two styles, examine their combined effects, or explore their applicability in similar contexts such as team performance or organizational change. The connections between the nodes indicate strong and more frequent links to larger thematic overlaps. Shared leadership and servant leadership are distinct areas but have commonalities, such as emphasizing the empowerment of others and fostering collaboration (Eva et al., 2019, Nicolaides et al., 2014). The overlap between the clusters suggests that both styles can be applied in complementary ways to improve organizational outcomes. Articles at the intersection of the clusters (closer to the boundary) are likely to examine how shared and servant leadership interact or compare with each other. These studies could explore hybrid models or the contextual appropriateness of the two styles.

3.4 Thematic Classification of Innovation Research

Beyond the bibliographic analysis in VOSviewer, we also manually sorted the 434 articles into different clusters by grouping them according to key topics related to the innovation process based on their summaries. These clusters, shown in the table, provide a structured overview of the primary research areas.

Table 4: Key Topic Clusters in the Innovation Process: Abstract Analysis

Cluster	Article count
Innovation and Development	191
Creativity and Idea Generation	81
Knowledge Sharing and Collaboration	69
Organizational Change	67
Implementation of Ideas	26

3.4.1 Innovation and Development

In the first cluster identified, Innovation and Development, we classified 191 articles based on their abstracts that deal with shared, or servant leadership topics related to this theme.

Servant leadership fosters an environment in which employees feel valued, psychologically safe and motivated to take creative risks (Liden et al., 2014; van Dierendonck, 2011). By prioritizing trust and ethical responsibility, servant leaders foster a culture that supports innovation (Fehr & Gelfand, 2012). Psychological safety is particularly important in this context as it encourages risk-taking and reduces the fear of failure (Walumbwa, Luthans, Avey, & Oke, 2011). Schwarz et al. (2016) emphasize how motivation in public service — a key component of servant leadership - promotes work performance and innovation.

In contrast to hierarchical models, shared leadership distributes decision-making and increases adaptability and collective creativity (Dinh et al., 2014; Bolden, 2011; Raes, Heijltjes, Glunk, & Roe, 2011). Research emphasizes the strong correlation with entrepreneurial success and innovation in start-ups (Ensley et al., 2006). Teams that practice shared leadership are more responsive to change and utilize different perspectives to solve problems (Carson et al., 2007; Wang et al., 2014). Studies also suggest that shared leadership works better in complex and dynamic environments than traditional leadership (Pearce & Sims, 2002; D’Innocenzo et al., 2016).

Innovation thrives in a knowledge-intensive environment where expertise is shared and utilized (Pearce, 2004). Servant leadership fosters a culture of knowledge sharing that empowers employees to make a meaningful contribution (Schwarz et al., 2016; Miao et al., 2014). Proactive work behaviors encouraged under both shared and servant leadership— increase engagement in innovative practices (Zhang & Parker, 2019). At a strategic level, shared leadership in top management strengthens decision-making and the utilization of knowledge (Mihalache et al., 2014).

Sustainable innovation requires leadership that aligns creative endeavors with long-term strategic goals (Neubert, Carlson, Kacmar, Roberts, & Chonko,

2009). Entrepreneurial endeavors thrive especially under strong leadership that deals with uncertainty and promotes agility (Klotz, Hmieleski, Bradley, & Busenitz, 2014; Yammarino, Dionne, Chun, & Dansereau, 2005). Psychological safety is crucial for encouraging experimentation and creative problem solving (De Jong et al., 2016). Servant leadership enhances this by promoting ethical responsibility and well-being (Schaubroeck et al., 2012). By creating an environment in which employees feel encouraged to innovate, leadership goes beyond decision-making and actively shapes the conditions necessary for learning and growth.

3.4.2 Creativity and Idea Generation

In the second identified cluster, Creativity and Idea Generation, we categorized 69 articles by analyzing their abstracts, focusing on studies examining the role of shared and servant leadership in this area.

Creativity is a prerequisite for innovation and requires leadership that fosters commitment, ethical responsibility and participative decision-making. Shared and servant leadership cultivates trust, psychological safety and collaboration and enables diverse perspectives to take risks, experiment and drive change (Carson et al., 2007; Walumbwa et al., 2011). Shared leadership enhances psychological safety and knowledge sharing and empowers employees to take ownership of ideas and engage in creative problem solving (Ye, Liu, & Tan, 2022; Pearce, Wassenaar & Manz, 2014). It alleviates fear of threat and encourages teams to question norms (Daly, 2014). Leaders who encourage questioning and initiative, increase creativity in employees (Carsten et al., 2010; DeRue, 2011). Servant leadership promotes innovation by emphasizing ethical leadership, trust and empowerment (Walumbwa et al., 2011).

Creativity in virtual teams is characterized by knowledge sharing and psychological safety (Morrison-Smith & Ruiz, 2019). Digital transformation requires adaptive leadership, with digital leaders utilizing technology to foster collaboration and innovation (Cortellazzo et al., 2019). In crisis situations, shared and servant leadership improve adaptability and creativity, as shown by the COVID-19 response (Fernandez & Shaw, 2020). Leadership effectiveness

is also associated with interpersonal neural synchronization, highlighting the role of deep connections in creative collaboration (Jiang et al., 2021).

Research shows that shared and servant leadership create dynamic, participative and innovative workplaces. By fostering trust, empowerment and ethical decision-making, these models enable employees to challenge norms and develop breakthrough ideas (Carsten et al., 2010; Morrison-Smith & Ruiz, 2019). Organizations that embrace these approaches sustain continuous innovation and competitive advantage (Walumbwa et al., 2011; Lemoine et al., 2019; DeRue, 2011).

3.4.3 Knowledge Sharing and Collaboration

In the third identified cluster, Knowledge Sharing and Collaboration, we categorized 69 articles by analyzing their abstracts, focusing on studies examining the role of shared and servant leadership in this area.

Knowledge sharing and collaboration are fundamental to organizational learning, innovation and long-term competitiveness (Černe, Nerstad, Dysvik, & Škerlavaj, 2014). Leadership plays a central role in shaping environments in which knowledge is created, shared and strategically deployed (Mumford et al., 2002). Shared and servant leadership, both of which promote trust, psychological safety and proactive engagement promote expertise flows across hierarchical boundaries (Dinh et al., 2014; Fehr & Gelfand, 2012; Mihalache et al., 2014).

Shared leadership distributes decision-making and empowers individuals to take responsibility for knowledge creation (Dinh et al., 2014). Bolden (2011) highlights that shared leadership promotes organizational learning by balancing structured authority and informal collaboration, ensuring that expertise is shared effectively. Zhang and Parker (2019) reinforce this by linking job design to knowledge sharing outcomes, showing that employees who actively shape their role contribute significantly to knowledge sharing.

At the top management level, Mihalache et al. (2014) emphasize that shared leadership fosters organizational ambidexterity and balances exploratory and utilitarian learning. Raes et al. (2011) analyze the interactions between top management teams

and middle managers and show that middle managers act as knowledge brokers and translate strategic insights into actionable knowledge. Similarly, Josefy et al. (2015) argue that larger organizations need structured mechanisms for knowledge sharing to remain flexible in decision making.

Servant leadership that emphasizes stewardship and community building enhances trust and collaboration, which are critical for knowledge sharing (Schwarz et al., 2016). Organizations where there is a climate of forgiveness — an attribute of servant leadership — are more open in communication and knowledge sharing (Chen, Zada, Khan, & Saba, 2022; Fehr & Gelfand, 2012).

Servant leadership also cultivates psychological empowerment and creates conditions for knowledge sharing at both individual and collective levels (Miao et al., 2014). Leaders who embrace this approach promote a culture of continuous learning and strategic collaboration, which is essential for sustained innovation (Miao et al., 2013). In high-pressure environments, servant leadership mitigates workplace anxiety and maintains engagement and collaboration even during crises such as COVID-19 (Liden et al., 2008). In healthcare, servant leadership fosters collaboration among care providers and improves knowledge transfer, as shown by Trastek, Hamilton, and Niles (2014). Similarly, Holt and Marques (2012) emphasize that leaders who cultivate empathy create psychologically safe environments for open communication and learning.

Leadership effectiveness is closely linked to knowledge sharing processes. Gardner, Coglisier, Davis & Dickens (2010) identify collaborative leadership approaches as important drivers of organizational learning. Carmeli, Meitar and Weisberg (2006) further emphasize the role of self-leadership in fostering knowledge sharing networks and suggest that organizations should develop self-leadership competencies to enhance both individual and collective learning.

Fehr and Gelfand (2012) present a multilevel model of forgiveness in the workplace and argue that an organizational climate based on trust and compassion fosters collaboration. This aligns with Mihalache et al. (2014) who propose shared leadership in top management teams as a driver of knowledge sharing and innovation.

Shared and servant leadership work synergistically to break down silos and enable cross-functional collaboration (Dinh et al., 2014; Mihalache et al., 2014). Whether through shared or servant leadership, these approaches create workplaces where knowledge is freely shared, strategically deployed and continuously refined. By fostering trust, ethical stewardship, and a commitment to learning, these leadership models ensure that organizations remain adaptable, innovative and competitive in an evolving knowledge-based landscape (Fehr & Gelfand, 2012; Raes et al., 2011; Zhang & Parker, 2019).

3.4.4 Organizational Change

In the fourth identified cluster, Organizational Change, we classified 67 articles based on their abstracts that address the impact of shared or servant leadership on organizational change.

A common thread running through these studies is the realization that traditional, hierarchical leadership models are insufficient for coping with modern organizational change. Instead, shared, and servant leadership models foster an environment in which change is not dictated from above, but co-created through collaboration, trust and distributed decision-making (Denis, Langley, & Sergi, 2012; Leithwood & Mascal, 2008). These leadership styles emphasize ethical responsibility, psychological safety and knowledge sharing and support inclusive, sustainable transformation efforts, focused on long-term business success (Chen, Zada, Khan, & Saba, 2022; Imam & Zaheer, 2020). Shared leadership decentralizes decision-making and improves adaptability and responsiveness (Avolio et al., 2009). Wahlstrom and Louis (2008) emphasize how shared responsibility strengthens professional communities, while Leithwood and Mascal (2008) establish a link between shared leadership and long-term development and improved performance.

Servant leadership promotes trust and psychological safety and empowers employees through values-based leadership (Liden et al., 2014). Hoch, Bommer, Dulebohn, & Wu (2018) highlight its role in improving engagement during transformation, while Hallinger and Heck (2010) establish a link between collaborative leadership and sustained school

improvement. Yammarino et al. (2005) highlight how shared leadership enables organizations to manage complexity, while Nahapiet and Ghoshal (1998) emphasize the role of social capital in fostering knowledge sharing — an essential principle in both servant and shared leadership. Servant leadership ensures that change is focused on long-term goals through ethical guidance and vision (van Dierendonck, 2011). Fehr & Gelfand (2012) reinforce this by showing how stewardship promotes organizational resilience.

Avolio et al (2009) provide a comprehensive overview of leadership theories and show how authentic, shared and collective leadership drive change. Shared leadership improves team performance in organizations and academic settings (Carson et al., 2007; Wahlstrom and Louis, 2008; Heck and Hallinger, 2010; Leithwood and Mascal, 2008). Hoch et al. (2018) compare leadership styles and find that servant leadership is particularly effective when it comes to managing ethical change. Liden et al. (2008) establish a link between servant leadership and citizenship behavior in organizations, while Walumbwa, Avolio, Gardner, Wernsing, & Peterson (2008) show that servant leadership promotes trust and commitment during change. Contractor, DeChurch, Carson, Carter, & Keegan (2012) use network analysis to illustrate how shared leadership promotes adaptability.

Ultimately, the research highlights that successful organizational change is deeply intertwined with leadership approaches that prioritize collaboration, empowerment, and adaptability. Traditional hierarchical models are not sufficient for managing modern change (Denis et al., 2012; Leithwood & Mascal, 2008). Whether through distributed decision-making, ethical guidance, or network-based leadership structures, these models position organizations to thrive in an increasingly complex and evolving landscape (Avolio et al., 2009; Wahlstrom & Louis, 2008; Walumbwa et al., 2008).

3.4.5 Implementation of Ideas

In the Implementation of Ideas cluster, 26 articles were categorized based on their abstracts, examining shared and servant leadership within this theme.

Successful implementation of innovative ideas requires leadership that promotes knowledge sharing, trust and strategic alignment. Shared and servant leadership can play a key role in turning creativity into sustainable results through collaboration, empowerment and participative implementation (Yoshida et al., 2014; Zhang et al., 2021).

Shared leadership improves knowledge integration and cross-functional collaboration and promotes effective implementation (Von Krogh, Nonaka, & Rechsteiner, 2012). It strengthens project success through team cohesion and trust (Imam & Zaheer, 2020) and promotes the team's adaptability to new ideas (Ali, Wang, & Johnson, 2019). Power heterarchies, where leadership shifts based on expertise, improve the execution of innovation by increasing responsiveness (Aime et al., 2014). Shared leadership improves the success of IT projects through knowledge sharing, cohesion and trust (Imam & Zaheer, 2020). In the hospitality industry, psychological safety and empowerment support the implementation of ideas and innovations (Karatepe, Aboramadan, & Dahleez, 2020).

Servant leadership promotes trust, empowerment and psychological safety, creating the conditions for effective implementation of ideas (Yoshida et al., 2014). Trust in leadership is key to risk-taking and implementation (Jaiswal & Dhar, 2016; Zhang et al, 2021), while self-efficacy strengthens proactive engagement (Yang et al., 2017).

Shared and servant leadership promote collaboration, empowerment and cross-functional integration. Shared leadership promotes collective decision-making and adaptability, while servant leadership promotes trust, psychological safety and sustained commitment. Organizations that integrate these approaches, supported by knowledge sharing structures and procedural justice, effectively translate creativity into long-term innovation success (Von Krogh et al., 2012; Yoshida et al., 2014; Imam & Zaheer, 2020). By prioritizing trust, collaboration and strategic alignment, leaders promote continuous refinement of innovation that promotes sustainable growth and competitive advantage.

3.4.6 Potential challenges, limitations, or unintended consequences of shared and servant leadership styles

From the abstracts analyzed, most studies highlight the positive impact of shared and servant leadership on knowledge sharing, collaboration, creativity, ideation and execution. However, a few articles point out potential challenges, limitations or unintended consequences of these leadership styles.

Yang et al. (2017) investigate the moderating effect of power distance on servant leadership and idea implementation. Their results suggest that in cultures with high power distance, servant leadership has a weaker effect on promoting innovation. This suggests that servant leadership may not be universally effective and that cultural differences may reduce its impact on creativity and knowledge sharing behavior.

Josefy, Kuban, Ireland and Hitt (2015) discuss organizational size and knowledge sharing dynamics, highlighting that larger organizations often struggle with knowledge flow due to bureaucratic structures. This suggests that while shared leadership is beneficial for collaboration, it can encounter challenges in large, hierarchical organizations where decision-making is traditionally centralized.

Imam and Zaheer (2020) emphasize the importance of cohesion and trust in shared leadership, but also point out that decision-making processes can become inefficient if trust is lacking, or leadership is too distributed. This suggests that shared leadership can lead to slower implementation and decision paralysis in some organizational contexts.

Fehr and Gelfand (2012) introduce the concept of forgiveness in the workplace and restorative justice but acknowledge that excessive forgiveness in leadership can reduce accountability and enable repeated negative behaviors. In servant leadership, which emphasizes forgiveness and interpersonal acceptance, this could mean lower performance expectations or leniency towards underperformance.

Cortellazzo, Bruni and Zampieri (2019) examine digital leadership and point out that leaders need to strike a balance between shared leadership and structured authority. They argue that in digitally transformed workplaces, over-reliance on participa-

tive decision-making can lead to inefficiencies and that leaders need to strike a balance between collaboration and decisive action.

None of these studies reject shared leadership or servant leadership outright, but they point to limitations, contextual factors and potential drawbacks that should be considered when applying these leadership models.

4 DISCUSSION

Research shows that shared leadership is a catalyst for team collaboration, decentralized decision making and adaptive problem solving (D’Innocenzo et al., 2016; Nicolaides, et al., 2014). In innovation-driven environments, shared leadership fosters cross-functional collaboration and knowledge sharing, which are essential for breakthrough innovation and sustained competitiveness (Wu, Chen, & Cormican, 2024). Organizations that practice shared leadership may benefit from collective intelligence that enables teams to respond dynamically to new challenges (Von Krogh et al., 2012).

The literature on servant leadership emphasizes its role in promoting psychological safety, ethical decision-making and sustainable business practices (Liden et al., 2008; Van Dierendonck, 2011; Eva et al., 2019). Organizations with a strong servant leadership culture often demonstrate higher levels of trust, employee engagement and long-term innovation (Eva et al., 2019).

The conceptual overlap between shared leadership and servant leadership points to emerging hybrid leadership models that combine participative decision-making with ethical and value-orientated leadership (Wang, Kim, & Kim, 2021; Burton, Peachey, & Wells, 2017). While shared leadership promotes decentralized control and collective action (Carson et al., 2007), servant leadership promotes that innovation efforts are aligned with long-term societal and ethical considerations (Eva et al., 2019).

Both shared leadership and servant leadership emphasize empowerment, collaboration and decentralized authority, albeit with different emphases. Shared leadership focuses on team dynamics and

promotes a distributed approach in which leadership tasks are shared collectively among team members (Pearce & Conger, 2002; Hoch, 2013). In contrast, servant leadership emphasizes the individual growth and well-being of employees, with leaders adopting a service-oriented attitude that promotes trust and motivation (Greenleaf, 1977; Eva et al., 2019). While these leadership models differ in their approach, they have complementary characteristics that create synergies in promoting innovation.

A fundamental synergy lies in their shared emphasis on psychological safety and trust. Servant leaders who prioritize the needs of their employees and create a supportive environment foster high levels of trust (Liden et al., 2008). Similarly, shared leadership fosters team cohesion and mutual accountability and promotes decision-making processes that are inclusive and adaptive to change (Carson et al., 2007; Wang et al., 2014). The interplay of these elements creates an optimal environment for creativity, knowledge sharing and experimentation, all of which are essential for innovation (Zhu, Liao, Yam, & Johnson, 2018; Yoshida et al., 2014).

Another important comparative finding is how each leadership style influences motivation and engagement. Servant leadership fosters intrinsic motivation by aligning leadership practices with employees’ personal and professional development (van Dierendonck, 2011; Neubert et al., 2016). This approach is associated with higher job satisfaction and engagement, which indirectly supports a culture of sustainable innovation (Sousa & van Dierendonck, 2017; Jaiswal & Dhar, 2017). Shared leadership, on the other hand, increases extrinsic motivation by promoting collective accountability and supporting distributed expertise in decision-making (D’Innocenzo et al., 2016; Nicolaides et al., 2014). By integrating both approaches, organizations can simultaneously increase individual motivation and collective team effectiveness and thus further drive innovation.

The role of communication and collaboration also demonstrates a synergy between the two leadership models. Shared leadership thrives on the continuous exchange of knowledge and enables teams to adapt quickly to challenges (Ensley et al.,

2006; Hoch & Dulebohn, 2013). Servant leadership reinforces open communication and inclusivity through its emphasis on empathy and active listening and fosters a sense of belonging and engagement (Eva et al., 2019; Chiniara & Bentein, 2016). This dual impact creates an ecosystem in which both team-driven and leader-facilitated collaboration improves problem solving and innovation outcomes (Zada et al., 2022; Zhang et al., 2021).

Servant leadership fosters a supportive, trust-based culture that encourages experimentation, risk-taking and the development of new ideas (van Dierendonck, 2011). The combination of the people-centered approach of servant leadership and the collective decision-making of shared leadership provides a holistic strategy to foster innovation in different organizational contexts.

Despite the synergies between shared and servant leadership, their integration poses certain challenges. Shared leadership, which thrives on distributed influence, can lead to role ambiguity and coordination difficulties if not carefully structured (Day et al., 2004; Small & Rentsch, 2011). Without clear processes for accountability, teams may struggle with decision-making, particularly in complex or rapidly changing environments. At the same time, while servant leadership fosters a supportive and trust-based culture, it may not always be suited for high-pressure, competitive settings where decisiveness and assertiveness are essential (Canavesi & Minelli, 2022). These dynamics raise important considerations about how organizations can harness the strengths of both leadership models while mitigating their limitations.

Both shared and servant leadership contribute to innovation by enhancing team collaboration, psychological safety, and motivation. Their intersection offers an opportunity to create leadership models that are both empowering and ethically grounded. The way these leadership styles influence different stages of the innovation process—from ideation to commercialization—remains a critical point of discussion (Sousa & van Dierendonck, 2017; Wang et al., 2014). Understanding how they interact in shaping decision-making, knowledge-sharing, and problem-solving can provide insight into their broader impact on organizational success.

This conversation is particularly relevant in environments characterized by uncertainty, where agility and ethical responsibility should coexist. The ability to balance decentralized collaboration with ethical leadership may prove essential in determining how organizations navigate business transformation and long-term competitiveness (Eva et al., 2019). As leadership continues to evolve alongside technological advancements, the interplay between influence, structure, and values will remain central to discussions on fostering sustainable innovation.

4.1 Theoretical contributions

This study advances leadership theory by bringing together new insights from organizational behavior, psychology and innovation management. The analysis of co-citation and co-word analysis indicate an ongoing development in leadership research that is moving away from individual-centered models towards more distributed, ethical and innovation-oriented approaches. Our findings highlight a paradigm shift in leadership thinking moving from traditional hierarchical models to shared and servant leadership that emphasize collaboration, empowerment and distributed authority (Dinh et al., 2014; Imam & Zaheer, 2020). Models of shared and servant leadership supported by motivational theories appear to play an important role in improving team effectiveness and knowledge sharing dynamics (Chen, Zada, Khan, & Saba, 2022; Imam & Zaheer, 2020). By positioning leadership as a relational process, shared leadership and servant leadership challenge traditional top-down structures and foster an environment in which collective decision-making and mutual accountability improve team effectiveness (Wang et al., 2014; Wu et al., 2020).

Furthermore, we highlight the critical intersection of ethics and innovation in leadership effectiveness and show how values-led governance strategies, central to servant leadership, improve decision-making and promote sustainable organizational growth (Fehr & Gelfand, 2012; Christensen et al., 2015; Eva et al., 2019). The findings highlight the increasing importance of technology and collaboration in modern leadership and emphasize the need for an adaptive and responsive leadership style (Wu et al., 2020; Eva et al., 2019). In an era increasingly defined by digital transformation, our analysis highlights the need for leaders to cultivate

virtual leadership, agile decision-making, and robust knowledge-sharing mechanisms and underscores how shared and servant leadership can guide organizations through complex and dynamic work environments (Morrison-Smith & Ruiz, 2019).

By integrating these dimensions, this study contributes to a more holistic understanding of leadership that emphasizes shared authority, ethical stewardship, and psychological empowerment, all core tenets of shared and servant leadership. These insights provide a strategic framework for developing resilient, high-performing teams capable of supporting long-term innovation and agility in evolving organizational landscapes (Wu et al., 2020; Holt & Marques, 2012).

Through bibliographic coupling analysis, this study highlights three primary contributions: the role of shared leadership in team collaboration, the im-

pact of servant leadership on ethical organizational behavior, and the emergence of hybrid leadership models in innovation policy. This study advances the understanding of shared leadership by highlighting its role in team-based collaboration and decentralized decision-making (D’Innocenzo et al., 2016; Nicolaides et al., 2014; Wang et al., 2014; Wu et al., 2020). The findings show that the shift from hierarchical to distributed leadership structures promotes innovation, agility and knowledge sharing, especially in knowledge-intensive industries where collective expertise and cross-functional collaboration are essential for competitive advantage.

This research extends the theoretical foundation of servant leadership by emphasizing its influence on ethical leadership, psychological safety and sustainability of innovation (Liden et al., 2008; Van

Table 5: Framing Theoretical Contributions Using the AC/DC Positioning Grid through co-citation and co-word analysis

How does the contribution ...	Which field?	Which discussion?	By which authors?	Scope of the contribution (small, moderate, large)	Why is it relevant? CONTRIBUTION (theoretically, not just practically)
Advance/progress	Leadership and Team Collaboration	Shared and servant leadership shift leadership from hierarchical models to collaborative, empowerment-focused approaches.	Dinh et al. (2014), Imam & Zaheer (2020)	Moderate	Redefines leadership as a collective, participatory process that fosters stronger team dynamics and mutual accountability.
Advance/progress	Ethical Leadership, Innovation Management	Servant leadership aligns governance with values-driven innovation strategies, ensuring ethical and sustainable decision-making.	Fehr & Gelfand (2012), Christensen et al. (2015), Eva et al. (2019); Mallen Broch, Dominguez Escrig, & Lapiedra Alcamí (2020).	Moderate	Expands leadership theory by embedding ethical stewardship into innovation, promoting responsible and sustainable leadership practices.
Advance/progress	Digital Leadership, Virtual Work	In a digital landscape, servant and shared leadership support virtual collaboration, agile decision-making, and knowledge sharing.	Morrison-Smith & Ruiz (2019); Chen et al., 2022; Imam & Zaheer (2020).	Moderate	Advances leadership research by addressing how digital transformation requires leaders to be more adaptive, inclusive, and responsive.
Advance/progress	Leadership Development, Organizational Psychology	By fostering distributed authority, ethical leadership, and psychological empowerment, servant leadership helps teams thrive in dynamic environments.	Wu et al. (2020); Holt & Marques (2012)	Moderate	Enhances leadership theory by demonstrating how empowerment-based leadership increases team resilience, innovation, and long-term success.

Source: The AC/DC positioning grid for framing theoretical contributions (Černe, 2021)

Dierendonck, 2011). By fostering trust-based cultures and prioritizing values-driven innovation, servant leadership endorses innovation processes that are aligned with ethical decision-making and long-term sustainability. This study emphasizes the importance of embedding servant leadership in strategic frameworks, particularly in industries where ethical considerations shape innovation practice.

This study contributes to the development of hybrid leadership models by integrating principles of shared and servant leadership to create context-sensitive leadership approaches for innovation-driven organizations. These models strike a balance between decentralized authority and ethical leadership and provide a governance framework that supports stakeholder trust, collaboration and sustainable innovation ecosystems.

4.2 Current Trends and Future Research Directions in Shared and Servant Leadership

Our findings emphasize the interdisciplinary and evolving nature of shared and servant leadership studies and show how leadership extends beyond tradi-

tional hierarchical models to collaborative, ethical and innovation-driven approaches. As organizations increasingly operate in complex, knowledge-based environments, leadership frameworks should adapt to technological advances, workforce diversity and changing employee expectations. The increasing complexity of work environments coupled with rapid technological advancement highlights the need to examine how these leadership styles drive knowledge creation and organizational agility (Wu et al., 2020; Eva et al., 2019).

4.3 Practical implications

The practical contributions of research on shared and servant leadership offer actionable insights for organizations, policy makers and innovation leaders. Shared leadership improves team collaboration, agility and decentralized decision-making and enables cross-functional teams to respond dynamically to innovation challenges by leveraging collective intelligence and distributed authority (D’Innocenzo et al., 2016; Nicolaides et al., 2014). Organizations can introduce co-leadership structures and participative decision-making systems to improve adaptability, es-

Table 6: Framing Theoretical Contributions Using the AC/DC Positioning Grid through bibliographic coupling analysis

How does the contribution ...	Which field?	Which discussion?	By which authors?	Scope of the contribution (small, moderate, large)	Why is it relevant? CONTRIBUTION (theoretically, not just practically)
Advance/progress	Leadership and Team Collaboration	Shared leadership as a driver of team collaboration and decentralized decision-making.	D’Innocenzo et al. (2016), Nicolaides et al. (2014), Lee (2020), Wang et al. (2014); Wu et al. (2020)	Moderate	Demonstrates how shared leadership enhances innovation, agility, and knowledge-sharing in dynamic environments.
Advance/progress	Servant Leadership and Organizational Behavior	The role of servant leadership in fostering ethical leadership, psychological safety, and innovation.	Liden et al. (2008), Van Dierendonck (2011), Eva et al. (2019)	Moderate	Explores how servant leadership fosters ethical governance, stakeholder engagement, and long-term innovation sustainability.
Advance/progress	Hybrid Leadership Models in Innovation Policy	The emerging hybrid models integrating shared and servant leadership for innovation-driven organizations.	Eva et al. (2019); Canavesi & Minelli (2022).	Moderate	Investigates the balance between decentralized leadership and ethical governance in knowledge-intensive industries.

Source: The AC/DC positioning grid for framing theoretical contributions (Černej, 2021)

Table 7: Future research directions in shared and servant leadership, classified within five main themes

Main Theme: Shared Leadership as a Driver of Innovation and Agility		
Key Fields for Future Research	Authors	Focus of Future Research
Role of shared leadership in accelerating the commercialization of new ideas	Zhu et al. (2018)	Exploring how shared leadership can accelerate the process of bringing new ideas to market
Main Theme: Servant Leadership and Ethical Innovation Cultures		
Key Fields for Future Research	Authors	Focus of Future Research
Influence of servant leadership on corporate social responsibility, and ethical governance	Eva et al. (2019); Tanno & Banner (2018)	Investigating how servant leadership principles influence ethical business practices
Role of servant leadership in fostering inclusive, diverse, and psychologically safe innovation environments	Eva et al. (2019); Wang, Kang & Choi (2022)	Studying the role of servant leadership in fostering diversity and psychological safety in innovation teams
Main Theme: The Intersection of Shared and Servant Leadership: Hybrid Approaches to Innovation		
Key Fields for Future Research	Authors	Focus of Future Research
Influence of hybrid leadership models on different stages of the innovation process	Zhu et al. (2023); Yoshida et al, 2014	Assessing how hybrid leadership models impact different innovation process stages, from ideation to commercialization
Role of psychological safety and trust in shared and servant leadership to foster innovation	Liden et al. (2008); Carson et al. (2007); Wang et al. (2014)	Studying how trust-building elements in leadership contribute to an innovative work environment
Comparative impact of shared and servant leadership on motivation and engagement	van Dierendonck (2011); Ruiz-Palomino, & Zoghbi-Manrique-de-Lara, P. (2020); Al-Asadi et al. (2019); Grille, Schulte, & Kauffeld (2015)	Comparing how different leadership styles influence intrinsic and extrinsic motivation
Role of communication and collaboration in enhancing innovation outcomes through shared and servant leadership	Ensley et al. (2006); Hoch & Dulebohn (2013); Chiniara & Bentein (2016)	Understanding how effective communication in leadership enhances collaboration and innovation outcomes
Main Theme: The Role of Leadership in Business Transformation		
Key Fields for Future Research	Authors	Focus of Future Research
Understanding leadership's role in shaping digital transformation strategies	Cortellazzo et al. (2019).	Investigating how leadership styles impact the adoption and success of digital transformation initiatives
The intersection of leadership and organizational learning in transformation contexts	Van Dierendonck & Sousa (2017)	Assessing how leadership fosters continuous learning and adaptability during business transformation
Main Theme: Challenges in Integrating Shared and Servant Leadership		
Key Fields for Future Research	Authors	Focus of Future Research
Role ambiguity and coordination difficulties in shared leadership	Day et al., 2004; Small & Rentsch (2011); Panaccio, et al. (2015).	Investigating how organizations can mitigate role ambiguity and improve coordination in shared leadership models
Challenges of servant leadership in competitive environments	Canavesi & Minelli, (2022)	Exploring the limitations of servant leadership in fast-paced, competitive contexts where assertiveness is required
Balancing the strengths and limitations of shared and servant leadership	Zhu et al. (2023)	Reinforcing the need for empirical research on combining shared leadership structures to enhance innovation.

pecially in digital and hybrid work environments where leadership is distributed across virtual teams. Meanwhile, servant leadership promotes ethical governance, employee wellbeing and long-term sustainability, forming the basis for corporate social responsibility, stakeholder trust and values-led innovation (Liden et al., 2008; Van Dierendonck, 2011).

In knowledge-intensive industries, hybrid models that integrate shared and servant leadership can balance decentralized authority and ethical oversight and foster collaborative innovation that is aligned with the values of the company and society (Eva et al., 2019). In addition, shared and servant leadership can play an important role in shaping innovation policy, influencing regulatory decisions, interdisciplinary collaboration and knowledge sharing in research institutions and public administration (Nguyen, Nguyen, & Tuan, 2023). Policy makers can introduce leadership-focused frameworks to foster ethical and inclusive innovation ecosystems, while universities and corporate training programs should focus on developing leadership skills tailored to a dynamic, high-stakes environment. Taken together, these implications demonstrate how shared, and servant leadership enable and promote organizational agility, ethical innovation and political effectiveness, ensuring that leadership strategies remain collaborative, empowering and ethically grounded in an evolving global landscape.

5 CONCLUSION

The integration of shared and servant leadership represents a transformative opportunity to foster innovation and build resilient, high-performing organizations. Shared leadership fosters creativity and team collaboration, especially in decentralized environments, while servant leadership promotes trust, an ethical culture and long-term commitment. Their complementary strengths — collective problem solving and individual empowerment — create a leadership model that is both dynamic and sustainable. Despite these synergies, careful implementation is essential. As shared leadership relies on distributed influence, clear coordination mechanisms are required, while servant leadership needs to be adapted to a fast-paced environment where decisiveness is required. By balancing these elements, organizations can realize the full potential of both approaches. Understanding how these leadership styles influence the different stages of the innovation process — from ideation to implementation — will provide deeper insights into their role in shaping business success. Integrating shared and servant leadership into innovation frameworks offers a powerful way to manage complexity while fostering collaboration, trust and purposeful growth.

EXTENDED SUMMARY/IZVLEČEK

Ta študija preučuje stičišče deljenega in služabniškega vodenja pri spodbujanju inovativnosti z uporabo bibliometričnih tehnik z analizo 434 znanstvenih objav. Z uporabo analiz so-citiranja, sopojavljanja besed in bibliografske povezanosti študija opredeljuje raziskovalne trende, tematske grozde in vrzeli v literaturi. Rezultati kažejo, da imata deljeno in služabniško vodenje pomemben vpliv na inovacijski proces, vendar sta njuni vlogi še vedno premalo raziskani in razdrobljeni. Študija prispeva k teoriji vodenja s poudarkom na vlogi deljenega vodenja pri timskem sodelovanju in decentraliziranem odločanju, obenem pa nadgrajuje teoretične temelje služabniškega vodenja v kontekstu etičnega vodenja, psihološke varnosti in trajnostne inovativnosti. Z integracijo obeh modelov prispevamo k razvoju hibridnih pristopov vodenja, ki spodbujajo kulturo, utemeljeno na zaupanju, ter kontekstualno prilagojene strategije za organizacije, usmerjene v inovacije. Poleg tega raziskujemo, kako prehod od hierarhičnega k deljenemu in služabniškemu vodenju spodbuja agilnost, izmenjavo znanja in inovativnost — zlasti v panogah, ki temeljijo na znanju in se opirajo na medfunkcijsko sodelovanje. Prihodnje raziskave bi se morale osredotočiti na deljeno in služabniško vodenje v vseh fazah inovacijskega procesa, zlasti v poznejših fazah, da bi naslovile nejasnost vlog in zagotovile usklajenost med na ljudeh temelječim vodenjem ter strateškimi zahtevami inovacij.

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