Empowering the Next Generation: The Principal's Role in Leadership Development and Succession in Secondary Schools

Usfandi Haryaka[1*], Sofyan Arianto[2], Irsyad[3], Tugimin Supriyadi[4]

[1] Universitas Mulawarman, Samarinda, Indonesia; usfandi.haryaka@fkip.unmul.ac.id

[2] Institut Agama Islam Negeri Lhokseumawe, Lhokseumawe, Indonesia; sofyan@iainlhokseumawe.ac.id

[3] Universitas Negeri Padang, Padang, Indonesia; irsyad@fip.unp.ac.id

[4] Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia; tugimin.supriyadi@dsn.ubharajaya.ac.id

ARTICLE INFO	ABSTRACT
	This study explores the influence of leadership behaviors on leadership transformation in high schools and higher education, emphasizing the need for effective preparation of future leaders. The issue arises from a lack of focus on leadership development in educational settings, which is critical for enhancing educator performance and organizational commitment. A quantitative survey approach was employed, involving 351 students from universities and high schools. Data collection was conducted via questionnaires, and descriptive statistical analysis was performed using SPSS Version 25.0, with standardized hierarchical regression analysis applied to test relationships. The findings reveal that transformational leadership behaviors significantly and positively influence job satisfaction, organizational commitment, and teacher performance. Leaders' individual attention to team members was identified as a key factor in improving leadership effectiveness. The study highlights the critical role of structured, evidence-based leadership development in fostering a positive organizational culture within educational institutions. Leadership behaviors that focus on communication and conflict management were found to be instrumental in achieving these outcomes. Educational institutions should prioritize leadership training programs to prepare effective leaders and enhance institutional performance. Future research should incorporate qualitative methods to provide a deeper understanding of leadership dynamics across high schools and higher education contexts.

Corresponding Author:
Usfandi Haryaka
Universitas Mulawarman, Samarinda, Indonesia; usfandi.haryaka@fkip.unmul.ac.id

1. INTRODUCTION

Leadership theories significantly impact an individual's ability to identify and select suitable replacement candidates (Alilyyani, 2022; Arroyo Barrigüete et al., 2022). These theories focus on evaluating leadership styles that influence subordinates' values, attitudes, perceptions, roles, and work

performance (Liu et al., 2020; Crawford et al., 2020). Transformational leadership, a key approach within neo-charismatic leadership theories, emphasizes how leaders inspire followers to commit to organizational goals, self-sacrifice, and exceed performance expectations (Siangchokyoo et al., 2020; Rohman et al., 2022).

In education, transformational leadership by principals positively impacts job satisfaction, organizational commitment, and teacher performance (Firmansyah et al., 2022; Mukhtar, 2020). However, the growing need for transformational leadership skills highlights the importance of continued research to address these gaps (Singh et al., 2020; Sheehan et al., 2020). The concept of leadership replacement theory expands this focus, examining how leaders adapt by identifying and manipulating environmental variables—such as individual, task, and organizational characteristics—to enhance or neutralize their influence (Gottfredson & Reina, 2020; Abdelwahed et al., 2023).

Lovrić et al. (2020) identified 56 replacement variables within work environments, while studies in education (Alexander et al., 2020; Ángeles López-Cabarcos et al., 2022) revealed their role in principals' daily responsibilities. These findings align with Shen et al. (2020), suggesting that leadership replacement variables can directly influence learning outcomes by moderating the relationship between leadership style and educational results. Thus, leadership effectiveness depends not only on style but also on adaptive use of environmental variables to meet organizational needs.

The enduring success of transformational leadership can be attributed to its flexibility and effectiveness, yet it has not been extensively studied in the context of education. Grosseck et al. (2019) propose that the model should be applied more broadly, leaving no reason to dismiss its potential moderating effects on educational leadership transformation. For instance, Fries et al. (2021) suggest that leadership succession could moderate the impact of supportive leadership—a form of transformational leadership (Martínez-Sanchis et al., 2020). Similarly, Thoroughgood et al. (2020) found that specific leadership replacement factors, such as perceived shortcomings, moderate the relationship between individual-focused leadership and teacher work commitment.

The influence of transformational leadership traits, such as high expectations, confidence in teachers, personal engagement, and visionary communication, may also be moderated by these replacement factors. Teachers' perceptions of their leader's ability to offer meaningful rewards can impact their alignment with the leader's vision or performance targets (Martinez et al., 2016). Feedback, whether immediate after teaching sessions or from peers, also shapes the effects of transformational leadership (Greimel et al., 2023; Zlokovic et al., 2020; Rafique et al., 2022).

In promoting consensus and stimulating educator professionalism, leadership outcomes may be further moderated by individual teacher preferences. For instance, educators with strong tendencies toward solitude may resist persistent leader interventions. Such conservatism and individualism can impede leaders' efforts unless group goals are accepted. Leader intelligence in adapting organizational strategies positively influences these dynamics by encouraging educators to rethink entrenched practices, driving professional growth (Shafi et al., 2020).

This research addresses the pressing need to bridge the gap between theoretical frameworks and the practical challenges faced by educational institutions in preparing effective leaders at the secondary and tertiary levels. In an increasingly dynamic global landscape, strong and adaptable leadership is essential for enhancing the quality of education and educator performance. Despite this, many schools continue to overlook the importance of leadership development rooted in transformational behavior, which has proven effective in boosting staff motivation and commitment.

The study aims to investigate the impact of leadership behaviors—both transformational and substitutional—on teacher performance and organizational commitment within educational settings. Additionally, it seeks to offer practical recommendations for designing leadership training programs that foster a positive organizational culture and cultivate new leaders. By doing so, the findings of this research are expected to contribute significantly to improving the quality of education and advancing leadership development in schools and higher education institutions.

2. METHODS

This research method is quantitative and correlational (Baas et al., 2020, López et al., 2022). This study aims to identify the effect of leadership replacement on the relationship between transformational leadership style and teachers' attitudes and performance (Schmitz et al., 2023). This study examines how the main influence of transformational leadership style is the influence of leadership change on the criterion variables and the moderating influence of leadership succession on the relationship between transformational style and criterion variables.

The sampling technique used random sampling. The sample consisted of 351 people consisting of higher education and high school levels. The sampling method used stratified random sampling without considering gender background. Respondents were asked to assess the transformational leadership style of leaders at the higher education and high school levels. Respondents were also asked to assess leadership succession, and commitment to the organization, higher education and schools were asked to provide an assessment of the performance of educators as a group and individual educators. Furthermore, all data obtained in this study were processed using the analysis unit at the higher education level producing teachers and high school. The questionnaire to the principal with a modified scale by Ahmed et al., (2020) from the original version of Dicker et al. (2021) into the educational context was used to measure the behavior of citizens of educational organizations. This questionnaire has 27 items and has three subscales consisting of altruism, compliance, and high personality. The internal consistency and reliability of this scale is high with the Cronbach alpha coefficient values of the altruism, compliance, and high personality factors from the pilot study being 0.83, 0.81, and 0.86.

Data collection technique using questionnaires. Teachers were asked to respond to a series of questionnaires on transformational leadership practice styles or leadership succession and commitment to the organization. Educators' views on the frequency of transformational leadership styles demonstrated by universities and high schools were measured through 54 items each. There are seven dimensions used to measure the construct of transformational leadership style, namely the dimensions of stimulating the formation and expressing the vision of universities and high schools (9 items), individual attention (6 items), individual skills (8 items), stimulating organizational intelligence (6 items), having high expectations and self-confidence (9 items), generating consensus (7 items) and conditional rewards (9 items). A total of 41 translation items were modified by (Kritikos et al., 2011) from the real instrument. The teachers were asked to mark the degree of agreement on the statements presented through a 5-point Likert scale, 5 = strongly agree to 1= strongly disagree. Thirteen factors used in this study are skills, teacher experience and training (7 items); professional orientation (7 items); no reward difference in the organization (3 items); teacher's need to be alone (3 items); tasks that give immediate feedback (6 items); tasks in the form of self-satisfaction (7 items); organizational formalization (8 items); no organizational flexibility (8 items); colleague support (7 items); workgroup ugliness (9 items); rewards beyond the principal's control (7 items); and the gap between principals and teachers (8 items).

The data analysis technique uses descriptive statistics assisted by SPSS Version 25.0, which looks at the mean value of each response to the questionnaire. The questionnaire was validated and tested for reliability before use and has been declared valid and reliable. The Cronbach alpha reliability value obtained from the pilot study for the entire item is 0.87. To measure the variables of commitment to the organization, a translation of the organizational commitment questionnaire (Rameshkumar, 2020). His questionnaire containing 33 items was used to identify two commitment factors, namely commitment to the organization and the desire to move. The Cronbach alpha reliability value obtained from the pilot study for 27 items in total is 0.87.

3. FINDINGS AND DISCUSSION

3.1 Findings

The results of the data analysis presented in Figure 1 show the distribution of criterion variables related to leadership style. This graph shows the total variance obtained for leadership style and how the variance is divided among various features, including leadership succession, subordinate features, assignment features, and organizational features. The total variance obtained for leadership style shows the number 65, which is the highest value in this graph. This indicates that leadership style has a significant influence on the results measured in this study.
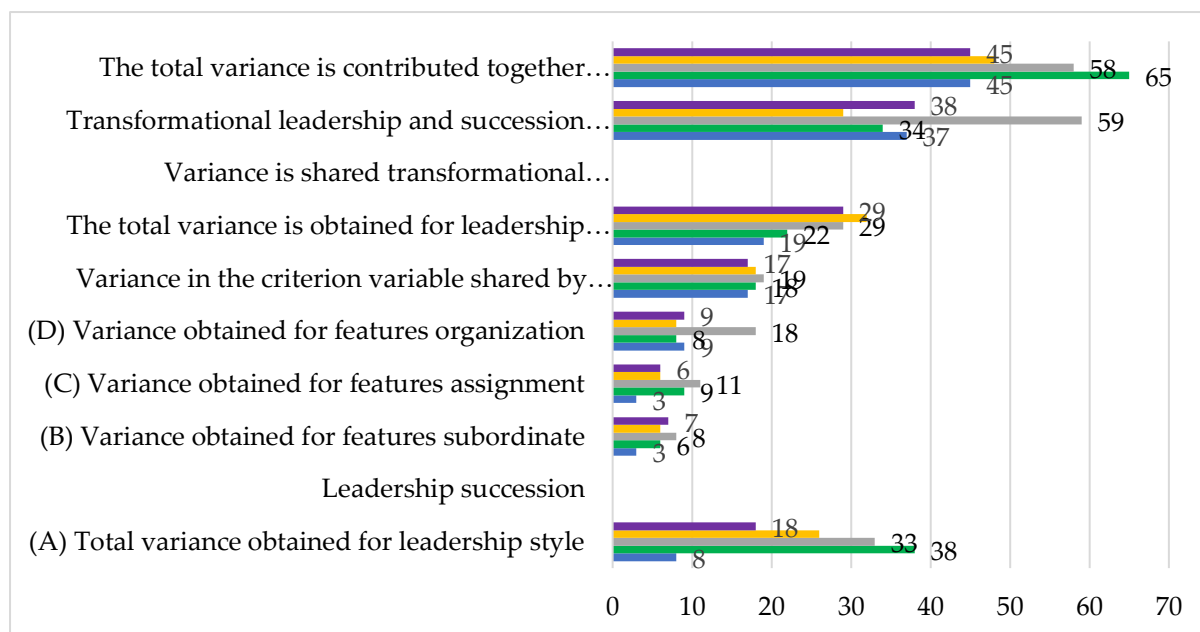
Figure 1. Distribution of variant criteria variables according to leadership style

As depicted in Figure 1, transformational leadership significantly contributes to organizational outcomes, as evidenced by its substantial variance. A variance of 37 highlights the strong relationship between leadership style and an organization's capacity to plan and execute leadership succession effectively. Transformational leaders create an environment conducive to growth and development, ensuring stability and sustainability in succession processes.

The subordinate feature, with a variance of 45, demonstrates the impact of transformational leadership on leader-subordinate relationships. Leaders employing this style build trust and positive relationships, fostering team motivation and performance. This aligns with transformational leadership theory, which emphasizes mutual trust and support between leaders and their teams.

The assignment feature shows a variance of 38, indicating that leadership style also influences task distribution. Transformational leaders adopt an inclusive decision-making process, enabling team members to contribute to task assignments. This approach enhances team engagement, efficiency, and task completion effectiveness.

Organizational features, with a variance of 29, reflect the role of leadership in shaping structure and culture. Transformational leaders often drive innovation and adaptability, creating cultures that respond effectively to environmental changes—an essential quality in a dynamic business environment.

The total leadership style variance (65) underscores the multifaceted contributions of transformational leadership. These include motivating subordinates, planning succession, managing

task assignments, and cultivating a positive organizational culture. Organizations adopting transformational leadership can enhance individual and team performance while fostering innovation and adaptability, ensuring long-term success.

Further research is essential to explore the interplay between leadership styles and external factors, such as organizational culture and team dynamics, to develop comprehensive strategies for improving leadership effectiveness and organizational performance.

Based on the data presented in Figure 2, the regression coefficients related to leadership in higher education and schools are analyzed. These regression coefficients provide an overview of how much influence various factors have on leadership effectiveness. In this context, we can see that factors such as individual attention, intellectual stimulation, and organizational characteristics play an important role in shaping leadership dynamics.
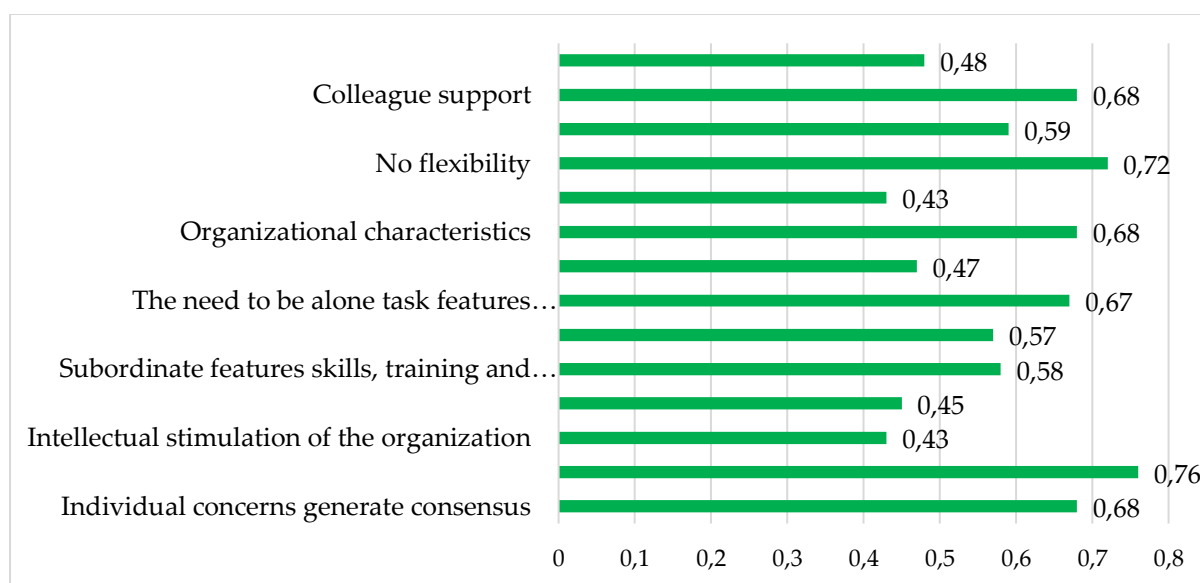
Figure 2. The regression coefficient of leadership in higher education and schools

Leaders providing individual attention to team members or subordinates exhibit a regression coefficient of 0.68, indicating its significant role in fostering consensus and enhancing leadership effectiveness. By addressing individual needs and aspirations, leaders can cultivate a harmonious and collaborative work environment. In education, such attention positively influences the motivation and performance of students and teaching staff.

Intellectual stimulation, with a regression coefficient of 0.76—the highest in the data— demonstrates that encouraging critical thinking and innovation among team members greatly enhances leadership effectiveness. In educational settings, this approach creates a dynamic and engaging learning environment. Leaders who promote intellectual challenges and facilitate open discussions foster a culture of continuous learning.

Organizational characteristics also affect leadership effectiveness. A lack of flexibility, reflected by a regression coefficient of 0.47, hinders leaders' adaptability to changes and challenges. In education, inflexible structures may cause dissatisfaction among staff and students and reduce responsiveness to evolving needs. Peer support, with a coefficient of 0.58, emphasizes the importance of collaborative networks. Supportive team dynamics enable the sharing of ideas and resources, enhancing leadership impact. Leaders who strengthen relationships among team members foster productivity and innovation.

Other contributing factors include subordinate skills and training (coefficient 0.43) and the need for solitude (coefficient 0.45). Leaders investing in training equip staff to address challenges effectively,

while recognizing the balance between teamwork and individual work boosts satisfaction and productivity.

The data in Figure 2 underscore that leadership effectiveness in education hinges on individual attention, intellectual stimulation, peer support, and adaptive organizational structures. By addressing these factors holistically, leaders can enhance collaboration, innovation, and overall growth, creating an environment that supports both academic and personal development.

3.2 Discussion

In organizational settings, leadership style is critical in determining team success and effectiveness. Among these, transformational leadership stands out for its ability to foster positive relationships between leaders and team members. The findings from this study highlight that transformational leadership not only enhances individual motivation and performance but also establishes an environment conducive to growth and innovation. The total variance obtained for leadership style, measured at 65, underscores the multifaceted factors influencing leadership success. This variance is distributed across key features such as leadership succession, subordinate interactions, task assignments, and organizational characteristics.

A significant variance of 37 in leadership succession illustrates the strong correlation between transformational leadership and an organization's ability to plan and implement leadership continuity. Transformational leaders tend to execute more structured and effective succession processes, contributing to organizational stability and sustainability. Consistent with prior studies, providing feedback and valuing contributions have been shown to enhance teachers' personal development (López-Martín et al., 2023; Hogg et al., 2023).

Subordinate features, with a variance of 45, highlight the role of leadership in fostering team relationships. Transformational leaders engage inclusively in decision-making, enabling team members to participate in task assignments. This inclusive approach enhances team members' sense of belonging, efficiency, and task completion. Trusting and supportive relationships create a more productive and innovative work environment. Organizational characteristics, with a variance of 29, further show how leadership influences structure and culture. Transformational leaders encourage innovation, fostering an adaptive and responsive organizational culture—crucial in dynamic, competitive environments.

In education, peer support and training also emerged as significant contributors to leadership effectiveness. Peer support, with a regression coefficient of 0.58, underscores the importance of collaborative networks in educational settings. Leaders who foster strong team connections promote resource-sharing and innovation. Additionally, training and skills development (coefficient 0.43) prepare educators to tackle challenges and enhance instructional quality. The need for independence, with a coefficient of 0.45, emphasizes the importance of balancing teamwork and individual work for improved productivity and satisfaction.

These findings align with previous research on the moderating effects of leadership factors on outcomes (Mehmood et al., 2023; Le et al., 2023). They reinforce the necessity of a holistic approach to leadership that prioritizes processes, relationships, and outcomes. Leaders who understand and manage these factors can create an environment that fosters learning, collaboration, and growth for students and faculty alike. Further research is essential to explore the interplay between leadership styles and additional criterion variables to develop more effective organizational and leadership strategies.

The implications of this study are very significant in the context of leadership development in educational institutions, both at the tertiary and secondary levels. This study shows that transformational leadership behavior has a strong influence on teacher performance and commitment.

This emphasizes the importance of educational leaders to adopt a leadership style that focuses not only on academic achievement, but also on the development of teacher character and motivation. Thus, leaders in educational institutions need to be trained to develop transformational leadership skills, which include the ability to provide constructive feedback, appreciate teacher contributions, and create a positive work environment. In addition, this study also has implications for the identification of substitute leadership factors, such as differences in rewards in the organization and direct task feedback, can improve teacher personality and performance. This suggests that educational institutions should pay attention to the reward and feedback systems implemented.

Fair and transparent reward systems play a critical role in enhancing teacher motivation, while timely and relevant feedback supports teachers' professional growth. Educational managers should design reward programs that account not only for outcomes but also for the processes and efforts invested by teachers. This study emphasizes the moderating factors in the relationship between leadership style and teacher performance, revealing that only 14% of moderator variables met the established criteria. This finding indicates a need for further exploration of other factors influencing leadership effectiveness in education. Future research could delve deeper into the interplay between leadership, teacher performance, and commitment, as well as the contextual factors affecting these dynamics.

Practical implications underscore the importance of structured, evidence-based leadership training. Educational institutions should prioritize training programs focused on interpersonal and managerial skills, including effective communication, conflict resolution, and team building, to foster a collaborative and productive environment. Collaboration between leaders and teachers is essential for cultivating a positive organizational culture. Leaders should actively involve teachers in decision-making processes and policy development to foster a sense of value and motivation. This approach enhances teacher engagement and institutional performance, ultimately advancing educational quality and outcomes.

However, the study's limitations should be addressed. The quantitative survey approach limits the exploration of subjective experiences and contextual nuances influencing perceptions of leadership. Incorporating qualitative methods, such as interviews or focus groups, could provide richer insights. Additionally, the sample size of 351 respondents, while stratified, may not sufficiently represent the diverse demographics of educators. Broader and more varied samples would improve generalizability. The study's geographic focus on Indonesia also restricts its applicability across different cultural and educational systems. Research in international contexts would illuminate how local factors shape leadership dynamics.

Moreover, the study's concentration on transformational leadership and substitute factors excludes other variables like organizational culture, peer support, and working conditions, which could significantly impact teacher performance. A more comprehensive exploration of these variables would provide a nuanced understanding of leadership effectiveness in education.

Future research should integrate mixed methodologies to capture a deeper understanding of transformational leadership's effects. Expanding sample diversity across different educational and geographical contexts would enhance the findings' relevance. Additionally, exploring a broader range of variables, such as organizational culture and peer dynamics, would yield a holistic view of the factors shaping leadership effectiveness. Such advancements will inform more effective leadership practices, ultimately enriching educational environments and outcomes.

4.   CONCLUSION

This study highlights key factors influencing leadership effectiveness in higher education and schools. Individual attention, with a regression coefficient of 0.68, emerged as a significant factor, as

leaders who address team members' needs foster consensus, boosting motivation and performance. Intellectual stimulation had the highest regression coefficient (0.76), showing that encouraging critical thinking and innovation creates dynamic and engaging learning environments. Peer support (0.58) also plays a crucial role by fostering collaboration, sharing ideas, and enhancing overall leadership impact. However, organizational rigidity, with a coefficient of 0.47, hinders leaders' adaptability and satisfaction among staff and students. Leaders who balance teamwork and independent work (0.45) contribute to greater productivity and job satisfaction.

The research underscores the need for a holistic leadership approach that emphasizes collaboration, innovation, and personal development alongside academic outcomes. The findings suggest that transformational leadership can enhance individual and team performance while fostering a culture of growth and adaptability.

Limitations of this study include its reliance on quantitative methods, which may overlook subjective experiences, and its geographic focus on Indonesia, limiting applicability to different cultural contexts. Additionally, the sample size may not fully represent diverse educational settings, and other influential factors like organizational culture and working conditions were not explored. Future research should integrate mixed methodologies for deeper insights, involve larger and more diverse samples, and examine additional variables such as organizational culture and peer dynamics. These steps will provide a comprehensive understanding of leadership effectiveness, guiding the development of better strategies for educational improvement.

REFERENCE

Abdelwahed, N. A. A., Soomro, B. A., & Shah, N. (2023). Predicting employee performance through transactional leadership and entrepreneur's passion among the employees of Pakistan. *Asia Pacific Management Review*, *28*(1), 60–68. https://doi.org/10.1016/j.apmrv.2022.03.001

Ahmed, W., Angel, N., Edson, J., Bibby, K., Bivins, A., O'Brien, J. W., Choi, P. M., Kitajima, M., Simpson, S. L., Li, J., Tscharke, B., Verhagen, R., Smith, W. J. M., Zaugg, J., Dierens, L., Hugenholtz, P., Thomas, K. V., & Mueller, J. F. (2020). First confirmed detection of SARS-CoV-2 in untreated wastewater in Australia: A proof of concept for the wastewater surveillance of COVID-19 in the community. *Science of the Total Environment*, *728*(1 August 2020), 138764.1-8. https://doi.org/10.1016/j.scitotenv.2020.138764

Alexander, M., Kim, S. Y., & Cheng, H. (2020). Update 2020: Management of Non-Small Cell Lung Cancer. *Lung*, *198*(6), 897–907. https://doi.org/10.1007/s00408-020-00407-5

Alilyyani, B. (2022). The Effect of Authentic Leadership on Nurses' Trust in Managers and Job Performance: A Cross-Sectional Study. *Nursing Reports*, *12*(4), 993–1003. https://doi.org/10.3390/nursrep12040095

Ángeles López-Cabarcos, M., Vázquez-Rodríguez, P., & Quiñoá-Piñeiro, L. M. (2022). An approach to employees' job performance through work environmental variables and leadership behaviours. *Journal of Business Research*, *140*(2), 361–369. https://doi.org/10.1016/j.jbusres.2021.11.006

Arroyo Barrigüete, J. L., Barcos, L., Bellón, C., & Corzo, T. (2022). One year of European premiers leadership and empathy in times of global pandemic: a Twitter sentiment analysis. *Cogent Social Sciences*, *8*(1), 1-31. https://doi.org/10.1080/23311886.2022.2115693

Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*, *1*(1), 377–386. https://doi.org/10.1162/qss_a_00019

Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P. A., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning and Teaching*, *3*(1), 09–28. https://doi.org/10.37074/jalt.2020.3.1.7

Dicker, D., Alfadda, A. A., Coutinho, W., Cuevas, A., Halford, J. C. G., Hughes, C. A., Iwabu, M., Kang, J. H., Nawar, R., Reynoso, R., Rhee, N., Rigas, G., Salvador, J., Sbraccia, P., Vázquez-Velázquez, V., & Caterson, I. D. (2021). Patient motivation to lose weight: Importance of healthcare professional support, goals and self-efficacy. *European Journal of Internal Medicine*, *91*(January), 10–16. https://doi.org/10.1016/j.ejim.2021.01.019

Firmansyah, F., Prasojo, L. D., Jaedun, A., & Retnawati, H. (2022). Transformational leadership effect on teacher performance in Asia: A meta-analysis. *Cypriot Journal of Educational Sciences*, *17*(6), 2127–2146. https://doi.org/10.18844/cjes.v17i6.7552

Fries, A., Kammerlander, N., & Leitterstorf, M. (2021). Leadership Styles and Leadership Behaviors in Family Firms: A Systematic Literature Review. *Journal of Family Business Strategy*, *12*(1), 100374.1-16. https://doi.org/10.1016/j.jfbs.2020.100374

Gottfredson, R. K., & Reina, C. S. (2020). Exploring why leaders do what they do: An integrative review of the situation-trait approach and situation-encoding schemas. *Leadership Quarterly*, *31*(1), 101373.1-20. https://doi.org/10.1016/j.leaqua.2019.101373

Greimel, N. S., Kanbach, D. K., & Chelaru, M. (2023). Virtual teams and transformational leadership: An integrative literature review and avenues for further research. *Journal of Innovation and Knowledge*, *8*(2), 100351.1-11. https://doi.org/10.1016/j.jik.2023.100351

Grosseck, G., Tîru, L. G., & Bran, R. A. (2019). Education for sustainable development: Evolution and perspectives: A bibliometric review of research, 1992-2018. *Sustainability (Switzerland)*, *11*(21), 1992–2018. https://doi.org/10.3390/su11216136

Hogg, L., Elvira, Q., & Yates, A. (2023). What can teacher educators learn from career-change teachers' perceptions and experiences: A systematic literature review. *Teaching and Teacher Education*, *132*(October 2023), 104208.1-14. https://doi.org/10.1016/j.tate.2023.104208

Kritikos, V. S., Woulfe, J., Sukkar, M. B., & Saini, B. (2011). Intergroup peer assessment in problem-based learning tutorials for undergraduate Pharmacy students. *American Journal of Pharmaceutical Education*, *75*(4), 1-12. https://doi.org/10.5688/ajpe75473

Le, T. T., Doan, X. H., & Duong, C. D. (2023). A serial mediation model of the relation between cultural values, entrepreneurial self-efficacy, intentions and behaviors: Does entrepreneurial education matter? A multi-group analysis. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(2), 100064.1-15. https://doi.org/10.1016/j.joitmc.2023.100064

Liu, K. C., Xu, P., Lv, W. F., Qiu, X. H., Yao, J. L., Gu, J. F., & Wei, W. (2020). CT manifestations of coronavirus disease-2019: A retrospective analysis of 73 cases by disease severity. *European Journal of Radiology*, *126*(March), 108941.1-5. https://doi.org/10.1016/j.ejrad.2020.108941

López-Martín, E., Gutiérrez-de-Rozas, B., González-Benito, A. M., & Expósito-Casas, E. (2023). Why Do Teachers Matter? A Meta-Analytic Review of how Teacher Characteristics and Competencies Affect Students' Academic Achievement. *International Journal of Educational Research*, *120*(August 2022), 1-14. https://doi.org/10.1016/j.ijer.2023.102199

López, D. P., López-Nicolás, R., López-López, R., Puente-López, E., & Ruiz-Hernández, J. A. (2022). Association between attitudes toward violence and violent behavior in the school context: A systematic review and correlational meta-analysis. *International Journal of Clinical and Health Psychology*, *22*(1), 1-11. https://doi.org/10.1016/j.ijchp.2021.100278

Lovrić, M., Meister, R., Steck, T., Fadljević, L., Gerdenitsch, J., Schuster, S., Schiefermüller, L., Lindstaedt, S., & Kern, R. (2020). Parasitic resistance as a predictor of faulty anodes in electro galvanizing: a comparison of machine learning, physical and hybrid models. *Advanced Modeling and Simulation in Engineering Sciences*, *7*(1), 1-22. https://doi.org/10.1186/s40323-020-00184-z

Martínez-Sanchis, P., Aragón-Amonarriz, C., & Iturrioz-Landart, C. (2020). How the Pygmalion Effect operates in intra-family succession: Shared expectations in family SMEs. *European Management Journal*, *38*(6), 914–926. https://doi.org/10.1016/j.emj.2020.04.005

Martinez, F., Taut, S., & Schaaf, K. (2016). Classroom observation for evaluating and improving teaching: An international perspective. *Studies in Educational Evaluation*, *49*(June 2016), 15–29. https://doi.org/10.1016/j.stueduc.2016.03.002

Mehmood, S., Jabeen, R., Khan, M. A., Khan, M. A., Gavurova, B., & Oláh, J. (2023). Impact of despotic leadership and workplace incivility on innovative work behavior of employees: Application of mediation-moderation model. *Heliyon*, *9*(9), 1-16. https://doi.org/10.1016/j.heliyon.2023.e19673

Mukhtar, S. (2020). Psychological health during the coronavirus disease 2019 pandemic outbreak. *International Journal of Social Psychiatry*, *66*(5), 512–516. https://doi.org/10.1177/0020764020925835

Rafique, M. A., Hou, Y., Chudhery, M. A. Z., Waheed, M., Zia, T., & Chan, F. (2022). Investigating the impact of pandemic job stress and transformational leadership on innovative work behavior: The mediating and moderating role of knowledge sharing. *Journal of Innovation and Knowledge*, *7*(3), 1–11. https://doi.org/10.1016/j.jik.2022.100214

Rameshkumar, M. (2020). Employee engagement as an antecedent of organizational commitment – A study on Indian seafaring officers. *Asian Journal of Shipping and Logistics*, *36*(3), 105–112. https://doi.org/10.1016/j.ajsl.2019.11.003

Rohman, F., Noermijati, N., Soelton, M., & Mugiono, M. (2022). Model altruism in improving organizational performance in social welfare institutions ministry of social affairs of the republic of Indonesia. *Cogent Business and Management*, *9*(1), 1-14. https://doi.org/10.1080/23311975.2022.2151678

Schmitz, M. L., Antonietti, C., Consoli, T., Cattaneo, A., Gonon, P., & Petko, D. (2023). Transformational leadership for technology integration in schools: Empowering teachers to use technology in a more demanding way. *Computers and Education*, *204*(July), 104880.1-15. https://doi.org/10.1016/j.compedu.2023.104880

Shafi, M., Zoya, Lei, Z., Song, X., & Sarker, M. N. I. (2020). The effects of transformational leadership on employee creativity: Moderating role of intrinsic motivation. *Asia Pacific Management Review*, *25*(3), 166–176. https://doi.org/10.1016/j.apmrv.2019.12.002

Sheehan, M., Garavan, T. N., & Morley, M. J. (2020). Transformational leadership and work unit innovation: A dyadic two-wave investigation. *Journal of Business Research*, *109*(2), 399–412. https://doi.org/10.1016/j.jbusres.2019.10.072

Shen, J., Wu, H., Reeves, P., Zheng, Y., Ryan, L., & Anderson, D. (2020). The association between teacher leadership and student achievement: A meta-analysis. *Educational Research Review*, *31*(October 2019), 100357.1-19. https://doi.org/10.1016/j.edurev.2020.100357

Siangchokyoo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *Leadership Quarterly*, *31*(1), 101341.1-18. https://doi.org/10.1016/j.leaqua.2019.101341

Singh, S. K., Giudice, M. Del, Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, *150*(September 2019), 119762.1-12. https://doi.org/10.1016/j.techfore.2019.119762

Thoroughgood, C. N., Sawyer, K. B., & Webster, J. R. (2020). Finding calm in the storm: A daily investigation of how trait mindfulness buffers against paranoid cognition and emotional exhaustion following perceived discrimination at work. *Organizational Behavior and Human Decision Processes*, *159*(January 2018), 49–63. https://doi.org/10.1016/j.obhdp.2019.02.004

Zlokovic, B. V., Gottesman, R. F., Bernstein, K. E., Seshadri, S., McKee, A., Snyder, H., Greenberg, S. M., Yaffe, K., Schaffer, C. B., Yuan, C., Hughes, T. M., Daemen, M. J., Williamson, J. D., González, H. M., Schneider, J., Wellington, C. L., Katusic, Z. S., Stoeckel, L., Koenig, J. I., … Chen, J. (2020).

Vascular contributions to cognitive impairment and dementia (VCID): A report from the 2018 National Heart, Lung, and Blood Institute and National Institute of Neurological Disorders and Stroke Workshop. *Alzheimer's and Dementia*, *16*(12), 1714–1733. https://doi.org/10.1002/alz.12157