

Development of transformational leadership research in higher education: A brief bibliometric review

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Abstract

General objective of this article was to examine the growth and thematic development of transformational leadership (TL) research in higher education from 1996 to 2025 using bibliometric analysis, in an attempt to respond to the following research questions; how was the TL literature for the last thirty years? what were the most contributing authors, articles and countries? what are the important subtopics related to TL research?, and what are the future research directions?. A bibliometric review carefully examined 556 articles extracted from the Scopus database, using PRISMA principles. Articles were examined using VOSviewer and Biblioshiny package software. Results show an increase in TL research in higher education, with an increase in publication after the year 2019, motivated by interest in innovation, digital transformation, and institutional resilience in academia. Transformational leadership research themes progressed from leadership traits and accountability to current emphasis on psychological capital, knowledge sharing, education 4.0, and post pandemic leadership. Future research directions highlight the need for more methodological approaches, expanded geographical representation, and more research of university department leadership and moderators such as culture and digital expertise. By mapping the intellectual terrain, this study contributes to theory development and guides future research and policy in advancing leadership practices within higher education institutions.

Keywords: Higher education, transformational leadership, academic leadership, leadership trends, bibliometric analysis

Introduction

In organizational research, transformational leadership is regarded as one of the most influential leadership paradigms. Original concept of transformational leadership was developed by Burns (1978) as the dichotomy of transformational leadership and transactional leadership styles (Hilton et al., 2023). Burns defined transformational leadership as “leaders and their followers raise one another to higher levels of morality and motivation” (Burns, 1978, p. 20). Later on Bass (1985) modified the definition to “a leadership process that is systematic, consisting of purposeful and organized search for changes, systematic analysis, and the capacity to move resources from areas of lesser to greater productivity to bring about a strategic transformation.” in which four components of transformational leadership emerged which were: impactful communication, empowering qualities, dependable, and cooperation (Frias et al., 2021). Bass's original claim is that value fit in the organization and trust are important characteristics in transformational leader. Building on this theoretical foundation, transformational leadership manifests within a framework

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of its four dimensions of inspirational motivation, idealized influence, intellectual stimulation and individualized consideration which pushes followers to perform exceptionally well (Ntseke et al., 2022; Samuel & Engelbrecht, 2021). The four dimensions provide meaning to followers' work by motivating subordinates to put group over individual self-interest to achieve better outcomes than expected (Fauzi et al., 2021). Leaders inspire and encourage followers to achieve a goal and influence subordinates in a positive direction which motivates high performance in individuals (Geibel et al., 2022; Montasser et al., 2023).

Within the realm of higher learning, the development of transformational leadership includes the application around different fields (Du & Yan, 2022). Transformational leadership is an effective leadership approach in universities. This is because transformational leadership has qualities that are well-suited to help develop universities. This type of leadership positively impacts various aspects of the universities, such as their organizational structure, the behavior of employees, their job performance, the quality of academic research, and the outcomes of community service programs (Al-Husseini et al., 2021) and facilitate knowledge sharing and innovation in universities (Al-Thawabiya et al., 2023). More recently, studies about how transformational leadership is expressed in virtual settings have primarily focused on the context of higher education institutions (Berkovich & Hassan, 2023), for example Antonopoulou et al., (2021) found that transformational leadership coexists with virtual leadership in higher education through Principal's Transformational leadership. This encourages higher education teachers and results in faculty engagement in career development cultivating innovation, improving morale, and supporting institutional resources (Al-Husseini et al., 2021). In comparison to transactional or laissez-faire leadership, transformational leadership is more seen in the academic sector because of its democratic culture, strengthening shared leadership and transparent decision making (Antonopoulou et al., 2021; Owusu-Agyeman, 2021).

In their study, Deng et al., (2023) emphasized the significance of integrating the principles of transformational leadership into development initiatives in order to generate positive change for organizations and individuals (Bayraktar & Jiménez, 2020). Despite its importance, higher education leadership is an understudied area (Waheeda et al., 2023). As there is limited leadership research in higher education, a review of research topics and future directions is warranted (Al Issa et al., 2024; Daenekindt & Huisman, 2020). As TL practices evolve, this study addresses this gap by identifying and proposing future research directions that align with ongoing developments in the field. This study is focused on analysing transformational leadership research in higher education documented in Scopus database over a period from 1996 to 2025. Specifically, it sets out to answer the following questions:

- i. How has the literature of transformational leadership (TL) in higher education developed over the last three decades?
- ii. What authors, institutions and countries contributed the most to the development of the literature?
- iii. What important subtopics are related to TL research in higher education?
- iv. What are the future directions of TL research in higher education?

Bibliometric Research Method

The processes of document selection and data analysis

A systematic literature review was conducted to address the four research questions, as stated in the introduction. The reviewed literature covered transformational leadership (TL) research in higher education, written in English and published from January 1996– May 2025. The articles reviewed were extracted from the Scopus database. Scopus was chosen as the main database source for the review as compared to Web of Science (WoS) or any other database, or combining information from all these sites, due to two reasons. The first is, as suggested by Archambault et al. (2009), using one database has been advised to avoid human errors, as different databases present data in different formats. The second reason is that Scopus database meets the publication standards and helps in conducting network analysis in VOSviewer and the Biblioshiny package of Rstudio software. This study adopted the PRISMA 2020 diagram (Figure 1) for replicability purposes (Korkmaz et al., 2022), and the final articles were extracted following the PRISMA process. The database search focused on academic articles using the following keywords: transformational leadership, higher education, universities, colleges, students’ satisfaction, and leadership practices. This search generated a total of 1220 results. After eliminating studies not published in English (n=51) and studies that were not journal articles (n = 166), the remaining 1003 articles were then assessed for content eligibility. The papers irrelevant to this research topic were excluded (n = 445) after reading the abstract of the papers, leaving the final dataset of 556 articles for further analysis

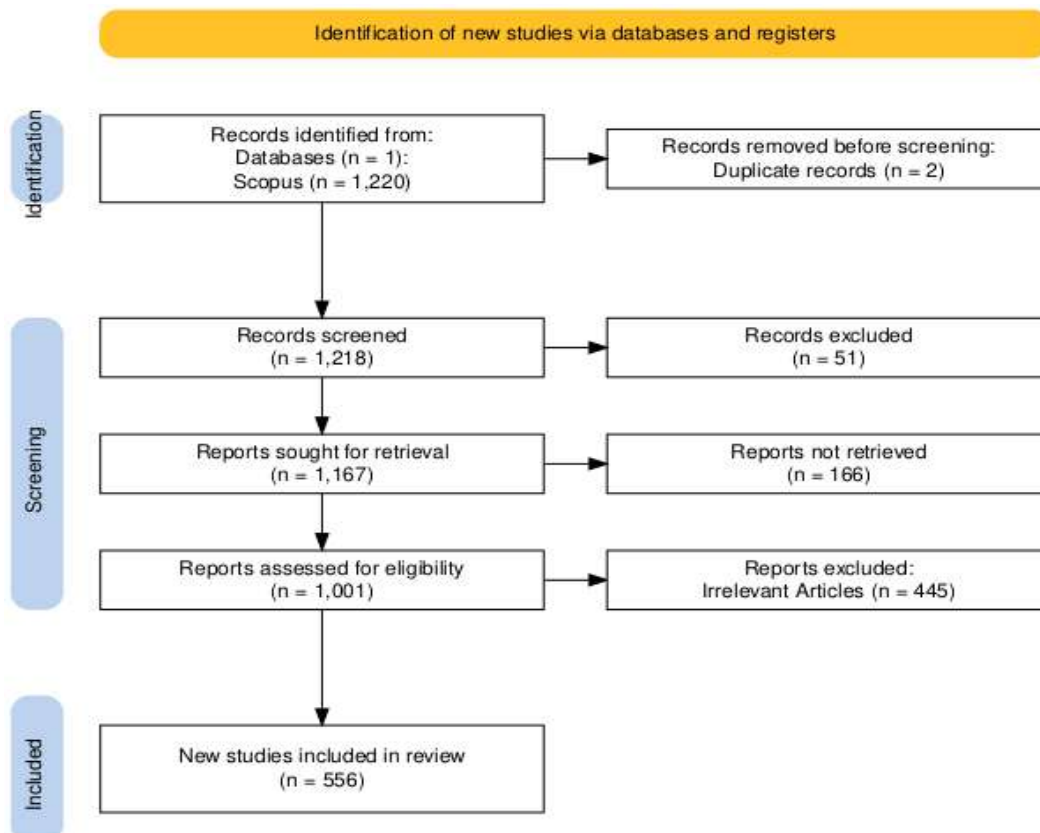


Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, 2020) diagram for identification and screening purposes.

Results and Discussion

Review of performance

Figure 2 presents the trends in the publication of transformational leadership research in higher education. From the analysis, 2024 was the most productive year. However, the journey of research in this area began 29 years ago by Doherty and Danylchuk (1996) with the article “*Transformational and transactional leadership in interuniversity athletics management*”. The trend shows a clear trajectory of growth, starting with minimal activity (1–4 publications annually) between 1996 and 2005, followed by a steady rise through the 2010s, and culminating in a significant surge from 2019 onward. This sharp increase, peaking at 94 publications in 2025, reflects growing global interest in the role of transformational leadership in addressing challenges, such as digital transformation, institutional resilience, and post-pandemic recovery in higher education. Considering the trends of the current year, research in this field is expected to continue growing in the coming years.

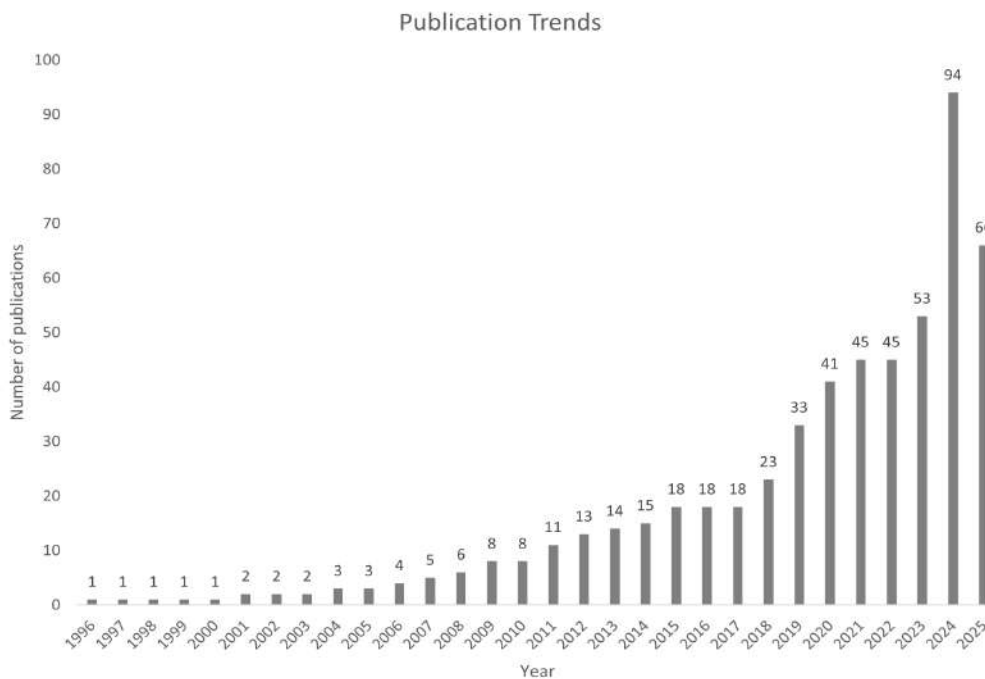


Figure 2. Transformational leadership (TL) research in higher education publication trends

Source: Scopus database

Leading countries, organizations, and authors for transformational leadership research in higher education

From the data in Table 1 reveals the predominant authors, institutions, and countries for transformational leadership (TL) research in higher education. Al-Husseini, Sawasn is the prominent author with 302 citations and has produced 3 research papers. Ramayah, T. has published 2 documents with 221 citations, while Zaini and Osama have published 2 documents each with 219 citations each. The leading institutions are Universiti Sains, Lancaster University, and American University in the Emirates, with 221, 218, and 217 citations, respectively. Similarly, the leading country is the United States with 1491 citations and 85 documents, followed by the United Kingdom with 1044 citations from 31 documents. Furthermore, Al-Husseini, Sawasn is the most productive author, and the United States is the most productive country in the field of transformational leadership research in higher education.

Table 1. Leading countries, organizations, and authors of transformational leadership research in higher education

TC	Author	TP	TC	Institution	TP	TC	Country	TP
302	Al-Husseini, Sawasn	3	221	Universiti Sains, Malaysia	2	1491	United States	85
221	Ramaya H, T.	2	218	Lancaster University, UK	1	1044	United Kingdom	31
219	AbdullaH, Zaini	2	217	American University in the Emirates, UAE	1	858	Canada	18
219	Isaac, Osama	2	217	Girne American University, Cyprus	1	842	Malaysia	80
218	Knight, Peter T.	1	217	Jadara University, Jordan	1	618	China	38

NB: TC = Total Citations; TP = Total Publications

Prominent journals of transformational leadership (TL) research in higher education

Table 2 presents impactful sources of TL in higher education research. The leading source for TL research on higher education is ‘Studies in Higher Education’ with 537 citations and 9 publications, trailed by ‘International Journal of Leadership in Education’ in 406 citations and 14 publications. The journals that produced more articles is ‘International Journal of Leadership in Education’ with 14 publications, trailed by ‘Studies in Higher Education’ with 9 publications. The period in which most articles were published/produced is from 2020 to 2025 in the leading and impactful journals. The most impactful leadership journal is “International Journal of Leadership in Education” and among the non-leadership journals, ‘Studies in Higher Education’ is most productive. Among the top five journals, two are not leadership journals: Telematics and Informatics and Journal of Retailing.

Table 2. Prominent journals of transformational leadership (TL) research in higher education

Journal	TC	TP	LEAD	‘96-‘01	‘02-‘07	‘08-‘13	‘14-‘19	‘20-‘25
Studies in Higher Education	537	9		1			4	4
International Journal of Leadership in Education	406	14	X		1		3	10
Telematics and Informatics	385	2					2	

Journal	TC	TP	LEAD	'96- '01	'02- '07	'08- '13	'14- '19	'20- '25
leadership and organization development journal	234	7	X			2	4	1
Journal of Retailing	189	1			1			

NB: TC = Total Citations; TP = Total Publications; LEAD = Leadership

Leading published articles on TL research in higher education

The table 3 below illustrates the highly cited and most impactful articles in TL research in higher education. The first-most influential article is “Department level Cultures and the Improvement of Learning and Teaching” by Knight and Trowler (2000) with 218 citations. The article critically examines transformational leadership in the context of improving pedagogy in higher education. The authors of the article argue that conventional models of transformational leadership, centered on charismatic, visionary leaders, are ill-suited to the complex and culturally diverse environment of academic departments. The authors reject both transformational and transactional leadership as overly managerial and insufficiently sensitive to departmental cultures. Instead, they propose an alternative model: *interactional leadership*, which emphasizes context-aware, collaborative, and trust-based approaches led by department heads who work within, rather than on, cultural contexts. With 217 citations, the article “The Impact of Transformational and Authentic Leadership on Innovation in Higher Education: The Contingent Role of Knowledge Sharing” by Elrehail et al. (2018) is the second-most influential study. The study highlights TL's strategic importance for fostering innovation in non-Western higher education and fills gaps by integrating leadership with knowledge-sharing practices. The results of the study indicate that transformational leadership (TL) positively influences process and product innovation in Jordanian private universities. Moreover, TL, viewed as a higher-order construct, is most effective when supported by strong knowledge-sharing norms. The study shows that knowledge sharing not only enhances innovation directly but also strengthens the impact of TL.

Table 3. Leading published articles in TL research in higher education

Author(s)	Title	TC
“Knight & Trowler (2000)”	“Department-level Cultures and the Improvement of Learning and Teaching”	218
“Elrehail et al. (2018)”	“The Impact of Transformational and Authentic Leadership on Innovation in Higher Education: The Contingent Role of Knowledge Sharing”	217
“Aldholay et al. (2018)”	“The Role of Transformational Leadership as a Mediating Variable in DeLone and McLean Information System Success Model: The Context of Online Learning Usage in Yemen”	168

Author(s)	Title	TC
“Al-husseini & Elbeltagi (2018)”	“Transformational Leadership and Innovation: the Mediating Role of Knowledge Sharing amongst Higher Education Faculty”	143
“Jia et al. (2018)”	“How Leadership Matters in Organizational Innovation: A Perspective of Openness”	110

Source: Scopus database

Leading references of TL research in higher education

Table 4 provides an overview of leading references of research publications for TL research in higher education with their local and global citations. A study by Al-Husseini et al. (2021) is the top-referenced paper with 15 local citations and 143 global citations. The title of the study is “Transformational Leadership and Innovation: The Mediating Role of Knowledge Sharing amongst Higher Education Faculty.” The local citations to global citations ratio is 10.49. The study focused on examining how transformational leadership behaviors cultivate a culture of knowledge exchange among faculty, thereby enhancing their ability to generate and apply innovative ideas. The authors of the study found that transformational leadership behaviours improve a culture of knowledge exchange among staff, therefore improving their ability to generate and put into practice creative ideas. They found that TL impacts innovation among higher education departments, through the mediating role of knowledge sharing. Using structural equation modeling on data from Iraqi public universities, the study revealed that all four dimensions of transformational leadership, idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration significantly impacted both product and process innovation. It is worth noting that the most striking result to emerge from the data is that transformational leadership improved knowledge sharing, which in turn increased innovation. Taken together, these results suggest that there is an indirect association between transformational leadership and innovation by increasing knowledge sharing.

In a similar vein, Balwant (2016) study titled “Transformational Instructor Leadership in Higher Education Teaching: A Meta Analytic Review and Research Agenda” has the second highest references with 13 local citations and 59 global citations, and 22.03 local upon global citation ratio. It revealed that transformational instructor leadership in higher education is associated with several key student outcomes which includes motivation, satisfaction, perceived instructor credibility, and academic performance. Primary objective of the article was to examine how transformational leadership, when applied by teachers, impacts students in higher education settings. It highlights that while transformational leadership is applicable, its effectiveness varies across different dimensions and contexts. She argues for the practical value of training teachers in transformational leadership behaviors.

Table 4. Leading references of TL research in higher education

LC	Author(s)	Title	GC	Normalized		
				LC/GC Ratio (%)	LC	LG
15	Al-Husseini et al. (2021)	“Transformational Leadership and Innovation: The Mediating Role of Knowledge Sharing amongst Higher Education Faculty”	143	10.49	14.36	7.17
13	Balwant (2016), J	“Transformational Instructor-Leadership in Higher Education Teaching: A Meta-Analytic Review and Research Agenda”	59	22.03	8.52	2.59
11	Harvey (2003)	“Instructor's Transformational Leadership: University Student Attitudes and Ratings”	47	23.40	1.00	1.00
9	Al-Husseini (2018)	“Evaluating the Effect of Transformational Leadership on Knowledge Sharing Using Structural Equation Modelling: The Case of Iraqi Higher Education”	62	14.52	5.59	1.64
9	Al-Husseini (2016)	“Transformational Leadership and Innovation: A Comparison Study between Iraq's Public and Private Higher Education”	97	9.28	5.90	4.27

NB:LC = Local Citations; GC = Global Citations

Source: Scopus database.

Knowledge foundations of TL research in higher education via co-citation Analysis

A field's knowledge foundations are revealed by the semantic associations of co-cited references (Donthu et al., 2021). Figure 3 depicts referencing co-citations mentioned more than thirty times by the articles in the Scopus database. Bass, Avolio, Judge, House, Walumbwa, Antonakis, Northouse, Yammarino, Barling, Burns, Riggio, and Jung (green joints) have high citations of works in TL research in higher education. Similarly, Leithwood, Bass, Shamir and Yuki (blue joints) have high citations of works in TL research in higher education. Meyer (yellow joints) have high citations of works in TL research in higher education. Lastly, Sarstedt, Ringle, Fornell, Bakker, Mackenzie, Podsakoff, Hair, Anderson and Larcker (red joints) have high citation works in TL research in higher education.

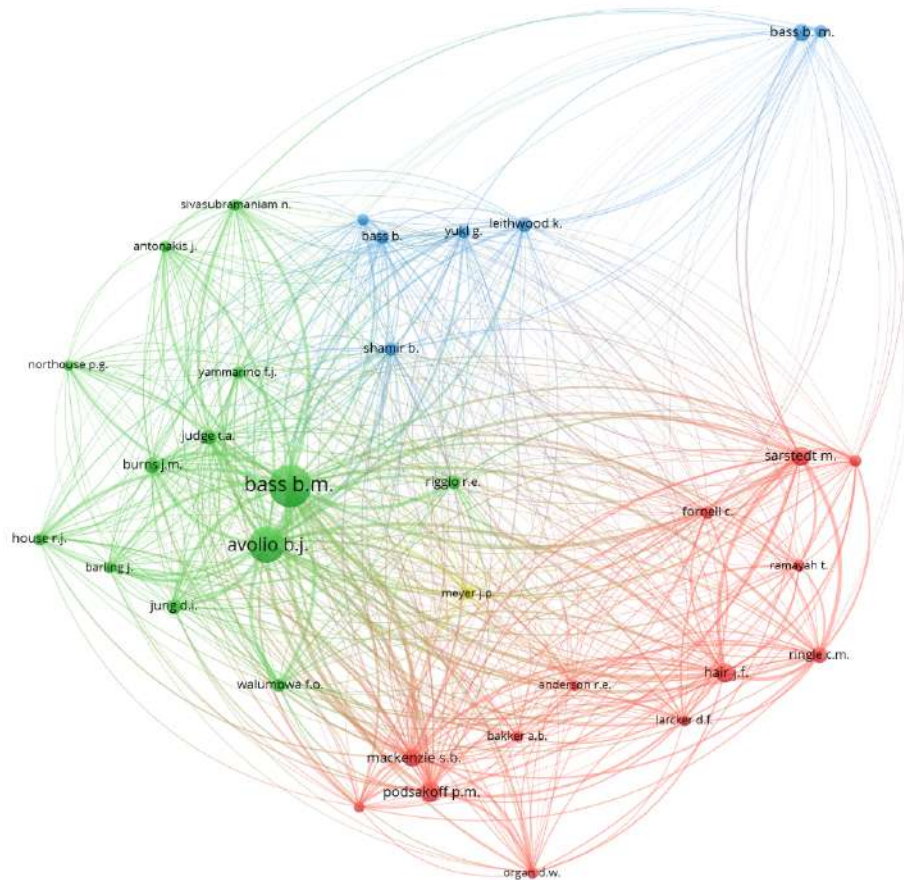


Figure 3. References cited in articles on TL research in higher education
Source: Scopus database

Note(s): Each node represents a cited reference and a semantic cluster of references based on theme similarity. Size of nodes indicates the degree of local citations, with larger nodes indicating a greater intensity. A co-citation is represented by a link between two nodes. Link thickness indicates the intensity of co-citations, with thicker links indicating more co-citations

Identifying thematic patterns and influence structures through coupling bibliographic data

Using co-occurrence analysis, Table 5 indicates a grouping of themes of TL research in higher education. These theme clusters are transformational leadership and innovation in higher education, transformational leadership and employee engagement, teaching and academic performance, leadership development and job performance, educational leadership and

motivation and knowledge management and organizational culture. As can be seen from Table 6, the leading articles summary of each cluster is provided. Research in the four groups covers all aspects of TL in higher education. Cluster one consists of 380 articles on TL practices and innovation in higher education, cited 5,386 times according to Scopus. Elrehail et al. (2018) examined how transformational and authentic leadership influence innovation in higher education. They found that only transformational leadership significantly drives innovation in non-western settings such as Jordan. Knowledge sharing moderated this effect, enhancing TL's impact. Furthermore, Aldholay et al., (2018) examined transformational leadership in the context of online learning in Yemeni public universities. They found out that overall quality (system, information, and service quality) impacts transformational leadership, and TL affects actual usage of online learning. In addition, TL mediates the relationship between overall quality and actual usage. Al-Husseini et al., (2021) examined the relationships between transformational leadership, knowledge sharing, and innovation in Iraqi public universities. It found that transformational leadership influences both knowledge sharing and innovation. Furthermore, the study shows that knowledge sharing mediates the relationship between transformational leadership and innovation, suggesting that leaders who promote a knowledge sharing culture increases greater innovation among staff.

Transformational leadership is included in Cluster 2 which according to Scopus consists of 378 articles cited 5,682 times. Al Husseini and Elbeltagi (2018) examined transformational leadership's (TL) impact on product and process innovation in Iraqi higher education, comparing public and private institutions. The authors found that TL affects innovation in both sectors, with public universities showing a stronger influence. While both sectors value TL components like idealized influence and intellectual stimulation, public HEIs prioritize individualized consideration, and private universities focus on inspirational motivation. Kent and Chelladurai (2001) studied on how leadership at different levels impacts employee attitudes and behaviors within intercollegiate athletics. Relationship between perceived transformational leadership (TL) of athletic directors, leader member exchange (LMX), and employees' organizational commitment (OC) and citizenship behavior (OCB) in a university athletic department were considered. There was a correlation between TL dimensions (charismatic leadership) and LMX, and that TL and LMX relate to OC, while LMX influences OCB. On the other hand, Antonopoulou et al., (2021) examined the relationship between leadership styles, digital skills, and their impact on higher education institutions, during the COVID-19 pandemic. Present results indicate that transformational leadership has a positive correlation with leadership outcomes like efficiency and employee satisfaction, while passive leadership has a negative correlation. It can therefore be assumed that transformational leaders equipped with digital skills are more effective in academic settings.

Cluster 3 covers teaching and academic performance. It consists of 259 articles cited 3,491 times according to Scopus. Knight and Trowler (2019) is the most influential author in this cluster. One of the issues that emerges from the findings is the universal application of transformational leadership in higher education. These results provide some tentative initial evidence that this model, along with transactional leadership, may be too simplistic, failing to account for cultural filters and individual contexts within university departments. Together, they propose interactional leadership as a more suitable approach, emphasizing teamwork, inclusiveness, and negotiation based on trust to promote an environment where teaching and learning are necessary. On the other hand, Farrukh et al., (2019) investigated how different leadership styles and psychological

empowerment (PE) can nurture intrapreneurial behavior (IB) within higher education institutions, underlining the importance of TL and authentic leadership in creating an environment where employees are empowered to be innovative, proactive, and take calculated risks. A strong relationship between transformational leadership (TL) and authentic leadership on IB was reported, while a negative association was reported between transactional leadership and IB.

Leadership development and job performance are included in cluster 4. It consists of 101 articles and cited 1,252 times according to Scopus. Jyoti and Bhau (2015) is one of the prominent studies in this cluster. The study explored the role of leader member exchange and relational identification in the relationship between transformational leadership and job performance within the higher education. In view of all that has been mentioned so far, one may suppose that leader member exchange acts as a mediator between transformational leadership and job performance, meaning that transformational leadership influences leader member exchange, which in turn improves job performance. Another research by Long et al., (2012) studied the impact of leadership styles on employee turnover intention among academic staff in a Malaysian community college. What stands out in these findings is the direct negative relationship between both transformational and transactional leadership and turnover intention, though this relationship was not significant in a statistical angle. This contradicts previous research suggesting a strong influence of leadership styles on turnover intention. This suggests that the insignificance might be due to the independent nature of academic work, where limited contact with superiors reduces the impact of leadership styles. Along the same lines, the study by Doherty and Danylchuk (1996) explored transformational and transactional leadership in interuniversity athletics, focusing on athletic administrators and their impact on head coaches. They found that the leadership profile of athletic administrators was predominantly transformational. The study found positive associations between transformational leadership behaviors (attributed charisma, individualized consideration) and positive outcomes like coaches' satisfaction with leadership, perceived leader effectiveness, and extra effort.

Table 5. Theme clusters for TL research in higher education

Theme	Author(s)	Title	TC
Transformational Leadership and Innovation in Higher Education	Elrehail, Hamzah; Emeagwali, Okechukwu Lawrence; Alsaad, Abdallah; Alzghoul, Amro	“The Impact of Transformational and Authentic Leadership on Innovation in Higher Education: The Contingent Role of Knowledge Sharing”	217
	Aldholay, Adnan H.; Isaac, Osama; Abdullah, Zaini; Ramayah, T.	“The Role of Transformational Leadership as a Mediating Variable in DeLone and McLean Information System Success Model: The Context of Online Learning Usage in Yemen”	168
	Al-Husseini, Sawasn; El Beltagi, Ibrahim;	“Transformational Leadership and Innovation: The Mediating Role of	143

	Moizer, Jonathan.	Knowledge Sharing amongst Higher Education Faculty”	
Transformational leadership	Al-Husseini, Sawasn; Elbeltagi, Ibrahim.	“Transformational Leadership and Innovation: A Comparison Study between Iraq's Public and Private Higher Education”	99
	Kent, Aubrey; Chelladurai, Packianathan.	“Perceived Transformational Leadership, Organizational Commitment, and Citizenship Behavior: A Case Study in Intercollegiate athletics”	97
	Antonopoulou, Hera; Halkiopoulos, Constantinos; Barlou, Olympia; Beligiannis, Grigorios N.	“Transformational Leadership and Digital Skills in Higher Education Institutes: During the COVID-19 Pandemic”	82
Teaching and academic performance	Knight, Peter T.; Trowler, Paul R.	“Department-level Cultures and the Improvement of Learning and Teaching”	218
	Farrukh, Muhammad; Lee, Jason Wai Chow; Shahzad, Imran Ahmed.	“Intrapreneurial Behavior in Higher Education Institutes of Pakistan: The Role of Leadership Styles and Psychological Empowerment”	66
	Tourish, Dennis; Craig, Russell; Amernic, Joel	“Transformational Leadership Education and Agency Perspectives in Business School Pedagogy: A Marriage of Inconvenience?”	65
Leadership development and job performance	Jyoti, Jeevan; Bhau, Sonia	“Impact of Transformational Leadership on Job Performance: Mediating Role of Leader–Member Exchange and Relational Identification”	62
	Long, Choi Sang; Thean, Lee Yean; Ismail, Wan Khairuzzaman Wan; Jusoh, Ahmad.	“Leadership Styles and Employees' Turnover Intention: Exploratory Study of Academic Staff in a Malaysian College”	56
	Doherty, Alison J.; Danylchuk, Karen E.	“Transformational and Transactional Leadership in Interuniversity Athletics Management”	51

Topical shifts of TL research in higher education

Expanding on the analysis of co-citations and bibliographic coupling, thematic trends in TL research within higher education are examined by employing co-occurrence analysis. This analysis utilizes authors' keywords. The keywords are then chronologically filtered to trace the topical evolution of TL research in higher education that appears in more than four articles in the Scopus data retrieved. Figures 4–8 illustrate this thematic sequence.

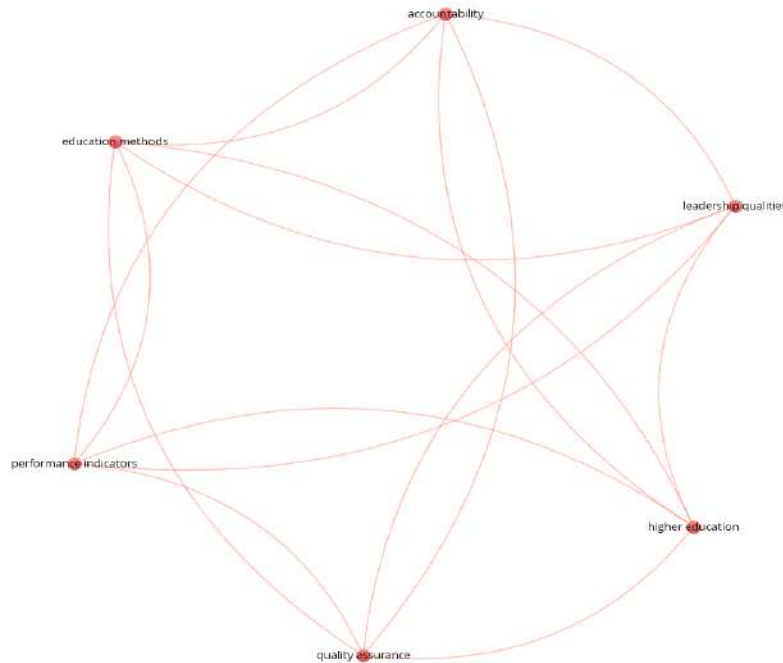


Figure 4. Leading topics from 1996 - 2001
Source: Scopus database

NB: quality assurance, performance indicators, higher education, leadership qualities, educational methods, accountability. Figure 4 captures the 1996 - 2001 trend of the intellectual development of transformational leadership research in higher education during this early phase. The key themes are quality assurance, performance indicators, education methods, leadership qualities, accountability, and higher education. These terms are moderately interconnected, indicating an emerging field exploring foundational concepts. Quality assurance and accountability are frequently used together, which suggests a desire to improve institutional standards and governance. A focus on education methods and performance indicators implies an interest in the ways in which leadership influences teaching practices and measurable outcomes. Leadership qualities play a key role in explaining effective transformational leaders. Overall, the network suggests that transformational leadership was being positioned as a catalyst for educational reform, institutional performance, and strategic governance in higher education.

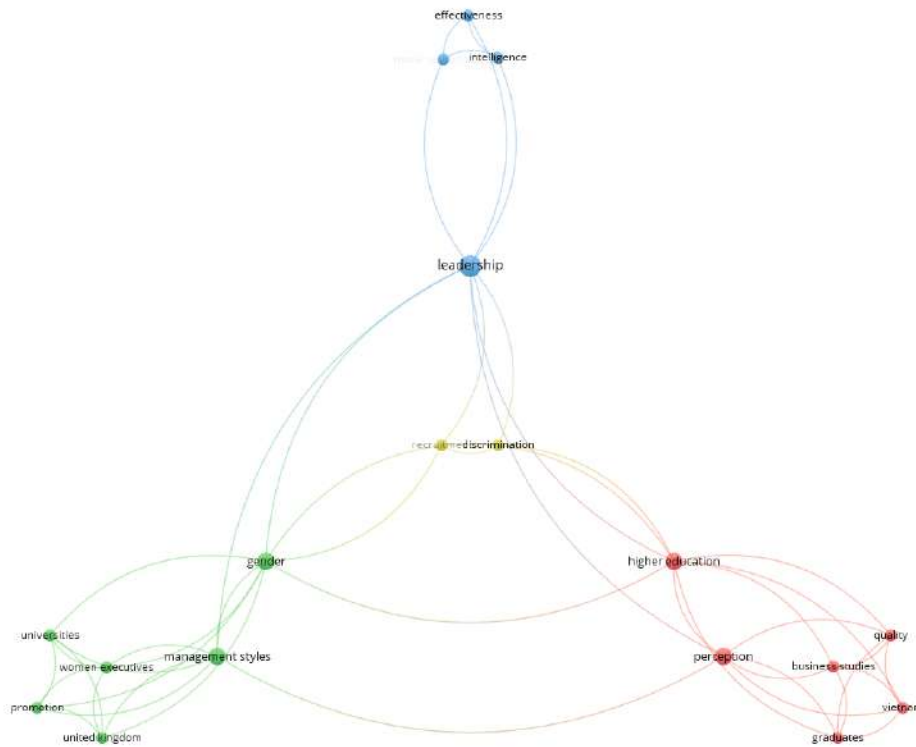


Figure 5. Topics that were influential from 2002-2007
Source: Scopus database

Note(s): red nodes: perception, graduates, quality, Vietnam and higher education. blue nodes: effectiveness, intelligence and leadership. green nodes: gender, management styles, women executives, promotion, universities and United Kingdom. yellow nodes: discrimination and recruitment. Figure 5 above shows the progress of transformational leadership research in higher education. It's growing and new central themes emerge which is leadership which also around it connects to other clusters, red and green. Both are centered on effectiveness, intelligence, gender, management styles and women executives showing interest in gender studies through leadership in UK universities. Other suggestion is that UK universities are researching the topic more in this area and that the topic is well established here. Third cluster which is red is more focused on perception, quality, and graduates in higher education, while highlighting Vietnam in the fringes using small circle showing an emerging interest in higher education in the third world. A yellow cluster consists of recruitment and discrimination, suggesting the intersection of leadership, gender and higher education in the domain.

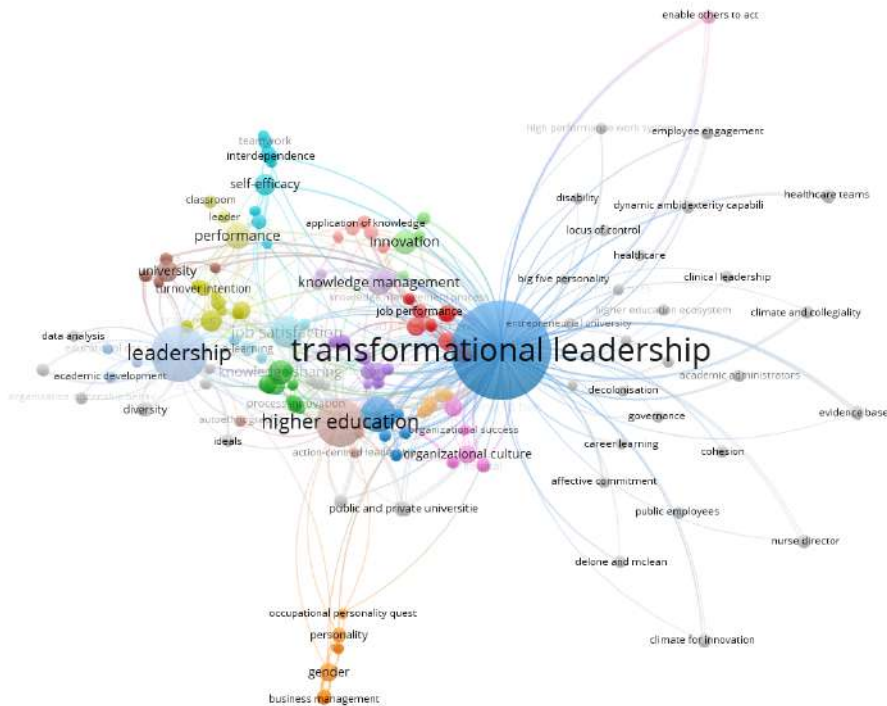


Figure 7. Topics that were influential from 2014- 2019

Source: Scopus database

Notes(s): blue nodes: transformational leadership, leadership, academic development, teamwork, interdependence, self-efficacy, higher education and organizational culture. green nodes: knowledge sharing, processing innovation, application of knowledge and innovation. yellow nodes: turnover intention, job satisfaction, performance, leader and classroom. gray nodes: public and private universities, public employees, decolonization, healthcare and employee engagement. orange nodes: gender, personality, occupational personality quest and business management. The 2014–2019 trend (Figure 7), it is apparent that the 2014–2019 growth expands, in terms of transformational leadership research in higher education. Transformational leadership is a dominant theme or topic showing that its matured and established. There are new emerging topics of interest such as knowledge management, job performance and higher education showing growing interest in how transformational leadership affects knowledge processes and academic staff output. All small circles such as gender and other topics suggest new entry in the research sphere in this period. This mapping demonstrates that transformational leadership research in higher education has expanded from general organizational themes to include general and applied educational challenges.

styles, for example examining how transformational leadership interacts with authentic, servant, or distributed leadership in academic settings. Furthermore, clusters three and four shows a need for studies that move beyond individual outcomes by studying departmental and institutional leadership dynamics, using longitudinal and mixed method designs to capture leadership development and performance over time.

Conclusion

Based on the bibliometric and thematic analyses, the literature on transformational leadership in higher education can be classified into three broad levels of research coverage. Some of the most covered fields focus on transformational leadership and innovation, knowledge sharing, faculty performance, and employee engagement. These areas dominate the literature, as reflected by high publication volumes, strong citation, and large thematic clusters, indicating sustained scholar attention over the past three decades. Middle covered fields include teaching and learning outcomes, leadership development, job performance, and organizational commitment. Despite these topics receiving consistent attention, they are often examined within limited institutional or regional contexts and through cross sectional research designs, suggesting opportunities for deeper and more diverse investigation. In contrast, several areas remain less explored within transformational leadership research in higher education. These include departmental level leadership dynamics, nonacademic staff leadership, longitudinal leadership development, administrative and organizational innovation, and leadership practices in underrepresented regions such as Africa and parts of Asia. Emerging topics such as education 4.0, digital competence, ethical leadership, sustainability, and post pandemic leadership responses also remain relatively under researched despite their growing relevance.

Building on the bibliometric and thematic findings of this review, future research on transformational leadership in higher education can advance the field in several ways. First, researchers can shift focus from predominantly individual level outcomes toward departmental and institutional leadership processes, particularly examining how transformational leadership operates within academic units where collegiality and shared governance are central. Second, future studies can incorporate underrepresented geographical contexts, from developing and emerging economies, to address the current regional concentration of the literature. Third, scholars can adopt longitudinal, comparative, and mixed method research designs to better understand how transformational leadership evolves over time and responds to crises such as digital transformation and post pandemic disruption. Finally, future research can test additional mediating and moderating variables including organizational culture, digital competence, trust, and psychological capital to provide a more nuanced explanation of how and when transformational leadership is most effective in higher education.

References

- Aldholay, A. H., Isaac, O., Abdullah, Z., & Ramayah, T. (2018). The role of transformational leadership as a mediating variable in DeLone and McLean information system success model: The context of online learning usage in Yemen. *Telematics and Informatics*, 35(5), 1421–1437. <https://doi.org/10.1016/j.tele.2018.03.012>
- Al-Husseini, S., El Beltagi, I., & Moizer, J. (2021). Transformational leadership and innovation: The mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670–693. <https://doi.org/10.1080/13603124.2019.1588381>

- Al-husseini, S., & Elbeltagi, I. (2018). Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: The case of Iraqi higher education. *International Journal of Leadership in Education*, 21(4), 506–517. <https://doi.org/10.1080/13603124.2016.1142119>
- Al Issa, H.-E., Thai, M. T. T., & Nguyen, H. (2024). A systematic mapping of social entrepreneurship education: A call for increased collaboration, ethics, and research frameworks. *The International Journal of Management Education*, 22(3), 101025. <https://doi.org/10.1016/j.ijme.2024.101025>
- Al-Thawabiya, A., Singh, K., Al-Lenjawi, B. A., & Alomari, A. (2023). Leadership styles and transformational leadership skills among nurse leaders in Qatar, a cross-sectional study. *Nursing Open*, 10(6), 3440–3446. <https://doi.org/10.1002/nop2.1636>
- Antonopoulou, H., Halkiopoulos, C., Barlou, O., & Beligiannis, G. N. (2021). Transformational leadership and digital skills in Higher Education Institutes: During the COVID-19 pandemic. *Emerging Science Journal*, 5(1), 1–15. <https://doi.org/10.28991/esj-2021-01252>
- Archambault, E., Campbell, D., Gingras, Y., & Lariviere, V. (2009). Comparing bibliometric statistics obtained from the Web of Science and Scopus. *Journal of the American Society for Information Science and Technology*, 60(7), 1320–1326. <https://doi.org/10.1002/asi.21062>
- Balwant, P. T. (2016). Transformational instructor-leadership in Higher Education Teaching: A meta-analytic review and research agenda. *Journal of Leadership Studies*, 9(4), 20–42. <https://doi.org/10.1002/jls.21423>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. <https://www.academia.edu/download/70684182/3c08a7312f01048b773d002f68e1d589a38a.pdf>
- Bayraktar, S., & Jiménez, A. (2020). Self-efficacy as a resource: A moderated mediation model of transformational leadership, extent of change and reactions to change. *Journal of Organizational Change Management*, 33(2), 301–317. <https://doi.org/10.1108/JOCM-12-2018-0368>
- Berkovich, I., & Hassan, T. (2023). Principals' digital transformational leadership, teachers' commitment, and school effectiveness. *Education Inquiry*, 1–18. <https://doi.org/10.1080/20004508.2023.2173705>
- Burns, J. (1978). *Leadership*. Harper & Row, Publishers.
- Busari, A. H., Khan, S. N., Abdullah, S. M., & Mughal, Y. H. (2020). Transformational leadership style, followership, and factors of employees' reactions towards organizational change. *Journal of Asia Business Studies*, 14(2), 181–209. <https://doi.org/10.1108/JABS-03-2018-0083>
- Daenekindt, S., & Huisman, J. (2020). Mapping the scattered field of research on higher education. A correlated topic model of 17,000 articles, 1991–2018. *Higher Education*, 80(3), 571–587. <https://doi.org/10.1007/s10734-020-00500-x>
- Deng, C., Gulseren, D., Isola, C., Grocutt, K., & Turner, N. (2023). Transformational leadership effectiveness: An evidence-based primer. *Human Resource Development International*, 26(5), 627–641. <https://doi.org/10.1080/13678868.2022.2135938>
- Doherty, A. J., & Danylchuk, K. E. (1996). Transformational and transactional leadership in interuniversity athletics management. *Journal of Sport Management*, 10(3), 292–309. <https://doi.org/10.1123/jsm.10.3.292>

- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Du, Y., & Yan, M. (2022). Green transformational leadership and employees' taking charge behavior: The mediating role of personal initiative and the moderating role of green organizational identity. *International Journal of Environmental Research and Public Health*, *19*(7), 4172. <https://doi.org/10.3390/ijerph19074172>
- Elrehail, H., Emeagwali, O. L., Alsaad, A., & Alzghoul, A. (2018). The impact of transformational and authentic leadership on innovation in higher education: The contingent role of knowledge sharing. *Telematics and Informatics*, *35*(1), 55–67. <http://dx.doi.org/10.1016/j.tele.2017.09.018>
- Farrukh, M., Lee, J. W. C., & Shahzad, I. A. (2019). Intrapreneurial behavior in higher education institutes of Pakistan: The role of leadership styles and psychological empowerment. *Journal of Applied Research in Higher Education*, *11*(2), 273–294. <https://doi.org/10.1108/JARHE-05-2018-0084>
- Fauzi, M. A., Martin, T., & Ravesangar, K. (2021). The influence of transformational leadership on Malaysian students' entrepreneurial behaviour. *Entrepreneurial Business and Economics Review*, *9*(1), 89–103. <https://doi.org/10.15678/EBER.2021.090106>
- Frias, A., Hampton, D., Tharp-Barrie, K., & Thomas, J. (2021). The impact of an emotional intelligence training program on transformational leadership. *Nursing Management*, *52*(2), 18. <https://doi.org/10.1097/01.NUMA.0000731924.03153.df>
- Geibel, H. V., Rigotti, T., & Otto, K. (2022). It all comes back to health: A three-wave cross-lagged study of leaders' well-being, team performance, and transformational leadership. *Journal of Applied Social Psychology*, *52*(7), 532–546. <https://doi.org/10.1111/jasp.12877>
- Hilton, S. K., Madilo, W., Awaah, F., & Arkorful, H. (2023). Dimensions of transformational leadership and organizational performance: The mediating effect of job satisfaction. *Management Research Review*, *46*(1), 1–19. <https://doi.org/10.1108/MRR-02-2021-0152>
- Jia, X., Chen, J., Mei, L., & Wu, Q. (2018). How leadership matters in organizational innovation: A perspective of openness. *Management Decision*, *56*(1), 6–25. <https://doi.org/10.1108/MD-04-2017-0415>
- Jyoti, J., & Bhau, S. (2015). Impact of transformational leadership on job performance: Mediating role of leader–member exchange and relational identification. *Sage Open*, *5*(4), 2158244015612518. <https://doi.org/10.1177/2158244015612518>
- Kent, A., & Chelladurai, P. (2001). Perceived transformational leadership, organizational commitment, and citizenship behavior: A case study in intercollegiate athletics. *Journal of Sport Management*, *15*(2), 135–159. <https://doi.org/10.1123/jsm.15.2.135>
- Knight, P. T., & Trowler, P. R. (2000). Department-level cultures and the improvement of learning and teaching. *Studies in Higher Education*, *25*(1), 69–83. <https://doi.org/10.1080/030750700116028>
- Korkmaz, A. V., Van Engen, M. L., Knappert, L., & Schalk, R. (2022). About and beyond leading uniqueness and belongingness: A systematic review of inclusive leadership research. *Human Resource Management Review*, *32*(4), 100894. <https://doi.org/10.1016/j.hrmr.2022.100894>
- Long, C. S., Thean, L. Y., Ismail, W. K. W., & Jusoh, A. (2012). Leadership styles and employees' turnover intention: Exploratory study of academic staff in a Malaysian

- College. *World Applied Sciences Journal*, 19(4), 575–581. <https://doi.org/10.5829/idosi.wasj.2012.19.04.155>
- Montasser, D., Prijadi, R., & Balqiah, T. E. (2023). The mediating effect of IT-enabled dynamic capabilities and organizational readiness on the relationship between transformational leadership and digital business model innovation: Evidence from Indonesia incumbent firms. *Sage Open*, 13(2), 21582440231181588. <https://doi.org/10.1177/21582440231181588>
- Ntseke, T., Mitonga-Monga, J., & Hoole, C. (2022). Transformational leadership influences on work engagement and turnover intention in an engineering organisation. *SA Journal of Human Resource Management*, 20. <https://doi.org/10.4102/sajhrm.v20i0.2013>
- Owusu-Agyeman, Y. (2021). Transformational leadership and innovation in higher education: A participative process approach. *International Journal of Leadership in Education*, 24(5), 694–716. <https://doi.org/10.1080/13603124.2019.1623919>
- Samuel, O. M., & Engelbrecht, A. S. (2021). How transformational leadership, psychological contract violation, empowerment and affective commitment influence employee's intention to quit an organisation. *South African Journal of Business Management*, 52(1). <https://doi.org/10.4102/sajbm.v52i1.2278>
- Tourish, D., Craig, R., & Amernic, J. (2010). Transformational leadership education and agency perspectives in Business School pedagogy: A marriage of inconvenience? *British Journal of Management*, 21(s1). <https://doi.org/10.1111/j.1467-8551.2009.00682.x>
- Waheeda, A., Vasudevan, A., Hai, S. T., & Balakrishnan, R. (2023). Nurturing academic leadership: A quest for the ideal academic leadership style for Maldives higher education. *International Journal of Education and Practice*, 11(4), 837–851. <https://doi.org/10.18488/61.v11i4.3513>