Title: Leadership and Change Management in Higher Education: A Conceptual Review

Abstract

In these turbulent times, accelerated by the COVID-19 pandemic, change is no longer an option but a necessity. Higher education is a dynamic and complex sector that must constantly embrace change to sustain its operations. Successful change requires leaders who have a clear vision, able to engage and bring people together to achieve common goals. To that end, there is much background work that leaders must invest in to equip themselves and their followers for change. This review paper aims to identify leadership best practices across global higher education in managing change, and consolidating these findings into common themes. The findings are expected to provide direction for future research in helping higher education institution leaders implement change effectively. This study synthesizes and identifies leadership best practices across global higher education in managing change using bibliometric analysis approach.

1. Introduction

Change is natural phenomena (Rudolph et al., 2018). Generally, changes come from unexpected circumstances (Wang e al., 2018, June), such as pandemic (Ellis et al., 2020), natural calamities, and natural disasters (Simsa et al., 2019) etc. These kinds of circumstances cause change everywhere (Oyedotun, 2020) like industry, higher education, health sector etc., and every sector wants to manage such changes efficiently. Leadership practices are such practices which enable any organization to manage such changes (Cortellazzo et al., 2019; Lamb et al., 2018). Right now, higher education institutions are undergoing significant and rapid change, driven by the COVID-19 pandemic (Ma et al., 2022; Lemoine & Richardson, 2020) and other internal and external factors (Adams Becker et al., 2017; Xing & Marwala, 2017). Effective leadership is essential to manage this change and to ensure the sustainability and success of higher education institutions (Attah et al., 2017; Aldulaimi & Abdeldayem, 2020). The ability to lead change effectively requires leaders to have a clear vision (Kane et al., 2019), engage and bring people together to achieve common goals, and invest in background work to equip themselves and their followers for change. However, studies have shown that as the world becomes more competitive and complex, educational institutions must constantly adapt to remain relevant and effective (Smith, 2020). This requires strong leadership and effective change management practices that can guide institutions

through periods of uncertainty, transition, and transformation (Jones, 2019). According to recent research, developing leadership skills that can facilitate change and transformation is essential for educational institutions to minimize the risks and disruptions that often accompany these changes (Brown & Green, 2021).

Despite the extensive literature on leadership in higher education, there remains a lack of consensus on best practices for leading change. This review paper aims to identify leadership best practices across global higher education in managing change, and consolidating these findings into common themes. The findings are expected to provide direction for future research in helping higher education institution leaders implement change effectively.

2. Methods

A bibliometric analysis approach was employed to identify and synthesize leadership best practices across global higher education in managing change. The authors have followed four basic and progressive steps, namely searching, evaluating, synthesizing, and analyzing (Vicente-Saez & Martinez-Fuentes, 2018). Accessibility to previously published relevant research must be obvious and unmistakable as a requirement for a systematic review and bibliographic inquiry (Linnenluecke et al., 2020). Multiple steps have been taken to explore the pertinent literature using a number of fixed filters and conditions (Nguyen & Singh, 2018, May). A comprehensive search of the Scopus database, Web of Science and ScienceDirect, were conducted (Gonzalez-Correa et al., 2021) using specific keywords and Boolean operators (Zhao et al., 2023) to retrieve relevant articles published between 2015 and 2022. A total of 21 articles met the inclusion criteria using preferred reporting items for systematic reviews and meta-analysis (PRISMA) approach (Saif et al., 2022); based on this information, relevant themes regarding leadership best practices for managing change in higher education organizations were identified. VOSviewer was also used to conduct bibliometric analysis of the records found in the academic research databases. The analysis includes co-citation analysis, bibliographic coupling analysis, and network analysis, to identify key themes and trends.

Keywords for search	Search within	Research databases	Period	Fundamental query string	Sort by	Total Number of papers
Leadership best practices for managing change in higher education	Title, Abstract, Keywords	Scopus, Web of Science, ScienceDirect	2015 to 2022	TITLE-ABS-KEY (leadership AND practices AND in AND managing AND change AND higher AND education) AND PUBYEAR > 2014 AND PUBYEAR < 2023	Relevance	592

Table 1: Techniques and procedures for searching

A total of 592 research publications were identified from the databases, as shown in Table 1.

Locating applicable papers in the research databases

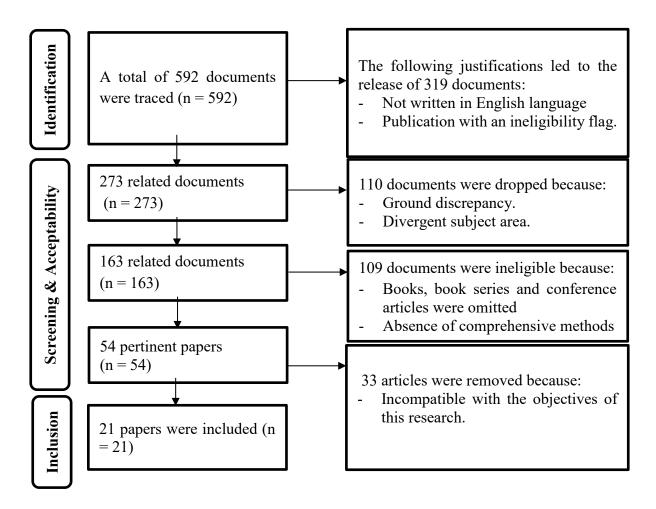


Figure-1: Results of PRISMA flow diagram.

3. Results and Discussion

From our analysis we documented the important figures here which are necessary for bibliometric and review study.

Documents on leadership best practices for managing change in higher education that were released by nations between 2015 and 2022 are shown in Figure 2. The United States is the country with the most publications in this area, which is a reflection of its continuing concerns about applying best leadership practices to change management. While the United Kingdom released 52 papers, the United States produced 82 records. Australia, Canada, India, Malaysia, and other countries contributed less than thirty percent to this field.

Documents by country or territory

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

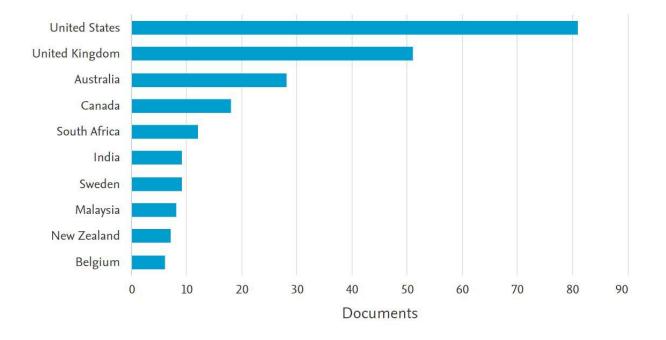
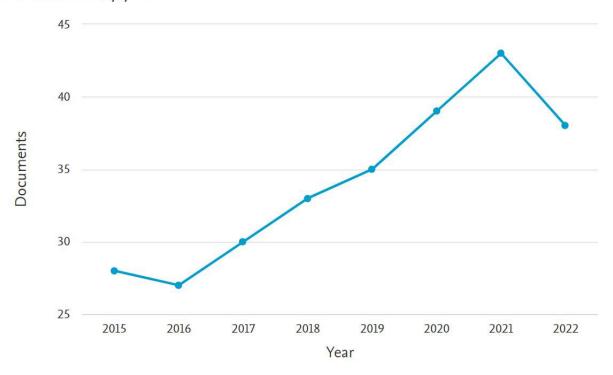


Figure-2: Documents by country.

Figure 3 below shows the number of publications over the years, with 2015 and 2016 having the fewest publications. The number of publications has gradually grown since 2016 up till 2021. The year 2021 had the most publications with 43. But in 2022, the number of publications fell to 38. The graph shows that in 2020 and 2021, the researchers concentrated more on this topic of leadership. This is unsurprising in view of the unprecedented COVID-19, which required strong leadership to navigate the pandemic effectively (Harris & Jones, 2020).

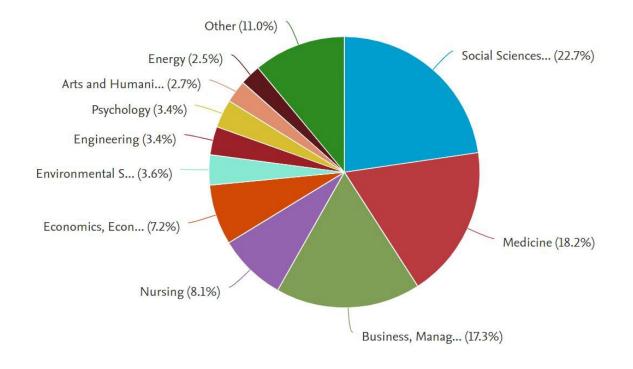


Documents by year

Figure-3: Publications by year (2015 to 2022).

Figure 4 displays papers on leadership best practices for managing change that have been published in a variety of disciplines. The figure shows that researchers from a variety of disciplines produced papers on the subjects mentioned. Social science, which made up 22.7% of the documents, was the area most concerned with leadership best practices and managing change, while Energy had the least (2.5%). 18.2%, 17.3%, 8.1%, 7.2%, and 11%, respectively, were

accounted for by medicine, business management, nursing, economics, and others. From these results, it can be deduced that social science researchers concentrated more on the topic of leadership practices for managing the changes (Hartley & Hinksman, 2019).



Documents by subject area

Figure-4: Publications by subject areas (2015 to 2022).

Figure 5 depicts the creation of a network map based on bibliographic data and the keywords from the relevant papers. The map represents a network of frequently occurring and noteworthy terms, with leadership serving as its focal point and connecting all other terms to it. The top ten central identified themes include human, pandemic, change management, evaluation, nurse, teamwork, skills, article, qualitative research, and learning, despite the fact that there are many other related words that are related to leadership.

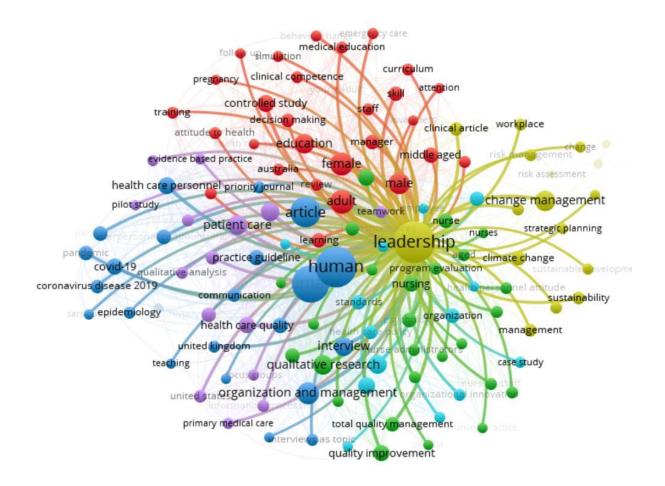


Figure-5: Keywords occurrence data-driven network map.

The term co-occurrence has been determined using the titles and abstracts of the selected articles to create Figure 6. The size of each term's bubble indicates how frequently it is used, and terms with the same hue frequently occur together. The network diagram demonstrates that all terms are related to education, with the word leadership appearing most frequently in bold type. The most commonly used terms, however, were human, article, structure and management, practice guidelines, patient care, and interview. Contrarily, insignificant words like training, curriculum, pilot study, COVID-19, etc. were used.

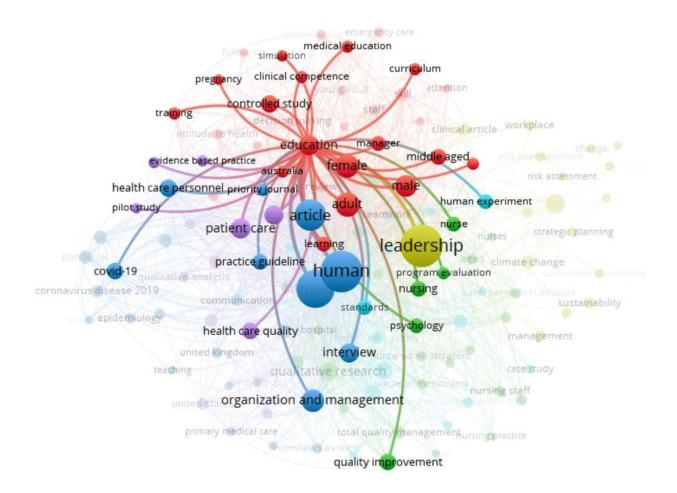


Figure-6: Text data-based term co-occurrence map.

According to bibliographic coupling, nations that belong to the same group frequently reference one another's works, as shown in Figure 7. The colors blue, dark green, light green, red and purple respectively, symbolize the five groups of nations. The network's hub is Malaysia, which is followed by the United States, United Kingdom, Canada, New Zealand, and Australia. However, the USA has the most frequent document citations, followed by the UK and Australia. It suggests that while American researchers are leading in this subject, Malaysian researchers are on par with the research work done by the other countries.

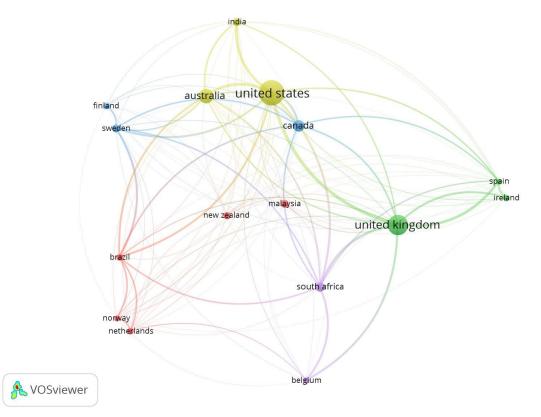


Figure-7: Bibliographic coupling of countries.

4. Discussion and Themes

Three significant themes regarding leadership best practices for managing change in higher education organizations were identified. Strategic planning was the first theme, which involved establishing a clear vision and purpose, creating a strategic plan, and coordinating resources and activities with the plan. Stakeholder collaboration and engagement was the second theme, and it involved working with stakeholders to create a shared understanding of the change process and its goals, creating partnerships and networks, participating in joint decision-making during the change process, listening to their opinions and worries, and attending to their needs and expectations. The final theme was staff development, which included giving staff members the chance to acquire the skills and information necessary to implement change successfully, assisting staff members during the change process, and praising and rewarding staff members for their contributions.

Key terms	Significant terms from derived papers	Filtration and association	Themes
human, pandemic, change management, evaluation, nurse, teamwork, skills, article, qualitative	Resource allocation, continuous improvement, communication, implementation, monitoring, evaluation, action planning, goal setting, purpose, partner, relationship, roles and responsibilities, decision- making, governance, performance, sustainability, stakeholder, needs and interests, engagement, feedback, transparency, accountability, training and development, coaching, incentives and recognition,	Resource allocation, continuous improvement, communication, implementation, monitoring, evaluation, action planning, goal setting, management Human, pandemic, change , pilot study and workplace	Strategic planning
research, learning, structure and management, practice guidelines , patient care, and interview, training, curriculum, pilot study, COVID- 19, standards, controlled study, workplace, case study, teaching, manager, staff		Partner, relationship, roles and responsibilities, decision-making, governance, performance, sustainability, stakeholder, needs and interests, engagement, qualitative research, learning, structure and management, evaluation, nurse, teamwork.	Stakeholder Engagement & Collaboration
		Performance, sustainability, stakeholder, needs and interests, engagement, feedback, transparency, accountability, training and development,	Staff development

coaching, incentives and recognition, skil controlled study workplace, case study, teaching	ls, ,
manager, staff.	

5. Conclusion and future direction

The results of this bibliometric analysis give a thorough overview of effective leadership techniques for handling change in higher education organizations. The review identified several crucial leadership behaviors, such as strategic planning, communication, teamwork, stakeholder involvement, and staff development (Schwartz & Pogge, 2000; Khayota, 2014) that can aid leaders in navigating the complexities of change. The analysis emphasizes how crucial it is to spend money on background research to prepare leaders and their followers for change. The effectiveness of these leadership best practices and how they can be modified for use in various institutional contexts could be the subject of future study in this field. The results of this review offer insightful recommendations for higher education leaders looking to successfully enact change as well as areas for further research.

References

- Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). NMC Horizon Report: 2017 Higher Education Edition. *New Media Consortium*.
- Aldulaimi, S. H., & Abdeldayem, M. M. (2020). A thematic analysis of leadership behaviours and change management in higher education to boost sustainability. *International Journal of Higher Education and Sustainability*, 3(1), 34-51.
- Attah, E., Obera, V. A., & Isaac, S. (2017). Effective leadership and change management for sustainable development in Nigeria. *International Journal of Public Administration and Management Research*, 4(2), 37-42.

- Brown, T. J., & Green, S. K. (2021). Leadership skills for managing change and transformation in educational institutions. Journal of Educational Administration, 59(2), 132-147. doi: 10.1108/JEA-08-2020-0159
- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The role of leadership in a digitalized world: A review. *Frontiers in psychology*, 10, 1938.
- Ellis, V., Steadman, S., & Mao, Q. (2020). 'Come to a screeching halt': Can change in teacher education during the COVID-19 pandemic be seen as innovation?. *European Journal of Teacher Education*, 43(4), 559-572.
- Gonzalez-Correa, C. A., Tapasco-Tapasco, L. O., & Gomez-Buitrago, P. A. (2021). A method for a literature search on microbiota and obesity for PhD biomedical research using the Web of Science (WoS) and the Tree of Science (ToS). *Issues in Science and Technology Librarianship*, (99).
- Harris, A., & Jones, M. (2020). COVID 19–school leadership in disruptive times. *School Leadership & Management*, 40(4), 243-247.
- 9. Hartley, J., & Hinksman, B. (2019). Leadership development: A systematic review of the literature. *Coventry: Warwick Institute of Governance and Public management, Warwick Business School, University of Warwick*.
- Jones, A. (2019). Leadership best practices in managing change in higher education. Journal of Higher Education Management, 34(2), 45-62.
- Kane, G. C., Phillips, A. N., Copulsky, J., & Andrus, G. (2019). How digital leadership is (n't) different. *MIT Sloan Management Review*, 60(3), 34-39.
- Khayota, M. C. (2014). Critical Analysis of Strategy Implementation on Organization Performance in Service Delivery: Case of Lake Victoria South Water Services Board in Kisumu. *European Journal of Business and Management*, 6(30), 192-201.
- Lamb, A., Martin-Misener, R., Bryant-Lukosius, D., & Latimer, M. (2018). Describing the leadership capabilities of advanced practice nurses using a qualitative descriptive study. *Nursing Open*, 5(3), 400-413.
- Lemoine, P. A., & Richardson, M. D. (2020). Planning for higher education institutions: Chaos and the COVID-19 pandemic. *Educational Planning*, 27(3), 43-57.

- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management*, 45(2), 175-194.
- 16. Ma, G., Black, K., Blenkinsopp, J., Charlton, H., Hookham, C., Pok, W. F., ... & Alkarabsheh, O. H. M. (2022). Higher education under threat: China, Malaysia, and the UK respond to the COVID-19 pandemic. *Compare: A Journal of Comparative and International Education*, 52(5), 841-857.
- Nguyen, N. H., & Singh, S. (2018, May). A primer on systematic reviews and metaanalyses. In *Seminars in liver disease* (Vol. 38, No. 02, pp. 103-111). Thieme Medical Publishers.
- Oyedotun, T. D. (2020). Sudden change of pedagogy in education driven by COVID-19: Perspectives and evaluation from a developing country. *Research in Globalization*, 2, 100029.
- 19. Rudolph, C. W., Rauvola, R. S., & Zacher, H. (2018). Leadership and generations at work: A critical review. *The Leadership Quarterly*, *29*(1), 44-57.
- 20. Saif, A. N. M., Islam, K. A., Haque, A., Akhter, H., Rahman, S. M., Jafrin, N., ... & Mostafa, R. (2022). Blockchain Implementation Challenges in Developing Countries: An evidence-based systematic review and bibliometric analysis. *Technology Innovation Management Review*, 12(1/2).
- 21. Schwartz, R. W., & Pogge, C. (2000). Physician leadership: essential skills in a changing environment. *The American journal of surgery*, *180*(3), 187-192.
- 22. Simsa, R., Rameder, P., Aghamanoukjan, A., & Totter, M. (2019). Spontaneous volunteering in social crises: Self-organization and coordination. *Nonprofit and Voluntary Sector Quarterly*, 48(2_suppl), 103S-122S.
- 23. Smith, B. (2020). Adapting to the changing landscape: A case study of successful change management in higher education. Journal of Educational Leadership, 18(3), 76-89.
- 24. Vicente-Saez, R., & Martinez-Fuentes, C. (2018). Open Science now: A systematic literature review for an integrated definition. *Journal of business research*, 88, 428-436.
- 25. Xing, B., & Marwala, T. (2017). Implications of the fourth industrial age on higher education. *arXiv preprint arXiv:1703.09643*.

- 26. Wang, P., Chan, C. Y., & de La Fortelle, A. (2018, June). A reinforcement learning based approach for automated lane change maneuvers. In 2018 IEEE Intelligent Vehicles Symposium (IV) (pp. 1379-1384). IEEE.
- Zhao, M., Liu, W., Saif, A. N. M., Wang, B., Rupa, R. A., Islam, K. M., ... & Rahman, M. A. (2023). Blockchain in Online Learning: A Systematic Review and Bibliographic Visualization. *Sustainability*, 15(2), 1470.