

## **Military Leadership Research: A Systematic and Bibliometric Review of Publication Trends, Themes, and Future Directions**

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**Abstract:** This study explores the development, geographic distribution, and themes of military leadership research and suggests directions for future research, particularly in Indonesia. A combined systematic review and bibliometric analysis were performed on Scopus-indexed papers. Using the PRISMA 2020 guidelines, 848 records were screened for article type, English language, and open-access status, resulting in 135 articles analyzed. Bibliometric and keyword co-occurrence analyses were conducted using VOSviewer. Results show a notable growth in military leadership research, with 105 articles (78%) published between 2021 and 2026. The U.S. was the most prolific, with strong research links across Europe, while Indonesia was represented by three publications. Key themes include military personnel, leadership, psychology, resilience, training, performance, leadership development, military health, innovation, mission command, and artificial intelligence. The study concludes that military leadership is evolving from a conventional command-centric perspective into a multidimensional capability. The study recommends that future research focus on underrepresented contexts, particularly Indonesia and other Southeast Asia's countries, and further examine the relationship between military leadership, resilience, organizational performance, and technological transformation, while adapting established leadership concepts to various institutional and cultural contexts.

**Keywords:** Bibliometric Analysis; Leadership Development; Military Leadership; Military Personnel; Systematic Literature Review

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## A. Introduction

Military organizations operate in an environment characterized by uncertainty, operational complexity, technological advancements, and high personnel demands. These conditions have expanded the concept of military leadership beyond traditional authority and command. Leaders are tasked with directing personnel and completing missions while making decisions under uncertainty, developing subordinates, maintaining cohesion, and adapting to changing operational contexts. Leadership occurs in hierarchical structures, with decisions that can directly affect personnel well-being and mission success (Laurence, 2011; Wong et al., 2003). Therefore, military leadership relies heavily on context rather than applying generic principles. Recent research supports this, showing that institutional, operational, and strategic factors influence command. For example, (Chin, 2025) how organizational fragmentation and conflicting timelines can limit counterinsurgency commands, while (Tchie, 2023) points out the complexity of the military's role in multinational peacekeepers. Additionally, (Baranovskyi et al., 2024) show that military action can extend to the strategic and diplomatic realms, illustrating that modern military leadership encompasses operational, institutional, and international levels.

(Wong et al., 2003) provide an influential contextual perspective by organizing military leadership across systems, organizations, and direct levels. Their framework emphasizes that leadership tasks, required capabilities, organizational culture, and performance expectations vary at different levels. Historical and empirical research has also shown that the effectiveness of military leadership is shaped by mission requirements, organizational culture, interpersonal relationships, and the operational environment (Fallesen et al., 2011; Halpin, 2011). Consequently, the field of research goes beyond formal command and increasingly encompasses how leaders influence teams, develop personnel, manage difficulties, and help organizational performance.

There is one stream of research that is constantly related to the characteristics and competencies of leaders. Research in the U.S. Army has shifted from a job analysis approach to a competency-based and situational perspective, with a greater focus on a leader's interpersonal competencies and their capacity to respond to changing situations (Fallesen et al., 2011). In an irregular and culturally complex environment, leadership also requires sociocultural competence, interpersonal flexibility, trust building, and the ability to understand local contexts (Laurence, 2011). Leadership cannot be reduced to authority or technical proficiency alone. Leadership involves the ability to combine interpersonal judgment, communication, integrity, adaptability, and effectiveness in a way that is appropriate to a particular operational environment. Recent research has also placed greater emphasis on ethical and exemplary behavior. (Beramendi & Frascaroli, 2025) examines leading by example as a practical way of military leadership, while (Nagody-Mrozowicz & Pietrakowski, 2024) highlights leadership having responsibility from the perspective of a professional soldier. These studies reinforce the view that leadership effectiveness depends not only on what commanders direct but also on how their behavior is perceived and executed within the organization.

The second stream connects leadership to team and collective performance. (Boies & Howell, 2009) suggests that leadership influences the cognitive and affective processes of soldiers and in turn affects the effectiveness of the team. These findings are important because they shift the analytical focus from leaders as isolated individuals towards social processes. Communication, cohesion, trust, motivation, and mutual understanding become part of the leadership process. (Lindsay et al., 2011) extend this logic through the concept of shared leadership, arguing that military missions may become so complex that leadership capacities can be fully within a single formally designated individual. The growing attention to distributed leadership does not eliminate hierarchies, but suggests that effective military organizations increasingly require mechanisms of initiative and cross-level coordination. (Fedorchuk et al., 2026) also emphasizes the development of personal initiative in hierarchical organizations, while (Bianchi-Calderon & Norena-Chavez, 2026) suggests that commitment to the creative process becomes an essential prerequisite for the radical creativity of subordinates in the military environment. Together, these findings suggest that contemporary leadership must create conditions in which subordinates can exercise initiative and creativity without weakening command responsibilities.

Military leadership develops through formal education and training, professional experience, challenging assignments, and reflection on operational situations in mission completion (Fallesen et al., 2011) (Siew & Koh, 2023) further demonstrates that novice military leaders develop through an ongoing process of building leadership identity, building confidence, understanding mission needs, and maintaining genuine concern for colleagues and subordinates. These findings support a broader conceptualization of leadership development as continuous learning, not just through institutional interventions. The findings also suggest that military education and training systems should link formal instruction with experience, feedback, mentoring, and operational learning. This requirement is important in the face of high-tech warfare, where training must prepare personnel to operate with increasingly complex systems and changing operational demands (Moustakis, 2025) Leadership development is not only related to the acquisition of interpersonal competencies but also the ability to translate learning into adaptive actions.

The psychological dimension is gaining increasing attention as military personnel and leaders routinely face prolonged demands, uncertainty, danger, separation, and job stress. (Bartone et al., 2013) attributes psychological resilience to adaptability among military leaders, while (Boga, 2024) highlights the role of leadership and organizational support in fostering resilience. (Cherif & Canada, 2020) also links strength of character to resilience among future military leaders. These findings place resilience in a broader leadership system rather than treating it as a separate factor. For example, (Ihme & Sundstrom, 2021) found no significant difference between the intervention group and the control group on the measured outcomes of their mindfulness training study, although their qualitative findings provided important experiential insights.

Military leadership research is also evolving along with technological transformation. Digital technology and artificial intelligence are increasingly influencing the procedures of information processing, decision-making, coordination, and organizational adaptation. (Liseanu, 2023) argues that contemporary military leaders must be able to operate in a changing relationship of organizational culture and technological capabilities, while (Mulolli & Islami, 2025) identifies the growing intersection between artificial intelligence and digital leadership. (Vasilescu, 2025) also highlights the organizational consequences of the military's digital transformation. These developments suggest that future military leaders need to understand not only human and organizational processes, but also how technological systems can transform information flow, decision-making authority, accountability, and operational coordination. (Knevelsrud et al., 2026) provides a complementary perspective by linking leadership empowerment to proactive behavior under the command of a mission, suggesting that technological and operational complexity reinforces the need for decentralized initiatives rather than eliminating them. The relationship between technology and leadership is also seen in research on critical thinking, communication, and command and control. (Moskalov & Nedvyha, 2025) emphasizes this capability in future warfare, while (Fedorovych et al., 2024) shows how advanced combat technologies such as drone swarms are capable of transforming operational planning. This development reinforces the argument for viewing technology as not just a matter of equipment, but rather of involvement in leadership issues.

Although the literature is evolving, the field remains fragmented between military psychology, management, organizational studies, military medicine, defense studies, and interdisciplinary journals. Individual studies often focus on specific populations, countries, institutions, leadership models, or operational environments. This kind of specialization is valuable, but it makes it difficult to see how this field of science as a whole is developing, which countries and institutions form its knowledge base, how collaborations are organized, and which themes are increasingly prominent. A broader synthesis is essential because the growth of a field of research cannot be evaluated solely on the basis of publication volume. But it is also necessary to determine whether this field of science is becoming more diverse in conceptual terms and whether established leadership concerns are beginning to connect with new themes such as resilience, mission command, innovation, and artificial intelligence. Historical and strategic studies reinforce why this synthesis is important: failures in operational command and decision-making can arise from institutional or contextual errors, not just individual competencies (Kryvyziuk & Kuznietsov, 2024; Shumakov, 2025) Therefore, military leadership research needs to connect individual capabilities with broader systems for command decision-making.

The international literature also provides a basis for considering whether the concept of established military leadership can be applied between cultures and institutions. (Laurence, 2011) shows the importance of sociocultural competencies in complex military contexts, while research on mission command and leadership is distributed only to highlight the interactions between structures and initiatives (Knevelsrud et al.,

2024; Lindsay et al., 2011) Indonesia provides a useful background for examining this relationship because military leadership is embedded in a distinctive institutional, cultural, geographical, and professional environment. Comparative research can bring about a discussion answering the question of whether one leadership model is universally effective and instead examine how leadership principles interact with the context.

Systematic and bibliometric approaches are useful to complement these gaps because they transparently combine the selected literature through quantitative mapping of research activities and relationships. PRISMA 2020 establishes a clear reporting framework for the identification, screening, eligibility, and inclusion of studies (Page et al., 2021) while bibliometric analysis maps publication patterns, research concentrations, collaboration structures, and thematic associations that are difficult to observe only through conventional narrative reviews (Donthu et al., 2021). In this study, the combination was used to construct evidence-based maps of the field that can develop theoretical and practical implications. Therefore, this study examines the latest corpus from Scopus regarding military leadership by analyzing the growth of publications, geographical and institutional distribution, publication sources, author productivity, international collaboration, and keyword co-existence. The study answers three research questions: RQ1: Does military leadership remain a significant and evolving subject for future scientific inquiry? RQ2: What is the geographical, institutional, publication source, authorship, and thematic distribution of research on military leadership today? RQ3: What are the theoretical, practical, and future research implications that can be derived from the current research landscape, particularly for Indonesia?

## **B. Methods**

### **Research Design**

The study uses a hybrid systematic literature review and bibliometric analysis. The systematic review component identifies and maintains relevant literature through an accountable selection process. The bibliometric component analyzes publication trends and structural relationships between countries, institutions, authors, and keywords. This combination is appropriate because bibliometric analysis is particularly useful for examining large research areas and identifying publication patterns, intellectual structures, and emerging themes (Cobo et al., 2011; Donthu et al., 2021). The screening process follows PRISMA 2020, providing accountable identification, screening, eligibility, and inclusion reporting (Page et al., 2021).

### **Research Source and Unit of Analysis**

Given that this is a bibliometric study, not a survey or interview, it does not involve human respondents. The population consists of scientific publications indexed in the current Scopus database. Therefore, the unit of analysis is not individual respondents but rather scientific articles. The research setup uses the Scopus bibliographic database

and related bibliometric datasets processed through VOSviewer.

The selection of Scopus is based on structured bibliographic information and broad international coverage. This database provides metadata related to titles, abstracts, keywords, authors, affiliations, countries, publication sources, and citation-related information, making it suitable for the construction of bibliometric networks.

### Search Strategy and Selection

The literature search was conducted on October 1, 2026. The initial search used: TITLE-ABS-KEY (military AND leadership), obtains 9,196 publications. In order to get a corpus that focuses on the phenomenon being investigated, the search is enhanced with the choice of the appropriate use of phrases: TITLE-ABS-KEY ("military leadership"). From the enhanced search, 848 publications were obtained.

Furthermore, the selection process is through restrictions on document type, language, and access. First, document types are limited to Articles, resulting in 481 records. Second, languages are limited to English, resulting in 409 records. Third, the dataset is limited to Open Access, resulting in a final corpus of 135 articles.

**Table 1. Search Strategy and Selection Criteria**

| Item                               | Specification                           |
|------------------------------------|-----------------------------------------|
| Database                           | Scopus                                  |
| Search date                        | October 1, 2026                         |
| Initial search                     | TITLE-ABS-KEY (military AND leadership) |
| Initial records                    | 9,196                                   |
| Refined search                     | TITLE-ABS-KEY ("military leadership")   |
| Refined records                    | 848                                     |
| Document type                      | Article                                 |
| Records after document type filter | 481                                     |
| Language                           | English                                 |
| Records after language filter      | 409                                     |
| Access                             | Open access                             |
| Final corpus                       | 135 articles                            |
| Review framework                   | PRISMA 2020                             |
| Bibliometric software              | VOSviewer                               |

Source: Scopus dataset, 2026, processed by the authors

### Data Analysis

The analysis is carried out through two stages. The first stage consists of a descriptive bibliometric analysis, where the output is examined by year, country or region, affiliation, source, and author, to identify patterns of productivity of research. The second stage uses VOSviewer to build a bibliometric network map. VOSviewer is specifically designed to visualize bibliometric maps that can be used for co-writing analysis, co-citation, and co-occurrence relationships of keywords (van Eck & Waltman, 2010) In this study, keyword co-coincidence was used to examine the conceptual and thematic structure of military leadership research, while state and institutional mapping was used to get the patterns of collaboration. This analysis is

descriptive and relational, not causal. The appearance of two keywords in the same publication indicates a conceptual association in the corpus even though it does not indicate a causal relationship. Similarly, a collaborative network shows a pattern of scientific connections although it does not always show equal intellectual influence among the participating countries or institutions.

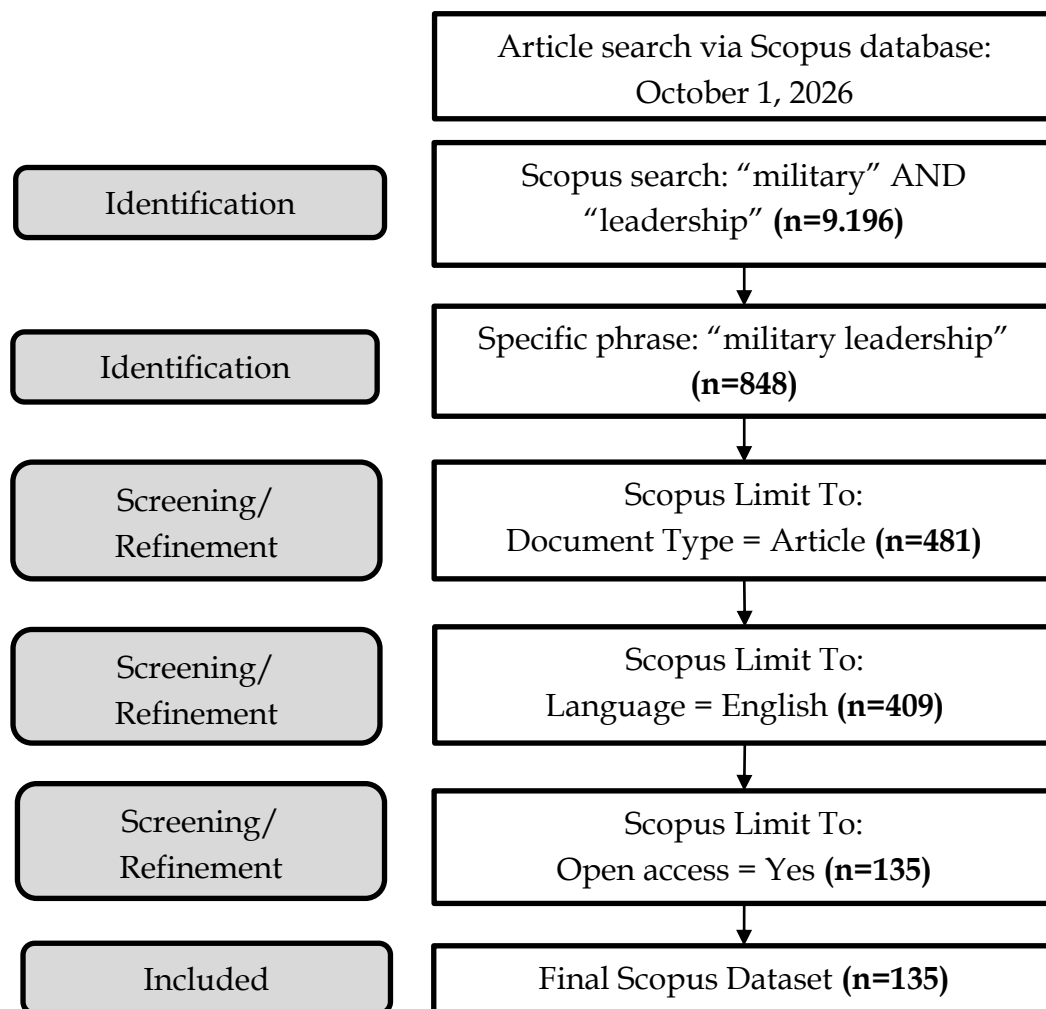


**Figure 1. Systematic Literature Review Information Flow Using PRISMA**

Source: Scopus, 2026, processed by the authors

## C. Results and Discussion

### Publication Trends

Figure 2 shows a clear increase in military leadership research during the period covered by the dataset. Of the 135 articles, 105 articles, or about 78%, were published during 2021–2026. The highest annual publication output reached 25 articles in 2025.

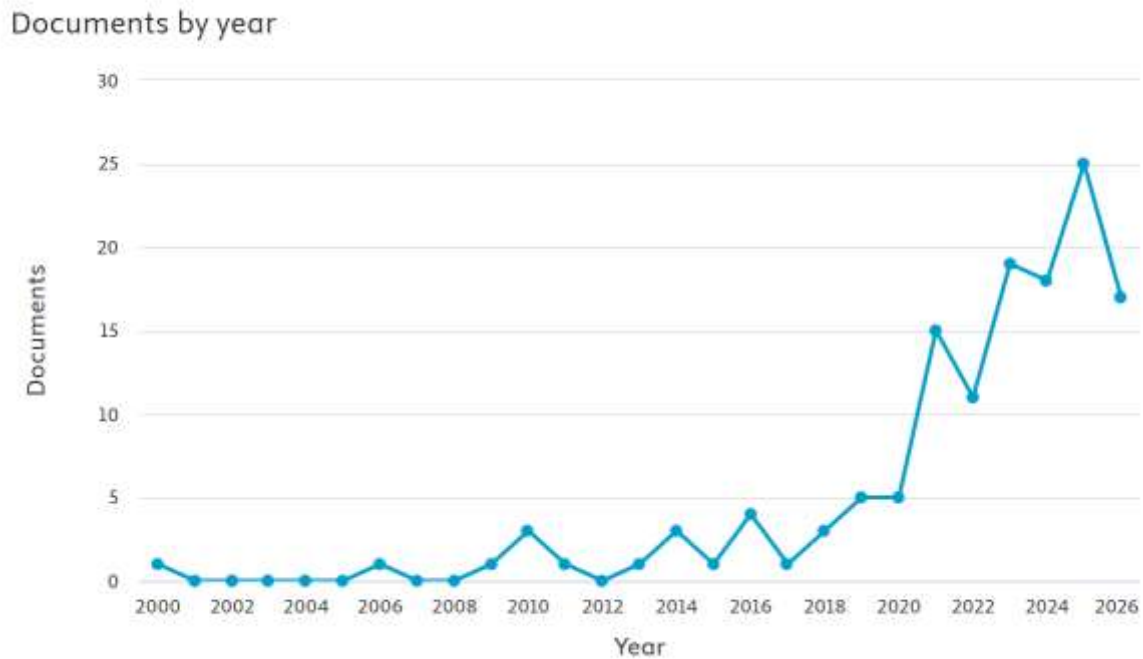


**Figure 2. Number of Military Leadership Publications**  
Source: Scopus, 2026

Publication trends provide a direct answer to RQ1. Military leadership remains a significant and growing area of scientific inquiry. The concentration of around 78% of publications in 2021–2026 means that current research activity is not only greater than in previous periods and still ongoing. The results are theoretically consistent with (Wong et al., 2003) which observed that military leadership research must respond to changes in warfare, organizational environment, and military missions. The growth of publication activities in the current dataset suggests that this adaptation is continuing. Military leadership is increasingly being studied not only in terms of command but also through resilience, leadership development, organizational, communication, technology, and personnel well-being. However, the annual pattern must be interpreted with caution. The dataset was collected on October 1, 2026, which means that the number of publications in 2026 represents only a fraction. For this reason, the total for 2026 cannot be interpreted as a decrease in research interest, but rather as the available evidence confirms that the field entered a period of much greater scientific activity after 2020.

### Geographical Distribution

Figure 3 below shows that military leadership research is geographically concentrated. The United States is the main contributor with 44 publications, followed by Norway and Ukraine with 10 publications each, the UK has 9, Australia has 7, Spain and Sweden have 5 each, and Denmark and Germany have 4 each. Not included in the picture, but Indonesia contributes three publications.

### Documents by country or territory

Compare the document counts for up to 15 countries/territories.

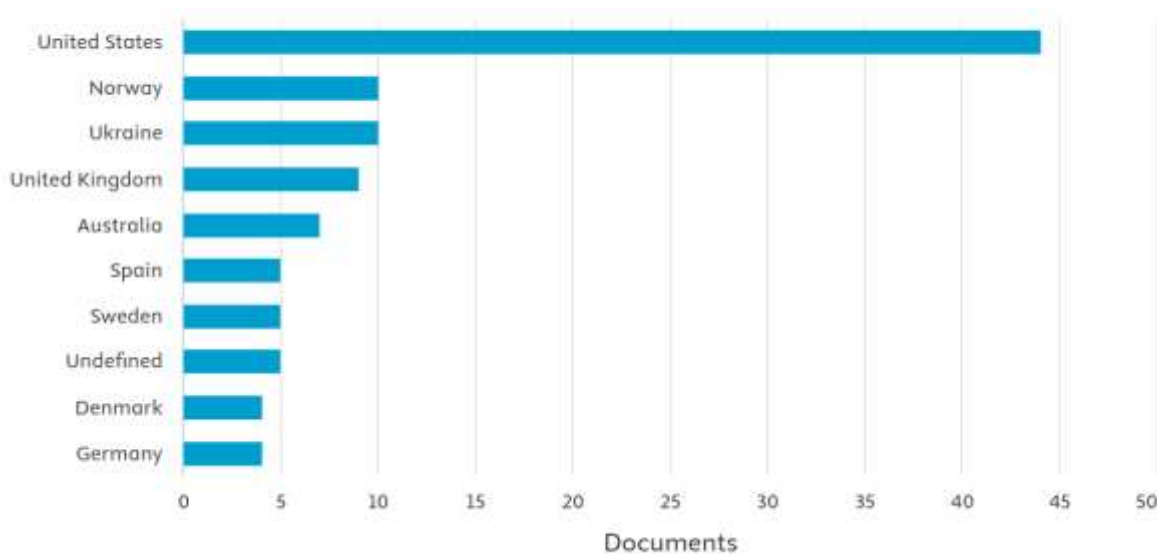


**Figure 3. Number of Articles By Country or Territory**

Source: Scopus, 2026

The strong position of the U.S. can be understood as a long-standing institutionalization that examines military leadership through U.S. military education and research institutions. The U.S. Army has broad research tradition, encompassing military leadership competencies, leader development, situational leadership, organizational culture, and team performance (Fallesen et al., 2011; Wong et al., 2003)

Europe's contribution shows a slightly different emphasis. Research from Norway and Sweden, for example, contributes to understanding adaptability, resilience, mission command, leadership development, and military selection (Hyllengren, 2017; Siew & Koh, 2023) The Scandinavian literature also shows military leadership can be studied through psychological and organizational perspectives, rather than through operational command alone. Other recent studies show that European military leadership research involves security environments, diplomacy and conflict, including Polish military diplomacy against Ukraine (Baranovskyi et al., 2024)

The lack of representation from Indonesia is a research opportunity. Indonesia represents a strategically relevant Southeast Asian context with institutional, cultural, organizational, and geographical characteristics that differ from the dominant environment of the US and Europe. Context-specific research can reveal whether existing concepts of military leadership can be directly applied or require adaptation.

This issue is related to the argument (Laurence, 2011) that the effectiveness of leadership in disorganized and culturally complex operations requires sociocultural competence. A similar principle can be extended to comparative research: leadership

models developed primarily in Western military contexts must be tested in various institutional and cultural environments, as they may not universally applicable.

### Country Collaboration Network

Figure 4 shows complementary perspective of relations between countries, not just the number of publications. The United States emerged as the largest and most central node, while several European countries formed relatively interconnected network. Ukraine appears marginalized, while Indonesia node as a smaller participant.



**Figure 4. Network Country Visualization**  
Source: VOSviewer, 2026

The pattern of collaboration shows that research visibility depends on publication productivity and international connectivity. The United States occupies the most central position, while Indonesia remains a smaller participant. As complex questions of military leadership increasingly cross organizational and national boundaries, international collaboration can increase comparative validity and contextual sensitivity (Connaughton et al., 2011; Lindsay et al., 2011). For Indonesia, collaboration with U.S., European, and Asia-Pacific researchers can increase visibility while allowing established concepts to be tested in different institutional settings.

### Institutional Distribution

Figure 5 below presents the distribution of publications by affiliation. The Uniformed Services University of the Health Sciences is the lead affiliate with six publications, followed by the Walter Reed Army Institute of Research and Forsvaret with four publications each. Several other militaries, medical, academic, and interdisciplinary institutions contribute two to three publications.

### Documents by affiliation

Compare the document counts for up to 15 affiliations.

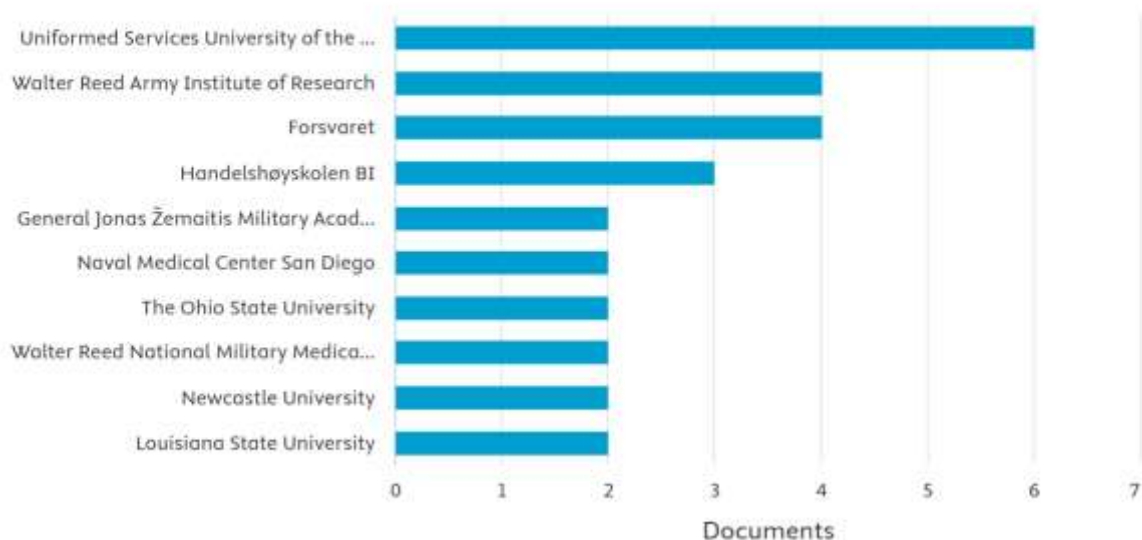


**Figure 5. Number of Articles by Affiliation**

Source: Scopus, 2026

The institutional distribution shows the interdisciplinary character of military leadership research. Contributions from military, medical, psychological, and civilian academic institutions reflect the relationship between leadership, cognition, resilience, resilience, personnel development, and organizational effectiveness (Bartone et al., 2013; Boga, 2024; Boies & Howell, 2009). Indonesia's affiliation still limited, providing opportunities to strengthen publication capacity and international collaboration.

### Publication Sources

Figure 6 shows Military Psychology is the most prolific source with 13 publications, followed by Military Medicine with 9 publications, and Armed Forces & Society with 7 publications.

## Documents per year by source

Compare the document counts for up to 10 sources.

[Compare sources and view CiteScore, SJR, and SNIP data](#)

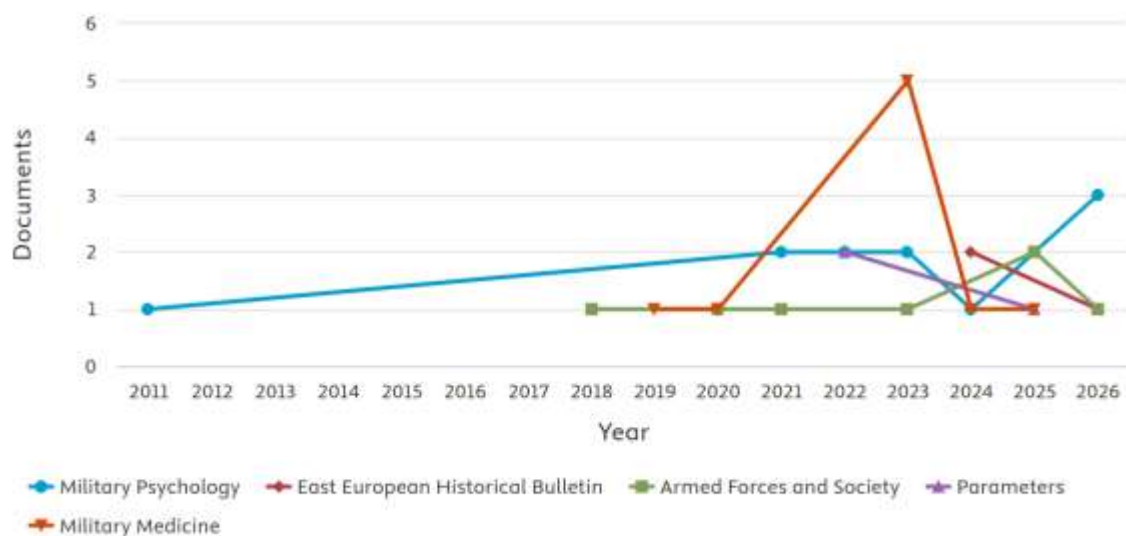


**Figure 6. Number of Articles by Sources**

Source: Scopus, 2026

The distribution of resources reinforces the interdisciplinary character of this field. Military Psychology, Military Medicine, and Armed Forces & Society link leadership to psychological function, personnel well-being, organizational behavior, and civil-military dimensions. Research on extreme conditions and toxic leadership has also shown that leadership influences the performance and social climate of military units (Fisher et al., 2010; Gallus et al., 2013)

## Author Productivity

Figure 7 is evidence of the existence of scattered authors. The ten most prolific writers each have two publications, meaning that no individual author dominates the field.

## Documents by author

Compare the document counts for up to 15 authors.

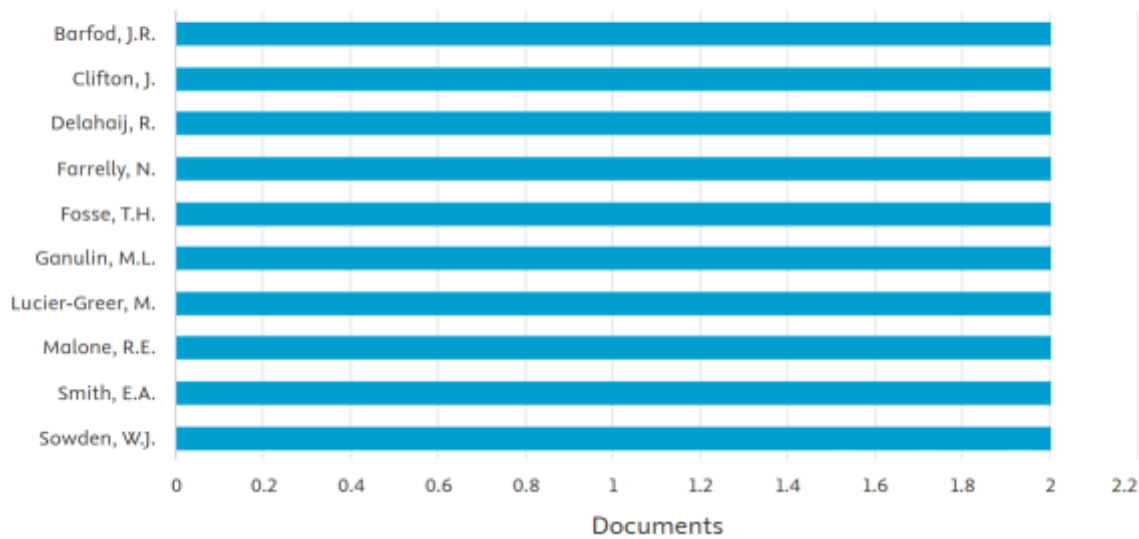


**Figure 7. Count of Publications By Author (Top 10 Authors)**

Source: Scopus, 2026

## Keyword Co-occurrence and Thematic Structure

Table 2 and Figure 8 indicate the intellectual structure of military leadership research. The most common terms include leadership (30 incidents), military leadership (24), military personnel (20), and military (15). Other terms that look like army, psychology, soldier, procedures, stigma, navy, resilience, training, performance, military effectiveness, innovation, mission command, and artificial intelligence.

**Table 2. Most Frequent Keywords and Total Link Strength**

| Keyword             | Occurences | Total Link Strength |
|---------------------|------------|---------------------|
| leadership          | 30         | 139                 |
| military leadership | 24         | 15                  |
| military personnel  | 20         | 199                 |
| military            | 15         | 63                  |
| army                | 13         | 111                 |
| psychology          | 9          | 107                 |
| soldier             | 5          | 54                  |
| procedures          | 4          | 34                  |
| stigma              | 3          | 29                  |
| navy                | 3          | 22                  |

Source: VOSviewer, 2026

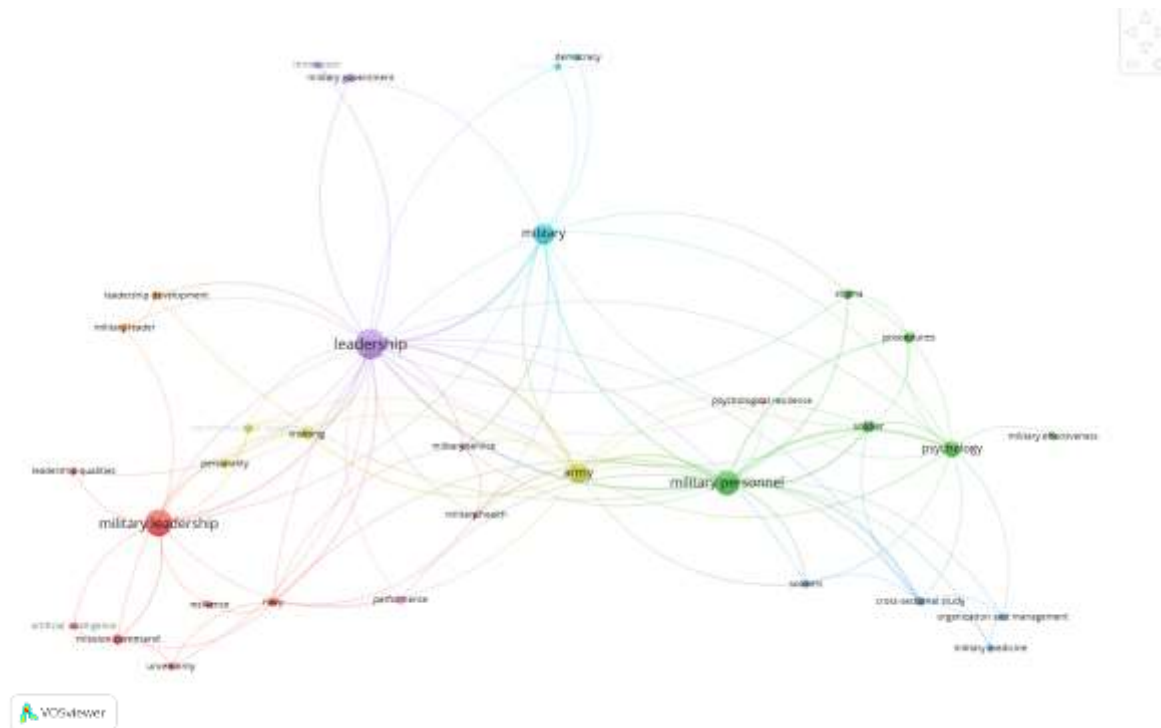


**Figure 8. Co-Occurrence Framework and Representation of Key Term**  
Source: VOSviewer, 2026

The structure of keywords becomes the clearest evidence that describes the intellectual organization of this field. First, military personnel and leadership form the core, meaning leadership is closely related to personnel management, development, and experience, not just command (Boies & Howell, 2009). Second, psychology, resilience, and personnel well-being form key dimensions. (Boga, 2024) and (Cherif & Canada, 2020) place resilience in military capability and leader development, while (Bartone et al., 2013) associate resilience with adaptability. The network suggests that resilience is structurally related to leadership and personnel research, not just as an isolated theme.

Third, training, performance, and leadership development remain the main themes. (Fallesen et al., 2011) (Siew & Koh, 2023) and (Bartone, 2024) collectively support the importance of developing leadership competencies, experience, resilience, and performance. Fourth, organizational adaptation and operational effectiveness are increasingly related to mission command, innovation, autonomy, and decentralized decision-making (Hyllengren, 2017; Knevelsrud et al., 2024).

Fifth, communication and distributed leadership are widely distributed beyond the classic leader-follower duel. Communication, understanding meaning, command intent, cross-cultural interaction, and shared leadership become as important as missions which more complex and geographically dispersed (Connaughton et al., 2011; Lindsay et al., 2011).

Sixth, artificial intelligence represents a thematic frontier that is evolving today. Compared to leadership, personnel, psychology, and training, artificial intelligence is

presumably less dominant in networks. Nevertheless, its emergence is significant because it indicates a newer trajectory of research.

(Liseanu, 2023) that modern military leadership must be able to coordinate human intelligence with high-tech capabilities, while (Mulolli & Islami, 2025) shows the growth of broader research linking artificial intelligence with digital leadership. (Vasilescu, 2025) also emphasizes the transformation of military organizations through digital technology.

The leadership implications of artificial intelligence are still less consolidated than traditional themes, so this is an important limitation. Future research should examine AI-related changes in leader competence, decision-making authority, accountability, ethics, trust, and human control. Research on initiative, follower creativity, critical thinking, communication, and high-tech warfare also points to the need to integrate human judgment with technology-mediated decision-making environment (Bianchi-Calderon & Norena-Chavez, 2026; Moskalov & Nedvyha, 2025; Moustakis, 2025)

(Langdon & Collins, 2026) attests to the emerging concern for the relationship between military training, leader personality, and subordinate perceptions of transformational leadership and abusive supervision. Their findings suggest that contemporary military leadership research is increasingly sensitive to how leadership is viewed by its followers, not just how leadership is defined by formal military doctrine.

## **Integrated Discussion**

Overall, Figures 2–8 show that military leadership research is evolving and continuous, diversifying, and becoming increasingly interdisciplinary. Publication activity has increased significantly, while geographic and institutional structures are still concentrated in the U.S. and Europe. While, the keyword network shows the existence of a strong relationship in leadership, personnel, psychology, resilience, training, mission command, organizational adaptation, and emerging technologies.

These findings do not contradict, but rather expand on previous research. (Wong et al., 2003) makes context-specific characters of military leadership, while (Fallesen et al., 2011) emphasizes competency-based and situational approaches. (Boies & Howell, 2009) links leadership to team cognition and affective processes, (Laurence, 2011) highlights sociocultural competencies, and (Lindsay et al., 2011) identifies the relevance of shared leadership. Recent studies extend this foundation through responsible leadership, leading by example, personal initiative, follower creativity, critical thinking, communication, and high-tech warfare (Beramendi & Frascaroli, 2025; Bianchi-Calderon & Norena-Chavez, 2026; Fedorchuk et al., 2026; Moskalov & Nedvyha, 2025; Moustakis, 2025; Nagody-Mrozowicz & Pietrakowski, 2024) Current mapping shows that these dimensions are increasingly more connected each other within one broader area of research.

The results also show that thematic prominence cannot be equated with evidence of

effectiveness. Resilience is highly visible in networks, but (Ihme & Sundstrom, 2021) found no significant differences between intervention and control groups on the measurable outcomes of mindfulness training. As an implication of this, research must be able to distinguish between the importance of a theme and evidence that a particular intervention produces leadership outcomes.

Similar differences apply to decentralized hierarchies and initiatives. Shared leadership and mission command emphasize initiative, autonomy, communication, and distributed problem-solving, but that does not mean command authority becomes lost (Connaughton et al., 2011; Knevelsrud et al., 2024; Lindsay et al., 2011). In contrast, contemporary military leadership seems to involve managing tensions between formal authority and adaptive initiative. Leaders remain accountable for mission intentions, standards, accountability, and direction while allowing directing subordinates to act when incomplete information or direct oversight is not available.

As evidence that Indonesia is very relevant in this discussion. Within the corpus are found three publications from Indonesia, meaning that Indonesia has limited international visibility but has an established research presence. (Yogaswara et al., 2024) examines the level of difficulty as a mediator in the relationship between military leadership and performance. This study is a useful bridge between international work on adaptability and resilience with Indonesia's specific evidence on leadership effectiveness. Instead of treating Indonesia as just a small contributor, these findings mean there is still an opportunity to develop research that tests international concepts under Indonesian institutional and cultural conditions.

From a defense management perspective, military leadership must be treated as an ability that connects personnel, organizational readiness, professional military education, resilience, innovation, and technological transformation. The emerging intellectual structure can be summarized in five connected dimensions, namely: human factors involving personnel, psychology, resilience, and development; relational factors involving communication, trust, and team; organizational factors involving mission command, adaptation, and performance; operational factors involving mission effectiveness and decision-making; and technological factors involving digital transformation and artificial intelligence. The inter-dimensional interaction will provide a more useful representation of contemporary military leadership than a command perspective alone.

## **Research Gaps and Future Directions**

Four research priorities emerged from the findings. First, geographic concentrations remain substantial. Future research is expected to expand on evidence from Southeast Asia and other regions that are currently underrepresented, with comparative studies examining command culture, professional military education, and organizational.

Second, the relationship between resilience and leadership effectiveness requires stronger empirical testing. The bibliometric association does not establish whether

leadership strengthens resilience, whether resilience increases leadership, or both are shaped by organizational factors. Studies at the individual, team, and organizational levels are still urgently needed.

Third, artificial intelligence and military leadership remain emerging fields. Future research should examine how AI affects decision-making authority, leader competence, trust, accountability, ethics, human control, and organizational learning.

Fourth, contextual transferability requires greater attention. Concepts such as transformational leadership, mission command, shared leadership, resilience, and adaptive leadership should be tested in a variety of institutional and cultural environments, rather than being assumed to be universally applicable. Comparative evidence from counterinsurgency, peace operations, military diplomacy, and historical command failures also suggests that leadership outcomes are embedded in broader institutional and strategic conditions (Baranovskyi et al., 2024; Chin, 2025; Kryvyziuk & Kuznietsov, 2024; Tchie, 2023). Indonesia offers useful context because its three publications demonstrate pre-existing empirical foundations while revealing limited international visibility. (Yogaswara et al., 2024) provides a very relevant starting point by examining the level of difficulty as a mediator between military leadership and performance. Future Indonesian studies can use comparative, longitudinal, and mixed-methods designs to test, adapt, and expand established concepts of military leadership.

#### **D. Conclusions**

The study shows that military leadership remains an active and evolving field of research, with 105 of the 135 articles analyzed published during 2021–2026. The field is geographically concentrated but conceptually and institutionally diverse. Leadership, military personnel, psychology, training, and performance remain central themes, while resilience, mission command, initiative, ethics, innovation, and artificial intelligence expand the research agenda beyond conventional command. These findings indicate that contemporary military leadership is best understood as a multidimensional capability connecting individual competencies with teams, organizational systems, operational contexts, and technological environments. Theoretically, the study contributes by showing how military leadership research is moving from a predominantly command-centered perspective toward a broader understanding that incorporates autonomy, communication, critical thinking, adaptive performance, resilience, ethics, and technological change. Methodologically, the combination of systematic literature review and bibliometric analysis provides a structured approach for identifying research patterns, geographic distribution, and emerging themes in military leadership research. For Indonesia, the findings highlight an important opportunity to strengthen context-specific evidence, as only three publications were identified in the corpus. However, this limited representation should not be interpreted as an absence of substantial Indonesian military leadership research. Existing Indonesian research, including (Yogaswara et al., 2024), provides a basis for examining the relationship between military leadership and performance in

the national context. The study is limited by its reliance on Scopus-indexed, English-language, and open-access publications, which may exclude relevant studies published in other languages, databases, or access conditions. Future research should therefore expand geographic coverage, particularly in Indonesia and Southeast Asia, and examine military leadership in relation to resilience, initiative within hierarchy, ethical and responsible leadership, contextual transferability, and artificial intelligence. Such research can strengthen military leadership scholarship while supporting defense management, professional military education, organizational readiness, and adaptation.

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## **F. Author Contributions**

Tony Sardianto Nugroho contributed to the design concept and implementation of the research, analysis of the results, and writing of the final manuscript. Heru Dewanto were involved in planning and supervising the work, processed the data, performed the analysis, drafted the manuscript, and designed the figures. Guntur Eko Saputro developed the theory and verified the analytical method. Susilo Wardoyo investigates and supervises the findings of this study. All authors discussed the results and contributed to the final manuscript.

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## **H. Data availability**

All data generated or analysed during this study are included in this published article.

## **I. Declarations**

### **Ethics approval and consent to participate**

The study was approved by the Ethics Committee of the Universitas Pertahanan, West Java, Indonesia. No participants in this study.

## J. Competing Interests

The authors declare no competing interests

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