Navigating the interplay between Sustainable Leadership, Relational Capital, and Academic Performance in Higher Education

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Abstract

Higher education is widely recognized as a pivotal factor in supporting the implementation of sustainable development goals (SDGs) through research, teaching and learning, collaboration, and management governance. Therefore, this research aimed to analyze the impact of leadership styles on academic performance, examine relational capital as a mediator in the relationship between leadership styles and academic performance, investigate the effect of sustainability leadership on curriculum design, and assess the influence of curriculum design on academic performance. The population consisted of lecturers from the Faculty of Economics at State Islamic Universities in Indonesia, the Islamic Science University of Malaysia (USIM) in Malaysia, and the Faculty of Islamic Studies, Department of Sharia and Economics, at the University of Malaya. With a population of 783 individuals and a precision of 5%, the sample size was determined to be 265 lecturers, and Partial Least Square (PLS) was used to test the hypotheses. The results showed that sustainable leadership did not affect academic performance. Furthermore, relational capital mediated the relationship between sustainable leadership and academic performance. Sustainable leadership and curriculum design directly affected academic performance. The findings highlighted the crucial role of leadership in facilitating curriculum design, relational capital, and academic performance. By emphasizing relational capital, higher education institutions proactively enhanced academic performance. Future research should also consider other important factors related to academic performance and explore different behavioral effects and leadership styles.

Keywords: *Sustainable Leadership, Relational Capital, Curriculum Design, Academic Performance, Higher Education, PLS*

INTRODUCTION

Academic context and higher education institutions (HEIs) are responsible for imparting knowledge, creating moral values, and driving societal dynamics. Academic world serves as a source of ideas for improving and giving meaning to human life. Higher education institutions are crucial in the transformation of sustainable education (Janssens, et al., 2022) and are considered the key to supporting the implementation of sustainable development goals (SDGs) through research, teaching and learning, collaboration, and management governance (Biasutti et al., 2018). These institutions have the potential to affect sustainable development in different fields such as economics, social change, and technological advancements (Findler et al., 2019). In line with these ideas, many educational institutions, including private universities, have emerged in Indonesia. This can be seen as an effort to contribute to the intellectual development of the nation and provide higher education management under the values prevailing in society (Munawiir et al., (2019).

Higher education plays a significant role in the transmission of information and skills more efficiently (Said et al., 2015). Despite technological advancements facilitating the transmission and transformation of ideas,

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educational leaders and campuses still face numerous challenges in meeting the demands of globalization (Said et al., 2015). Education is a key factor in achieving SDGs (Novawan & Aisyiyah, 2020). However, most institutions face challenges in developing curriculum and learning practices. One of the problems is the lack of effective leadership in curriculum reform. As part of the concept of sustainable performance, curriculum design, including educational practices, requires dynamic changes to meet current and future needs. Curriculum and learning serve as powerful and dynamic tools to understand and predict the activities in the classroom, as well as to manage educational environment. These conditions can be effectively addressed with leadership support.

Higher education (HE) is one of many types of organizations responsible for shaping sustainable development (Iqbal & Piwowar-Sulej, 2022). By disseminating knowledge, collaborating with the industry, and publishing research, it is aimed to contribute to sustainable development (Bayuo, Chaminade, & Göransson (2020). According to Hangel & Schmidt-Pfister (2017), lecturers need encouragement to publish articles related to their careers, and it is the leader's responsibility to address the condition. By incorporating these goals into curriculum, higher education institutions can synergize with the adoption of SDGs (Caeiro et al., 2020) and enhance academic performance (Colin & Lindsay, 2020., Ali, 2017). Furthermore, Mauliddina & Muhayat (2020) emphasized the significant effect of curriculum implementation on academic performance.

Higher education heavily relies on knowledge since its competitiveness depends on sharing knowledge, development, and intellectual assets (Dahiiyat, 2015). Higher education requires mechanism to allocate and coordinate relational capital as a form of internal and external collaboration (Masaro et al., 2019). This plays a strategic role to enhance academic performance, considering the interconnections and collaborations with internal and external stakeholders to improve organizational capacity leading to superior performance (Ramadan et al., 2017).

Superior performance achievement is determined by the university's vision and mission-oriented toward international reputation, such as generating and disseminating knowledge through scientific research (Leal Filho, 2022), teaching, collaboration, and international publications (Secundo et al., 2017). Other factors to consider in achieving superior performance include articulating and integrating goals into practical implementation, building trust among universities, fostering collaboration, involving academic community in professional education integration, combining individual and collective ideas, and emphasizing the importance of communication among academic community (Vandaele & Stålhammar, 2022).

According to the Ministerial Decree of Research, Technology, and Higher Education of Indonesia Number 142/M/Kpt/2019, performance indicators for higher education towards excellent accreditation include the percentage of programs with excellent accreditation (A), the graduates employed, qualified doctoral lecturers, the percentage of professors, international publications, the number of registered intellectual property, nationally indexed reputable journals, globally indexed reputable journals, and citations of scholarly works. The synergy between academic and practitioner enhances the quality of learning and graduate output. Collaboration with different domestic and international universities among the top 1000 in world-class university rankings greatly helps universities improve their international reputation (Secundo et al., 2017; Guthrie & Dumay, 2015).

Leadership is one of the indicators of achieving an international academic reputation. In higher education, it is expected to develop sustainable identity, as well as expand roles and competencies at different university levels to manage existing diversity (Stefanii, & Blessingers, 2017). Previous research suggested the implementation of sustainable leadership to manage organizational cultural diversity. Therefore, the practices should integrate the concepts of collegial and relational leadership into sustainable leadership Stefanii, & Blessingers. (2017). Various leadership in higher education have been examined, such as servant (Aboramadan et al., 2020), transformational (Owusu, 2019), ethical (Zeng & Xu, 2020), empowering (Deweettinck & Ameiijde, 2011), and inclusive leadership, which seems to be the most effective style for managing diversity (Stefanii, & Blessingers, 2017). Sustainable leadership can also be seen as a collaborative mechanism through which organizational members effectively assume their roles. Employees are willing to follow leaders who can motivate them to work, and enhance their commitment. The role of a leader is to create an environment where employees can perform tasks to improve their performance sustainably (Deweettinck & Ameiijde, 2011). In contrast, Khan et al.

(2020) stated that there is no significant direct influence between leadership and academic performance. Herdayati et al. (2020) also showed that visionary leadership does not affect performance.

Sustainable leaders remove barriers, foster relationships with others, support everyone's engagement in organizational activities, and ensure equal opportunities for individuals in the organization. Leaders encourage different stakeholders to work, address conflicts, and promote organizational progress (Stefanii, & Blessingers, 2017). Previous research suggested that leadership is a crucial key to promoting organizational inclusiveness (Brimhall, 2021) and academic performance. Building relationships with others, eliminating barriers, supporting organizational activities, and ensuring success are the characteristics of sustainable leaders. These leaders are expected to facilitate collaboration among multiple stakeholders, resolve disputes, advance organizational development, and enhance academic performance success (Brimhall, 2021). Even though there are many other forms, sustainable leadership is most beneficial in addressing situations. By implementing practices of social responsibility, this leadership aims to guide organizations toward sustainable development (Iqbal et al., 2020). According to Gjerde and Ladegard (Gjerde & Ladegård, 2019), having sustainable leaders can motivate staff members and create a work environment to balance their demands with organizational demands, driving individual and group performance. Sustainable performance is related to the long-term effects of academic performance, including administrative activities, teaching, and research (Alghamdi et al., 2017).

Academic performance is influenced by various factors, including relational capital (Deweettinck & Ameiijde,2011), which constitutes an integral component of an institution of higher education's intellectual capital (Garcia-Merino et al., 2014). Therefore, efforts to enhance relational capital are reflected in the activities of higher education institutions (Slupskaa, 2019). It refers to the relationships between the institution and other entities as well as collaborations with others. The creation of relational capital is a crucial feature of any higher education institution. It consists of internal relationships with lecturers and staff, as well as collaborations built between institutions [Hormiga et al., 2011]. Relational capital is also defined as the relationships with stakeholders that impact the sustainability of the institution, enhancing competitive advantage to build and maintain bonds among academic community (Arenaa et al., 2021), to achieve academic performance (Deweettinck & Ameiijde, 2011). Important indicators of academic performance include teaching, research and publications, branding and promotion, and diversity in research programs (Yadav et al., 2022). Therefore, the integration of research findings into curriculum development is necessary (Alm et al., 2022; Manoharan et al., 2022; Poon, & Brownlow, 2015). stated that academic performance can be seen from curriculum and teaching. Based on these opinions, there are differences regarding the indicators of academic performance.

This research proposes sustainable leadership model, where relational capital and curriculum design serve as effective intervention mechanism. This variable describes a positive relationship with innovative behavior, creativity, job engagement, and well-being (Guuo et al., 2020; Javed et al., 2018). However, some empirical research have tested the concept in universities, where (Iqbal & Piwowar-Sulej, 2022) stated that sustainable leadership has not been well elucidated due to limited literature (Najmaiei & Sadehinejad (2019), and the existing information indicates a scarcity of research (Sugiyono, 2017). This research also discusses relational capital's contribution to organizational performance (Bruscaa et al., 2019; Salinas-Ávila et al., 2020) by delineating the direct and indirect contributions of relational capital to academic performance. The novelty lies in the mediating role of relational capital and curriculum design on sustainable leadership and academic performance, respectively.

LITERATURE REVIEW

Sustainable leadership enables higher education institutions to function and motivate academic to exhibit different role performance behaviors to address all challenges (Hollander, 2009). This variable has styles of recognition, ownership, inclusivity, and identity, as well as prioritizes the needs and interests of followers (Randel et al., 2018). Muhammad & Nugraheni (2022) showed that leadership correlated with learning outcomes form the basis for decisions related to curriculum development, such as instructional, learning, assessment, and staff development model.

Leadership is the key to driving organizational performance (Brimhall, 2021), which is related to teaching and research. Performance in research activities includes lecturer-student collaboration, lecturer research, article publications, and citation counts (Cricellii, 2018). The construction is expected to contribute to academic performance, where organizational learning functions as an effective intervention mechanism (Guuo et al., 2020).

Higher education institutions heavily rely on knowledge sharing, development, and intellectual assets (Dahiiyat, 2015). Meanwhile, institutions require mechanism to allocate internal and external collaboration (Masaro et al., 2019), which serves as a channel to improve academic performance (Ramadan et al., 2017).

Relational capital positively correlates with performance of higher education institutions (Garcia-Merino, 2014). Therefore, efforts to enhance the variable are reflected in higher education activities (Słupskaa, 2019). Relational capital refers to the relationships between the university and other entities as well as collaborations with some institutions (Hormiga et al., 2011). It involves patterns of interaction among partners that facilitate positive feelings and alliance functions. The more relational capital a local company develops from alliances, the greater the likelihood of acquiring external knowledge (Liu et al., 2020).

Novawan & Aisyiyah (2020) examined the role of leadership in curriculum planning and found that top-level leaders prioritize innovation as a written document. Meanwhile, middle-level leaders delve into grassroots-level reform agendas closely related to the capacity development of curriculum developers in faculties. Colin et al. (2020) stated that the implementation of curriculum planning through a comprehensive process, followed by assessment and more focused teaching practices, can enhance academic performance. Curriculum introduces a credit system, providing flexibility in course selection, which leads to better academic performance (2020). Therefore, the hypotheses are as follows:

H1: Sustainable leadership affects academic performance.

H2: Relational capital mediates the effect of sustainable leadership on academic performance.

H3: Sustainable leadership affects curriculum design.

H4: Curriculum design can improve academic performance.

METHODOLOGY

This explanatory research was conducted to explain the cause-and-effect relationships between variables through hypothesis testing to draw causal conclusions (Sekaran, 2003). The population consisted of 783 lecturers from the Faculty of Economics and Business at State Islamic Universities in Indonesia, including the State Islamic University of Malang, State Islamic University of Surabaya, State Islamic University of Jakarta, State Islamic University of Banten, State Islamic University of Yogyakarta, State Islamic University of Semarang, State Islamic University of Bandung, State Islamic University of Lampung, State Islamic University of Makassar, Faculty of Economics and Muamalat, Islamic Science University of Malaysia (USIM) Malaysia, and Malaya University Malaysia. Based on a population of 783 individuals and a precision of 5%, the sample size comprised 265 lecturers.

Data collection was accomplished using questionnaires distributed to all respondents. Sustainable leadership referred to (Aboramadan et al., 2020; Iqbal & Piwowar-Sulej 2022) and consisted of Openness, Accessibility, Interactive communication, and Listening to employees. Relational capital was adapted from the opinions of (Secundo et al., 2017; Arenaa et al., 2021 and involved (1) Relationships in co-authorship, (2) Relationships created by joint research, (3) Development projects, and (4) International students in exchange programs (International Mobility). Curriculum design referred to Ali (2017), Novawan & Aisyiyah (2020), and included (1) curriculum review, (2) MBKM curriculum, and (3) Sustainable curriculum. Academic performance adopted the views of Crivelli et al. (2018), and Chi & Glanzel (2018), which included the learning process, learning evaluation, research continuity, and research publication. The measurement scale used to measure variables was a Likert scale with weights assigned to each item, ranging from 1 to 5 (Sekaran, 2003).

Descriptive analysis was used to provide an explanation of respondents' answers regarding questions or statements and to provide an overview of the frequency distribution of respondents' statements from the collected data. Meanwhile, Partial Least Square (PLS) was used to test research hypotheses and was applied to all types of data scales. It did not require many assumptions or large sample size and was used to confirm theories or test propositions (Ekowati et al., 2024). Mediation also detected the position of intervening variables in model using the Sobel procedure (Sobel Test) (Ekowati et al., 2024).

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RESULTS

Statistical Calculation Results

The stages of this research were testing the relationships between variables using WARP-PLS, measurement model, and structural equation model. The Reliability test results for each variable had Cronbach's alpha values higher than the cut-off point of 0.60. The variables were internally acceptable since Cronbach's alpha was higher than $\alpha > 0.60$ [54]. The square root of the average variance extracted ($\sqrt{AVE}$) was greater than 0.5, indicating that the instruments were valid [55]. From the testing results of composite reliability, sustainable leadership, relational capital, curriculum design, and academic performance had a value of 0.822, 0.808, 0.821, and 0.758, respectively. Therefore, the analyzed variables had good composite reliability because their values were above 0.70. Further analysis should be conducted by testing the goodness of fit of model.

The Goodness-of-Fit

Table 1. Goodness-of-Fit Testing Results

Structural Model	Endogenous Variables	R - Square
1	RC (Y1)	0.37
2	DC (Y2)	0.35
3	AP (Y3)	0.52

The R2 values for each endogenous variable Y1, Y2, and Y3 were 0.37, 0.35, and 0.52, respectively. The predictive-relevance value was calculated using the following formula:

$Q2 = 1 - (1 - R12)(1 - R22)(1 - R32)$

$Q2 = 1 - (1 - 0.37)(1 - 0.35)(1 - 0.52)$

$Q2 = 1 - (0.63)(0.65)(0.48)$

$Q2 = 0.804$

value. The value of 80.4% indicated that 80.4% of the data variation can be explained by model. The remaining 11.1% was explained by other variables and errors.

Structural Equation Modeling

SEM using Warp-PLS was conducted to test hypotheses, including direct and indirect effects or mediation. The results of the direct effects depicted in this research section are shown in Table 2.

Path Coefficients of Direct Effects

Hypothesis testing and path coefficients of the direct effects were between SL and AP, SL and DC, and DC and AP. The analysis results between variables were observed from the path coefficient values and p-values, as presented in Table 2.

Table 2. Hypothesis Testing Results of Direct Effects

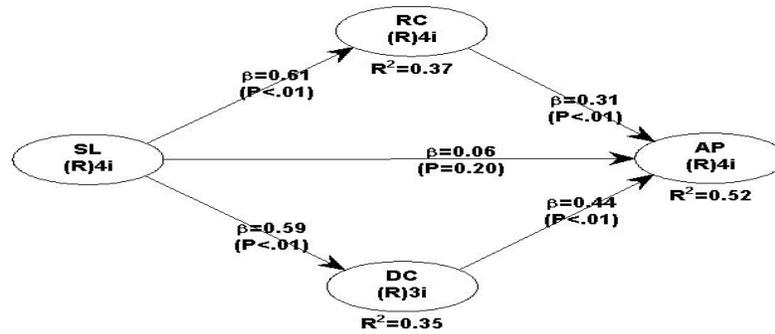| Independent Variable	Dependent Variable	Path Coefficient	P-Value	Description
SL	AP	0.006	0.200	Not Significant
SL	DC	0.590	0.000	Significant
DC	AP	0.440	0.000	Significant

Figure 2. Path Diagram of the Structural Model in PLS

Hypothesis testing results presented in Table 2 and Figure 1 will be explained as follows:

H1. Sustainable leadership affects academic performance.

The analysis of the inner model path coefficients in WARP-PLS showed that the direct effect of sustainable leadership on academic performance had a path coefficient value of 0.006 with a p-value of $0.200 > 0.05$. Since the p-value was greater than 5%, sustainable leadership did not have a direct effect on academic performance.

H3. Sustainable leadership affects design curriculum.

The analysis of the inner model path coefficients in WARP-PLS showed that the direct effect of sustainable leadership variable on design curriculum had a path coefficient value of 0.590 with a p-value of $0.000 < 0.05$. Since the p-value was less than 5%, sustainable leadership has a direct effect on design curriculum.

H4. Design curriculum can improve academic performance.

The analysis of the inner model path coefficients in WARP-PLS indicated that the direct effect of design curriculum variable on academic performance had a path coefficient value of 0.440 with a p-value of $0.000 < 0.05$. Since the p-value was less than 5%, design curriculum had a direct effect on academic performance.

Path Coefficients of Mediating Variables

H2. Relational capital mediates the effect of sustainable leadership on academic performance.

The examination of mediating path effects determined the position of variables in model. This method was used to determine complete, partial, or non-mediation relationships between variables. The results of testing the path coefficients of relational capital can be seen in Table 3.

Table 3. Results of Hypothesis Testing for Indirect Effects

Hypothesis	Path Coefficient	P-Value	Result
SL - RC – AP	SL-RC	< 0.001	Full mediation
	RC - AP	< 0.001	
	SL - AP	0.201	

Based on Table 3, the P-value was < 0.001 for the path coefficients of SL→RC and RC→AP, indicating significance. The P-value for the path coefficient of SL→AP was 0.201, indicating no significant effect. Relational capital fully mediated the relationship between sustainable leadership and academic performance, hence, hypothesis H2 was accepted

DISCUSSION

Sustainable Leadership Has a Direct Effect on Academic Performance.

Based on the inner model path analysis, sustainable leadership did not directly affect academic performance. The research findings were not aligned with Iqbal & Piwowar-Sulej (2022), where sustainable leadership enhanced performance. Higher education leader should provide faculty members, especially lecturers, with an induction program to understand the system and its functions. This should present opportunities for faculty members to develop their potential and engage in interdisciplinary research as well as community service (Mahajan, 2020).

The research was consistent with Iqbal et al. (2020), indicating that sustainable leadership indirectly influenced performance through innovation. Leadership supported the motivation of lecturers to continuously improve their knowledge and skills, concerning the factors necessary to enhance a world-class university. Sustainable leadership should grant autonomy to followers, leading to decentralized leadership behavior involving employees in decision-making (Liu et al., 2020).

Sustainable leadership encompasses the inclusion of followers to apply their specific talents and skills in organizational activities (Randel et al., 2018). These leaders establish an environment where followers can enhance their learning and develop individual qualities (Najmaiei & Sadehinejad, 2019). Furthermore, leadership plays a pivotal role in organizational success, and optimal performance (Javed et al., 2018). Sustainable leadership involves leaders delegating power, as well as providing job autonomy, training, and information to subordinates (Iqbal et al., 2020).

Based on the findings, leadership style did not directly affect academic performance. Therefore, sustainable leadership provided space for all campus members to be accountable to predefined principles. This motivated and regulated all members in their work activities according to the principles to achieve the established vision. It strengthened the relationship between the structural dimension of social capital and educational task performance but did not improve research and community service performance. These findings suggested a tendency among lecturers to reduce the prioritization of research due to various regulations. Leadership policies are needed to improve academic performance in an internationally reputable or world-class university. The policies are increasing the number of international publications, international collaborations, and competitive research projects, removing restrictions on research funding, providing publication financing for journals, and enhancing the qualifications of lecturers with doctoral and professorial degrees. Therefore, the role of leadership in higher education becomes one of the determinants of organizational success.

Relational Capital Mediates Sustainable Leadership on Academic Performance

The field research findings were consistent with Drewniak et al. (2011), indicating that leadership had an impact on internal relational capital. Furthermore, there was a pattern of intra-organizational relationship formation by identifying the actions that contributed to the development of relational capital. The results showed that in creating and developing relational capital, the role of a leader promoted the formation of organizational values and the creation of culture.

Gjerde and Ladegard (2019) stated that sustainable leaders should motivate academic members and create a work environment to balance their demands, thereby promoting individual and group sustainable performance. Sustainable performance in higher education is related to the long-term effects of academic performance, including university administration, teaching, and research (Alghamdi, 2017).

The study also aligned with previous research that relational capital influenced performance (Fauzan, 2012). The findings showed that the collaborations of lecturers were directly related to the exchange of information

and knowledge. The variable was also proportional to the involvement in productive and sustainable activities as a certification of social trust from external agents (Liu et al., 2020), leading to higher academic performance (Fauzan, 2012).

The on-field conditions were in line with Drewniak et al. [2011], that relational capital was an element of the intellectual capital of a university positively correlated with performance. Therefore, efforts to enhance relational capital were reflected in the activities of the university (Slupskaa, 2019). This variable referred to the relationships between the university and other entities, as well as the collaborations with some institutions (Hormiga et al., 2011). The creation of relational capital was also a vital feature of any university. The variable consisted of internal relationships with lecturers and employees, collaborations established between universities, and relationships with stakeholders, affecting the university's sustainability (Hormiga et al., 2011).

Relational capital served to understand knowledge creation as a social process that required interaction among individuals, especially in educational institutions, such as universities. The variable was crucial for the survival of an organization and for enhancing competitive advantage in building and maintaining bonds within academic community (Arenaa et al., 2021). Interconnection and collaboration throughout the organization were key factors responsible for the sharing of ideas, information, and expertise (Ramadan et al., 2017).

Sustainable leaders eliminated barriers, cultivated relationships with others, supported everyone's engagement in organizational activities, and ensured fair opportunities (Iqbal & Piwowar-Sulej, 2022). Leaders encouraged various stakeholders to work together, resolved conflicts, and promoted organizational progress (Aboromadan et al., 2020). Previous research recommended that leadership was a crucial key to fostering organizational inclusiveness, indirectly contributing to improving academic performance (Brimhall, 2021). Achieving superior performance was determined by the vision and mission of a university oriented towards international reputation, which included generating and disseminating knowledge through scientific research (Leal Filho et al., 2022), teaching, collaborative activities, and international publications (Secundo et al., 2017). Other factors to consider in achieving superior performance was by articulating and integrating goals into practical implementation, building trust between universities, fostering collaboration, involving academic community in professional education integration, combining individual and collective ideas, and emphasizing the importance of communication among academic community (Vandaele & Stålhammar, 2022). An important indicator of academic performance for a university included teaching, research and publications, branding and promotion, and diversity in the research programs (Yadav et al., 2022). Therefore, the integration of research into the university curriculum was necessary (Alm, 2022). Manoharan et al. (2022) stated that academic performance can be seen through curriculum and teaching. The synergy between academic and practitioners also enhanced the quality of learning and graduate output. Collaboration among various universities included in the top 100 rankings also improved its international reputation.

Sustainable Leadership Has a Direct Effect on Curriculum Design

The research was in line with Muhammad & Nugraheni (2022), that leadership correlated with learning outcomes served as the basis for making decisions related to curriculum development tools such as instructional model, learning model, assessment model, and staff development. In curriculum reform, top leadership was considered influential in decision-making, setting vision, and member mobility facilitated by the policy direction from top leaders. The complexity and ambiguity resulting from diversity, subjectivity, and multiple interpretations can be reduced (Novawan & Aisyiyah, 2020). Top leaders instructed and guided curriculum reform process from planning, and implementation to evaluation throughout the stages. Efforts to communicate the vision and address urgent current issues were necessary actions for implementing curriculum reform (Yaghi, 2017).

In curriculum reform, the function of middle leadership involved strategic communication to absorb policies and vision to affect the decisions of top leaders. They learned policies and work practices, considering input from colleagues. Furthermore, a pluralistic approach was adopted, where views change beyond the boundaries of conservative leadership theory. The rational and adaptive reaction was based on the local situation (Yaghi, 2017) to maintain collaboration in facilitating curriculum design (Colin & Lindsay, 2020). By incorporating these goals into curriculum, universities synergized in adopting SDGs (Caero et al., 2020) and enhancing

academic performance (Ali, 2017; Colin & Lindsay, 2020). Therefore, knowledge and curriculum played a key role in the advancement of universities (Secundo et al., 2017).

Curriculum Design Can Improve Academic Performance.

The path analysis test results indicate that curriculum design directly influences academic performance variable. The research findings align with Mauliddina & Muhayat (2020), showing a significant effect of curriculum implementation on academic performance. An important indicator of academic performance for a university includes teaching, research and publications, branding and promotion, and diversity in the programs offered (Alm et al., 2022). Therefore, research integration into the university curriculum was necessary (Yadav et al., 2022).

Curriculum perspectives were based on goals, context, and teaching and learning techniques. The purpose of curriculum goal was to impart cultural heritage or advance students' intellectual abilities. Based on context, curriculum served as a tool to prepare children for their future selves. Concerning the teaching and learning approach, it was related to teaching methods, enabling students to learn effectively (Ali, 2017).

The findings aligned with Colin et al. (2020), that the implementation of curriculum planning through a comprehensive process, followed by assessment and more focused teaching practices, enhanced academic performance. This was because curriculum introduced a credit system for courses, providing flexibility in selection, and improving academic performance.

IMPLICATIONS AND CONCLUSION

Based on the findings, several factors contributing to academic performance included sustainable leadership, relational capital, and curriculum design. Institutions should pay more attention to these factors to enhance academic performance. Empirical evidence suggested that leadership can improve academic performance through relational capital. The variable played a crucial role in facilitating relational capital and academic performance. Sustainable leadership, relational capital, and curriculum design were some components that enhanced academic performance. Meanwhile, institution leaders should consider ways to promote and develop relational capital as well as integrate research findings into curriculum to optimize academic performance achievement. Sustainable leadership was expected to optimize work outcomes in higher education institutions with a collective culture. Considering that Indonesia and Malaysia are collectivist societies, behavioral leadership should be effective in these organizations within these countries compared to the West.

In conclusion, it was reported that sustainable leadership did not directly affect academic performance. To enhance academic performance toward international reputation or world-class university status, leaders were expected to implement policies such as increasing the number of international publications and collaborations as well as enhancing the qualifications of lecturers with doctoral degrees. Therefore, the role of leaders in higher education institutions became a determinant of academic performance. Relational capital also mediated the relationship between sustainable leadership and academic performance. In creating and developing the variable, the role of leaders was to promote organizational values and culture that supported goal achievement and enhanced performance.

Sustainable leadership directly affected academic performance. Leadership correlated with learning outcomes became the basis for making decisions related to curriculum development, instructions, course sequences, assessment model, and staff development. Leadership was considered influential in decision-making, vision setting, and member mobility facilitated by the structural framework and policy direction from leaders. Furthermore, curriculum design directly affected academic performance. Implementing curriculum planning through a comprehensive process, followed by focused teaching and learning practices also enhanced academic performance.

Concerning the limitations of this research, all respondent answers were aggregated, and the specific responses for each Islamic State Religious University were unknown. Existing literature employed cross-sectional data to investigate the relationship between leadership, academic performance, curriculum design, and relational capital. This type of data was useful in understanding the characteristics and status quo of an organization but

had limitations not reflected in the dynamics of higher education institution. Further research was needed regarding the different roles played by sustainable leadership in affecting academic performance. They should strive to explain the different effects provided by sustainable leadership and other leadership styles. The role of mediators and moderators should also be examined to uncover the relationship between sustainable leadership and academic performance. Therefore, a comprehensive understanding of the combined effects of factors from different levels could be gained, explaining mechanism where sustainable leadership affected academic performance from multiple perspectives.

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