Volume: 20, No: S7(2023), pp. 1367-1378

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online) www.migrationletters.com

Online Instructional Leadership and Educators' Dedication: The case of Saudi Arabia

Dr. Kawthar Khalaf Alhajjuj¹

Abstract

This research investigates the influence of online instructional leadership on educators' commitment within the context of Najran University and educational institutions in Saudi Arabia. The study employs a convergent parallel mixed methods approach involving 120 participants from the Saudi education sector. By combining qualitative and quantitative data collection and analysis, this approach ensures a comprehensive understanding of the phenomenon under scrutiny. The findings indicate that school administrators exhibit distinctive online instructional leadership behaviors in the selected institutions. Eleadership practices encompass strategic planning, resource provision, teacher support, and active communication, all facilitated through digital platforms. The study also reveals that these leadership behaviors significantly impact educators' commitment to their profession (mean score = 4.2). This heightened commitment is evident in increased motivation, job satisfaction, and a stronger sense of institutional loyalty among educators. The study is unique as it delves into the essence of e-leadership by analyzing its digitized components, including strategic planning, resource management, support systems, and communication channels, and enquires into the manner in which these leadership components can inspire and retain instructors, thus impacting the educational outcomes as a whole. The study concludes with a comprehensive understanding of the situation and makes suitable recommendations for the stakeholders.

Keywords: Educator commitment, E-leadership, Online instructional leadership, Saudi Arabia.

Introduction

Given the greater interconnectedness of societies on a global scale, precious insights can provide a means to comprehend the potential effects of digital leadership on educator retention and morale, both of which are pivotal metrics of stable academic achievement (Sheninger, 2019). The implications of digital leadership guide educational leaders worldwide on how to effectively utilize digital platforms to cultivate a dedicated teacher base (Antonopoulou et al., 2021). Digitization has caused significant transformation in the education sector which has been further propelled by the 2019 pandemic (Amankwah et al., 2021). This transition has compelled educational institutions, including those in Saudi Arabia, to reassess the efficacy of teacher leadership in an online setting. Examining the intricacies of e-leadership and its impact on the dedication and commitment of educators in the Saudi Arabian context can provide valuable insights for the international educational community.

¹ Assistant Professor: Educational Leadership and Policy in Higher Education, Department of Education and Psychology, College of Education, Najran University, Kingdom of Saudi Arabia, kkalhajuj@nu.edu.sa Education technology has been a developing theme throughout the 21st century. However, the concept of online instructional leadership, also known as e-leadership, which is a relatively recent development, remains largely unexplored in the symbiosis of technology and education (Elkington, 2020). The deficiency is conspicuous in the framework of educational establishments which have been experiencing a swift metamorphosis to digital patterns and domestic modernization endeavors (Al-Salman & Haider, 2021). Initially, this rapid transition to online education was accelerated by the emergence of the COVID-19 pandemic, which brought the notion of e-leadership to the forefront (Contreras et al., 2020). As educational institutions grappled with this unexplored domain, the demand for directors well-versed in digital platforms became evident. However, there is a lack of research examining the impact of this type of leadership on the commitment and dedication of educators (Al Asmari & Khan, 2014).

The transition to digital education in Saudi Arabia, a country where cultural and religious norms are intricately woven into the education system, presents distinctive obstacles. The significance of education is emphasized by the Vision 2030 initiative, which also advocates for forward-thinking leadership to guide the sector (Vision 2030, 2017). Eleadership is a strategic imperative and not merely a functional necessity in this framework (Alahmadi & Osman, 2021). Nevertheless, there is a significant dearth of scholarly work concerning the precise actions and methodologies employed by e-leaders in the Saudi setting, as well as the consequences of these methodologies on teacher retention and engagement. Previous studies have indicated that the continued dedication of educators is dependent on their job satisfaction and institutional loyalty (Smith & Lindsay, 2014). However, there is limited understanding regarding the factors that precede such satisfaction in the context of online instruction. Furthermore, a considerable proportion of expatriate educators contribute to the variety of faculty members comprising the educational milieu in Saudi Arabia. Further research is warranted to examine the effects of e-leadership on this diverse group (Alghamdi & Li, 2013).

The issue at hand is complex in nature; it extends beyond simply adjusting to digital platforms and involves cultivating leadership attributes that align with the intrinsic and extrinsic motivations of educators. In the educational context of Saudi Arabia, transformational leadership appears to be positively correlated with employee motivation (Aljaberi, 2016). However, research on the implementation of such leadership in the online realm is limited. The purpose of this research is to fill in this knowledge gap by examining the distinct behaviors of e-leadership that promote educator commitment and the manner in which these behaviors manifest as increased motivation, job contentment, and a feeling of allegiance to the institution among educators. With the ongoing transformation of the Saudi education sector, the establishment of e-leadership competencies emerges as a national priority rather than merely a concern for the success of individual institutions (Alghamdi & Al Salloom, 2019). This research contributes to the existing body of knowledge by investigating the interplay between educator commitment, technology, and leadership, as advocated by scholars including Almutairi (2018). Furthermore, it addresses the wider academic conversation on educational leadership, which underscores the significance of novel leadership approaches in enhancing academic achievements (Al-Zaidi, 2018). The present issue pertains to the necessity of comprehending and augmenting online instructional leadership in the educational milieu of Saudi Arabia.

Research questions

- 1. To what extent do e-leadership practices in Saudi Arabian educational institutions impact educators' motivation, job satisfaction, and institutional loyalty?
- 2. What specific behaviors of online instructional leadership are most influential in enhancing the dedication of educators in the context of Saudi educational institutions?

Literature Review

Online instructional leadership and educators' dedication

Due to the expanding integration of technology in education, online instructional leadership is an emerging field of study to have acquired prevalence (Ugur & Koc, 2019). Educational leadership in an online environment is a concept that centers on the behaviors and competencies required to guide and assist students and instructors in virtual environments (Aljaberi, 2016). The intricacy of this style of leadership is emphasized by Harris et al. (2020), who also highlight the criticality of leaders possessing expertise in digital tools and pedagogies. Furthermore, Ng (2018) emphasizes the profound impact that online instructional leaders have on the development of novel pedagogical approaches. In the context of this framework, the notion of educators' dedication is complex and includes elements such as job fulfillment, motivation, and a steadfast commitment to the teaching profession. A positive correlation has been identified in research conducted by Goddard et al. (2019) between the caliber of online instructional leadership and the level of commitment and involvement of educators in their profession. The implementation of online learning environments therefore, requires a reassessment of leadership methodologies. According to Green (2021), in the digital realm, traditional characteristics of instructional leadership, including vision-setting, curriculum alignment, and instructional supervision, must be rethought. Educators' commitment can be substantially impacted by the capacity of leaders to adjust to this modality, given that they depend on leadership signals for their career growth and job contentment (Smith & Riley, 2012).

Scholars have designated e-leadership practices, such as resource allocation, strategic planning, and professional support, as crucial catalysts for educator commitment (Johnson, 2020). Efficient communication, also an element of e-leadership, is additionally pivotal in fostering a sense of community among educators, thereby cultivating commitment (Bennett et al., 2019). The influence of e-leadership on the commitment of educators is also noteworthy when considering the speed of the digital revolution that is occurring in the field of education. Scholarly investigations suggest that committed instructors are more inclined to test out novel pedagogical approaches and exhibit greater fortitude in the face of the difficulties associated with online instruction (Tan et al., 2022). However, literature also warns of prospective obstacles. As an illustration, the relationship-building component of leadership, which is vital for educators' commitment, may be hindered by the impersonal nature of online interactions (Smith, 2021). This underscores the criticality of e-leaders possessing effective communication and relationship-building abilities. Additional aspects of the literature investigate the impact of culture on online instructional leadership and the commitment of educators. The adoption of technology in education and the standards set for leadership positions are both impacted by cultural norms (Chang et al., 2018). Therefore, in diverse educational environments, it is critical to cultivate a sense of commitment among educators by giving due attention to the cultural context. The scholarly literature identifies online instructional leadership as a critical determinant impacting the commitment of educators. Effective eleadership practices can foster a sense of community, dedication, and contentment among educators, which is critical for the success of online learning programs despite the inherent difficulties of online education.

The emergence of digital technology has brought about substantial changes to the paradigm of educational leadership. This change has been swift and transformative in the Saudi context, especially in light of the government's efforts to digitize education through different initiatives (Al-Rahmi et al., 2019). Nevertheless, despite the widespread availability of digital resources, there is limited understanding of the impact of online instructional leadership, also referred to as e-leadership, on the level of commitment and dedication exhibited by educators in this field. The present study employs a mixed-methods design to gain a comprehensive understanding of e-leadership through its

interaction with 120 participants who are employed in the KSA education sector. In the Saudi context, where educational research is in its nascent stages and qualitative insights are necessary to capture the intricate cultural dynamics, this approach is especially suitable (Alhamdan et al., 2014). Previous studies have emphasized the importance of proficient leadership during the process of digital transformation of educational institutions (Hargreaves & Fullan, 2012). However, there remains a knowledge vacuum regarding the specific manner in which these leadership responsibilities are implemented in virtual settings. The stability and expansion of educational institutions are dependent on the dedication of educators, which is demonstrated through their motivation, job satisfaction, and loyalty (Leithwood & Beatty, 2008). The difficulty is exacerbated in Saudi Arabia by the need to synchronize these elements with the rapid advancements in digital education. According to the findings of the study, e-leadership behaviors significantly influence educator commitment. This finding aligns with the results of international research indicating that teacher motivation and satisfaction can be positively impacted by leadership in online environments (Bogler & Somech, 2019). However, this has not been thoroughly examined in the academic literature in the context of the Saudi educational system, which is distinctive for its swift technological advancements and incorporation of technology into teaching methods (Alabdulkareem, 2015). This study investigates the correlation between online instructional leadership and educator commitment in order to fill this research vacuum by demonstrating the positive impacts of online instructional leadership behaviors on teacher motivation, satisfaction, and loyalty, this study contributes to the extensive dialogue surrounding educational leadership. The aforementioned results hold significant pertinence within the Saudi Arabian setting, where the incorporation of digital technology into instruction and educational reform are components of the country's Vision 2030 educational objectives (Aljabreen, 2020). Furthermore, the implications of the study transcend the immediate geographical boundaries of Saudi Arabia. The results of this study provide valuable insights that may influence leadership practices and international educational policy due to the pervasiveness of digital education. The research highlights the criticality of professional development initiatives that furnish educational leaders with the essential competencies required to thrive in an online instructional setting.

Methods

Research design

The research employed a convergent mixed methods approach to examine the impact of online instructional leadership on educators' dedication in Saudi educational institutions. This design was chosen to enable the integration of quantitative and qualitative data, thereby ensuring a robust understanding of e-leadership phenomena. This mixed methods approach allowed for the triangulation of data, enhancing the validity of the findings (Creswell & Creswell, 2018). The study took place at Najran University, in the academic year 2023.

Participants

The study comprised 120 stakeholders from the Saudi education sector, including teachers, administrators, and support staff. A stratified random sampling technique was implemented to ensure representation across different roles, institutions, and regions (Smith, 2020). This approach allowed for the collection of diverse perspectives, enriching the study findings.

Instruments

Quantitative data were gathered through surveys measuring commitment levels, while qualitative data were collected via interviews exploring experiences with e-leadership practices. A questionnaire was designed to assess educators' perceived levels of

commitment and their experiences with e-leadership. This was validated by three eminent academicians. Then the reliability was ensured with a Cronbach's alpha of 0.85, indicating high reliability. Additionally, semi-structured interview protocols were developed and pilot-tested to ensure validity and reliability in capturing participants' detailed experiences and perceptions. The data gathering commenced with the distribution of informed consent forms, which outlined the study purpose, procedures, potential risks, and the confidentiality of responses. Upon receiving consent, the researchers administered the questionnaires online. Simultaneously, interviews were scheduled and conducted using secure video conferencing tools. All procedures were approved by an Institutional Review Board (IRB) to ensure compliance with ethical standards, emphasizing voluntariness, anonymity, and data protection (Johnson & Christensen, 2019).

Data analysis

Quantitative data were analyzed using SPSS (Version 26) to perform descriptive and inferential statistics, while qualitative data underwent thematic analysis using NVivo to identify patterns and themes related to e-leadership practices and their impact. At the interpretation stage, findings from both methods were compared and contrasted to draw comprehensive conclusions about the influence of e-leadership on educator dedication (Saldaña, 2021).

Results

RQ1: To what extent do e-leadership practices in Saudi Arabian educational institutions impact educators' motivation, job satisfaction, and institutional loyalty?

The results presented in Table 1 offer insightful implications regarding the impact of eleadership behaviors on educator commitment in Saudi educational institutions. These findings are instrumental for both academic researchers and policy-makers in the education sector as they navigate the digital transformation of leadership practices. Participants showed an average mean score of 4.2 and standard deviation of 0.5 on educator commitment. Examination of the data showed that teacher support and job satisfaction are the most positively perceived aspects of e-leadership, with mean scores of 4.5 and 4.6, respectively. This suggests that educators feel highly supported in their roles and are satisfied with their jobs when e-leadership is effectively implemented. The high score in resource provision, with a mean of 4.2, indicates that digital platforms are being used successfully to provide teachers with the necessary resources to perform their duties, which is a testament to the capacity of e-leadership to facilitate educational processes. Furthermore, the high scores in Educator commitment and institutional loyalty, both exceeding the threshold of 4.0, imply that such leadership practices are fostering a sense of dedication and loyalty among educators, which is crucial in retaining quality staff and ensuring the stability of the educational environment.

Table 1. Impact of various e-leadership behaviors on educator commitment

Variable	Mean	SD	Interpretation
Strategic planning	3.8	0.6	Moderate/Low
Resource provision	4.2	0.5	High
Teacher support	4.5	0.4	High
Active communication	4.0	0.7	Moderate/Low
Educator commitment	4.3	0.5	High
Job satisfaction		0.3	
Job satisfaction	4.6	0.5	High

Institutional loyalty	4.1	0.6	High
Average	4.2	0.5	High

On the other hand, strategic planning and active communication received moderate/low scores, which raises concerns about the efficacy of these e-leadership behaviors. A score of 3.8 for strategic planning suggests that there may be a lack of clear vision or adequate involvement of educators in the planning process when conducted online. Similarly, the moderate score for active communication points to potential issues in the frequency, clarity, or effectiveness of digital communication between administrators and educators. These areas present opportunities for further development and indicate that while some eleadership practices are thriving, others may require additional attention and improvement.

RQ2: What specific behaviors of online instructional leadership are most influential in enhancing the dedication of educators in the context of Saudi Arabian educational institutions?

Table 2. Qualitative data on e-leadership behaviors in Saudi educational institutions

Key findings	Implications for e-leadership
Teacher support	E-leadership positively impacts job satisfaction and educator commitment. Teachers feel highly supported in their roles.
Job satisfaction	High job satisfaction indicates the importance of effective e-leadership in creating a positive work environment.
Resource provision	Successful use of digital platforms for resource provision enhances the capacity of e-leadership to facilitate educational processes.
Strategic planning	Concerns about the efficacy of e-leadership in terms of clear vision and educator involvement in online planning processes.
Active communication	Moderately low scores suggest room for improvement in the frequency, clarity, and effectiveness of digital communication.
Educator commitment	E-leadership fosters dedication among educators, vital for retaining quality staff and ensuring educational stability.
Institutional loyalty	High scores indicate that e-leadership practices promote loyalty, which contributes to institutional stability.
Skill development	A need for skill development programs in e-leadership to enhance the impact of these practices.
Digital transition	The transition to digital platforms presents both opportunities and challenges, requiring careful planning and communication.
Strategic adoption	The strategic adoption of e-leadership practices is crucial for the future success of educational institutions.

Based on the data, it can be concluded that e-leadership positively influences educator commitment and job satisfaction in Saudi educational institutions. The considerable level of job contentment expressed by educators underscores the criticality of proficient electronic leadership in establishing a positive and inspiring professional atmosphere. The significance of investing in technology and infrastructure to support e-leadership initiatives is highlighted by this result. The data presents doubts regarding the effectiveness of e-leadership with regard to educator engagement in online planning processes and the provision of a distinct vision, as evidenced by the moderately low score for strategic planning. This discovery suggests that there is potential for enhancement in the integration of e-leadership practices into strategic planning, specifically by involving

educators actively in the planning process to foster a collective understanding of objectives and vision. Further, communication received moderately low scores indicating the need for improvements in the frequency, lucidity, and efficacy of digital correspondence between educators and administrators, and the significance of transparent and effective channels of communication in e-leadership, given that successful leadership practices require effective communication.

Discussion

The convergence of qualitative and quantitative data on e-leadership behaviors in the Saudi education sector yields significant insights regarding the effects and possible enhancements in leadership practices. Results indicated that teachers and educational leaders have high perception on the impact of e-leadership on educator commitment. This result indicates that e-leadership practices significantly improve the capacity to furnish instructors with essential digital resources. This discovery highlights the criticality of allocating resources towards technology and infrastructure that facilitate the learning process, thereby establishing a solid foundation for e-leadership initiatives. The results of the research, which highlight the importance of e-leadership strategies being in line with the goals of the institution, are consistent with a substantial body of literature in the domain of educational leadership. The significance of aligning leadership practices with the overarching objectives and mission of educational institutions has been a longstanding argument among leadership scholars (Bass & Riggio, 2006; Leithwood & Sun, 2012). This alignment not only serves to augment the efficacy of leadership but also plays a role in fostering the overall prosperity and durability of educational institutions. The importance of thorough preparation and efficient channels of communication, as underscored by the qualitative data, is a fundamental principle of leadership theory as it pertains to e-leadership. In order to direct the actions of an organization, effective leadership requires strategic planning and transparent communication (Yukl, 2013). Eleadership, which is a subset of leadership in the digital age, attributes even more significance to the aforementioned factors on account of the distinctive obstacles and prospects that digital platforms offer (Avolio & Kahai, 2003).

The qualitative data additional evidence in favor of this, emphasizing the favorable effects that e-leadership has on fostering a sense of devotion and allegiance to the academic establishment. These findings underscore the necessity of thorough planning and efficient communication channels to facilitate the adoption process. The convergence of qualitative and quantitative data in the Saudi Arabian education sector highlights the multifaceted and intricate nature of e-leadership practices. These findings are consistent with previous studies which have a beneficial impact on the job satisfaction and commitment of educators (Bass & Riggio, 2006; Leithwood et al., 2004). By placing an emphasis on teacher support and job satisfaction, e-leadership practices have the potential to foster a motivated and committed teaching staff, ultimately leading to improved student learning outcomes (Hoy & Tschannen-Moran, 1999; Ingersoll & Strong, 2011). Conversely, the challenges identified in strategic planning and active communication by the study align with the more extensive body of literature concerning leadership in the era of digitalization. The process of strategic planning becomes more intricate with the transition to digital platforms, which is a fundamental leadership responsibility (Fullan, 2014). Active participation of educators in planning processes is essential for achieving shared vision and goal alignment, which are fundamental components of effective leadership (Hallinger & Heck, 2010; Spillane et al., 2004). The results of the study underscore the significance of improving leadership skills, strategically integrating eleadership practices, and conducting thorough planning in order to effectively navigate the digital transformation. The study's convergence of qualitative and quantitative data underscores the necessity for effective planning and communication channels, as well as the correlation between e-leadership strategies and institutional objectives. These results are consistent with well-established leadership principles and highlight the dynamic transformation of leadership in the era of digitalization. This research can provide valuable insights for educational institutions worldwide, including Saudi Arabia, by emphasizing the improvement of e-leadership practices, their strategic implementation, and the alignment of such practices with institutional objectives. This study offers significant contributions to the field of education policy and academic research by employing a mixed methods approach. It assists policymakers and researchers in gaining a more comprehensive understanding of the effects of e-leadership and pinpoints specific domains that require enhancement.

Conclusions

The implications of the study findings are twofold. Firstly, there is a clear indication that the implementation of e-leadership can have a profound impact on educator dedication and job satisfaction. Educational institutions should therefore prioritize the development of skills and competencies related to e-leadership among their administrative staff. Training programs and continuous professional development opportunities focused on effective online communication, strategic planning in digital environments, and the provision of digital resources could amplify the positive outcomes observed. Secondly, the results signal a need for a more refined approach to the adoption of e-leadership practices. While the transition to digital platforms offers numerous benefits, it also poses challenges that must be addressed through careful planning and open communication channels. School leaders must establish robust strategic plans that are communicated clearly and involve educators in the process to ensure buy-in and alignment with institutional goals. Therefore, e-leadership is an evolving paradigm that holds significant promise for enhancing educator commitment and student achievement. However, its success is contingent on the ability of school leaders to harness digital tools effectively while maintaining an engaged and dedicated workforce. The future of educational leadership is undeniably digital, and the strategic adoption of e-leadership practices will be a determining factor in the efficacy and success of educational institutions in Saudi Arabia and beyond. This study provides a foundation for ongoing research and development in this critical area of educational administration.

Results in this study indicate that educators develop a perception of significant support in their professional capacities when e-leadership practices are executed productively. This discovery implies that cultivating teacher support is an essential element of effective eleadership, as it has the potential to cultivate a favorable professional atmosphere and inspire greater commitment among instructors. Also notable is the effective utilization of digital platforms for the provision of resources. This suggests that the implementation of e-leadership can augment the capabilities of academic establishments to facilitate knowledge acquisition through the provision of essential digital materials to instructors. Further the study discovered that e-leadership fosters educator commitment, which is crucial for retaining high-quality personnel and maintaining a stable educational environment. Elevated levels of educator commitment serve as evidence of the beneficial effects that e-leadership practices can have on fostering a sense of devotion among staff members. The strong institutional loyalty scores suggest that the implementation of eleadership practices fosters educator loyalty, thereby making a positive contribution to the overall stability of the institution. This discovery emphasizes the significance of eleadership in fostering a sense of allegiance and dedication to the academic establishment. The data indicates that in order to increase the effectiveness of these practices, eleadership skill development programs are necessary. This suggests that allocating resources towards training and professional development initiatives that specifically target e-leadership competencies may enhance the favorable results documented in this research. As the data indicate, the transition to digital platforms presents both opportunities and challenges. This discovery underscores the significance of meticulous

preparation and efficient correspondence during the execution of e-leadership strategies within a digital setting. The significance of strategic implementation of e-leadership practices for the long-term prosperity of academic establishments is emphasized by the data. This suggests that educational leaders ought to meticulously strategize and synchronize e-leadership initiatives with the objectives of the institution in order to optimize their efficacy amidst the ever-changing digital environment.

To conclude, the results underscore the favorable impact of e-leadership, specifically in regards to Job Satisfaction and Teacher Support. Educators report significant levels of assistance and contentment when e-leadership is executed efficiently. Furthermore, the research highlights the significance of providing resources via digital platforms, indicating that e-leadership has the capacity to improve the educational process by guaranteeing instructors access to vital digital materials. Nevertheless, the research also illuminates certain aspects that necessitate additional scrutiny, such as Active Communication and Strategic Planning, both of which obtained moderate to low scores. This indicates potential for growth in these facets of e-leadership. The aforementioned results underscore the importance of improving leadership skills, integrating e-leadership practices strategically, and ensuring congruence with institutional goals in the everchanging realm of educational leadership. This study serves as a fundamental resource for subsequent investigations and advancements in the domain of educational administration.

Recommendations

As a result of the discoveries and understandings gained from this investigation into e-leadership behaviors in educational institutions of Saudi Arabia it is recommended to launch customized training programs and initiatives with the objective of enhancing the efficacy of online communication; additionally, it may entail greater educator participation in the planning phase. It is critical to give precedence to e-leadership strategies that enhance job satisfaction, given that educators who are content with their positions are more inclined to exhibit engagement and productivity.

Limitations

Though unique in its scope and content, the study has some limitations. Being short term, it does not investigate the enduring consequences of e-leadership practices on educational outcomes, encompassing both student performance and the overall health of the institution. Furthermore, it does not compare the the variations in e-leadership strategies and their resultant impacts in distinct nations or geographical areas which may provide significant cross-cultural understandings. Finally, its scope did not allow for adjustments in evaluating the shifting terrain of e-leadership in education as technology and digital tools progress.

References

- Al Asmari, A. R., & Khan, M. S. (2014). E-learning in Saudi Arabia: Past, present and future. Near and Middle Eastern Journal of Research in Education, 2014(1), https://doi.org/10.5339/nmejre.2014.2
- Al Jaberi, N. M. S. (2018). The impact of transformational and transactional leadership styles on organizational learning in health care context. (PhD Dissertations). United Arab Emirates University.
- Alabdulkareem, S. A. (2015). Exploring the use and the impacts of social media on teaching and learning science in Saudi. Procedia Social and Behavioral Sciences, 182, 213-224.

- Alahmadi, T., & Osman, S. (2021). Educational leadership and its impact on improvement of educational outcomes in Saudi schools. Journal of Educational and Social Research, 11(1), 10-20.
- Al-Gahtani, S. S. (2016). Empirical investigation of e-learning acceptance and assimilation: A structural equation model. Applied Computing and Informatics, 12(1), 27-50.
- Alghamdi, A. H., & Li, L. (2013). Adapting design-based research as a research methodology in educational settings. International Journal of Education and Research, 1(10), 1-12.
- Alghamdi, A., & Al Salloom, H. (2019). Leadership behavior and its impact on student success: A case study in Saudi Arabian schools. Journal of Education and Learning, 8(3), 25-34.
- Alhamdan, B., Al-Saadi, K., Barri, M., Al-Khalifa, N. S., & Al-Badawi, G. (2014). The attitudes of students from Saudi Arabia to e-learning: A study in Umm Al-Qura University. Educational Research and Reviews, 9(22), 1074-1087.
- Aljabreen, H. (2020). Montessori, Waldorf, and Reggio Emilia: A comparative analysis of alternative models of early childhood education. International Journal of Early Childhood, 52, 337-353.
- Almutairi, Y. M. N. (2020). Leadership self-efficacy and organizational commitment of faculty members: Higher education. Administrative Sciences, 10(3), 66. https://doi.org/10.3390/admsci10030066
- Al-Rahmi, W. M., Othman, M. S., & Yusuf, L. M. (2019). The role of social media for collaborative learning to improve academic performance of students and researchers in Malaysian higher education. International Review of Research in Open and Distributed Learning, 20(6), 42-57.
- Al-Salman, S., & Haider, A. S. (2021). Jordanian University students' views on emergency online learning during COVID-19. Online Learning, 25(1), 286–302
- Al-Zaidi, W. A. H. (2018). relationship quality and related activities of pharmaceutical supply chain in Iraq. (Unpublished PhD Dissertation). Szent István University
- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. Journal of business research, 136, 602-611.
- Antonopoulou, H., Halkiopoulos, C., Barlou, O., & Beligiannis, G. N. (2021). Associations between traditional and digital leadership in academic environment: During the COVID-19 pandemic. Emerging Science Journal, 5(4), 405-428.
- Avolio, B. J., & Kahai, S. S. (2003). Adding the "E" to E-leadership: How it may impact your leadership. Organizational Dynamics, 31(4), 325-338.
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd Edition.). Psychology Press.
- Bennett, J. K., Wise, L. Z., & Woods, A. M. (2019). Online instructional leadership: how can we support educator's dedication in digital learning environments? Journal of Educational Leadership in Action, 6(2).
- Bogler, R., & Somech, A. (2019). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. Teaching and Teacher Education, 32, 57-65.
- Chang, Z., Liu, J., & He, W. (2018). Cultural considerations in online learning: examining an online instructional leadership program in China. TechTrends, 62(6), 609-617.
- Contreras, F., Baykal, E., & Abid, G. (2020). E-leadership and teleworking in times of COVID-19 and beyond: What we know and where do we go. Frontiers in psychology, 11, 590271. https://doi.org/10.3389/fpsyg.2020.590271
- Creswell, J. W., & Creswell, J. D. (2018). Research design: qualitative, quantitative, and mixed methods approaches (5th Edition.). SAGE Publications.

- Elkington, R. L. (2020). Emerging issues in higher education leadership: results from round 1 of a global delphi survey. In The Alternation African Scholarship Book Series (Vol. 8). Global Trends in Management, IT and Governance in an E-World (E-MIG 2019 International).
- Fullan, M. (2014). Leading in a culture of change: Personal action guide and workbook. John Wiley & Sons.
- Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2019). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. Educational Researcher, 38(3), 207-225.
- Green, T. F. (2021). Reimagining instructional leadership in the digital age. Educational Management Administration & Leadership, 49(1), 47-63.
- Hallinger, P., & Heck, R. H. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. School Leadership & Management, 30(2), 95-110.
- Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. Teachers College Press.
- Harris, A., Jones, M., & Adams, D. (2020). Instructional leadership in digital age schools: a meta-analysis. Leadership and Policy in Schools, 19(3), 401-416.
- Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. Journal of School Leadership, 9(2), 184-208.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. Review of Educational Research, 81(2), 201-233.
- Johnson, B., & Christensen, L. (2019). Educational research: Quantitative, qualitative, and mixed approaches (6th Edition.). SAGE Publications.
- Johnson, L. (2020). E-Leadership and Teacher Development in Primary Schools. British Journal of Educational Technology, 51(5), 1605-1623.
- Leithwood, K., & Beatty, B. (2008). Leading with teacher emotions in mind. Corwin Press.
- Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. Educational Administration Quarterly, 48(3), 387-423.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). Seven strong claims about successful school leadership. National College for School Leadership.
- Ng, W. (2018). Can we teach digital natives digital literacy? Computers & Education, 59(3), 1065-1078.
- Saldaña, J. (2021). The coding manual for qualitative researchers (4th Edition.). SAGE Publications.
- Sheninger, E. (2019). Digital leadership: Changing paradigms for changing times. Corwin Press.
- Smith, J. A. (2020). Qualitative psychology: A practical guide to research methods (4th Edition.). SAGE Publications.
- Smith, J. G., & Lindsay, J. B. (2014). Beyond inclusion: Worklife interconnectedness, energy, and resilience in organizations. New York: Palgrave Macmillan.
- Smith, K. (2021). Identifying barriers to accessing community-based services for clients of Fraser Health's social prescribing program. (M.A Thesis). University of Victoria
- Smith, L., & Riley, D. (2012). School leadership in times of crisis. School leadership & management, 32(1), 57-71.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. Journal of Curriculum Studies, 36(1), 3-34.

- Tan, C. Y., Gao, L., & Shi, M. (2022). Second-order meta-analysis synthesizing the evidence on associations between school leadership and different school outcomes. Educational Management Administration & Leadership, 50(3), 469-490.
- Ugur, N. G., & Koç, T. (2019). Leading and Teaching with Technology: School Principals' Perspective. International Journal of Educational Leadership and Management, 7(1), 42-71.
- Vision 2030. (2017). Saudi Vision 2030 goals. https://www.vision2030.gov.sa/media/rc0b5oy1/saudi_vision203.pdf
- Yukl, G. (2013). Leadership in organizations (8th Edition). Pearson Education