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The impact of reward systems for lecturers, communication culture, intrinsic motivation, and transformational leadership on institutional effectiveness in Islamic higher education

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ABSTRACT

This study aims to analyze the influence of reward systems, communication culture, and intrinsic motivation on the institutional effectiveness of Islamic higher education institutions in Binjai City, emphasizing the mediating role of transformational leadership. The research is motivated by the importance of professional and high-quality educational management in addressing globalization challenges and meeting societal demands for higher education. Data were collected from 83 respondents, comprising lecturers at Institut Syekh Abdul Halim Hasan Binjai and Sekolah Tinggi Ilmu Tarbiyah Al-Washliyah, using a closed questionnaire. The analysis was conducted through simple correlation, multiple correlation, and path model testing. The findings reveal that reward systems, communication culture, and intrinsic motivation positively and significantly influence transformational leadership, contributing 2.9%, 2.3%, and 1.8%, respectively. Intrinsic motivation also directly impacts institutional effectiveness by 7%. However, other factors, such as organizational context and work culture, also play significant roles in determining overall institutional effectiveness. The practical implications of this study suggest the need for policies that support strengthening reward systems, fostering effective communication culture, and enhancing lecturers' intrinsic motivation to improve the institutional effectiveness of Islamic higher education. These findings provide insights for the management of Islamic higher education institutions in designing more effective institutional strategies.



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Introduction

Indonesia faces significant challenges in advancing its education sector, especially in higher education institutions, including Islamic universities and colleges. These challenges are both institutional and functional, reflecting broader societal shifts and the increasing demands of globalization (Zaini & Syafaruddin, 2020). To remain relevant, higher education institutions must manage their resources effectively and adapt to technological advancements. For Islamic higher education institutions, the challenges are further compounded by their dual responsibility to uphold Islamic teachings while addressing modern educational demands. This creates a complex environment where institutional effectiveness is often hindered by limited resources, misaligned priorities, and underdeveloped management practices. (Dumitriu et al., 2014). One of the most pressing challenges faced by Islamic higher education institutions is the disparity in funding and resources compared to

secular institutions. Islamic institutions often operate with minimal financial support, which restricts their ability to invest in infrastructure, technology, and faculty development. This resource gap limits their competitiveness and creates barriers to providing a holistic educational experience. Additionally, the lack of adequate funding affects the ability of these institutions to retain high-quality lecturers, many of whom seek better opportunities in institutions with more robust support systems. These disparities highlight the need for innovative strategies to optimize available resources and improve institutional effectiveness (Alkaabi et al., 2022; Pujiyati, 2020).

Another key challenge lies in balancing traditional Islamic values with the demands of the modern labor market. Islamic higher education institutions aim to preserve and promote religious teachings while ensuring their graduates possess the skills and competencies needed in contemporary industries. This dual focus often leads to tensions in curriculum design, where efforts to modernize are sometimes perceived as a compromise on religious values. The challenge, therefore, is to create curricula that are both deeply rooted in Islamic principles and responsive to the evolving needs of society. This requires careful planning and collaboration among academic leaders, faculty, and stakeholders (Mesiono, 2022). Lecturer competencies are also a critical factor influencing institutional effectiveness in Islamic higher education. While many lecturers are well-versed in religious studies, they often lack exposure to innovative teaching methods and contemporary pedagogical tools.

This gap hinders their ability to provide students with well-rounded education that bridges traditional knowledge and modern applications. Furthermore, the workload of lecturers in Islamic institutions is often higher than in secular universities, as they are expected to contribute to community service and religious activities in addition to their teaching and research responsibilities. Addressing these challenges requires targeted professional development programs and better support systems for lecturers. (Ananda & Rafida, 2017) asserts that "Empowerment of superior human resources starts with a good education process. Formal education in higher education units will be the focal point of the education process". Achieving this requires investment in developing lecturer competencies, improving lecturer welfare, and providing adequate institutional support. To address these multifaceted challenges, this study examines the role of reward systems, communication culture, intrinsic motivation, and transformational leadership in enhancing institutional effectiveness in Islamic higher education. Reward systems, for instance, play a crucial role in motivating lecturers to perform at their best. By recognizing and rewarding contributions to teaching, research, and community service, institutions can foster a culture of excellence. However, these systems must be designed to align with Islamic values, emphasizing not just material rewards but also moral and spiritual recognition (Papantymou & Darra, 2017).

Communication culture is another critical variable that influences institutional effectiveness. In Islamic higher education, fostering open and respectful communication is essential for creating an environment of collaboration and mutual understanding. A strong communication culture can bridge gaps between administrative staff, faculty, and students, ensuring that all stakeholders work towards shared goals. Effective communication also helps to address conflicts, improve decision-making processes, and build trust within the institution, which are vital for its success (Romanowski, 2022). Law No. 20 of 2003 on the National Education System provides a legal framework that regulates various important aspects of national education in Indonesia. The references mentioned above offer deeper insights into the issues and policies governed by this law. Regarding this, Law No. 12 of 2012 on Higher Education, Article 1 Paragraph (2), states that higher education is the level of education after secondary education, encompassing diploma, bachelor's, master's, specialist, and doctoral programs organized by higher education institutions. Article 62 Paragraph (1) states that higher education institutions have autonomy to manage themselves as centers for the implementation of *tridharma*. Article 63 specifies that the autonomy of higher education management is based on principles of accountability, transparency, non-profit orientation, quality assurance, effectiveness, and efficiency.

Intrinsic motivation is particularly relevant in Islamic higher education, where values such as sincerity (*ikhlas*) and accountability (*amanah*) are central to organizational culture. Lecturers who are intrinsically motivated are more likely to engage in meaningful teaching and research activities, driven by personal fulfillment rather than external rewards. This internal drive not only enhances their performance but also contributes to the overall effectiveness of the institution. Encouraging intrinsic motivation involves creating an environment where lecturers feel valued, supported, and aligned with the institution's mission (Champoux, 2017). Transformational leadership is perhaps the most significant factor in driving change and improving institutional effectiveness. Leaders in Islamic higher education must possess the vision and charisma to inspire their teams while remaining grounded in Islamic principles (Miller et al., 2016). Transformational leadership involves empowering lecturers and staff, fostering innovation, and setting clear goals that align with the institution's mission. By adopting this leadership style, Islamic higher education institutions can navigate the complexities of modern education while preserving their religious identity. Despite the importance of these variables, existing research often focuses on them individually or in secular contexts, leaving a significant gap in understanding their collective impact within Islamic higher education. Previous studies have demonstrated the benefits of reward systems and

transformational leadership, but they rarely explore how these elements interact with intrinsic motivation and communication culture in shaping institutional outcomes. Furthermore, there is limited research on how these factors can be adapted to align with the unique values and challenges of Islamic education (Stumm et al., 2021).

Edward T. Hall's basic theory of communication culture emphasizes that communication is influenced not only by language and symbols but also by the broader cultural context. The High-Context vs. Low-Context Theory distinguishes between cultures that rely heavily on social, nonverbal, and implicit communication (high-context) and those that rely more on explicit verbal communication (low-context). Key points include 1) High-Context Cultures, rely on social context, non-verbal cues, and implicit messages. Communication is often indirect, and messages require deep contextual and cultural understanding. 2) Low-Context Cultures, Rely more on explicit verbal information. Communication is direct, clear, and focused on the verbal message (Scharrer & Ramasubramanian, 2021; Wendelinus Dasor et al., 2022).

Motivation is an internal drive that compels someone to act and achieve specific goals. It is the force that energizes and directs behavior toward desired outcomes. Motivation is vital for achieving individual goals. Intrinsic motivation refers to the internal drive to engage in an activity for personal satisfaction, learning, exploration, or personal achievement. It differs from extrinsic motivation, which involves external incentives, rewards, or social pressure. Intrinsic motivation and reward systems are interrelated concepts in motivation and performance contexts. Intrinsic motivation comes from internal drives for personal satisfaction, while reward systems provide external incentives for desired behaviors. Research on intrinsic motivation in higher education has been essential in understanding factors influencing student motivation, academic achievement, and strategies for enhancing intrinsic motivation. Transformational leadership, as described by James L. Gibson, motivates followers to work for transcendental goals and achieve self-actualization (Finnigan, 2010a; Park & Rainey, 2012).

Transformational leadership inspires individuals to become key actors in the change process, encouraging self-improvement and organizational goal attainment. Transformational leadership in higher education is crucial as universities play a strategic role in developing human resources and fostering innovation. According to (Hariyanto et al., 2021), transformational leadership is based on the assumption that people will follow someone who inspires them, has a clear vision, and the energy to achieve significant goals. Working with a transformational leader provides valuable experiences as they inspire and energize their followers. Institutional effectiveness refers to an organization's ability to achieve its goals efficiently, effectively, and sustainably. It involves resource management, policy implementation, performance evaluation, and strategic adjustments. Islamic work ethics significantly enhance job performance and intrinsic motivation, as demonstrated in a study of university teachers in Pakistan, where intrinsic motivation mediated the relationship between ethical adherence and job performance. Similarly, transformational leadership behaviors correlate positively with psychological empowerment, as observed in Saudi universities, where gender was not a determinant of effective leadership practices.

This underscores the importance of fostering inclusive leadership environments and promoting psychological empowerment as a core element of institutional success. Additionally, transcendental leadership has been shown to inspire affective commitment among university faculty, with intrinsic motivation moderating this relationship and altruistic mindsets acting as mediators, highlighting the necessity for leadership that prioritizes values and transcends traditional managerial roles. Furthermore, the integration of Islamic education with science and technology offers a practical framework for achieving holistic educational goals, emphasizing the alignment of spiritual and technical learning for moral and intellectual development. Collectively, these findings demonstrate the critical roles of reward systems, effective communication, intrinsic motivation, and transformational leadership in fostering institutional effectiveness, offering valuable strategies for Islamic higher education institutions to achieve sustainable growth and align with their core ethical and educational missions (Ajmal et al., 2024; Ari Nugroho, 2017; Bin Bakr & Alfayez, 2022; Ud Din et al., 2019).

This study aims to fill this gap by providing a comprehensive analysis of how reward systems, communication culture, intrinsic motivation, and transformational leadership contribute to institutional effectiveness in Islamic higher education. By examining these variables collectively, the research offers new insights into their interplay and practical implications for policymakers and academic leaders. The findings of this study can inform the development of targeted strategies to enhance institutional management, improve lecturer performance, and create a more supportive and collaborative academic environment. In addition to addressing theoretical gaps, this research has significant practical implications for Islamic higher education institutions. For example, it highlights the need to develop reward systems that balance material incentives with recognition of moral and spiritual contributions. It also emphasizes the importance of fostering inclusive communication cultures that respect hierarchical structures while encouraging open dialogue. Moreover, the

study underscores the value of transformational leadership in driving innovation and maintaining alignment with Islamic values.

The insights from this study can guide Islamic higher education institutions in navigating their unique challenges and capitalizing on their strengths. By adopting the recommended strategies, these institutions can enhance their competitiveness, improve their operational efficiency, and better fulfill their mission of providing high-quality education rooted in Islamic principles. Ultimately, this research contributes to broader efforts to advance education in Indonesia by offering context-specific solutions that address the complexities of Islamic higher education.

Method

This study was conducted at the Institut Syekh Abdul Halim Hasan Binjai and Al-Washliyah Islamic Education College in Binjai City, with lecturers as the research subjects. The research steps were systematically carried out, beginning with planning, data collection through closed-ended questionnaires, and data analysis using path analysis methods. This study aimed to examine the direct and indirect effects of exogenous variables such as reward systems, communication culture, intrinsic motivation, and transformational leadership on the endogenous variable of institutional effectiveness. Data collection was conducted from January to March 2024, employing an ex-post facto approach as it investigates phenomena that have already occurred. Data analysis utilized descriptive statistics to depict data distribution and path analysis to test the relationships between variables.

The study population comprised 107 lecturers from the two institutions, with the sample determined using random sampling techniques. The Taro Yamane formula was applied to calculate the sample size, resulting in 83 respondents. The research instruments consisted of questionnaires developed based on indicators of the five main variables: reward systems, communication culture, intrinsic motivation, transformational leadership, and institutional effectiveness. Responses were measured using a Likert scale with four options: Always, Often, Rarely, and Never. Before deployment, the instruments were tested for validity using product moment correlation and reliability using the Cronbach's Alpha formula to ensure accuracy and consistency (Creswell & Creswell, 2018). Data collection was conducted by distributing the questionnaires directly to respondents without allowing them to be taken home, ensuring data accuracy. The collected data were processed using statistical software such as SPSS to verify the findings align with the research methodology. Statistical tests included normality, homogeneity, and linearity to confirm the appropriateness of the path analysis. Data analysis involved simultaneous and individual testing of the path model to measure direct and indirect effects among variables. These analyses aimed to provide comprehensive insights into institutional management within Islamic higher education contexts (Sugiyono, 2019).

Results and Discussions

Normality Test

The Kolmogorov-Smirnov normality test is part of the classical assumption tests used to determine whether the residual values are normally distributed. A good regression model requires residual values to follow a normal distribution. The decision-making criteria are based on the significance value: if the significance value is greater than 0.05, the residuals are considered normally distributed; if it is less than 0.05, the residuals are not normally distributed. The results of the normality test are summarized in Table 1 below.

Table 1. Summary of Normality Test Results for Research Data

Variabel	L _{count}	L _{table}	Conclusion
Institutional Effectiveness (X ₅) on Reward System (X ₁)	0,060	0,086	Normally Distributed
Transformational Leadership (X ₄) on Reward System (X ₁)	0,060	0,086	Normally Distributed
Transformational Leadership (X ₄) on Communication Culture (X ₂)	0,075	0,086	Normally Distributed
Transformational Leadership (X ₄) on Intrinsic Motivation (X ₃)	0,078	0,086	Normally Distributed
Institutional Effectiveness (X ₅) on Intrinsic Motivation (X ₃)	0,078	0,086	Normally Distributed

The results presented in Table 1 indicate that the residual error variables X₅ over X₁, X₂, X₃, and X₄, are normally distributed, as $L_o < L_{table}$ at a significance level of $\alpha = 0,05$. This implies that the data for System Reward (X₁), Communication Culture (X₂), Intrinsic Motivation (X₃), transformational Leadership (X₄), dan Institutional Effectiveness (X₅) follow a normal distribution. Table 1 shows that the residual error of Institutional

Effectiveness (X5) over System Reward (X1) yields a Liliefors calculated value of 0.060, while the Liliefors critical value at 5% significance with $dk = 106$ is 0,086. Since $L_{count} < L_{table}$ i.e., $0,060 < 0,086$ it can be concluded that the residual error scores of X5 over X1 originate from a normally distributed population. For the normality test of the residual error of Transformational Leadership (X4) over System Reward (X1) the calculated Liliefors value is 0.060, while the critical value at 5% significance with $dk = 106$ is 0,086. Since $L_{count} < L_{table}$ i.e., $0,060 < 0,086$ it is concluded that the residual error scores of (X4) over Sistem Reward (X1) are from a normally distributed population.

For the residual error of Transformational Leadership (X4) over Communication Culture (X2) the calculated Liliefors value is 0.075, while the critical value at 5% significance with $dk = 106$ is 0,086. Thus $L_{count} < L_{table}$ i.e., $0,075 < 0,086$ indicating that the residual error scores of (X4) over (X2) are normally distributed. Similarly, for the residual error of Transformational Leadership (X4) over Intrinsic Motivation (X3) the calculated Liliefors value is 0.078, while the critical value at 5% significance with $dk = 106$ is 0,086. Since $L_{count} < L_{table}$ i.e., $0,078 < 0,086$ it can be concluded that the residual error scores of (X4) over (X3) originate from a normally distributed population. For the residual error of Institutional Effectiveness (X5) over Intrinsic Motivation (X3) the calculated Liliefors value is 0.078, and the critical value at 5% significance with $dk = 106$ is 0.086. Again, since $L_{count} < L_{table}$ i.e., $0,078 < 0,086$ the residual error scores of (X5) over (X3) are normally distributed. In conclusion, based on the tests conducted, it is evident that the data distribution for each research variable is normal, as $L_{count} < L_{table}$ at a significance level of $\alpha = 0,05$. This confirms that the data in this study is normally distributed.

Homogeneity Test

The homogeneity test is conducted to determine whether the data from a population has homogeneous variance or not. The test is performed using Bartlett's test. The variance of each variable is considered homogeneous if $X^2_{count} < X^2_{table \text{ sig } 5\%}$.

Table 2. Summary of Homogeneity Test Results

Variabel	X^2_{count}	X^2_{table}	Result
Institutional Effectiveness (X ₅) on Reward System (X ₁)	0,188	124,3	Homogen
Transformational Leadership (X ₄) on Reward System (X ₁)	0,538	124,3	Homogen
Transformational Leadership (X ₄) on Communication Culture (X ₂)	0,306	124,3	Homogen
Transformational Leadership (X ₄) on Intrinsic Motivation (X ₃)	0,185	124,3	Homogen
Institutional Effectiveness (X ₅) on Intrinsic Motivation (X ₃)	0,321	124,3	Homogen

Based on Table 2, the following conclusions are drawn For the homogeneity test of the Institutional Effectiveness variable (X5) over the System Reward variable (X1) the value $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,188 < 124,3$). This indicates that the variance of Institutional Effectiveness (X5) over System Reward (X1) is homogeneous. For the homogeneity test of the Transformational Leadership variable (X4) over the System Reward variable (X1) the value $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,538 < 124,3$). This indicates that the variance of Transformational Leadership (X4) over System Reward (X1) is homogeneous. For the homogeneity test of the Transformational Leadership variable (X4) over the Communication Culture variable (X2) the value $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,306 < 124,3$). This indicates that the variance of Transformational Leadership (X4) over Communication Culture (X2) is homogeneous.

For the homogeneity test of the Transformational Leadership variable (X4) over the Intrinsic Motivation variable (X2) the value $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,306 < 124,3$). This indicates that the variance of Transformational Leadership (X4) over Intrinsic Motivation (X2) is homogeneous. For the homogeneity test of the Institutional Effectiveness variable (X4) over the Intrinsic Motivation variable (X3) the value $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,185 < 124,3$). This indicates that the variance of Institutional Effectiveness (X4) over Intrinsic Motivation (X3) is homogeneous. In summary, the results confirm that the variances of all tested variables are homogeneous, as $X^2_{count} < X^2_{table \text{ sig } 5\%}$ ($0,321 < 124,3$). at the 5% significance level is homogeneous.

Linearity and Regression Significance Test

To determine whether exogenous variables have a linear and significant relationship with endogenous variables, a linearity test is conducted as a prerequisite for simple regression statistical techniques. The criteria for linearity testing are as follows: if $F_h < F_t$ at a significance level of 5%, the relationship between the two variables is linear. Meanwhile, the criterion for $F_h > F_t$ at a significance level of 0.05, the relationship is considered significant.

Table 3. ANOVA Summary of Linearity Test Results

Variabel	F _{count}	F _{table}	Conclusion
Reward System (X ₁) and Institutional Effectiveness (X ₅)	0,556	2,46	Linier
Reward System (X ₁) and Transformational Leadership (X ₄)	3,152	2,46	Linier
Communication Culture (X ₂) and Transformational Leadership (X ₄)	2,402	2,46	Linier
Intrinsic Motivation (X ₃) and Transformational Leadership (X ₄)	1,871	2,46	Linier

The presented data examines the linear relationships between specific variables, assessed through an F-test. These variables include the reward system (X₁), communication culture (X₂), intrinsic motivation (X₃), transformational leadership (X₄), and institutional effectiveness (X₅). The comparison between F_{count} and F_{table} (2.46) serves as the benchmark for determining linearity. If F_{count} exceeds F_{table}, the relationship between the respective variables is deemed linear. The analysis indicates that the relationship between the reward system (X₁) and institutional effectiveness (X₅) is linear, with an F_{count} of 0.556, which is less than the F_{table}. Similarly, the relationship between intrinsic motivation (X₃) and transformational leadership (X₄) is considered linear with an F_{count} of 1.871. These relationships demonstrate an alignment with the predefined linearity benchmark. Interestingly, the reward system (X₁) and transformational leadership (X₄) show a higher F_{count} of 3.152, surpassing the F_{table} value, confirming their linear relationship. On the other hand, communication culture (X₂) and transformational leadership (X₄) exhibit an F_{count} of 2.402, narrowly meeting the criteria for linearity.

Hypothesis Testing

The results of the analysis prerequisites testing indicate that the data for each research variable meet the requirements for statistical hypothesis testing and research hypothesis testing. Before hypothesis testing, a correlation analysis between variables was conducted. Table 1 presents the inter-variable correlations.

Table 4. Correlation Between Research Variables

Variable	X ₁	X ₂	X ₃	X ₄	X ₅
X ₁	-	0,325	0,343	0,667	0,176
X ₂		-	0,968	0,549	0,951
X ₃			-	0,576	0,983
X ₄				-	0,581
X ₅					-

The research investigates the relationships among variables such as reward systems, communication culture, intrinsic motivation, transformational leadership, and institutional effectiveness. Each hypothesis is systematically tested using correlation analysis and t-tests to establish direct and indirect influences. The findings provide empirical evidence for the significance of these variables in the organizational context of Islamic Higher Education Institutions in Binjai. For the first hypothesis, the reward system (X₁) demonstrated a positive and significant influence on institutional effectiveness (X₅), with $r = 0.342$ and $t_{count} = 10.768$ exceeding the critical t_{table} value of 1.98. Similarly, the reward system showed a strong correlation with transformational leadership (X₄), with $r = 0.667$ and $t_{count} = 9.833$. These results emphasize the pivotal role of effective reward mechanisms in enhancing leadership quality and institutional performance. The third and fourth hypotheses examined the effects of communication culture (X₂) and intrinsic motivation (X₃) on transformational leadership (X₄). Both variables showed significant positive correlations, with communication culture achieving $r = 0.549$ and $t_{count} = 9.254$. These findings highlight the importance of fostering a collaborative culture and intrinsic motivation to strengthen transformational leadership.

The study further explores indirect influences, demonstrating that reward systems, communication culture, and intrinsic motivation positively impact institutional effectiveness (X₅) through transformational leadership (X₄). For example, the indirect effect of the reward system on institutional effectiveness was significant, with

tcount = 7.606 while communication culture and intrinsic motivation yielded tcount = 8.217 and 8.070, respectively. This underscores the mediating role of transformational leadership in achieving organizational effectiveness. The final hypothesis confirmed the combined influence of reward systems, communication culture, intrinsic motivation, and transformational leadership on institutional effectiveness. The overall tcount = 6.724 exceeded the critical value, demonstrating the integrated impact of these factors in shaping institutional outcomes. In summary, the research emphasizes the interconnectedness of reward systems, communication culture, intrinsic motivation, and leadership in driving institutional effectiveness. These findings serve as actionable insights for administrators aiming to enhance organizational performance within Islamic Higher Education Institutions. By investing in these critical areas, institutions can foster a productive, motivated, and well-led workforce to achieve long-term success.

The research explores the influence of reward systems, communication culture, and intrinsic motivation on transformational leadership and institutional effectiveness in Islamic higher education institutions in Binjai. The results provide evidence of significant direct and indirect relationships among the variables, underlining their importance in organizational and leadership development. The reward system significantly affects both institutional effectiveness and transformational leadership, as demonstrated by positive regression equations. A well-designed reward system fosters improved relationships between lecturers and institutional leadership, thereby enhancing overall institutional performance. However, its direct impact on institutional effectiveness is relatively small, accounting for only 0.5% of the variance, suggesting the influence of other factors. Communication culture also plays a critical role in transformational leadership. A positive communication culture, characterized by openness, mutual respect, and collaborative discussions, contributes to leadership development, though its direct impact on institutional effectiveness is limited to 2.3%. This highlights the need for complementary factors to enhance leadership outcomes. Intrinsic motivation emerged as a key driver of transformational leadership and institutional effectiveness. While its direct impact on institutional effectiveness is higher (7%), the remaining variance indicates a complex interplay of factors influencing organizational performance. Intrinsic motivation's role in fostering leadership is significant, emphasizing the value of self-driven initiatives among lecturers.

Despite its contributions, this study has certain limitations. First, the data is specific to Islamic higher education institutions in Binjai, limiting its generalizability to other educational or organizational contexts. Second, the study relies on self-reported measures, which may introduce bias or inaccuracies in responses. Third, the analysis focuses on linear relationships, potentially overlooking non-linear or interaction effects between variables. The study also does not deeply explore other potential mediators or moderators, such as organizational culture, resource availability, or external environmental factors. Additionally, the relatively low explained variance for some variables suggests that significant influencing factors were not included in the model.

(Finnigan, 2010) analysis in his research explains that the motivation variable does not significantly influence organizational commitment either directly or indirectly, while organizational climate significantly influences organizational commitment directly but not significantly as an intervening variable. However, organizational commitment significantly influences performance. Hanafi's research did not include entrepreneurial ability as a variable. Additionally, (Yıldızlı & Saban, 2016) in her research provides empirical evidence that good university governance has a positive and significant influence on the performance of Muhammadiyah universities in Indonesia. The findings suggest that improving the implementation of good university governance can enhance university performance. Therefore, university management, stakeholders, and the government should strive to improve the implementation of good university governance in higher education institutions by establishing standard regulations in the form of decrees.

This study demonstrates the multifaceted impact of transformational leadership on organizational outcomes such as Organizational Citizenship Behavior (OCB) and innovative work behavior. Transformational leadership was found to directly influence OCB and indirectly affect it through job satisfaction, although trust in supervisors did not mediate this relationship. This highlights the importance of leaders fostering a supportive work environment to enhance job satisfaction and, subsequently, employees' willingness to go beyond their formal roles (Nasra & Heilbrunn, 2016). (Khan et al., 2020) In higher education, leadership styles significantly influence innovative work behaviors, with organizational culture and OCB playing critical mediating and moderating roles. These findings emphasize the necessity of cultivating a conducive organizational culture and promoting OCB to amplify the effects of transformational leadership on innovation within academic institutions. The research underlines the broader implications for leadership development programs, especially in culturally diverse or contextually specific environments such as those in Pakistan or the UAE. (Litz & Scott, 2017) Globally, the adoption of transformational leadership has been shown to be effective in driving educational reforms, but cultural nuances must be considered for successful implementation. For instance, in the UAE,

differences in perception between principals and teachers regarding leadership practices were influenced by cultural orientations. This led to the proposal of a Modified Transformational Leadership Model tailored for Middle Eastern/Islamic contexts, offering a culturally sensitive framework for leaders aiming to implement transformative changes effectively.

(Aljumah, 2023; Al-Mansoori & Koç, 2019) This collection of research emphasizes the critical role of leadership styles, motivation, and ethical work practices in enhancing organizational performance and employee satisfaction across diverse contexts. Transformational leadership emerges as a key driver in fostering innovation, intrinsic motivation, and organizational learning culture, ultimately improving employee performance and institutional outcomes. Additionally, transactional leadership moderates the effects of extrinsic and intrinsic motivations on job satisfaction, highlighting the importance of aligning leadership strategies with workforce motivations. (Gheitani et al., 2019; Udin et al., 2023) The studies also underscore the significance of Islamic work ethics (IWE) in shaping job satisfaction and organizational commitment through the mediating role of intrinsic motivation. Collectively, these findings offer valuable insights for designing leadership frameworks and motivational strategies to enhance productivity and morale in dynamic organizational environments.

Future studies could expand the geographical and institutional scope to include diverse educational contexts. Exploring non-linear and interaction effects among variables could yield a more nuanced understanding of their relationships. Researchers should also consider integrating other mediating and moderating factors, such as organizational culture and external influences. Longitudinal studies could provide insights into the temporal dynamics of these relationships, helping to establish causality more robustly. Employing mixed methods, combining quantitative and qualitative approaches, could enrich the data and address biases associated with self-reported measures.

For policymakers and educational leaders, the findings highlight the importance of fostering a supportive reward system and communication culture to enhance leadership and institutional effectiveness. Strategies should include implementing transparent reward mechanisms, promoting collaborative communication practices, and nurturing intrinsic motivation among staff. Leadership development programs should prioritize transformational leadership styles, emphasizing the role of intrinsic motivation and positive communication culture. Institutions should also regularly evaluate their reward systems to ensure alignment with organizational goals and employee expectations. This study underscores the interconnectedness of reward systems, communication culture, and intrinsic motivation in shaping transformational leadership and institutional effectiveness. By addressing the limitations and building on these findings, future research and organizational strategies can further enhance the performance and leadership capacities of educational institutions.

Conclusions

This study highlights the complex interplay of reward systems, communication culture, intrinsic motivation, and transformational leadership in shaping institutional effectiveness in Islamic higher education. Reward systems were found to directly influence institutional outcomes by motivating lecturers and fostering improved relationships with leadership. Similarly, communication culture and intrinsic motivation play significant roles in enhancing transformational leadership, which acts as a mediator in achieving institutional goals. Together, these variables provide actionable pathways for strengthening organizational performance in educational institutions. Transformational leadership emerges as a pivotal factor, enabling institutions to navigate the challenges of modern education while maintaining alignment with Islamic values. Leaders who adopt transformational practices can inspire innovation, foster collaboration, and align institutional goals with broader societal needs. The findings also emphasize the importance of intrinsic motivation in driving lecturer engagement, highlighting its potential to bridge traditional and contemporary educational demands. However, the study acknowledges its limitations, including its focus on Islamic higher education in Binjai, reliance on self-reported data, and exclusion of other potential mediators such as organizational culture. Future research should expand the scope to other contexts, explore non-linear interactions, and include additional influencing factors to provide a more comprehensive understanding. By addressing these gaps, institutions can develop robust strategies to enhance educational effectiveness, leadership, and sustainability.

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