

Transactional leadership for implementing a green campus: Driving sustainable change through effective leadership strategies

Dwi Sulistiani^{*1}, Ma'rifatul Hasanah², Nur Cholifah³
Universitas Islam Negeri Maulana Malik Ibrahim Malang:
Jl. Gajayana No. 50 Kota Malang, (0341) 551354

^{*1}dwisulistiani@pips.uin-malang.ac.id, ²marifah@uin-malang.ac.id, ³nurcholifah@uin-malang.ac.id

Abstract This paper explores the role of transactional leadership in implementing green campus initiatives, as long as the strategy, challenge and limitations. As higher education institutions face growing pressure to adopt sustainable practices, effective leadership is paramount. Qualitative research with a case study approach was used to answer research questions. The data in this research is in the form of interviews and documentation at Islamic state universities in Indonesia with the best green campus. Transactional leadership, focusing on clear objectives, rewards, and performance-based management, offers a structured approach to achieving campus environmental sustainability. This paper examines how transactional leadership can be utilized to drive the adoption of green policies, engage stakeholders, and achieve measurable environmental outcomes. One of the key strengths of transactional leadership in green campus initiatives is its ability to provide structure and clarity. Stakeholder participation in green campus initiatives can be encouraged by transactional leadership's emphasis on incentives and rewards. The implementation of green campus projects is greatly aided by transactional leadership, which offers structure, direction, and motivation through rewards and incentives. Higher education institutions must have certain strategies: leadership and vision, stakeholder engagement and collaboration, sustainable education and training, as long as monitoring and evaluation to succeed green campus. However, there are several challenges and limitations to implementing a green campus, such as: budgetary limitations, infrastructure and technological constraints, cultural and behavioral opposition, complexity and multidisciplinary collaboration, measurement and accountability, managing conflicting priorities, policy and regulatory challenges.

Keywords Transactional Leadership; Green Campus; Sustainable Development; Higher Education; Environmental Management; Leadership Strategies

A. INTRODUCTION

Climate change and global environmental problems have placed a great responsibility on educational institutions to be role models in implementing sustainable practices. One manifestation of this commitment is the implementation of the green campus concept which integrates environmentally friendly principles into all aspects of campus operations and policies, from energy management to waste reduction. Although the green campus concept has been widely adopted, the

biggest challenge in its implementation often lies in how to ensure this change can be consistent and effective (AlNuaimi et al., 2021). However, to effectively realize a green campus, a leadership strategy is needed that is capable of driving change at all levels of the organization (Mahdinezhad et al., 2013).

Transactional leadership, which emphasizes rewarding and punishing based on performance and setting clear goals, is often considered effective in driving the implementation of concrete policies such as green campuses (Bader K. AlNuaimi et al., 2021). Through transactional leadership, leaders have more structured control to ensure that all campus elements, from students, lecturers, to administrative staff, are actively involved in the desired change process. With this approach, leaders can encourage the achievement of environmental targets through incentives that are oriented towards measurable results. The other approach is exception-based management. Transactional leaders frequently use an active or passive management-by-exception strategy. When leaders practice active management by exception, they closely monitor their subordinates' work to spot and address any departure from the norm. When mistakes become more serious problems, they step in to stop them. Passive management by exception involves leaders intervening only in response to issues or subpar work. Reactive approaches are less effective since they let problems worsen before they are dealt with. A structured environment is the final one. Transactional leadership works well in settings with little room for doubt and well-defined tasks. It works well in companies where job duties are clear and procedures are established. Because everyone in the controlled atmosphere that transactional leadership creates is aware of their responsibilities and the repercussions of their actions, productivity, and efficiency can soar.

Additionally, transactional leadership has a number of advantages, especially in situations where speed, consistency, and predictability are crucial (Sanda & Arthur, 2017). Its capacity to swiftly accomplish short-term objectives is one of its key assets. Tasks can be accomplished on schedule and to the required standard if transactional leaders set clear targets and provide rewards for compliance. The elimination of uncertainty in the workplace is another advantage (Bass et al., 2003). Clear expectations and rules are provided by transactional leaders, which can assist employees in concentrating on their work and lessen misunderstanding. Employees may feel less stressed and have higher job satisfaction because they are clear about what is expected of them and what they will receive in return. Furthermore, transactional leadership can be useful in highly regulated businesses or during crises where following protocols is essential. In these situations, keeping an eye on control and compliance can help steer the organization in the right direction and avoid expensive mistakes.

Another drawback of transactional leadership is that it may result in low employee satisfaction and motivation. Although rewards have the potential to be powerful motivators, they might not satisfy workers' underlying demands for autonomy, personal development, and meaningful employment (Mahdinezhad et al., 2013). If workers believe their work is motivated only by outside rewards rather than internal incentives, they may become disengaged. However, in the context of implementing a green campus which requires changes in culture and habits, the challenges faced are quite significant (Budihardjo et al., 2021). Transactional leaders set specific goals, provide direction, and use incentives as a tool to ensure achievement of organizational targets. According to Brammer & Walker (2011), transactional leadership emphasizes compliance with rules and roles, where subordinates will be rewarded when they meet expectations and subject to sanctions when they fail to achieve targets. In the context of educational organizations, this approach can help create a more structured and results-oriented system, especially in implementing new policies such as green campuses.

According to Brammer & Walker (2011), a green campus is a campus that cares about and implements ecologically oriented policies. To create a green campus, universities are required to implement environmentally friendly development and education practices. There are several criteria for determining a green campus, including sustainable infrastructure, water, waste, transportation, renewable energy and sustainable education and research (Yaprakli & Özden, 2021).

Jusuf et al. (2020) discovered the importance of leadership style in the successful implementation of a green campus. The results of this research state that transactional leadership is a leadership style that is suitable for starting the implementation of a green campus. Wang et al. (2020) conducting research at universities in China found that using a campus transactional leadership style could reduce the amount of energy and resources spent to support green campus programs. Transactional leadership provides rewards and punishment for campus members who take the initiative to support a green campus. This is suitable for use on campuses that are starting their green campus program.

This research provides empirical evidence of the role of transactional leadership style in supporting the implementation of green campuses. This research explains how transactional leadership supports a green campus, as well as strategies, challenges and limitations in implementing a green campus. Previous studies show that transactional leadership has great potential to be applied in green campus implementation. However, to achieve deeper sustainable change, this approach needs to be supported by more holistic and collaborative leadership. The results of this research provide a contribution to university leaders regarding the appropriate leadership style to start implementing a green campus. The following research questions might be formulated in light of these goals:

- RQ1. How can transactional leadership support the implementation of green campus initiatives?
- RQ2. What are the strategy that transactional leaders in higher education might employ to succeed the green campus?
- RQ3. What are the challenge and limitation in terms of encouraging green campus?

B. METHODS

This study uses qualitative techniques frequently employed to investigate intricate phenomena, comprehend experiences, and obtain profound insights. A case study technique involves a detailed examination of a specific case in the context of actual life. In order to provide a deeper understanding of the topic matter, qualitative research frequently focuses on meanings, experiences, and processes as opposed to quantitative facts. The evaluation of transactional leadership's contribution to green campus activities is based on qualitative data. The greatest green campus for Islamic state higher education in Indonesia is where this research was carried out. Document analysis and interviews will be used to gather data. Interviews with these groups will be conducted to learn more about how campus leaders, green campus units, and staff see leadership and green campus initiatives. Data dependability and authenticity are ensured by utilising many sources and procedures. Thematic analysis will be utilised to investigate qualitative data.

C. RESULT AND DISCUSSION

The Role of Transactional Leadership in Green Campus Initiatives

In discussing the role of transactional leadership in green campus initiatives, it is important to understand how the key characteristics of this leadership style contribute to the implementation of sustainable environmental policies and strategies in higher education. This is as explained in the results of an interview with the green campus team at one of the Islamic state universities in Indonesia.

"Our leaders use a transactional leadership style, as evidenced by the existence of rewards and punishments related to the implementation of the green campus. The green campus is included in the university's vision and mission, so that it becomes a performance index for all officials at the university. Therefore, green campus measurement indicators have been established to be able to assess this performance."

Previous research found that transactional leadership styles use measurement indicators to assess the success of green initiatives on their campus. These measurements are not only quantitative, but also qualitative such as changes in attitudes and behavior. Therefore, it is necessary

to develop evaluation tools that are not only quantitative but also qualitative, such as cultural changes and commitment to sustainability issues. Transactional leadership sometimes gets caught up in only short-term goals but forgets long-term goals such as building environmental cultural awareness for all campus members (Burhanudin et al., 2020).

A transactional leadership style that provides rewards and punishment for organizational members can support the successful implementation of a green campus. These results were explained by the green campus team in the following interview session.

"At our place, rewards and punishments are implemented for academics in implementing a green campus. Rewards are in the form of performance calculations in the remuneration scheme, otherwise there are administrative sanctions and can also be in the form of cuts in remuneration. On the other hand, the application of sanctions for violations of sustainability policies is also recognized as effective in maintaining compliance with green initiatives"

Providing incentives has proven to be an effective tool in encouraging participation and achieving environmental goals. However, if incentive implementation focuses too much on material outcomes, there is a risk that internal motivation, such as a personal commitment to sustainability, may not develop. Therefore, it is important for leaders to ensure that incentives are not the only driver of change, but rather part of a broader strategy (Yaprakli & Özden, 2021).

Effective communication is also needed in implementing a green campus. This was mentioned by the following campus green team.

"Transactional leaders who implement clear and transparent communication strategies successfully build awareness of the importance of sustainability among students and staff. Leaders who actively convey information about the goals, policies, and benefits of green campus initiatives create an environment that supports engagement."

Transactional leadership is an effective leadership style that works well in situations requiring efficiency, consistency, and clarity. Its emphasis on organised surroundings, management by exception, and reliant compensation can boost short-term success while ensuring high-quality work completion. Its disadvantages, however, may only be appropriate in certain situations, particularly when it comes to limiting creativity and decreasing long-term motivation. Effective leaders consider the environment in which they work (Bingab et al., 2018). To get the best results for their organizations, they might have to combine transactional leadership with other approaches, including transformational leadership.

Apart from communication, collaboration and team involvement are also needed to successfully implement a green campus, as shown in the following interview.

"Transactional leaders who encourage collaboration between units on campus, such as faculties and student organizations, creating positive synergy in implementing green campus initiatives. This collaboration enables the exchange of ideas and best practices, which increases the effectiveness of sustainability programs."

Research by Mahdinezhad et al. (2013) shows that transactional leadership can be strengthened with a more participative and collaborative approach. In the context of a green campus, leaders need to not only implement rewards and sanctions, but also involve campus residents in designing sustainability initiatives. This involvement can create a sense of ownership of the programs implemented and increase individual commitment to environmental sustainability.

Leaders have a variety of effects on sustainability. A clear vision for a sustainable future is expressed by sustainable leaders, who also create strategies that support this vision (Di Gerio et al., 2020). They have set high standards for social justice, environmental sustainability, and economic prosperity. By integrating sustainability into their organizations' central goals and values, leaders may promote systemic change. Successful leaders understand that cooperation amongst various stakeholders, such as workers, clients, communities, governments, and investors, is necessary for sustainability (Yaprakli & Özden, 2021). They establish partnerships, have conversations with these

stakeholders, and promote a shared responsibility culture. By incorporating other viewpoints, leaders may develop sustainability projects that are more inclusive and successful.

Clear and regular measurements and evaluations also really support the implementation of a green campus. This was mentioned by the heads of the administration, general, personnel and finance bureaus.

“Transactional leaders who implement clear measurement systems to assess the progress of green campus initiatives can provide better feedback to campus residents. Leaders who regularly evaluate results and discuss them with stakeholders are successful in maintaining motivation and commitment to achieving sustainability goals.”

The results show that strict control and corrective action are effective in enforcing discipline across all elements of the campus. By having a clear control mechanism, campuses can be more consistent in carrying out green programs, as well as identifying areas that need improvement. Transactional leadership can produce real results in organizational contexts that require structure and control (Bass et al., 2003).

Adequate training and education for the green campus team and all employees is also needed to support the successful implementation of the green campus. The following are the results of interviews with heads of administration, general, personnel and finance bureaus.

“Our leaders provide training and education related to sustainability practices successfully increasing the understanding and skills of campus residents. the training provided helps them implement concrete steps to reduce environmental impacts, such as energy management and waste reduction.”

Previous research, Lahmar (2020), found that training and education regarding sustainability issues is needed for all members of the organization to be able to successfully implement a green campus.. underlines the importance of organizational culture in supporting sustainability. Education and training can provide organizational members with a greater understanding of sustainability issues, so that it will be easier for them to support the program.

Strategies for Success

The first strategy that can be implemented in implementing a green campus is establishing a sustainable vision and mission. This is in accordance with the results of the following interview with the Chancellor.

“Transactional leaders who are successful in making a green campus a success first establish a clear and measurable sustainability vision and mission. This vision not only emphasizes the importance of environmental sustainability but also links it to the missions of education, research and community service. Leaders who are able to convey this vision strongly and clearly can inspire and motivate all campus residents to participate in green initiatives.”

The driving force behind green campus activities must be a compelling and well-defined vision for sustainability. The organization's mission statement and strategic plans should represent this vision, which the highest-ranking officials, such as chancellors or presidents of the universities, should express. Leadership should be given top priority by leadership and commit to long-term objectives, including carbon neutrality, waste reduction, and social responsibility that align with international sustainability standards (Omotayo et al., 2021). In addition, funding sustainability initiatives, endorsing sustainability committees or offices, and interacting with outside sustainability networks are all ways that leaders can show their dedication to sustainability. A culture of environmental stewardship is promoted, and the importance of sustainability is signaled to the entire campus community when leadership demonstrates its commitment.

Pervious research show that setting clear goals can increase individual motivation and performance. In the context of a green campus, transactional leaders need to set measurable targets related to sustainability, such as reducing energy use, managing waste, or increasing the use of renewable resources. By setting measurable goals, all campus members can have a clear direction to

contribute to sustainability initiatives. Goal measurement is based on the vision and mission of each organization (Lahmar, 2020).

Furthermore, the Chancellor mentioned the second strategy, namely by developing structured policies and procedures.

“Transactional leaders have also succeeded in developing structured policies and procedures to support green campus initiatives. policies that include guidelines for resource management, energy use, waste management, and sustainable transportation are helpful in creating a clear framework for all campus residents. clear policies help them understand what is expected and how they can contribute”

Many campuses are successful in achieving short-term green targets through incentives and corrections, but still face challenges in creating behavioral changes and more sustainable mindsets. Students and staff are often motivated to get involved because of incentives, but when incentives diminish, their participation tends to decline. Although transactional leadership is very effective in the short term, long-term strategies require a combination with a transformational leadership approach capable of inspiring deeper cultural change. Leaders must strive to integrate sustainability values into campus culture so that environmental awareness becomes part of each individual's identity, not just to meet certain targets (Kretschmer et al., 2021).

The third strategy is to create an appropriate reward and incentive system. This is in accordance with the following interview with the Chancellor.

“Effective reward and incentive systems play an important role in encouraging individual and group participation in green campus initiatives. Transactional leaders who reward faculty, staff, and students who successfully achieve sustainability targets or innovate environmentally friendly practices create a positive competitive atmosphere. This award increases motivation and enthusiasm to be involved in sustainability programs.”

Transactional leaders set specific goals, provide direction, and use incentives as a tool to ensure achievement of organizational targets. According to Brammer & Walker (2011), transactional leadership emphasizes compliance with rules and roles, where subordinates will be rewarded when they meet expectations and subject to sanctions when they fail to achieve targets. The use of rewards and punishment in transactional leadership is effective in encouraging organizational members to carry out green campus initiatives (Wang et al., 2020).

Another strategy that is no less important is education and training on sustainability issues for all members of the organization. This was conveyed in the following interview session with the heads of administration, general, personnel and finance bureaus.

“Another strategy that we carry out is to hold seminars, workshops, international conferences on sustainability issues. We involve students, lecturers and education staff in socializing the green campus program. Understanding sustainability is very important so that all members of the organization can support the implementation of a green campus.”

For sustainability to be ingrained in the institution's academic mission, curriculum integration and funding for sustainability-related research are essential. In all subject areas, sustainability ought to be ingrained in the educational process (Blanco & Ceca, 2016). In addition to incorporating sustainability subjects into already-existing courses, universities might offer specific sustainability courses, minors, or majors. Students who complete this course will be better equipped to handle sustainability issues in the workplace. The institution can establish itself as a pioneer in sustainability innovation by funding research on sustainability-related subjects including environmental justice, climate change, and renewable energy. Encouraging sustainable research through collaborations, infrastructure, and financing can draw in eminent academics and students.

The green campus team also mentioned the need for collaboration between departments on campus to make the green campus a success. This is as shown in the following interview.

“A green campus is included in the university's vision and mission, so it is also included in the official performance index. Therefore, it is easier to collaborate between faculties, study programs,

institutions and units under the university so that a synergy is formed in implementing a green campus.”

Collaboration is very necessary in forming an effective organization. In the context of a green campus, leaders must create space for collaboration between faculty, staff, and students in designing and implementing sustainability initiatives. By mobilizing participation from various stakeholders, leaders can build a sense of ownership of green programs, which in turn will increase engagement and commitment (Ngh et al., 2020).

Lastly, which is no less important, is continuous monitoring and evaluation. Continuous improvement must be carried out to always provide room for improvement in every activity. The heads of the administration, general, personnel and finance bureaus mentioned this in the following interview.

“Leaders who implement an effective monitoring and evaluation system for green campus initiatives are proven to be able to identify progress and challenges faced. Leaders who regularly evaluate the performance of sustainability programs and provide feedback to all campus members can maintain motivation and ensure continuous improvement. Constructive feedback helps them understand their contributions and improves overall performance”

To achieve sustainable green campus success, it requires a combination with other leadership styles, such as transformational leadership, which is able to inspire deep change and build a collective commitment to environmental values throughout the academic community. The green campus team said that a combination of leadership styles is needed to implement a green campus more effectively.

“The combination of transactional and transformational leadership can produce more optimal results in green campus initiatives. Leaders who are able to provide clear and measurable direction (transactional) and inspire long-term commitment through a strong vision (transformational) are more effective in driving sustainable change.”

The combination of transactional and transformational leadership styles can create a balance between achieving short-term targets and building a culture of long-term sustainability (Mahdinezhad et al., 2013). One way to succeed in this field is to set zero-waste objectives (Tseng et al., 2020). Establishing challenging zero-waste objectives, such as the campus's goal of keeping as much garbage out of landfills as possible, might spur waste reduction creativity. The electric automobile (EV). Transportation-related emissions can be further decreased by encouraging the use of electric vehicles by installing EV charging stations and transitioning campus fleets to electric or hybrid cars.

A campus's carbon footprint can be greatly decreased by retrofitting existing buildings with energy-efficient heating, ventilation, and air conditioning (HVAC) systems and by putting in smart energy management systems (Yaprakli & Özden, 2021). For sustainability from the ground up, new development should follow green building standards, such as LEED certification. To achieve long-term sustainability goals, switching to renewable energy sources like solar, wind, or geothermal is essential. Universities can acquire renewable energy credits or invest in on-site renewable energy installations to offset their energy use. Water-saving technologies, like rainwater harvesting systems, low-flow fixtures, and xeriscaping (landscaping using drought-resistant plants), can be implemented to reduce water usage and encourage sustainable water use habits.

Challenges and Limitations

Although the transactional leadership style has proven effective in directing and managing results-oriented projects, including green campus initiatives, there are several significant challenges and limitations that affect its application in the context of long-term sustainability. The following are the findings and discussion regarding these challenges and limitations:

“One of the main challenges in implementing a green campus is the lack of support and commitment from top management. Without strong support from institutional leadership, efforts to implement sustainability initiatives are often overlooked and do not receive enough attention.

Management's lack of understanding of the importance of environmental sustainability also becomes an obstacle in allocating adequate resources for green programs."

While focusing on short-term results can provide rapid gains in green campus implementation, it becomes a challenge when addressing long-term sustainability goals. Green campuses require sustainable cultural and behavioral changes, not just achieving temporary targets. This reliance on short-term targets can create an environment where students and staff only engage because of incentives or punishments, rather than because of an intrinsic commitment to sustainability. As a result, once targets are achieved or incentives cease, participation can decline, making true sustainability difficult to achieve (Yapraklı & Özden, 2021).

Limited funds are the biggest challenge, because implementing a green campus certainly requires a large budget. This statement is as stated by the head of the administration, general, personnel and finance bureau below.

"Implementing a green campus requires a large budget. This sometimes becomes an obstacle for us to go further in campus green initiatives. Infrastructure is needed that supports sustainability, waste processing, water availability, renewable energy, environmentally friendly transportation as well as sustainability training and education programs. All of this requires a large budget, of course."

Finance is one of the reasons why higher education institutions do not support green campus initiatives. Their limited budget limits campuses from further supporting sustainability issues. Innovation and technological support are needed which of course require quite a bit of funding (AlNuaimi et al., 2021).

The next challenge and limitation is the low awareness and knowledge of organizational members regarding green campus initiatives. This is as stated by the green campus team as follows.

"Another challenge for implementing a green campus at our place is the lack of awareness and knowledge of campus members regarding sustainability. Many of them do not understand sustainability issues so they tend to be apathetic towards green campus programs."

Rybnycek et al. (2019) found that a lack of awareness and knowledge regarding sustainability makes organizational members reluctant to support green campus initiatives. In this study, most respondents stated that they did not fully understand the impact of their daily actions on the environment, which led to low involvement in green campus initiatives. Environmental awareness is an important foundation in implementing a sustainable green campus. However, transactional leadership styles that focus on incentives and punishments can ignore aspects of environmental education that are necessary to change perceptions and attitudes towards sustainability. Without a deep awareness of the importance of environmentally friendly practices, green programs will simply become a series of administrative tasks that are mechanically complied with, rather than a movement that is understood and emotionally appreciated by the academic community (Di Gerio et al., 2020).

Culture is a habit carried out by everyone in a community. An organizational culture that does not support a green campus is a challenge and obstacle to the success of the green campus program. The following is an explanation from the green campus team.

"An organizational culture that does not support sustainability initiatives is also a challenge. resistance to change among staff and students can hinder the implementation of green campus initiatives."

Research by Budihardjo et al. (2021) shows that the success of sustainability initiatives is strongly influenced by an organizational culture that supports sustainability values. In this context, some respondents complained that old, environmentally unfriendly habits are difficult to change, even amidst efforts to encourage green initiatives. Entrenched behaviours and cultural hurdles impede the implementation of a green campus strategy. It can be difficult to change the behaviours and mindsets of instructors, staff, and students, especially when there is a need for better awareness and appreciation of sustainability-related issues (Brown et al., 2019).

A true sustainability campaign requires consistent behavioral change, regardless of external rewards. Reliance on incentives can create a situation where people only engage in green programs as long as there is a reward. In the long term, this has the potential to weaken program sustainability, because without incentives, enthusiasm for participation can decrease. Therefore, efforts are needed to build strong intrinsic motivation among the academic community so that the green campus program can continue without depending on external incentives. Although transactional leadership has power in facilitating the implementation of structured and results-based green campus policies, its challenges and limitations in building cultural change, environmental awareness, and long-term commitment make it less than optimal in realizing true sustainability (Lăzăroiu et al., 2020).

Infrastructure that does not support the green campus concept is a limitation for the campus. This is also a challenge that must be faced in order to implement a green campus. The results of interviews with the green campus team stated the following.

“Many campuses do not have adequate infrastructure to support green campus initiatives. Limitations in terms of facilities such as waste management systems, recycling and the use of renewable energy are obstacles in implementing environmentally friendly practices.”

Research by Rybnicek et al. (2019) show that without appropriate infrastructure, institutions have difficulty implementing sustainability policies effectively. Some campuses that wish to implement sustainability policies face limitations in terms of supporting facilities, which makes implementing green initiatives difficult.

The absence of standard measurement and evaluation tools in implementing a green campus is a challenge and limitation for the University. This explanation was explained by the green campus team below.

“difficulties in measuring and evaluating the success of green campus initiatives. Institutional leaders often lack clear indicators to assess the progress of sustainability programs.”

Research by Bass et al. (2003) confirms the importance of evaluation in managing change. Many campuses lack clear measurement tools to evaluate the impact of sustainability programs, which can reduce motivation to continue such initiatives.

However, in implementing the green campus the other obstacles as explained in the following interviews with state Islamic university staff.

“Problems related to sustainability frequently call for creative solutions and situational adaptation. By encouraging new technologies, supporting research and development, and cultivating a continuous improvement culture, leaders prioritizing sustainability also stimulate innovation. Sustainable leaders place a high value on moral decision-making, considering the long-term effects of their choices and attempting to strike a balance between social, environmental, and economic implications. They set an exemplary example by making honest, open, and responsible judgments.”

Leadership for sustainability necessitates special attributes that allow leaders to tackle sustainability's intricate and interrelated problems. Visionary thinking, systems thinking, resilience, inclusivity and empathy, courage, and resilience are some of the essential traits of sustainable leaders (Gluch & Månsson, 2021). Although it is imperative for leaders to practice sustainable leadership, doing so presents many obstacles. Short-termism, complexity and unpredictability, opposition to change, resource limitations, and juggling conflicting goals are some of these difficulties. Sustainability and leadership are closely related, with successful leadership being a prerequisite for attaining sustainable results (Sam, 2017).

D. CONCLUSION

The results of this research provide empirical evidence of the role of transactional leadership style in supporting the implementation of green campuses in higher education institutions. There are several strategies that can be implemented by campus leaders to support green campus initiatives, namely: sustainability vision and mission, clear policies and procedures, rewards and punishment,

education and training, collaboration and support from all members of the organization, regular monitoring and evaluation. Meanwhile, there are challenges and limitations in implementing a green campus, including: lack of managerial support, budget limitations, unsupportive culture and infrastructure, difficulties in measurement and evaluation.

There are implications from the results of this research for campus leaders in implementing green campus initiatives. A transactional leadership style is needed to be able to support green campus programs related to sustainability issues. Higher education institutions must focus on preparing strong managers to support a green campus, allocate sufficient resources and build a sustainable organizational culture. By understanding existing challenges and limitations, leaders can design more effective strategies to achieve green campus goals.

Future research directions are indicated, particularly in relation to merging transformational and transactional leadership philosophies to maximise the performance of green campus projects. The first section uses case studies and comparative approaches to investigate the combination of transactional and transformational leadership. The second step is to analyse how different leadership philosophies affect sustainable culture through surveys, interviews, and long-term cultural change studies. The third component is initiative and leadership in green campus projects. Leadership styles and stakeholder engagement rank fourth. The programs for creating leaders for sustainability come last. Academics who pursue these study avenues can provide more profound insights into the effective blending of transactional and transformational leadership styles to maximise the effects of green campus projects. This knowledge would be beneficial for higher education institutions looking to improve their sustainability efforts and make a long-term positive environmental impact.

REFERENCES

- AlNuaimi, Bader K., Singh, S. K., & Harney, B. (2021). Unpacking the role of innovation capability: Exploring the impact of leadership style on green procurement via a natural resource-based perspective. *Journal of Business Research*, 134(October 2020), 78–88. <https://doi.org/10.1016/j.jbusres.2021.05.026>
- AlNuaimi, Bader Khamis, Khan, M., & Ajmal, M. M. (2021). The role of big data analytics capabilities in greening e-procurement: A higher order PLS-SEM analysis. *Technological Forecasting and Social Change*, 169(November 2020), 120808. <https://doi.org/10.1016/j.techfore.2021.120808>
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218. <https://doi.org/10.1037/0021-9010.88.2.207>
- Bingab, B. B. B., Forson, J. A., Abotsi, A. K., & Baah-Ennumh, T. Y. (2018). Strengthening university governance in sub-sahara Africa: The ghanaian perspective. *International Journal of Educational Management*, 32(4), 606–624. <https://doi.org/10.1108/IJEM-02-2016-0039>
- Blanco, P., & Ceca, B. (2016). Green public procurement as an initiative for sustainable consumption. *Journal of Cleaner Production*, 133(1), 648–656. <https://doi.org/10.1016/j.jclepro.2016.05.056>
- Brammer, S., & Walker, H. (2011). Sustainable procurement in the public sector: An international comparative study. *International Journal of Operations and Production Management*, 31(4), 452–476. <https://doi.org/10.1108/01443571111119551>
- Brown, P., Ly, T., Pham, H., & Sivabalan, P. (2019). Automation and management control in dynamic environments: Managing organisational flexibility and energy efficiency in service sectors. *British Accounting Review*, 52(2), 100840. <https://doi.org/10.1016/j.bar.2019.100840>
- Budihardjo, M. A., Ramadan, B. S., Putri, S. A., Wahyuningrum, I. F. S., & Muhammad, F. I. (2021). Towards sustainability in higher-education institutions: Analysis of contributing factors and appropriate strategies. *Sustainability (Switzerland)*, 13(12), 1–15. <https://doi.org/10.3390/su13126562>
- Burhanudin, M., Akmaluddin, D., Siburian, P., Nurhayati, N., Zahri Harun, C., Bahrin, B., Nellitawati,

- N., Kadariah, K., Sunaengsih, C., Anggarani, M., Amalia, M., Nurfatmala, S., Naelin, S. D., Rahman, M. A., Santosa, A. B., Sihotang, H., Wiyono, B. B., Burhanuddin, Maisyaroh, ... Mulyadi, M. (2020). The Influence of Principal's Leadership, Teacher Performance And Internal Quality Assurance System in Improving The Quality of Education in Vocational High School. *Educational Research and Reviews*, 9(2), 305.
- Di Gerio, C., Fiorani, G., & Paciullo, G. (2020). Fostering Sustainable Development and Social Responsibility in Higher Education: The Case of Tor Vergata University of Rome. *Management Dynamics in the Knowledge Economy*, 8(1), 31–44. <https://doi.org/10.2478/mdke-2020-0003>
- Gluch, P., & Månsson, S. (2021). Taking lead for sustainability: Environmental managers as institutional entrepreneurs. *Sustainability (Switzerland)*, 13(7). <https://doi.org/10.3390/su13074022>
- Jusuf, E., Herwany, A., Kurniawan, P. S., & Gunardi, A. (2020). Sustainability Concept Implementation in Higher Education Institutions of Indonesia. *Journal of Southeast Jiaotong University*, 55(1), 1–17.
- Kretschmer, S., Dehm, S., Bilali, H. El, Strassner, C., & Hassen, T. Ben. (2021). Sustainability Transitions in University Food Service-A Living Lab Approach of Locavore Meal Planning and Procurement. *Sustainability*, 13, 1–31. <https://doi.org/10.3390/su13137305>
- Lahmar, F. (2020). Islamic education: An islamic “wisdom-based cultural environment” in a western context. *Religions*, 11(8), 1–15. <https://doi.org/10.3390/rel11080409>
- Lăzăroiu, G., Ionescu, L., Uță, C., Hurloiu, I., Andronie, M., & Dijmarescu, I. (2020). Environmentally responsible behavior and sustainability policy adoption in green public procurement. *Sustainability (Switzerland)*, 12(5). <https://doi.org/10.3390/su12052110>
- Mahdinezhad, M., Suandi, T. Bin, Silong, A. D., & Omar, Z. B. (2013). Transformational, transactional leadership styles and job performance of academic leaders. *International Education Studies*, 6(11), 29–34. <https://doi.org/10.5539/ies.v6n11p29>
- Ngah, A. H., Ramayah, T., Ali, M. H., & Khan, M. I. (2020). Halal transportation adoption among pharmaceuticals and cosmetics manufacturers. *Journal of Islamic Marketing*, 11(6), 1619–1639. <https://doi.org/10.1108/JIMA-10-2018-0193>
- Omotayo, T., Moghayedi, A., Awuzie, B., & Ajayi, S. (2021). Infrastructure elements for smart campuses: A bibliometric analysis. *Sustainability (Switzerland)*, 13(14). <https://doi.org/10.3390/su13147960>
- Rybníček, R., Leitner, K. H., Baumgartner, L., & Plakolm, J. (2019). Industry and leadership experiences of the heads of departments and their impact on the performance of public universities. *Management Decision*, 57(12), 3321–3345. <https://doi.org/10.1108/MD-10-2018-1173>
- Sam, C. (2017). Cambodian higher education in transition: an institutional governance perspective. *Journal of Enterprising Communities*, 11(3), 414–434. <https://doi.org/10.1108/JEC-11-2015-0051>
- Sanda, A., & Arthur, N. A. D. (2017). Relational impact of authentic and transactional leadership styles on employee creativity: The role of work-related flow and climate for innovation. *African Journal of Economic and Management Studies*, 8(3), 274–295. <https://doi.org/10.1108/AJEMS-07-2016-0098>
- Tseng, M. L., Chang, C. H., Lin, C. W., Nguyen, T. T. H., & Lim, M. K. (2020). Environmental responsibility drives board structure and financial and governance performance: A cause and effect model with qualitative information. *Journal of Cleaner Production*, 258, 120668. <https://doi.org/10.1016/j.jclepro.2020.120668>
- Wang, J., Yang, M., & Maresova, P. (2020). Sustainable development at higher education in China: A comparative study of students' perception in public and private universities. *Sustainability (Switzerland)*, 12(6). <https://doi.org/10.3390/su12062158>
- Yapraklı, S., & Özden, E. (2021). The effect of sustainable development on economics complexity in

oecd countries. *International and Multidisciplinary Journal of Social Sciences*, 10(2), 51–80.
<https://doi.org/10.17583/RIMCIS.7949>