



Review article

A study on managerial leadership in education: A systematic literature review

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ARTICLE INFO

Keywords:

Managerial leadership
Leadership in education
Strategic management
Administration effectiveness
Systematic literature review

ABSTRACT

Background: Articles on managerial leadership (ML) have been published from year to year, since 1950s. The use of ML theory in previous research is common, but some inconsistencies are found regarding the terms commonly used. In other words, there is a mismatch between the use of the term ML in article paper and structures. This will certainly have an impact on bias and ambiguity for future research literatures.

Novelty: Theoretical review on this topic is rarely carried out, specifically in ML theory. The novelty of this research lies in the classification results of articles that used the term ML in accordance with the theory.

Objective: This theoretical review was conducted to examine the classification of accuracy of articles which were using the term ML in title with four consistency and accuracy indicators on the article structures starting from the problem, aim, literature, results and discussion, as well as conclusion sections.

Method: This review as a qualitative literature research used a language and historical approach, as well as a ML theory. This study Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. The technique and instrument used was bibliographic instruments, comprehensive list of keywords and mixed search terms to search the articles online with the help of Google Chrome and Mozilla Firefox browsers. A total of 68 articles published from 1959 to 2022 as a final reviewed. They were obtained from several well-known digital

Abbreviations: ML, Managerial Leadership; MEL, Managerial Ethical Leadership; MLB, Managerial Leadership Behavior; MLS, Managerial Leadership Style; MLR, Managerial Leadership Role; MLD, Managerial Leadership Development; MrLS, Manager's Leadership Style; MLP, Managerial Leadership Practice; MLr, Managerial Leader; MLC, Managerial Leadership Competency; MLSk, Managerial Leadership Skill; MrL, Manager's Leadership.

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<https://doi.org/10.1016/j.heliyon.2023.e16834>

Received 11 February 2023; Received in revised form 27 May 2023; Accepted 30 May 2023

Available online 1 June 2023

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journal content such as Jstor, Proquest, Oxford University Press, Google Scholar, and National Library, as well as various journals under major publishers such as Elsevier, Taylor & Francis, SAGE, Emerald, Brill, and Wiley. The data collected were analyzed using content analysis with 4 indicators of consistent (accurate & additional) and inconsistent (difference & additional), and 4 accuracy category of accuracy, appropriate, bias, and error for determining the articles classification, and validated them by using triangulation and grounded theory.

Results: The results showed that in 1959 the first article appeared using the word ML, in 2012 the first and only article appeared that only used ML, and the last is in 2022. Then, the consistency of the title with other article sections is 17 articles (25% of 68) according to the accurate term indicator. Last, the accuracy of articles was divided into four categories: 10 articles (15% of 68) in the accuracy category.

Contribution: This systematic review contributes the article classification that can become a more established scientific roadmap of references and reasoning of studying ML.

1. Introduction

The study of leadership has been a central part of the literature on management behavior in an organization for several decades and has been widely researched. In relation to that, there has been growing interest in global leadership among scholars and practitioners due to the strategic importance of organizations for expanding services. The previous research suggested that certain cultural leadership characteristics are likely useful. This view is widely supported by findings from almost all major research. Currently, there have been a thousand articles on the related subject, and it has been increasing at a high rate and a large body of literature [1–8]. Classically, managerial leadership (ML) was an effective and efficient organizational approach [9]. It was an on-demand useful leadership [10]. Recently, ML theory has been a combination between the functions and work of the managers with the role of leaders in an educational organization and corporate [11–14]. In addition, the ML is set up to discuss obstacles inhibiting leadership performance in formal organizations from achieving success in the current environment [8,15,16].

This research contributes to knowledge with an exploratory research of a review of consistent managerial leadership (ML) terms to avoid bias in some reading sources and references. The analysis was done by classifying articles using the term viewed from how the consistency fits the article's structure, problems, objectives, literature, findings, and conclusions through indicators of consistency and accuracy.

The issue has been explored through the lens of an event's team, which is in response to the call for more empirical research on the enablers and inhibitors of successful events as articulated in the literature. The issues in this study focus on inconsistencies in ML terms between the title and other parts of the article structure, making the articles biased and resulting in terminology errors. One solution is implementing history, consistency, and classifying articles based on accuracy indicators.

Several phenomena emerged in research articles about ML are that in reviewing the leadership literature, however, little consensus exists among researchers and practitioners about how to develop leaders [5]. The key emerging knowledge gap is the fact that the available studies have not investigated the link between leadership ethics and services [4]. The massive size and scope of the literature precludes detailed descriptions of individual studies of every leadership reference [1,17]. Furthermore, the literature on leadership does not involve an extensive list of leadership styles [6]. Only a few good studies have contributed to the roles and functions of leaders [18]. Moreover, regarding the review on the leader roles, they often struggle to balance the expectations of their many roles and responsibilities [16]. Leadership has always been more difficult in challenging times. It calls for a renewed focus on genuine leadership [19]. Consequently, several conscious leaders are vacuumed in institutions. Therefore, principle leaders are urgently needed [20].

ML is often used as a reference in developing leadership theory in the world of education, this is what makes ML a contribution that can be utilized and applied by all leaders as one of the right strategies in educational institutions. Leaders' knowledge, understanding and experience of the institutions or organizations they lead also influence their success in actuating the managerial of educational institutions.

Accordingly, based on relevant previous studies and reviews related to ML terminology, including: Yukl reviewed major leadership theories and summarized findings from empirical research on leadership [1]. Bolden reviewed conceptual leadership to identify its origins for further work [17]. Lekka & Healey identified specific leadership styles, behaviors, and practices that represent effective leadership [2]. Nazari & Emami discussed the status of leadership theory concerning its purpose, construct definitions, and historical foundations for future research [19]. Igbaekemen & Odvwri found the missing link between leadership styles and the impact on the follower's performance in an organization [20]. Khan et al. found the social contract of leadership is viewed as a myth that functions to reinforce existing structure about the necessity of leaders in organization [3]. Rigii found a clearer understanding of the concept and the need for practitioners to work towards ensuring organizations are aligned with best practices for leadership qualities [4]. Park et al. critically examined the literature on leadership competencies and behaviors [5]. Xie investigated the relationship between leadership and organizational culture measured in the literature [6]. Besides, Gifford et al.'s systematic review revealed that leadership for research use involves change and task-oriented behaviors [7]. According to Karim, Mansir et al., the current literature on ML development is sparse [11,21]. This observation leads to a review of the relevant literature in managerial leadership in education.

The study and research on ML has indeed been carried out from various aspects and events that occur in the world of education, but the existing research has not thoroughly explained the ML concept that can be applied to educational institutions that are programmed in a systematic, precise, accurate and sustainable manner. Based on the previous studies, there is still little research which investigated

managerial leadership in educational system and too much the research explored the leadership in education. This research will contribute to the review of the literature confirmed that what is really known about the link between ML and performance, still remains largely unanswered. Based on the phenomena, problems, and various opinions of previous researchers, the novelty of this study is a review of the consistency of articles using ML in the title with other article structures through accuracy indicators to produce history, consistency, and article accuracy classification.

Based on the literature review and the results of previous research observations conducted at educational institutions that implement ML as a system. This research will thoroughly discuss managerial leadership in education, an education system that is systematically designed in accordance with the decisions of the leadership, managerial leadership theory in terms of various aspects of organizational and institutional management, so that this research can bring out the novelty of theory from various literature related to managerial leadership.

Within this gap between what we know and what we do, this paper will focus an investigation on the litelature review connecting with managerial leadership in educational system as central key to build positive school culture to achieve educational objective. Managerial leadership represents a rapidly evolving research domain which has seen significant theoretical development to date, but is still lacking in empirical testing of theories proposed. This is an important shortcoming as managerial leadership is paramount for corporate success in education. This literature review aims to address three research questions (RQs).

RQ1	How does the history of articles using the word ML in the titles?
RQ2	How consistent are the articles using the word ML in their title with article sections based on consistency indicators?
RQ3	How is the accuracy classification of articles using the word ML measured on accuracy indicators?

To set the stage for the importance of the topic, some literature highlights the ubiquity, and increasing rate, of managerial leadership in education. On the others hand, we aimed to systematically review the published literature on managerial leadership in education with a focus on frequency, setting, content, learning evaluation, and learning outcomes. This article is a critical review of the terminology of 68 articles mentioning the word ‘ML’ in their titles. The review used four consistent and accurate indicators to classify which articles fell into accurate, appropriate, biased, and error categories.

Based on the facts and problems described in the background above, the objectives for the importance of this research can be formulated, including the history of articles using the word ML in the titles, the consistent of the articles in using the word ML in their title with article sections based on consistency indicators, and The accuracy classification of articles using the word ML measured on accuracy indicators. With this aim, a systematic review can analyze the history, consistency and accuracy of articles on ML.

2. Literature review

2.1. The theoretical origins of managerial leadership

Managerial leadership (ML) is a term that integrates management and leadership into a coherent concept [22]. Espinoza & Schwarzbart handle the convergence of roles with the title of managerial leader (MLr) [23], while Sveningsson et al. defined the ML as a work practice. In order to understand leadership as a work practice, we need more theories of managers’ behaviours [24]. Gifford et al. argued that ML, for both point-of-care and senior managers, inspire and encourage for staff through a combination of task-oriented behaviours that are responsive to specific situations [7]. Ather argued that ML is an approach of getting things done through others most effectively and efficiently in an organization [9]. The ML in very essential to influence the quality. Meanwhile, leadership is the process that managers use to influence subordinators work towards organizational goals. Conceptually, leadership can be seen as that combination of traits, values, attitudes, and behaviors that result in the effective long-term performance of organizations [25]. In line with this approach, Valentine & Prater argued that leader’s belief that collective decision making is a stronger response to solving the larger, while choosing to exercise ML skills to make routine decisions [26]. Larson identified that the problem solving was important behaviors of ML during a crisis and praise-recognition were important behaviors during a stable situation [27]. ML strategy creates change that affects the function and structure of an organization.

Before discussing more deeply about ML, it is also necessary to understand theories about leadership and management of an institution or organization, one of which is transformational leadership which can improve the quality of management processes and product innovation in institutional or organizational management [28]. In the organizational management theory, an institution or company requires knowledge dynamics and organizational orientation to ensure that one’s leadership can bring progress to the organization they lead [29]. A theoretical review of managerial leadership work demonstrated the need to explore the relationships between managerial leadership and staff job satisfaction in the educational institution [30]. The emphasis here is placed on the theoretical framework used in this study, the Multiple Linkage Model of Leader Effectiveness [31]. Moreover, This Multiple Linkage Model considered a series of leadership behaviors, leadership power/influence factors, leadership skills, overall managerial leadership effectiveness, and situational variables [32]. A combination of these factors appeared necessary for understanding effective managerial leadership. Leadership effectiveness is, of course, a relative concept [33]. A managerial leader is considered to be effective ifthe manager’s staff performs their work well and is adequately satisfied with their working milieu [34].

ML provides a four-tiered approach that helps professionals from all walks of life develop strong management and leadership skills [35]. It includes top leadership models and frameworks, tools for assessing leadership strengths, techniques for handling change and growth [36]. Specifically, MLr must have several skills: they think strategically and build effective teams and they create a healthy

organizational culture [37,38]. ML implies two fundamental dimensions: 1. Informal dimension, which stems from the expertise and the abilities the leader possesses and which is built over time by means of others' recognition. 2. Formal dimension, which stems from his formal authority, associated with a formal managerial position. ML heavily influences the performances and outcomes of organizations [39]. Characteristics of ML which combined from some of the experts' thought above are [1]; leadership roles; values, culture, attitudes, task behaviours, unstructured relationships, and loyalty motivation [13,40,41], [2] the function of manager; planning, organizing, staffing, directing, and controlling, and [3] managerial roles; interpersonal, informational, and decisional [11,42].

ML in principle will set the pattern of institutional management to advance an organization. This is done as part of the implementation of quality and quality management. This ML character is built to create a healthy and civilized organizational environment. ML style can create a ready-to-work organization and solid teamwork [43–45]. ML can be applied to educational institutions led by school principals through three approaches, namely the trait approach, which emphasizes motivation and managerial skills; the power/influence approach, which examines the accumulation and use of power; and the behavioral approach, which focuses on managerial activities [46,47]. The concept of ML pattern knowledge will be studied with various literatures to produce new theories that support educational management to be more advanced and of high quality in accordance with the policies of leaders who manage their institutions.

2.2. Theoretical review

Researchers usually define managerial leadership according to their individual perspective and the aspect of the phenomenon of most interest to them. After a comprehensive review of the ML literature, [48]. Most definition of managerial leadership involve an influence process, but the numerous definition of leadership that have been proposed appear to little else common. Most of researcher pinpointed that ML has been defined in terms of individual traits, leader behavior, interaction patterns, role relationship, follower perception, influence on task goals, and influence on institutional culture [48,49].

A theoretical framework is usually explained in the literature review section, such as ML and situational concepts [3]. In reviewing the theory, we aimed to synthesize relevant bodies of literature and make connections between knowledge bases to propose a conceptual framework. We followed guidelines; that is, location of articles, search period, number of articles screened, and criteria for screening [5]. Rigii argued that the framework depicts a situation where accountability and ethics first interact with leadership qualities [4]. Based on the conclusions and the conceptual framework, the review ends by outlining the implication of this paper on theory, practice and policy in the next section.

The authors argue that managerial concern for people determines event's success as it enhances the effectiveness of intra-team interaction, thus enabling better team performance. Managerial concern for people is closely linked to managerial competencies as they explain how effectively event managers can deal with event employees, not only when resolving conflicts, but also when setting goals. Moreover, effective leadership requires managers to develop cognitive, social and emotional intelligence in order to recognise the needs of all team members, thus anticipating changes in motivation.

2.3. Consistency terminology and accuracy indicators

In the scientific areas, the most important thing is a common understanding of the basic concepts and terms. People are historically devoted to achieving this goal [50]. Product definitions and the grant of rights are the backbone of any licensing agreement. Using consistent terminology is key [51]. Therefore, the indicators used to review the use of the ML in each part of the article are the indicators of consistency and accuracy initiated by Yablo [52], Pavese, Menditto et al., and Royer which involve being consistent and inconsistent [50,51,53], are.

2.3.1. Consistent

Consistency ensures that author, reader, leader, and manager get the information they need to make the best possible high-level of decisions [51].

- 1) Accurate term is the accuracy of the use of the word "managerial leadership" without additional terms.

Accuracy is a qualitative performance characteristics, expressing the closeness of agreement between a measurement result and the value of the measurand [53].

- 2) Additional term is the accuracy of the use of the word "managerial leadership" (ML), adding terms either at the beginning, middle, or end of the word ML in each section of the article.

Closeness of agreement between a quantity value obtained by measurement and the true value of the measurand. The misuse of the word accuracy in place of trueness in most analytical publications was recently addressed [53].

2.3.2. Inconsistent

According to Royer, inconsistent is we had realized that all our terminology was inconsistent, but had never come up with such clear, understandable, easy-to-follow language until implementing organization [51].

1) Different of term a term that is used differently from the word “ML,” but the article still discusses managerial and leadership theory.

An effort has being made to understand whether the apparent inconsistencies are due to historical stratification or to sound reasons (e.g. sectorial), and to find ways toward reducing their number –not necessarily toward a single set of meanings for the concepts and terms, but limited, in addition to their general meaning, to undisputable sectorial needs [50].

2) Additional variable are variables that are used differently from ML terms and even tend to be different. However, the article still discusses managerial or leadership.

Similarly, if one or more influence quantities cause effects on the measurement result that can be identified as systematic components of the error (systematic error), such effect is expressed by the performance characteristics trueness. It can be quantified as bias, i.e. the difference [53]. However, an inconsistent rule is not false; indeed it may be correct in the only sense that matters, that of according with speakers’ semantic intentions [52]. Managerial leadership holds a proven positive effect on the event team’s performance and employee motivation to collaborate in order to achieve the set event’s objectives. So the strong leadership makes an event’s more competitive in institutional competition.

The code of article section is divided into; problems (P), objectives (A), literature (L), results (R), and conclusions (C). While the indicator codes used are Accurate term (AT), Additional term (AdT), Different term (DT), and Additional variable (AV) as described by Table 1. The code for 68 articles is sorted by order of the year of the article. For example, the first article in 1959 was written 1a to 2019 64a, and the last year 2022 was written 68a. For the year code, the last two digits are taken. For example, 1959–2022 was written 59-22, while names are coded with initials, such as DAE.

Based on the theoretical review and managerial theory terminology described above, it can be concluded that ML can be applied with various decision-making indicators, namely the consistency and accuracy of its leaders which can influence the success of leaders in managing and managing the organization they lead.

3. Methods

The objects in this review are articles using the word managerial leadership (ML) in the titles published from 1950 to 2022, an analysis of the consistency of articles in each section of the article, and the classification of articles that fall into accurate, appropriate, biased, and error categories.

3.1. Method and approaches

The systematic literature review presented in this research has conducted a commonly applied methodology [54]. By following systematic methods to explore and classify relevant literature, such reviews provide reproducible, reliable assessments of the current status of a field of a research and diminish potential bias that may occur in narrative styles of analysis [55] by using PRISMA statement in Fig. 1. The resulting quantitative assessment evaluates the subject area, type of method used, and outcomes obtained.

This study of the literature in relation to ML in educational management addresses three main aims [1]: to examine history of article using the word ML in the titles [2]; to identify the consistent are the articles using the word ML in their title with article sections based on consistency indicators; and [3] to identify the accuracy classification of articles using the word ML measured on accuracy indicators.

An extensive review of published papers from 1950 to 2022 was carried out in order to capture consistency terminology in the area of ML. The emphasis was on those issues that either represented inconsistency in using ML that have implications for the literatures and future researchers [2]. Furthermore, methodological issues in leadership research for improving ML terminology are discussed also [1]. This article used an ML theory approach to obtain in-depth data [57], combining the role of a leader and a manager’s function [11, 12,58,59], historical [60], and internationally accepted language with consistent indicators consisting of AT and AdT and inconsistent consisting of DT and AV [50,52]. In fact, the skill and competence of ML must be enhanced for the leader to create positive culture in the educational institution [61]. Today, digital competence for leaders is very significant.

3.2. Techniques and data instrument

This review was firstl conducted on targeted articles that were most relevant to our purpose and research question in multiple online databases [5] such as Elsevier, Taylor & Francis, SAGE, Brill, Emerald, Springer, and Wiley, as well as several well-known digital

Table 1
Consistency and accuracy indicators.

Consistent		Inconsistent	
Accurate Term	Additional Term	Different Term	Additional Variable
Managerial leadership	Managerial leadership with additional term	Managerial and leadership	Managerial or leadership
4	3	2	1
75–100%	50–740%	26–49%	1–25%
Accuracy	Appropriate	Bias	Error

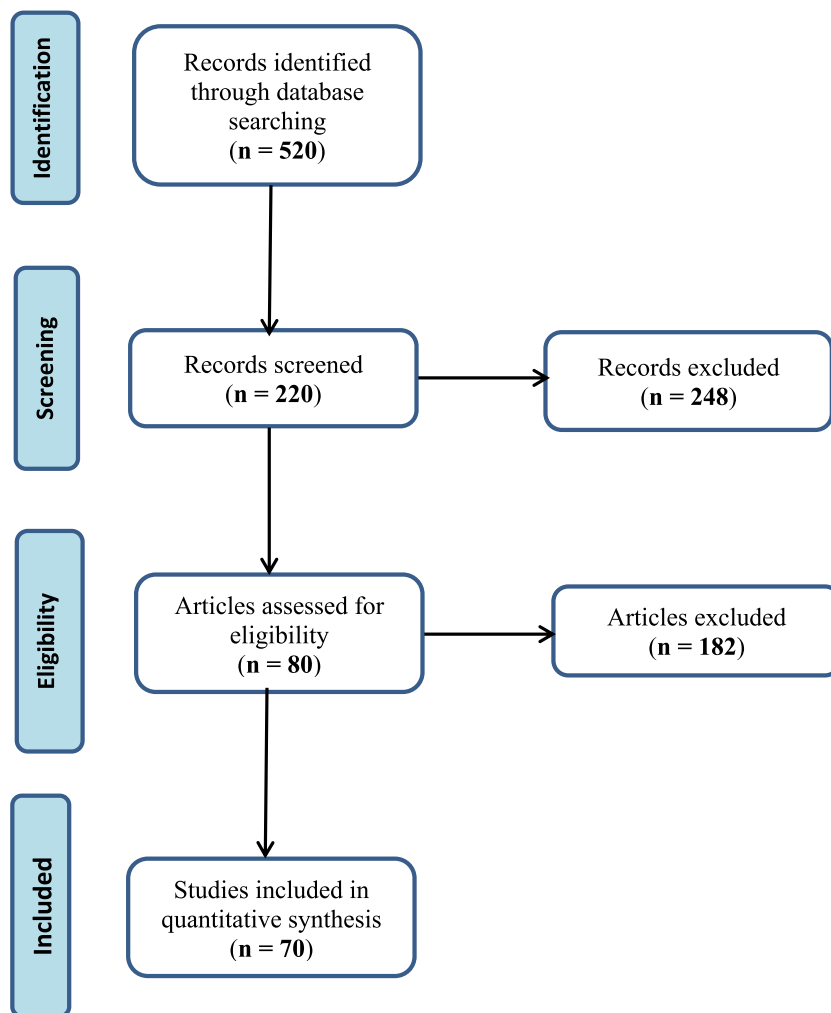


Fig. 1. Selection flow diagram for the studies. (Adapted from The PRISMA Group [56])

journal content such as Jstor, Proquest, Oxford University Press, Google Scholar, and National Library with the help of Google Chrome and Mozilla Firefox browsers [62]. The bibliographic instruments and comprehensive list of keywords and mixed search terms [63], such as ‘managerial leadership,’ ‘manager & leader,’ and ‘managerial leadership in education’ within the search titles were used to obtain 110 articles published from 1950 to 2020. The articles were selected based on the research objectives, especially the keyword ‘managerial leadership in education,’ to answer the problem formulations. As a result, this research identified 68 articles included in the final review, published between 1959 and 2022. The 68 articles were then presented according to year, name, title, and ML term in each article structures, such as problem, aims, literature, findings, and conclusions into “articles by year” files, “article section recapitulation,” and “review recapitulation” [64]. The year, name, and ML word in each article section and indicators were coded to simplify the review and analysis process. For example, in 1950, there was a DAE article. The code for the problem section that corresponded to the AT indicator was coded PAT1a59DAE, meaning that P stands for problem, AT means AT indicator, 1a means the first article, 59 means published in 1959, and DAE means the author’s name [50,52,53].

3.3. Data analysis and validation

The 68 articles were analyzed using a content analysis technique through four indicators, namely AT, AdT, DT, and AV, to review the consistency of the use of the term ML in the title with other structures [65]. The data already contained in the file by year were analyzed for each part of the article structure. Then, each word was reduced and simplified so that only words or terminology appeared in each table according to indicators [66,67]. Once it had been simplified, the results were recapitulated and interpreted in a separate table. The data that had been successfully interpreted was then validated using the grounded theory ML technique to become data presented in the results and discussion [68,69].

Table 2
Articles details.

Date	Author(s)	Title	Database/Publisher/journal/doi/url	Vol(No):p.	Code
1959	DAE	ML	Wiley (W)/(PP)/doi	12(1):65-79	1a
1965	JKC-J	ML	Wiley (W)/(JMS)/doi	2(3):319-30	2a
1971	NG	ML	Elsevier (E)/(BH)/doi	14(6):33-43	3a
1980	P	ML	Proquest (P)/(UO)		4a
1986	CM	ML	Taylor&Francis (T&F)/(JGHE)/doi	10(1):102 = 09	5a
1986	JDM	ML	Jstor (Js)/(JDA)/url	21(1):15-30	6a
1987	GE	M Ethical L (MEL)	Jstor (Js)/(JBE)	6: 657-663	7a
1989	WF" B" A	ML Behavior (MLB)	Wiley (W)/(PI)	28(1):43-46	8a
1989	GY	ML	Sage (S)/(JM)/doi	15(2):251-89	9a
1990	JIAR	ML	Springer (S)/(JBE)	9:293-316	10a
1992	RH	ML	Proquest (P)/(UM)		11a
1992	LEF	ML	Proquest (P)/(UM-K)		12a
1995	PEM	MEL	Sage (S)/(BEQ)/doi	5(1):117-28	13a
1996	DRL	MLB	Proquest (P)/(HU)		14a
1998	YAN	ML	Elsevier (E)/(BH)/doi	41(4):19-26	15a
1999	EY	ML	Google Scholar (GS)/(NDCC)/doi	105:67-74	16a
2001	MG	ML	Springer (S)/(JBE)/doi	34(3):175	17a
2002	DPK	ML	Proquest (P)/(GSU)		18a
2002	SKK	ML Styles (MLS)	Google Scholar (GS)/(ILAC)		19a
2003	AO'D	Role of ML (RML)	Google Scholar (GS)/(UAHSE)		20a
2004	CK	MLB	Proquest (P)/(HT)/doi	82(4):2	21a
2004	DBC	ML Development (MLD)	Wiley (W)/(HRDQ)/doi	15(2):217-48	22a
2004	S	ML	Elsevier (E)/(BH):doi	47(1):7-18	23a
2006	AMMR	Managers' Leadership Style (MrLS)	Emerald (Em)/(LHS)/doi	19(2):1366	24a
2006	TH	ML Roles (MLR)	Elsevier (E)/(JPN)/doi	22(6):339-46	25a
2007	AEO-A	ML	Emerald (Em)/(TQMM)/doi	19(6)	26a
2007	EL	ML Practices (MLP)	Proquest (P)/(WU)		27a
2007	FCM	ML	Google Scholar (GS)/(BBU)	44-62	28a
2007	WJP	ML	Proquest (P)/(PF)	31(2):1-32	29a
2007	SMA	ML	Google Scholar (GS)/(IUCs)	4:7-24	30a
2007	WGRN	ML	Wiley (W)/(IS)/doi	13(127):126-45	31a
2008	HPN	ML Implications (MLI)	Jstor (Js)/(AD)/doi	33(4):97-116	32a
2008	JS	MrLS	Google Scholar (GS)/(JAH)	37(1):38-44	33a
2008	TOP	Managerial Leaders (MLr)	Taylor&Francis (T&F)/(PPMR)/doi	31(4): 503-516	34a
2008	JGJH	ML	Elsevier (E)/(LQ)/doi	20(4):503-16	35a
2009	ANa	ML	Jstor (Js)/(OEM)/doi	66:51-55	36a
2009	DA	ML	Elsevier (E)/(R)/doi	15(2):113-20	37a
2009	ANb	ML	Google Scholar (GS) (KIS)		38a
2010	CK	MLB	Taylor & Francis (T&F)/(HT)/doi	82(4)	39a
2011	IH	ML	Sage (S)/(L)/doi	6(4):353-72	40a
2011	IW	ML	Elsevier (E)/(JWB)/doi	46:234-41	41a
2011	JYC	ML Competencies (MLC)	Elsevier (E)/(PLBE)/doi	17-33	42a
2011	JWV	ML	Sage (S)/(NASSPB)/doi	95(1):5-30	43a
2011	RFL	ML	Google Scholar (GS)/(APJBM)	2(1):65-91	44a
2011	RC	MLr	Wiley (W)/(JCD)/doi	97(3):120-26	45a
2012	EMG	ML	Taylor&Francis (T&F)/(ICUT)/doi	22(2):79-80	46a
2012	RMS	ML	Taylor&Francis (T&F)/(APBR)/doi	18(3):425-439	47a
2012	RRS	ML.	Proquest (P)/(TNU)		48a
2012	S	ML	(OUP)/(UQBSP)/doi	69-86	49a
2012	YJ	MLS	Google Scholar (GS)/(ASC)		50a
2013	BDH	MLS	Proquest (P)/(NSU)		51a
2013	CS	ML	Taylor&Francis(T&F)/(APBR)/doi	19(3):356-380	52a
2013	DG	ML	Emerald (Em)/(IJLPS)/doi	9(1):59-64	53a
2013	LK	MLS	Google Scholar (GS)/(STSR)	. 4 (33):18-24	54a
2014	MB	ML	Elsevier (E)/(SJM):doi	30(3):344-357	55a
2015	FL	RML	Google Scholar (GS)/(IA8)	8:159-167	56a
2016	HHHL	ML	Proquest (P)/(NDSU)		57a
2017	ALD	MLS	Jstor (Js)/(AMJ)/doi	7(4)	58a
2018	CS	ML Strategies (MLSt)	Google Scholar (GS)/(CMR)/doi	14(2):87-120	59a
2018	DDM	MLB	Google Scholar (GS)/(HRDTD)/url	31	60a
2018	LX	Leadership and Organizational (LO)	Emerald (Em)/(EJTD)/doi	43(1):76-104	61a
2018	WAG	ML	Google Scholar (GS)/(IS)/doi	13(127):1-23	62a
2019	LMG	ML	Elsevier (E)/(RCR)/doi	140: 54-64	63a
2019	SV	ML Skills (M-LSk)	Wiley (W)/(PIQ)/doi	32(3):237-63	64a
2021	ESO	MLS	Emerald (Em)/(ERLJ)/doi	43(6):1362-1381	65a
2022	KT	MLB	Taylor&Francis (T&F)/(APJSWD)/doi	Latest article	66a
2022	JKT	MLS	Sage (S)/(GBR)/doi	23(3): 543-560	67a
2022	AB	Managers' Leadership (MrL)	Wiley (W)/(JCN)/doi	31(9-10):1377-1388	68a

Table 3
Articles titles type.

Year	Title Type								N
	ML		MrL/MLr		ML + T		L		
	H	sH	H	sH	H	sH	H	sH	
50s	1a								1
60s	2a								1
70s	3a								1
80s	4a,5a,6a,9a				7a,8a				6
90s	10a,12a,15a,16a	11a			13a,14a				7
2000s	17a,18a,23a,26a,28a,29a,30a,31a,35a,36a,37a,38a		24a,33a	34a	19a,20a,21a,22a,25a,27a,32a				22
2010s	40a,41a,43a,44a,46a,47a,48a,49a,52a,53a,57a,62a	55a,63a	45a		39a,42a,50a,51a,54a,56a,58a,59a,60a,64a		6a		26
2020s			68a		65a, 67a	66a,			4
Sum	35	3	4	1	23	1	1		68
Def.	H = Header, sH = sub-Header, MrL = Managers' Leadership, MLr = Managerial Leaders, ML + T = ML Added Term, L = Leadership								

Table 4

Review on articles' problems (P), aims (A), literatures (L), results (R), and conclusion (C) published from 1959 to 2022.

Date of publications	64 Authors	AT	AdT	DT	AV
1959	P = 1 A = 1 L = 1 R = 1 C = 1	P = 1 (PAT1a59DAE) RML A = 1 (AAT1a59DAE) ML L = 1 R = 0 C = 0	P = 0 A = 0 L = 1 (LAdT1a59DAE)MLD R = 1 (RAdT1a59DAE) MML C = 1 (CAdT1a59DAE) MML	P = 0 A = 0 L = 0 R = 0 C = 0	P = 0 A = 0 L = 0 R = 0 C = 0
1965	P = 1 A = 1 L = 1 R = 1 C = 1	P = 0 A = 1 (AAT2a65JKC-J) IML L = 0 R = 0 C = 0	P = 0 A = 0 L = 0 R = 0 C = 0	P = 0 A = 0 L = 0 R = 0 C = 0	P = 1 (PAV2a65JKC-J)LE A = L = 1 (LAV2a65JKC-J)LE R = 1 (RAV2a65JKC-J)LE C = 1 (CAV2a65JKC-J)LE
1971	P = 1 A = 1 L = 1 R = 1 C = 1	P = 0 A = 0 L = 0 R = 0 C = 0	0 = 0 A = 0 L = 0 R = 0 C = 0	P = 0 A = 0 L = 0 R = 0 C = 0	P = 1 = (PAV3a71NG)ELR A = 1 (AAV3a71NG)PVJF L = 1 (LAV3a71NG)LF R = 1 (RAV3a71NG)LF C = 1 (CAV3a71NG)LF
1980	P = 6	P = 0	P = 3 (PAdT7a87GE)EDL	P = 1 (PDT6a86JDM)	P = 2 (PAV4a80P)MS
1986	A = 6	A = 0	(PAdT8a89WF"B"A)MCLB	ILSS	(PAV5a86CM)VM
1986	L = 6	C = 0	(PAdT9a89GY)LIPM	A = 1 (ADT6a86JDM)	A = 0
1987	R = 6	C = 0	A = 5 (AAdT4a80P)ALS	SM	L = 2 (LAV4a80P)MST
1989	C = 6	C = 1 (CAT4a80P)ML	(AAdT5a86CM)VML (AAdT7a87GE)MEL (AAdT8a89WF"B"A)LCM (AAdT9a89GY)LVM L = 3 (AAdT7a87GE)MEL (LAdT8a89WF"B"A)MLB (LAdT9a89GY)M,LB R = 4 (RAdT4a80P)MSM (RAdT7a87GE)MEL (RAdT8a89WF"B"A)MLB (RAdT9a89GY)M,LB C = 3 (CAdT7a87GE)MEL (CAdT8a89WF"B"A)MLB (CAdT9a89GY)JLCT	L = 1 (LDT6a86JDM)SS R = 1 (RDT6a86JDM)SS C = 1 (CDT6a86JDM)SS	(LAV5a86CM)VML R = 1 (RAV5a86CM)VML C = 1 (CAV5a86CM)VML
1990 – 2000	P = 7 A = 7 L = 7 R = 7 C = 7	P = 2 (PAT11a92HR)ML (PAT12a92LEF)APL A = 1 (AAT12a92LEF) ML L = 2 (LAT12a92LEF) MLP (LAT14a96DRL)ML R = 2 (RAT12a92LEF) ML (RAT16a99EY)ML C = 2 (CAT12a92LEF) ML (CAT14a96DRL)ML	P = 1 (PAdT13a95PEM) MEL A = 3 (AAdT13a95PEM) MEL (AAdT14a96DRL)LBMR (AAdT15a98YAN)MNC L = 3 (LAdT10a90JIAR) CLMR (LAdT11a92HR)MLF (LAdT13a95PEM)MEL R = 1 (RAdT13a95PEM) MEL C = 2 (CAdT13a95PEM) MEL (CAdT16a99EY)M&L P = 2 (PAdT21a04CK)MLB (PAdT23a04S)M< A = 3 (AAdT20a03AO'D) RML (AAdT21a04CK)MLB (AAdT23a04S)LSHM L = 2 (LAdT17a01MG)EL (LAdT23a04S)LSM R = 4 (RAdT17a01MG) MML	P = 2 (PDT10a90JIAR) EM (PDT14a96DRL)INP A = 3 (ADT10a90JIAR) OC (ADT11a92HR)BCM (ADT16a99EY)LB L = 1 (LDT16a99EY)LB R = 2 (RDT10a90JIAR) EP (RDT14a96DRL)ZCE C = 2 (CDT10a90JIAR) ELM (CDT11a92HR)BI	P = 2 (PAV15a98YAN) MC (PAV16a99EY)LM A = 0 L = 1 (LAV15a98YAN) MNC R = 2 (RAV11a92HR)PL (RAV15a98YAN)MNC C = 1 (CAV15a98YAN) MNC
2001 – 2004	P = 7 A = 7 L = 7 R = 7 C = 7	P = 1 (PAT18a02DPK) ML A = 1 (AAT18a02DPK) ML L = 2 (LAT18a02DPK) LM (LAT21a04CK)MrL R = 1 (RAT18a02DPK) ML	P = 2 (PAdT21a04CK)MLB (PAdT23a04S)M< A = 3 (AAdT20a03AO'D) RML (AAdT21a04CK)MLB (AAdT23a04S)LSHM L = 2 (LAdT17a01MG)EL (LAdT23a04S)LSM R = 4 (RAdT17a01MG) MML	P = 2 (PDT20a03AO'D) LF (PDT22a04DBC)DE A = 3 (ADT17a01MG)PL (ADT19a02SKK)MS (ADT22a04DBC)FTI L = 2 (LDT20a03AO'D) RM (LDT22a04DBC)OL L = 0	P = 2 (PAV17a01MG) MCL (PAV19a02SKK)MS A = 0 L = 1 (LAV19a02SKK)MS R = 2 (RAV19a02SKK)MP (RAV22a04DBC)RL C = 2 (CAV20a03AO'D) MS (CAV22a04DBC)RL

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Table 4 (continued)

Date of publications	64 Authors	AT	AdT	DT	AV
		C = 2 (CAT17a01MG) ML (CAT18a02DPK)ML	(RAdT20a03AO'D)MSL (RAdT21a04CK)LSM (RAdT23a04S)LM C = 2 (CAdT21a04CK) MrLS (CAdT23a04S)MrL	C = 1 (CDT19a02SKK) RMr	
2005 – 2009	P = 15 A = 15 L = 15 R = 15 C = 15	P = 4 (PAT30a07SMA) PM (PAT34a08TOP)MLB (PAT35a08JGJH)ML (PAT38a09Anb)ML A – 6 (AAT27a07EL) MLP (AAT30a07SMA)PML (AAT32a08HPN)MLI (AAT35a08JGJH)MLL (AAT36a09ANa)AML (AAT38a09Anb)ML L = 4 (LAT26a07AEO-A) ML (LAT28a07FCM)ML (LAT30a07SMA)MML (LAT38a09Anb)ML R = 4 (RAT30a07SMA) LM (RAT32a08HPN)ML (RAT34a08TOP)MLB (RAT35a08JGJH)MLr C = 1 (CAT30a07SMA) MrL	P = 3 (PAdT31a07WGRN) LBM (PAdT26a07AEO-A)MLP (PAdT28a07FCM)CML A = 6 (AAdT24a06AMMR) MrLS (AAdT26a07AEO-A)RML (AAdT28a07FCM)L&M (AAdT31a07WGRN)LAM (AAdT33a08JS)MrLS (AAdT34a08TOP)MLB L = 5 (LAdT25a06TH)MLR (LAdT29a07WJP)OL (LAdT31a07WGRN)LBM (LAdT34a08TOP)MLB (LAdT37a09DA)LSM R = 3 (RAdT24a06AMMR) LSM (RAdT28a07FCM)M&L (RAdT38a09Anb)LBM C = 6 (CAdT24a06AMMR) LSM (CAdT25a06TH)MLR (CAdT28a07FCM)M&L (CAdT34a08TOP)MLB (CAdT37a09DA)LSM (CAdT38a09Anb)MBLr	P = 4 (PDT24a06AMMR)EJS (PDT25a06TH)AP (PDT27a07EL)LWC (PDT37a09DA)CO A = 1 (ADT25a06TH) SVC L = 2 (LDT32a08HPN) PSD (LDT35a08JGJH)OT R = 2 (RDT25a06TH)OV (RDT37a09DA)CO	P = 4 (PAV32a08HPN) PPS (PAV33a08JS)LS (PAV29a07WJP)OE (PAV36a09ANa)MB A = 2 (AAV29a07WJP)OL (AAV37a09DA)LB L = 4 (LAV24a06AMMR) LS (LAV27a07EL)LT (LAV33a08JS)ELS (LAV36a09ANa)MB R = 6 (RAVT26a07AEO-A)MLE (RAV27a07EL)LP (RAV29a07WJP)LA (RAV31a07WGRN)MA (RAV33a08JS)TLS (RAV36a09ANa)MB C = 8 (CAV26a07AEO-A) MP (CAV27a07EL)LT (CAV29a07WJP)LA (CAV31a07WGRN)MIR (CAV32a08HPN)EA (CAV33a08JS)TLS (CAV35a08JGJH)AEL (CAV36a09ANa)MB P = 4 (PAV40a11IH)FMW (PAV41a11IW)LOBE (PAV47a12RMS)ICL (PAV52a13CS)ELC A = 0 L = 4 (LAV40a11IH)FMW (LAV44a11RFL)PL (LAV52a13CS)LE (LAV54a13LK)LS R = 2 (RAV47a12RMS)LB (RAV54a13LK)ELS C = 4 (CAV40a11IH)LTS (CAV41a11IW)PL (CAV47a12RMS)RCLB (CAV54a13LK)LS
2010 – 2015	P = 18 A = 18 L = 18 R = 18 C = 18	P = 5 (PAT39a10CK) MLB (PAT45a11RC)ML (PAT44a11RFL)ML (PAT48a12RRS)MLr (PAT55a14MB)LCM A = 6 (AAT41a11IW)ML (AAT45a11RC)ML (AAT48a12RRS)ML (AAT49a12S)ML (AAT55a14MB)ML (AAT56a15RL)ML L = 8 (LAT41a11IW)ML (LAT42a11JYC)MLr (LAT43a11JWV)ML (LAT45a11RC)MLP (LAT48a12RRS)ML (LAT53a13DG)ML (LAT55a14MB)ML (LAT56a15RL)EML R = 6 (RAT44a11RFL) ML (RAT45a11RC)ML (RAT48a12RRS)PLJ (RAT49a12S)ML (RAT53a13DG)MLr (RAT55a14MB)ML	P = 6 (PAdT42a11JYC) ECM (PAdT43a11JWV)PML (PAdT49a12S)PL (PAdT50a12YJ)ELE (PAdT51a13BDH)MLS (PAdT56a15RL)L&MR A = 7 (AAdT39a10CK)MLB (AAdT40a11IH)EL (AAdT42a11JYC)MR (AAdT43a11JWV)PM (AAdT50a12YJ)LSM (AAdT51a13BDH)MLS (AAdT54a13LK)LSM L = 5 (LAdT39a10CK)MLB (LAdT47a12RMS)GM,L (LAdT49a12S)TLMB (LAdT50a12YJ)MLS (LAdT51a13BDH)LMS R = 7 (RAdT39a10CK) MTLB (RAdT42a11JYC)ECM (RAdT43a11JWV)PLB (RAdT50a12YJ)PLSM (RAdT51a13BDH)LSME (RAdT52a13CS)Mr&L (RAdT56a15RL)TP	P = 3 (PDT46a12EMG) CRE (PDT53a13DG)FC (PDT54a13LK)PWL A = 5 (ADT44a11RFL) PL (ADT46a12EMG)MS (ADT47a12RMS)LB (ADT52a13CS)EL (ADT53a13DG)CE L = 1 (LDT46a12EMG) AP R = 3 (RDT40a11IH)EL (RDT41a11IW)LP (RDT46a12EMG)AP C = 2 (CDT53a13DG)LP (CDT46a12EMG)AP	

(continued on next page)

Table 4 (continued)

Date of publications	64 Authors	AT	AdT	DT	AV
2016–2020s	P = 12 A = 12 L = 12 R = 12 C = 12 T=340	C = 4 (CAT42a11JYC) MLr (CAT45a11RC)ML (CAT48a12RRS)ML (CAT55a14MB)ML	C = 8 (CAdT39a10CK) MTLB (CAdT43a11JWV)PL (CAdT44a11RFL)MLB (CAdT49a12S)LMB (CAdT50a12YJ)MPDLS (CAdT51a13BDH)TLS (CAdT52a13CS)MEL (CAdT56a15RL)LMOP		
		P = 4 (PAT57a16HHHL) ML (PAT58a17ALD)EML (PAT65a21ESO)ML (PAT68a22AB)ML A = 5 (AAT57a16HHHL)ML (AAT58a17ALD)ML (AAT64a19SV)MLSk (AAT65a21ESO)ML (AAT68a22AB)ML L = 4 (LAT57a16HHHL) ML (LAT64a19SV)MLSk (LAT65a21ESO)ML (LAT68a22AB)ML R = 2 (RAT65a21ESO) ML (RAT68a22AB)ML C = 4 (CAT62a18WAG) MrLP (CAT64a19SV)MLSk (CAT65a21ESO)ML (CAT68a22AB)ML AT = 87 (25%)	P = 3 (PAdT62a18WAG) LPM (PAdT64a19SV)LMS (PAdT67a22JKT)LSM A = 4 (AAdT59a18CS)MP (AAdT62a18WAG)LBM (AAdT63a19LMG)MrEL (AAdT67a22JKT)LSM L = 5 (LAdT59a18CS)MLS (LAdT60a18DDM)MLE (LAdT62a18WAG)LBM (LAdT63a19LMG)MEL (LAdT67a22JKT)LSM R = 6 (RAdT57a16HHHL) LBM (RAdT62a18WAG)MPLB (RAdT63a19LMG)MEL (RAdT64a19SV)LFM (RAdT66a22KT)MLB (RAdT67a22JKT)LSM C = 3 (CAdT57a16HHHL) LBM (CAdT66a22KT)MLB (CAdT67a22JKT)LSM AdT = 121 (36%)	P = 2 (PDT59a18CS)MO (PDT63a19LMG)EB A = 2 (ADT60a18DDM) MB (ADT61a18LX)LOC L = 1 (LDT66a22KT)M R = 1 (RDT58a17ALD) PPF C = 2 (CDT58a17ALD) PTSO (CDT63a19LMG)MC DT = 54 (16%)	P = 3 (PAV60a18DDM) OPM (PAV61a18LX)LS (PAV66a22KT)OP A = 1 (AAV66a22KT)OP L = 2 (LAV58a17ALD)LM (LAV61a18LX)LT R = 3 (RAV59a18CS)MPR (RAV60a18DDM)MBPR (RAV61a18LX)TL C = 3 (CAV59a18CS)MS (CAV60a18DDM)MB (CAV61a18LX)TL AV = 78 (23%)

4. Results

4.1. Article history using world ML

Based on the data analysis of this study, the result of the history of articles using the word ML in the titles will be presented on Table 2 and Table 3. Our systematic review attempted to analyze the paper based on history of publication from 1959 to 2022 concerning the ML in education. So we will illustrate in table below.

The article table using the word ML in the titles reveals: 1) GS provided 14 articles from 1999 to 2022 with article code/year/author/publisher/journal as follows: 16a99EY/GS/NDCC to 62a18WAG/GS/IS. 2) ProQuest provided 11 articles from 1980 to 1957 with codes 4a80 P/P/UO to 57a16HHHL/P/NDSDU. 3) Elsevier published ten articles from 1971 to 2008 with the code 3a71NG/E/BH to 35a08JGJH/E/LQ. 4) Wiley published eight articles from 1959 to 2022 with the code 1a59DAE/W/PP to 68a22AB/W/JCN. 5) Taylor & Francis published seven articles in 1990–2022 with codes 5a86CM/T&F/JGHE to 66a22 kT/T&F/APJSWD. 6) JSTOR provided five articles from 1986 to 2017 with code 6a86JDM/Js/JDA up to 58a17ALD/Js/AMJ. 7) Emerald published five articles from 2006 to 2021 with codes 24a06AMMR/Em/LHS to 65a22ESO/Em/ERIJ. 8) SAGE published five articles from 1989 to 2022 with codes 9a89GY/S/JM to 67a22JKT/S/GBR. 9) Springer published two articles in 1990 and 2001 under the code: 10a90JIAR/S/JBE & 17a01 MG/S/JBE. 10) OUP published one article in 2012 with the code 49a12S/OUP/UQBSP. Wiley published the first and last articles with ML term in the titles. GS, the largest database of five other databases, provided 14 articles entitled ML. Meanwhile, Elsevier, the largest publisher of the six publishers, provided ten articles with ML in the titles.

In the 50s, one article was found with code 1a, then in the 60s with code 2a, and the 70s with code 3a. The three articles using ML are in the main title (header). In the 80s, six articles used the word ML with the following details: four articles with codes 4a - 9a with the word ML, then two articles with codes 7a and 8a with the addition of the words ethical and behavior. The word ML in the six articles is in the main title (header). In the 90s, seven articles had the word ML with the following details: five articles with codes 10a - 16a with the word ML, then two articles with codes 13a and 14a were added with the words practice, ethical, and behavior. The word ML in six articles with codes 10a - 16a is in the main title (header), while one with code 11a is in the sub-header. The title of the article

published in 1959 that first used the word ML in the main title is an article with code 1a, with DAE as the author, W, as the published, and PP as the journal. In addition, the title of the first 1987 article with the addition of the word 'ML' located in the main title is the article coded 7a, with GE as the author, the Js database, and the JBE journal.

In the 2000s, the articles with the word ML in the titles reached 22 articles with the following details: twelve articles with codes 17a - 38a, then one with code 34a, with the word 'managerial leaders', and seven with code 19a- 32a with other words styles, roles, behaviors, development, practices, and implications, and two articles with codes 24a and 33a using 'managers' leadership.' The words for both ML and 'managers' leadership' in 21 articles with codes from 17a - 38a are in the main title (header). In contrast, another article coded 34a uses the word managerial leaders located in the sub-header. The title of the article published in 2008 using managerial leaders, which is in the sub-title, is the article coded 34a, with TOP as the author, T&F as the publisher, and PPMR as the journal. Meanwhile, the first 2006 issue title uses the other words managers' leadership style. It is in the main title is the article coded 24a, with AMMR as the author, E as the publisher, and LHS as the journal.

In the 2010s, the title of articles with ML term reached 26 articles with the following details: 14 articles with codes from 40a - 63a. One article coded 45a with the word managerial leaders, eleven articles coded from 39a - 70a with the words 'behaviors', 'competencies', 'styles', 'roles', 'strategies', and 'skills,' and an article with code 61a that only uses the word 'leadership.' As for the location of the words both ML and 'managerial leaders,' there are 24 articles with codes from 39a - 62a and 70a in the main title (header). Meanwhile, two other articles with the word 'managerial leaders' coded 55a and 63a are in the sub-header. The title of the first and only 2012 published article in the main title is an article coded 46a, with EMG as the author, T&F as the publisher, and ICUT as the journal. At the same time, the title of the last article published in 2019 using a hyphen (-) M-L skill located in the main title is an article coded 70a, with SV as the author, W, as the publisher, and PIQ as the journal. In addition, the only article titles published in 2018 that only use the word leadership are articles coded 61a, with LX as the author, E as the publisher, and EJTD as the journal. In the 2020s, four articles were found with code 65a - 68a. One article with code 68a uses the title MrL with the heading type, and one article with code 66a uses the title L as a sub-heading, while the other two articles with codes 65a and 67a use the title ML + T as a heading.

Research has consistently shown, however, that leadership is a skill that can be taught and improved. This theme of leadership teachability was echoed in several of the study populations reviewed in this study, where residents felt more confident after participating in explicit teaching programs about leadership.

4.2. Article consistency

Our systematical literature review in this stage, we have determined the publication papers in several reputable journals based on Problem, Aims, Literatures, Results, and Conclusion concerning ML. for further analysis we display in [Table 4](#) below.

According to the AT indicator, the problems section contains 17 items (20%) from articles code (PAT1a59DAE) to (PAT68a22AB), the aims section includes 21 items (24%) from code (AAT1a59DAE) to (AAT68a22AB), the literature section contains 20 items (23%) from code (LAT12a92LEF) to (LAT68a22AB), the results section includes 15 items (17%) from code (RAT12a92LEF) to (RAT68a22AB). The conclusion section contains 14 items (16%) from code (CAT4a80P) to (CAT68a22AB), with 87 items (25% of 340 items), it means 17 articles which were used the ML.

Beside that, according to the AdT indicator, the problems section contains 18 items (15%) from the code (PAdT7a87GE) to (PAdT67a22JKT). The aims section includes 28 items (23%) from the code (AAdT4a80P) to (AAdT67a22JKT), the literature section has 24 items (20.7%) from code (LAdT1a59DAE) to (LAdT67a22JKT), the results section include 26 items (21%) from code (RAdT1a59DAE) to (RAdT67a22JKT), the conclusion section consists of 25 items (21%) from code (CAdT1a59DAE) to (CAdT67a22JKT), with 121 items (36% of 340 items), it means 24 articles which are adding ML with the words ethical, behaviors, roles, style, development, function, position, skills, environmental, methods, principals, and performs.

Then, according to the DT indicator, the problems sections contains 14 items (26%) from the code (PDT6a86JDM) to (PDT63a19LMG), the aims section has 15 items (28%) from the code (ADT6a86JDM) to (ADT61a18LX), the literature section has 8 items (15%) from code (LDT66a22KT) to (LDT6a86JDM), the results section includes 9 items (17%) from code (RDT6a86JDM) to (RDT58a17ALD), the conclusion section contains 8 items (5%) from code (CDT6a86JDM) to (CDT63a19LMG), with 54 items (16% of 340 items), it means 11 articles not included in articles that use the word ML, but still discussing leaders and managers.

Additional indicators of variable suitability with the problems section contained 19 items (24%) from code (PAV2a65JJC-J) to (PAV66a22KT), the aims section has 4 items (5%) from code (AAV3a71NG) to (AAV66a22KT), literature section has 16 items (20%) from the code (LAV2a65JJC-J) up to (LAV61a18LX), the results section contains 18 items (23%) from the code (RAV2a65JJC-J) to (RAV61a18LX), the conclusion section contains 21 items (27%) from the code (CAV2a65JJC-J) to (CAV61a18LX), with 78 items (23% of 340 items), it means 16 articles not using the word ML, but still discussing managerial or leadership.

Thus, the consistency of the title with other article sections based on four indicators is as follows: 87 of 340 items (25% of 68 articles) is 17 articles according to the AT indicator, 121 of 340 items (36% of 68 articles) is 24 articles with the AdT indicator, 54 of 340 items (16% of 68 articles) is 11 articles with the DT indicator, and 78 of 340 items (23% of 68 articles) is 16 articles with AV indicators. The article sections with four indicators show those 24 articles which are consistent with ML by additional terms (AdT).

A major finding in our study is that even managerial leadership may bear strong imprints of the constructions of subordinates and is even often initiated (or inhibited) by the very targets for leadership, i.e. the 'followers'. This is to some extent in line with parts of the literature on active, self-leading followers, but in contrast, our study highlights the followers' initiation of the managerial leadership process, and therefore adds a new angle.

4.3. Article accuracy

The data in Table 5 for the 68 articles bellow show that approximately between 14 and 21 articles correspond to the AT indicator with the following details: 17 articles on the problem section, 21 articles on the aim, 20 articles on the literature, 15 articles on the results, and 14 articles on conclusion. Then other data shows that between 18 and 28 articles correspond to the AdT indicator with the following details: 18 articles on the problem section, 28 articles on the aim, 24 articles on the literature, 26 articles on the results, and 25 articles on the conclusion. Then the article data, according to the different term indicators, contain between 6 and 15 articles with the following details: 15 articles on the problem aspect, 15 articles on the aims, 6 articles on the literature, 9 articles on the results, and 7 articles on the conclusion. Finally, the article data that corresponds to the additional variable indicator contains approximately 4–22 articles with details as follows: 18 articles on the problem section, 4 articles on the aim, 18 articles on the literature, 18 articles on the results, and 22 articles on the conclusion section.

Classification of articles those fall into the accuracy category in using the word managerial leadership (ML) in the title section with other article sections, namely 10 articles with article codes/year/author as follows: 7a87GE published in 1987, 8a89WFBA in 1989, 12a92LEF in 1992, 18a02DPK in 2002, 30a07SMA in 2007, 45a11RC in 2011, 48a12RRS in 2012, 55a14MB in 2014, 67a22JKT in 2022, and 68a22AB in 2022. Meanwhile, the classification of articles that fall into the category of accuracy in using the word ML adds the words 'ethical,' 'behaviors,' and 'style' in the title section with other article sections, namely 23 articles with the code: 9a89GY published in 1989, 13a95PEM in 1995, 14a96DRL in 1996, 1a04CK2 in 2004, 23a04S in 2004, 28a07FCM in 2007, 34a08TOP in 2008, 35a08JG(J.)H in 2008, 38a09ANb in 2009, 39a10CK in 2010, 42a11JYC in 2011, 43a11JWV in 2011, 44a11RFL in 2011, 49a12S in 2012, 50a12YJ in 2012, 51a13BDH in 2013, 53a13DG in 2013, 56a15FL in 2015, 57a16HHHL in 2016, 62a18WAG in 2018, 64a19SV in 2019, 65a21ESO in 2021, and 67a22JKT in 2022.

Then, the articles are categorized as appropriate in using the word ML in the title section with other article sections, namely 15 articles, divided into two groups. The first group, articles that use the word ML in the title but have other words in other parts of the article, are 10 articles with the following code: 1a59DAE published in 1959, 9a89GY in 1989, 23a04S in 2004, 28a07FCM in 2007, 34a08TOP in 2008, 38a09ANb in 2009, 43a11JWV in 2011, 49a12S in 2012, 57a16HHHL in 2016, and 62a18WAG in 2018. The second group is articles that use the word ML with other words in the title, but there is a change to the word ML in other sections, namely five articles with the code: 21a04CKa published in 2004, 39a10CKb in 2010, 42a11JYC in 2011, 56a15FL in 2015, 70a19SV in 2019, and 65a21ESO in 2021. As for the articles in the appropriate category based on the results of the score calculation, there are four articles with the codes: 14a96DRL, 35a08JG(J.)H, 44a11RFL, and 53a13DG were published between 1996 and 2013.

Beside that, the articles were categorized as biased in using the word ML in the title section, then changed to managerial and leadership words in the other articles, namely 1 article with code 6a86JDM published in 1986. Several articles with other biased categories based on the results of the score calculation; there were 23 articles divided into two groups: the first group with 16 articles that used the word ML in the title section and underwent changes in the article section, coded 4a80P, 10a90JIAR, 11a92HR, 16a99EY, 17a01MG, 22a04DBC, 26a07AEO-A, 31a07WGRN, 32a08HPN, 36a09ANa, 37a09DA, 40a11IHDA, 41a11IW, 47a12RMS, 52a13CS, and 63a19LMG published from 1965 were scattered until 2013. Meanwhile, in the second group, 7 articles used the word ML with additions in the title section and changed the parts of the article, namely articles coded 20a03AOD, 24a06AMMR, 25a06TH, 27a07EL, 58a17ALD, 59a18CS, and 66a22KT published from 2003 to 2018.

The last, the classification of articles was categorized as an error in using the word ML in the title section, then changed to the word managerial or leadership only in the article section, namely an article coded 3a71NG published in 1971. The article includes another error because it does not use the word ML in the title. Still, the word leadership later changed to managerial and leadership words in the article section; an article coded 61a18LX was published in 2018. In addition, nine other articles are categorized as errors based on the results of the calculation of scores which are divided into two groups: the first group contains five articles that use the word ML in the title and then change to managerial and leadership with the code 2a65JKC-J, 5a86CM, 15a98YAN, 46a12EMG, and 29a07WJrP which were published from 1965 to 2007. The second group contains four articles with the word ML and other words but changed to the word managerial and leadership, articles coded 19a02SKK, 33a08JS, 54a13LK, and 60a18DDM published from 2002 to 2018. Our results and findings highlight the vital role of followers in the initiation phase of managerial leadership, thereby contributing to an 'expanded view' of leadership/followership-dynamics. It is therefore also an example of how social constructionist studies can be social relevant to organizational concerns.

Based on the description of the research findings and Fig. 2 above, the researcher concludes that the ML literature has many research results that have been conducted and is divided into four categories, namely first, research whose theory is accurate and consistent according to the classification of the articles studied. Second, the results of appropriate research whose theories influence each other and support each other's variables so as to produce new theories related to ML. Third, research that is theoretically biased and does not support managerial leadership theory but can influence the concept of ML literature. Fourth, research with an error theory in this case means that the research results are not related and do not support each other so that there is a contradiction between the theories found and the previous theory. So that the research under study allows for a novelty theory about ML patterns in educational institutions which can be used as a reference for educational institutions with systemic management.

Table 5
The clasification of articles accuracy.

Year	Name	Code	Title				Problem				Aim				Literature				Results				Conclusion				C	IC
			AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV		
1959	D. A. E.	1a	1a				1a				1a				<u>1a</u>				1a				<u>1a</u>				3	
1965	J. K. C-J.	2a	2a							<u>2a'</u>	2a								<u>2a</u>				<u>2a</u>					1
1971	N. G.	3a	3a							3a									<u>3a</u>				<u>3a</u>					1
1980	P.	4a	4a								4a								4a				4a					2,6
1986	C. M.	5a	5a							<u>5a</u>	5a								<u>5a</u>				<u>5a</u>					1,8
1986	J. D. M.	6a	6a						6a				6a				<u>6a</u>			6a				6a				2
1987	G. E.	7a		7a			7a				7a				<u>7a</u>				7a				<u>7a</u>				4	
1989	W. F. "B." A.	8a		8a			8a				8a				<u>8a</u>				<u>8a</u>				<u>8a</u>					4
1989	G. Y.	9a	9a				9a				9a				9a				9a				9a					3
1990	J. I. A. R.	10a	10a						10a				10a		10a						10a			10a				2
1992	H., R.	11a	11a				11a						11a		11a							11a			11a			2,6
1992	L., E. F.	12a	12a				12a				12a				12a				12a				12a				4	
1995	P. E. M.	13a		13a			13a				13a				<u>13a</u>				13a				13a					3
1996	D. R. L.	14a		14a					14a						14a						14a		14a					3
1998	Y. A. N.	15a	15a							<u>15a</u>	15a							<u>15a</u>					<u>15a</u>					1,8
1999	E. Y.	16a	16a							<u>16a</u>		16a					<u>16a</u>		16a				16a					2,6
2001	M. G.	17a	17a							17a					17a				17a				17a					2,8
2002	D. P. K.	18a	18a				18a				18a				18a				18a				18a				4	
2002	S. K. K.	19a		19a					19a			19a						19a			19a			19a				1,6
2003	A. O'D.	20a		20a					20a			20a					20a		20a						20a			2
2004	C. K.	21a		21a			21a				21a				21a				21a				21a				3	
2004	D. B. C.	22a	22a						22a			22a					22a				22a			22a				2
2004	S.	23a	23a				23a				23a				23a				23a				23a					3
2006	A. M. M. R.	24a		24a					24a			24a					24a		24a				24a					2
2006	T. H.	25a		25a					25a			25a			25a						25a		25a					2
2007	A. E. O-A.	26a	26a				26a				26a				26a						26a			26a				2,6
2007	E. L.	27a		27a					27a		27a						27a				27a			27a				2
2007	F. C. M.	28a	28a				28a				28a				28a				28a				28a				3	
2007	W. Jr. P.	29a	29a						29a				29a		29a						29a			29a				1,8
2007	S. M. A.	30a	30a				30a				30a				30a				30a				30a				4	
2007	W. G. R. N.	31a	31a				31a				31a				31a						31a			31a				2
2008	H. P. N.	32a	32a						32a		32a						32a		32a					32a				2,6
2008	J. S.	33a		33a					33a			33a					33a				33a			33a				1,6
2008	T. O. P.	34a	34a				34a					34a			34a				34a				34a				3	
2008	J. G. (J.) H.	35a	35a				35a				35a						35a		35a					35a				3
2009	A. Na.	36a	36a						<u>36a</u>		36a						<u>36a</u>				37a		<u>36a</u>					2
2009	D. A.	37a							37a				37a		37a						37a			37a				2
2009	A. Nb.	38a	38a				38a				38a				38a				38a				38a				3,6	
2010	C. K.	39a		39a			39a					39a			39a				39a				39a					3
2011	I. H.	40a	40a						40a			40a					<u>40a</u>				40a				40a			2
2011	I. W.	41a	41a						41a		41a				41a						41a				41a			2,6
2011	J. Y. C.	42a		42a					42a			42a			42a				42a				42a				3	
2011	J. W. V.	43a	43a				43a					43a			43a						43a			43a				3
2011	R. F. L.	44a	44a				44a						44a				44a		44a					44a				3
2011	R. C.	45a	45a				45a				45a				45a				45a				45a				4	
2012	E. M. G.	46a	46a						46a			46a					<u>46a</u>				46a				<u>46a</u>			1,8
2012	R. M. S.	47a	47a						47a			47a			47a						47a				<u>47a</u>			2

(continued on next page)

Table 5 (continued)

Year	Name	Code	Title				Problem				Aim				Literature				Results				Conclusion				C	IC
			AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV	AT	AdT	DT	AV		
2012	R. R. S.	48a	48a				48a				48a				48a				48a				48a				4	
2012	S.	49a	49a					49a			49a					49a			49a					49a			3	
2012	Y. J.	50a		50a				50a				50a				50a				50a				50a			3	
2013	B. D. H.	51a		51a				51a				51a				51a				51a				51a			3	
2013	C. S.	52a	52a							52a			52a					52a		52a				52a				2
2013	D. G.	53a	53a							53a			53a		53a				53a						53a		3	
2013	L. K.	54a		54a						54a			54a					54a				54a				54a		1,8
2014	M. B.	55a	55a				55a				55a				55a				55a				55a				4	
2015	F. L.	56a		56a				56a			56a				56a					56a				56a			3	
2016	H. H. H. L.	57a	57a				57a				57a				57a				57a					57a			3,6	
2017	A. L. D.	58a		58a			58a				58a							58a			58a			58a			2,6	
2018	C. S.	59a		59a					59a			59a				59a						59a			59a		2	
2018	D. D. M.	60a		60a					60a				60a			60a						60a			60a		1,8	
2018	L. X.	61a			61a				61a				61a					61a				61a			61a		1	
2018	W. A. G.	62a	62a					62a				62a				62a				62a			62a			3		
2019	L. M. G.	63a	63a						63a				63a			63a				63a					63a		2,8	
2019	S. V.	64a		64a				64a			64a				64a					64a			64a			3		
2021	E.S.O	65a	68a	65a			65a	67a	66a		65a	67a		66a	65a	67a		66a	65a	66a			65a	66a		3	2	
2022	K.T	66a		66a			68a				68a				68a				68a	67a			68a	67a		3		
2022	J.K.T	67a		67a																						4		
2022	A.B	68a																										
	Amount		42	25	1	0	17	18	15	18	21	28	15	4	20	24	6	18	15	26	9	18	14	25	7	22	10	24
	Total		68				68					68				68				68				68			23	11

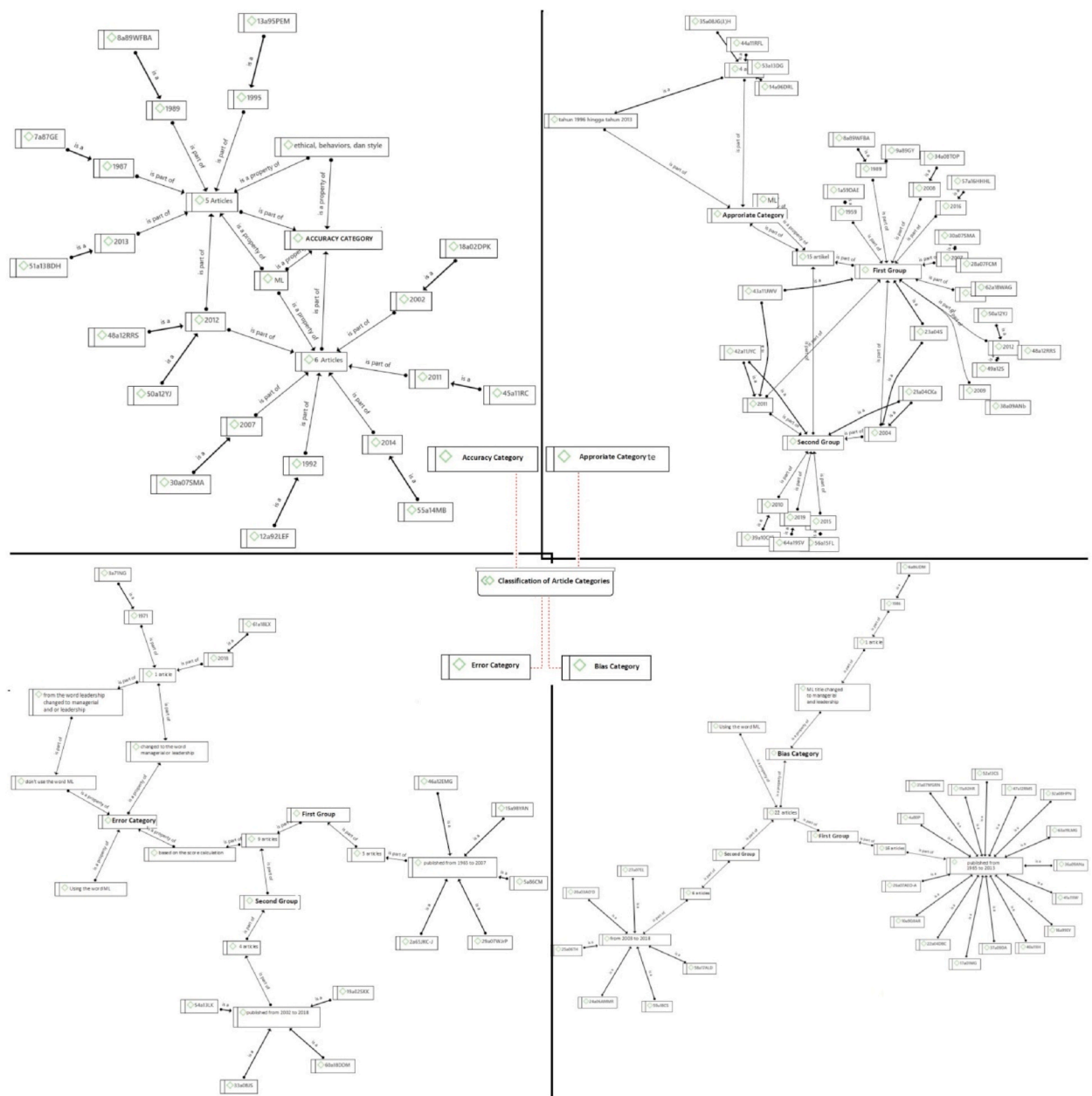


Fig. 2. Classification accuracy of articles.

5. Discussion

5.1. Article history

Based on the results analysis indicated that most articles using the word ‘managerial leadership’ (ML) in the title are provided by the database, followed by publishers. The database instrument is also used and recommended by Park et al. to obtain data online [5, 70]. The 1959 was the first year articles using the title ML were found, as indicated by Emery, who wrote “ML through motivation by objectives” [71]. In addition, the first article to use the word ‘ethical’ was 1987 by Enderle [72], entitled *Some perspective of MEL*. Then in 2006, for the first time, the article used the word ‘managers’ leadership style’ as the main title, as written by Ref. [73], entitled *A study of relationship between MrLS*. Then in 2008, an article was found that first used the word ‘manager leaders’ as a subheading, written by Peterson & Fleet [74], entitled *A tale of two situations: An empirical study of non-for-profit MLr*. In 2012, the first and only article using the word ML only as the main title was written by Grassell [75]. Then in 2019, the last article with the word ML was found

by Vandergoot et al., entitled *Factors that influence the transfer generalization and maintenance of M-LSk: A retrospective study* [76]. The newer published article from 2018 to 2023 pin pointed by Lekchiri who published the ML effectiveness in HE [77]. Rudolph et al. wrote the research paper concerning critique of research on health leadership in the organization [78]. As development theory in the leadership field Arici & Uysal investigated the leadership and green innovation creativity [79]. Fries discussed the leadership style and behavior [80].

5.2. Article consistency

A review in the problems section of 68 articles published from 1959 to 2022 found that 17 articles used the word ML in the problem section and matched the AT indicator. Then 18 articles using other ML words and according to AdT indicators. Then 15 and 18 articles use the word 'managerial' or 'leadership' and are by indicators of different terms. Only one article (1a) matched the AT indicator or an article that used the word ML in the problem section. Emery emphasized the aim of his article to outline an approach to ML that provides practical means [35,71]. Only in the 90s, 2000s, and 2010s did all the problems in the article section meet four indicators described by Delbecq as the last article with an AT indicator with the issue of an overview on effective ML [81]. In addition, Murphy & Enderle also mentioned that the illustration of the MEL was not only influenced by the organization's practice [82].

In the aims section, 21 articles use the word ML, 28 articles use the word ML with additional terms, three articles use the word 'managerial' or 'leadership,' and 15 and 4 articles use the word 'managerial' or 'leadership.' From the 50's to the '90s, almost only one article per era was found, such as 1a, which uses the word ML in the objective section, as it was written by Emery "to outline an approach to ML," that "to outline an approach to ML [71]," and article 2a as shown in Chadwick-Jones "to demonstrate from case-study material the importance of MNL [83]," as well as article 12a, which aims to compare the ML practices performed at the senior- and middle-levels of higher education administration [18,84]. It was only from the 2000s to 2022 that more articles used the word ML in the article's destination. For example, Vandergoot et al. (2019) wrote the goal "to examine the factors affecting transfer generalization and maintenance of M-LSk" as the last author of 2019 [76].

The findings in the literature section showed that 20 articles use the word ML, 24 articles use the word ML with other words, 6 and 18 articles use the word 'managerial' or 'leadership,' and seven articles use the words 'managerial' and 'leadership.' In the 50s and 80s, no articles used the word ML. The word ML was only discovered in the 90s, as reinforced by Leonard and Lipsky with literature on ML practices and scales [18,85]. Since the 2000s, articles were found showing all indicators, although, in 2010, there were also empty different term indicators. However, a literature review showed that from 1959 to 2022, the AT indicator was the highest compared to other indicators. Kialain and Vandergoot used ML skills & development theory [8,76]. Kialain and Vandergoot et al. used ML skills & development theory [8,76]. The recent research was conducted by Ref. [80], Kafetzopoulos, and Kelemen discuss the development theory in the ML [86,87].

The data review of the results section of the article showed that 15 articles use the word ML, 26 articles use the word ML with other words, 9 and 18 articles use the word 'managerial' or 'leadership,' and nine articles use the word 'managerial' and 'leadership.' Other findings showed that from the '50s to '80s, as well as the 2010s, the word ML was not found at all in the results section, even if there were additional words such as "the managerial style of the top manager ranged from the benevolent authoritative" by Emery and Wongruangwisarn [71,88], and reinforced by Larson who used "transformational leadership behavior of management by exception [27]." However, in the 90s, articles were found using the word ML as written by Leonard, namely "selected ML practices". In a sense, ML is closely related to the success of higher education administrative management at both the secondary and senior levels. If the pattern of ML is applied properly, the administration of higher education that it manages will also produce good quality so that the graduates are of high quality [18]."

The review data for the conclusion section showed that 14 articles use the word ML, 25 articles use the word ML with other words, eight articles use the words 'managerial' and 'leadership,' and 7 & 21 articles use the word 'managerial' or 'leadership.' Articles from the '50s to the '90s have no articles with the word ML. It was only in the 2000s that Ather found an article that concluded, "A ML quality is expected to combat any managerial challenges and complexities of the centuries ahead [9]." In this period, there is not a single article conclusion that uses the words managerial and leadership. Even up to 2010–2022, only ML words were found with other words. Kleinman and Larson concluded that "organization culture was specifically associated with transformational leadership behavior of managers [27,89]." Rudolph and Tuffour concluded that "organization culture was specifically associated with transformational leadership behavior of managers [34,90]."

5.3. Article accuracy

The data on the consistency classification of articles that use the word ML with other articles showed four categories: first, 11 articles with accurate categories, confirmed by Leonard with *An analysis of ML practices and substitutes for leadership in higher education administration* [18], Blom with *Leadership on demand: Followers as initiators and inhibitors of ML* [10], Enderle with *Some perspectives of ethical ML* [72], and Howell with *An examination of demographic characteristics, preferred ML style, and managerial effectiveness of full-service lodging managers* [91]; Second, 15 articles with appropriate categories, as strengthened by Peterson & Fleet with *A tale of two situations: An empirical study of behavior by not-for-profit managerial leaders* [74], and Y Chin with *Seven ML competencies* [92]. Kelemen investigated the several innovation in leadership based on demand era [93] and Arici & Uysal discuss about innovation leadership [94]. Third, 23 articles with bias categories as exemplified by Montgomery, who described "the results from a study of management training needs for the public [95];" Fourth, 11 articles with an error category as written by George with the sentence "the relationships that emerge from leadership research should be regarded as diagnostic tools, not precise guidelines [96]."

Based on the results of the discussion above, it can be concluded that the consistency of articles was divided into four categories: 10 articles in the accuracy category, 23 articles in the appropriate category, 24 articles in the bias category, and 11 articles in the error category. Moreover, managerial leadership aspect becomes significant part to discuss in the management science, because the good leader and manager will create good culture in the education.

6. Conclusion

6.1. Conclusion and limitation

Based on the analysis of the research results and the discussion in the previous chapter, several conclusions can be drawn to provide answers to research purpose. The results show that [1]: the article history showed that articles with the word 'managerial leadership' (ML) in the titles were provided mainly by based data such as Google Scholar, Scopus, Web of Science, followed by reputable publishers with various journals such as Taylor & Francis, Sage, ScienceDirect, Wiley, Emerald, and Erich. Started in 1959 the first article appeared using the word ML. In 1987 the first article appeared using the word 'ethical ML,' then in 2008, an article appeared using the word 'managerial leaders.' After that, in 2006, an article appeared using the words 'managerial leadership style'. Then in 2012, the first and only article appeared that only used 'ML', and the development of theory of ML in 2022, the last article used the word 'ML as effective leadership in educational institution.' [2] A review of the consistency of the word ML in the title analyzed using four indicators against other sections showed that there are: 17 of 68 articles fall into category of AT indicator, 24 articles fall into category of AdT indicator, 11 articles into DT indicators, and 16 articles into AV indicator [3]. The consistency of articles was divided into four categories: 10 articles in the accuracy category, 23 articles in the appropriate category, 24 articles in the bias category, and 11 articles in the error category. Moreover, managerial leadership aspect becomes significant part to discuss in the management science, because the good leader and manager will create good culture in the education.

The review is limited to access to databases, publishers, and journals to get complete and more articles related to ML, resulting in an incomplete analysis of the articles found. In addition, qualitative methods with a few average and percentage formulations cause interpretation and validation results that still need improvements, thus requiring a mix of methods for further research. Therefore, based on the results of the research and the conclusions found, the researcher realizes that there are limitations to the research results so as to provide an opportunity for future researchers to be able to study managerial leadership from a chronological aspect of theory, namely bringing together or tracing from the first theory in 1959–2023.

6.2. Contribution and implication

The findings contribution imply that article classification can become a more established scientific roadmap and be used as reading material, literature, and a map of reasoning for further researchers, especially those studying ML. moreover, future studies may involve more literature review and theoreticah review connecting with managerial leadership and leadership style in many approach. It may also possibly include quantitative analysis to allow generalisation of findings. We also hope to analyze the digital competence of ML for future study.

This study implication describes the function of managerial leadership differs in various types of organizations specifically in education; how the typical skills of management and abilities of leadership combine in the various roles of managerial leadership; the extent to which the functions of management and leadership are culturally based paradigms.

Author contribution statement

All authors listed have significantly contributed to the development and the writing of this article.

Data availability statement

Data included in article/supp. material/referenced in article.

Additional information

No additional information is available for this paper.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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