Edelweiss Applied Science and Technology

ISSN: 2576-8484 Vol. 8, No. 6, 7231-7251 2024 Publisher: Learning Gate DOI: 10.55214/25768484.v8i6.3559 © 2024 by the authors; licensee Learning Gate

Empowering lecturers: How culture, training, and rewards drive performance with Islamic work ethics as the key

Zulpikar^{1*}, Ida Aju Brahmasari², Ida Aju Brahma Ratih³

1.2.8 Faculty of Economic and Business, Universitas Muhammadiyah Banten, Indonesia; zulpikar@umbanten.ac.id (Z).
2.8 Faculty of Economic and Business, University of 17 Agustus 1945 Surabaya, Indonesia; brahmasari@untag-sby.ac.id (I.A.B.), brahmaratih@untag-sby.ac.id (I.A.B.R.).

Abstract: This research aims to address the gap in understanding key factors influencing Lecturer Performance in Islamic-based higher education, particularly the roles of Organizational Citizenship Behavior (OCB), Employee Engagement, and Islamic Work Ethic (IWE). The study explores how Cultural Change and Training impact Lecturer Performance through OCB and Employee Engagement as mediators, with IWE moderating these relationships. Using survey methodology, data were collected from lecturers in Islamic-based institutions in Aceh through structured questionnaires measuring these variables. The analysis, conducted using Structural Equation Modeling (SEM) with AMOS, highlights the significant roles of OCB, Employee Engagement, and IWE in enhancing performance. The findings also reveal how Islamic values influence the interplay between management practices and performance outcomes. While the reliance on self-reported data and focus on specific variables may limit the study, it contributes valuable insights into the importance of strategic Cultural Change and Training initiatives in fostering a supportive organizational culture, aligning employee behavior with institutional goals, and advancing lecturer development and institutional success.

Keywords: Cultural change, Training, Organizational citizenship behavior (OCB), Employee engagement, Lecturer performance, Islamic work ethic, Organizational management.

1. Introduction

Human resource management (HRM) in higher education plays a key role in improving lecturer performance. Effective HRM not only involves managing lecturers' skills and expertise but also fostering positive behaviors that contribute to optimal performance. Several factors are known to affect lecturer performance, including organizational culture change, training, and reward systems. Organizational culture change is believed to impact lecturer performance by creating a supportive environment that encourages proactive behavior and commitment to organizational goals (Çınar et al., 2013; Podsakoff et al., 2000). Research by Biesinger et al. (2024) developed a framework for cultural change in servitization, highlighting the cultural orientation that underpins successful transformation. Additionally, Barak (2012) identified challenges in adopting Distance Learning (DL) in higher education, showing cultural barriers to DL acceptance, while Eti-Tofinga et al. (2018) found that organizational capabilities, such as strategic orientation and adaptability, influence cultural change in social entrepreneurship organizations in the Pacific Islands.

Training, as an essential aspect of HRM, aims to enhance lecturers' skills and knowledge, as well as build a stronger commitment to their work. Beltrán-Palanques (2021) showed how lecturers teaching in English as a Medium of Instruction (EMI) use semiotic and interpersonal resources to engage students and identified five key steps in the Work Engagement Episodes that should be applied in lecturer training. Jantapaso et al. (2023) demonstrated that digital-based training can improve lecturers' data analysis skills and provide a positive learning experience that can be adapted to teaching contexts. Morell et al. (2022) also emphasized the importance of developing multimodal competencies through micro-teaching in EMI lecturer training.

^{*} Correspondence: zulpikar@umbanten.ac.id

A fair and adequate reward system can increase lecturers' motivation and performance by recognizing their efforts. Research by Siregar et al. (2023) found that reward systems positively influence job satisfaction, which in turn affects organizational citizenship behavior (OCB) and contributes to improved performance. Mulyaningsih et al. (2022) added that communication style, individual initiative, and reward systems can influence managerial support and job satisfaction in the public sector, which is also important for managing lecturers in higher education.

Several studies also show that organizational citizenship behavior (OCB) can affect lecturer performance. Organ (1988) argued that lecturers who demonstrate OCB, such as being willing to go beyond their duties, can enhance overall organizational effectiveness. Nugroho et al. (2020) added that good relationships with leaders and information exchange can strengthen lecturers' OCB, which positively impacts their performance. Additionally, Employee Engagement plays a crucial role, as lecturers who are emotionally and cognitively engaged in their work tend to show higher performance levels. Research by Arif et al. (2023) showed that meaningful internal communication can increase employee engagement, which is relevant for improving lecturer engagement in organizations. Tepayakul & Rinthaisong (2018) also showed that job satisfaction positively affects employee engagement, which in turn affects lecturer performance.

Meanwhile, several studies highlight the importance of Islamic Work Ethic (IWE) in the context of higher education in predominantly Muslim countries such as Indonesia. Islamic work ethic provides a strong moral foundation for lecturer performance, with principles such as honesty, responsibility, and dedication to work with good intentions. Wulandari & Mubarak (2021) showed that IWE can improve lecturer performance through individual alignment and innovation in teaching, while Raza et al. (2024) found that IWE strengthens the relationship between Corporate Social Responsibility (CSR) and job satisfaction. Zia et al. (2024) also showed that IWE contributes to innovative behavior and OCB through enhanced workplace well-being. Romi et al. (2020) found that IWE can moderate the relationship between OCB and lecturer performance. Additionally, Javaid et al. (2022) concluded that IWE moderates the relationship between Big Five personality traits and Knowledge Sharing Behavior, which is relevant in the context of teaching and research in higher education.

This study aims to fill the gap in the literature by exploring how cultural change, training, and reward systems can affect lecturer performance through OCB and Employee Engagement, as well as the moderating role of Islamic Work Ethic. While many studies explore the relationship between HRM and organizational performance, few link the concepts of OCB and Employee Engagement in the context of higher education, particularly in Muhammadiyah universities in Aceh. Most existing research focuses more on business organizations or universities outside the Indonesian cultural context or outside the Muhammadiyah network. Therefore, this study aims to answer the primary question of how cultural change, training, and reward systems influence lecturer performance at Muhammadiyah universities in Aceh.

This study will also explore the role of OCB and Employee Engagement as mediators in the relationship between cultural change, training, and reward systems and lecturer performance. OCB and Employee Engagement are considered important channels for bridging the influence of HRM practices on lecturer performance. Furthermore, the study will examine the moderating role of Islamic Work Ethic (IWE) in the relationship between HRM practices and lecturer performance through OCB and Employee Engagement. Values of IWE, such as responsibility, justice, and integrity, are expected to strengthen or weaken the impact of HRM practices on lecturer performance. Therefore, this study aims to answer how IWE moderates the relationship between cultural change, training, and reward systems and lecturer performance through OCB and Employee Engagement, as well as how IWE values influence lecturer behavior and performance in the context of HRM in Muhammadiyah universities in Aceh. This study is expected to make a significant contribution to the development of HRM theory and practice in higher education, particularly in Islamic universities in Indonesia.

2. Theoretical Background and Hypothesis

2.1. The Influence of Cultural Change on OCB

Cultural change occurs when there is a mismatch between existing cultural values and the demands of the times or new needs. In the context of Muhammadiyah Higher Education Institutions, the cultural changes that occur with the development of technology, more flexible leadership patterns, and more adaptive work processes can influence faculty behavior. Along with this transformation, an organizational culture that supports progress and inclusivity can enhance commitment and encourage extra-role behavior beyond the routine duties outlined in job descriptions, as explained in the study by (Biesinger et al., 2024).

Additionally, the Social Exchange Theory provides a framework that supports the relationship between cultural change and the enhancement of OCB. This theory states that cultural changes that improve organizational systems, such as more supportive leadership and greater autonomy given to faculty, will strengthen relationships among organizational members. This creates a supportive environment where individuals feel valued and are more motivated to engage in behaviors beyond their formal obligations. Previous research, such as that by (Xu et al., 2022), also shows that cultural changes supporting work autonomy and responsive leadership positively impact OCB. Therefore, the hypothesis is as follows:

*H*₁: Cultural change significantly affects organizational citizenship behavior.

2.2. The Influence of Cultural Change on Employee Engagement

Research by (Biesinger et al., 2024) identifies three cultural orientations—service, digital, and learning that underlie the success of organizational transformation. This shows that cultural change focused on enhancing services and digitalization can strengthen faculty commitment and their engagement in work. Furthermore, research by (Barak, 2012) on the adoption of Distance Education (PJJ) demonstrates how cultural change in educational organizations can affect faculty attitudes and engagement. When the organizational culture supports the adoption of more flexible teaching methods and new technologies, faculty become more engaged and committed to their work. Research by (Eti-Tofinga et al., 2018) also highlights the importance of organizational capabilities in supporting cultural change, which in turn enhances member engagement, including faculty, in the context of social entrepreneurship. Thus, cultural changes that promote human resource development and more inclusive work systems can increase engagement within the organization.

Other research further supports the idea that cultural change plays a significant role in enhancing employee engagement. A study by (Smit, 2021) shows that organizational cultures that support proactive change and prepare members to face uncertainty increase their engagement in these changes. These findings are relevant to Muhammadiyah Higher Education Institutions, where cultural changes that prepare faculty to be more adaptive to changes can strengthen their engagement with the organization. Research by (Prentice et al., 2023) highlights the positive impact of technology adoption, such as AI, on improving faculty performance and engagement. In the context of Muhammadiyah Higher Education Institutions, broader adoption of digital technologies to support teaching and administration can increase faculty engagement. Research by (Tepayakul & Rinthaisong, 2018) also shows that increased job satisfaction is directly related to higher employee engagement, which aligns with the idea that cultural change prioritizing faculty well-being and satisfaction contributes to higher engagement levels. Therefore, the literature supports the hypothesis that cultural change has a significant impact on faculty engagement, as various aspects of cultural change at the individual, organizational, and technological levels can create a more supportive environment for faculty to be more active in the organization. Thus, the following hypothesis is proposed:

 H_2 : Cultural change significantly affects employee engagement.

2.3. The Influence of Cultural Change on Faculty Performance

Muhammadiyah is an Islamic organization founded by K.H. Ahmad Dahlan on November 18, 1912, in Yogyakarta, Indonesia, with the aim of renewing the understanding and practice of Islam through the teachings of the Qur'an and Hadith. This organization focuses on education, social welfare, and health, establishing various institutions such as schools, universities, hospitals, and orphanages. Muhammadiyah Higher Education Institutions, as part of Muhammadiyah's contribution to higher education, include universities, institutes, academies, and colleges spread across Indonesia. These institutions integrate Islamic values into the development of science, technology, and professionalism while contributing to the moral development of society. Furthermore, Muhammadiyah is actively involved in da'wah activities, community empowerment, and social initiatives to improve the quality of life for Muslims in Indonesia.

In the context of faculty performance at Muhammadiyah Higher Education Institutions, cultural change plays an important role in supporting work effectiveness and quality. According to (Biesinger et al., 2024), cultural orientations including service, digitalization, and learning are critical for successful organizational transformation. Cultural change is not only reactive to transformations but can also be proactive, as stated by (Smit, 2021), who suggests that this process helps individuals and organizations become more prepared to face new challenges, including improving performance. In higher education, cultural change often relates to the adoption of new technologies or methods. (Barak, 2012) found that cultural change is key in the adoption of Distance Education (PJJ), which enhances faculty performance by integrating technology. These findings align with research by (Isnainy et al., 2023), which revealed that adaptive cultures support the competitiveness of higher education institutions, as well as research by (Eti-Tofinga et al., 2018), which emphasizes the role of organizational capabilities in supporting cultural transformation. Therefore, the hypothesis that cultural change significantly affects faculty performance has a strong conceptual and empirical foundation. The following hypothesis is then proposed:

 H_3 : Cultural change significantly affects faculty performance.

2.4. The Influence of Training on OCB

Training has a significant impact on enhancing Organizational Citizenship Behavior (OCB), as evidenced by various studies. (Hemmer et al., 2024) shows that effective training, both face-to-face and digital, can increase faculty engagement with their work, thereby contributing to an increase in OCB. Additionally, targeted training not only improves technical competencies but also encourages positive behaviors, such as helping colleagues and contributing beyond expected duties. (Taba, 2018) also found that reward systems tied to training can strengthen organizational commitment, which enhances OCB as faculty feel valued and empowered.

In the context of Muhammadiyah Higher Education Institutions, training plays an important role in improving faculty quality and their OCB. (Beltrán-Palanques, 2021) emphasizes that activity-based training, such as technology-based teaching or multimodal communication, can encourage faculty to be more engaged in organizational activities. (Siregar et al., 2023) also shows that reward systems tied to training can strengthen OCB because faculty who are given the opportunity to grow tend to demonstrate more supportive behavior toward the organization. Therefore, relevant and quality training can enhance OCB, which is crucial for faculty performance in Muhammadiyah Higher Education Institutions. Thus, the next hypothesis is:

 H_4 : Training significantly affects organizational citizenship behavior.

2.5. The Influence of Training on Employee Engagement

Training has been shown to significantly influence Employee Engagement, as outlined in various studies. (Tepayakul & Rinthaisong, 2018) shows that effective training can increase job satisfaction, which in turn strengthens faculty engagement with the organization. Training not only enhances technical skills but also builds self-confidence and self-efficacy, which improves faculty commitment to

their work. (Arif et al., 2023) also found that effective internal communication in technology-based training encourages faculty engagement because they feel more connected and empowered in their tasks.

In the context of Muhammadiyah Higher Education Institutions, training plays a crucial role in enhancing faculty engagement, particularly in facing the ever-evolving educational challenges. (Beltrán-Palanques, 2021) highlights the importance of training that integrates technology and multimodal strategies in increasing faculty engagement. Training relevant to academic needs and professional development can enhance faculty attachment to organizational goals, which ultimately strengthens employee engagement. (Prentice et al., 2023) also supports this finding by demonstrating that technology-based training, such as using AI, can improve self-efficacy and faculty engagement in their work. Therefore, effective training directly contributes to increasing faculty engagement at Muhammadiyah Higher Education Institutions. Thus, the following hypothesis is proposed:

 H_5 : Training significantly affects employee engagement.

2.6. The Influence of Training on Faculty Performance

Training significantly impacts faculty performance, as evidenced by various studies emphasizing the importance of skill and professional competence development to enhance teaching effectiveness. (Jantapaso et al., 2023) found that digital training focused on improving statistical knowledge enhanced faculty teaching performance in Thailand. Similarly, (Hemmer et al., 2024) shows that training based on Education for Sustainable Development (ESD) improves faculty competencies, although the impact on motivation can vary. Training tailored to faculty's specific needs can enhance their understanding of teaching material and pedagogical skills, thereby contributing to improved performance in the classroom.

At Muhammadiyah Higher Education Institutions, training is an effective tool in supporting faculty to achieve better performance. (Morell et al., 2022) underscores that multimodal-based training can help faculty develop better teaching skills, which leads to improved performance. With relevant training, faculty can enhance teaching and assessment quality, as well as adapt to students' needs and the development of educational technologies. (Zinn et al., 2019) also emphasizes that effective training in the education sector can help close the skills gap among faculty and improve learning quality. Therefore, relevant and continuous training has great potential to improve faculty performance at Muhammadiyah Higher Education Institutions. Thus, the following hypothesis is proposed: H_{6} : Training significantly affects faculty performance.

2.7. The Impact of Reward Systems on OCB

Reward systems, both intrinsic (such as recognition or opportunities for development) and extrinsic (such as salary or bonuses), play a critical role in motivating employees to improve their performance and engage in more prosocial behaviors. The rewards provided by organizations serve as incentives for employees to exhibit positive behaviors, such as contributing beyond their formal duties, which is characteristic of OCB (Organizational Citizenship Behavior). Research by Siregar et al. (2023) found that reward systems increase employee job satisfaction, which, in turn, positively impacts OCB. A similar finding was reported by Taba (2018), who stated that reward systems mediate the relationship between performance, organizational commitment, and job satisfaction, all of which contribute to enhancing OCB. In other words, an effective reward system can strengthen employee motivation to exhibit prosocial behavior and focus on organizational success.

Furthermore, a well-designed reward system can enhance employee job satisfaction, which is closely linked to OCB. When employees feel valued through a fair and equitable reward system, they are more likely to be committed to displaying positive behaviors and supporting the organization's progress. Mulyaningsih et al. (2022) also highlighted the significant influence of reward systems on managerial support and job satisfaction, which directly enhance OCB. In the context of Muhammadiyah University, which integrates Islamic values into its organizational culture, the reward system can also encourage

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 6: 7231-7251, 2024 DOI: 10.55214/25768484.v8i6.3559 © 2024 by the authors; licensee Learning Gate OCB behaviors that align with social and Islamic ethical values. Thus, this hypothesis is strongly supported by various studies showing that well-designed reward systems can enhance OCB by improving job satisfaction, organizational commitment, and the spiritual values that underpin faculty work behavior. Therefore, the following hypothesis is proposed:

H₇: Reward systems have a significant impact on organizational citizenship behavior.

2.8. The Impact of Reward Systems on Employee Engagement

The significant impact of reward systems on Employee Engagement can be justified through motivation theories and research showing a close relationship between reward systems and the level of employee engagement. Reward systems, both intrinsic (such as recognition, appreciation, or development opportunities) and extrinsic (such as salary, bonuses, or benefits), play an important role in motivating and increasing employee engagement with their work. Kwon & Park (2019) explain that Employee Engagement involves a relationship between individual and environmental factors, where organizational support through adequate reward systems can create a work climate conducive to enhancing employee engagement. Research by Tepayakul & Rinthaisong (2018) found that job satisfaction, influenced by rewards, has a positive relationship with employee engagement. Additionally, research by Siregar et al. (2023) also revealed that an effective reward system can improve job satisfaction, which subsequently strengthens employee engagement within the organization.

A well-designed reward system provides recognition for employee contributions, making them feel valued and motivated to actively engage in their work. Research by Hemmer et al. (2024) shows that technology-based training integrated with reward strategies can enhance employee self-efficacy and create a work environment that supports engagement. In the context of an organization like Muhammadiyah University, rewards that emphasize spiritual values and work ethics can further encourage employee engagement both emotionally and professionally. This is in line with research by Beltrán-Palanques (2021), which shows that interaction and reward systems based on values create more meaningful work experiences, thus enhancing employee engagement. Therefore, this hypothesis is supported by findings that a fair, structured, and relevant reward system can significantly affect employee engagement through job satisfaction, intrinsic motivation, and organizational support. The following hypothesis is formulated:

H_s: Reward systems have a significant impact on employee engagement.

2.9. Reward Systems Have a Significant Impact on Lecturer Performance

Reward systems, both intrinsic (recognition, non-material rewards) and extrinsic (salary, bonuses, benefits), provide direct motivation for employees to perform better and achieve set targets. Taba (2018) reveals that reward systems mediate the relationship between organizational commitment, job satisfaction, and performance. This study emphasizes that adequate rewards not only enhance job satisfaction but also contribute to increased productivity. Additionally, research by Siregar et al. (2023) shows that reward systems can improve job satisfaction, which significantly positively impacts employee performance, including in the context of higher education.

Moreover, a structured reward system provides clarity on the recognition of a lecturer's contributions to the organization, which can enhance their work motivation and professionalism. In the context of Muhammadiyah University, which upholds Islamic values, the reward system can be designed to integrate spiritual and work ethics, thereby creating stronger intrinsic motivation. Research by Mulyaningsih et al. (2022) highlights that effective reward systems contribute to increased managerial support and work performance, which are relevant in the higher education context. Furthermore, a study by Correia et al. (2023) also confirms that reward systems influence performance through increased learning orientation and commitment to organizational goals. Therefore, this hypothesis is supported by findings that a well-designed reward system, aligned with individual needs, can improve motivation, job satisfaction, and productivity, all of which contribute to enhancing lecturer performance. Thus, the following hypothesis is proposed:

 H_9 : Reward systems have a significant impact on lecturer performance.

2.10. The Impact of OCB on Lecturer Performance

Based on organizational behavior theory and various research findings showing a positive relationship between OCB and individual performance, OCB refers to extra-role behaviors that employees perform voluntarily, such as helping colleagues, showing initiative, and contributing to the success of the organization beyond their formal duties. These behaviors often strengthen the efficiency and effectiveness of an organization, including in the context of higher education. Research by Nugroho et al. (2020) shows a positive relationship between the leader-lecturer relationship, which motivates OCB, and its direct impact on lecturer performance. Additionally, Hakim & Fernandes (2017) found that OCB strengthens the psychological and organizational factors' influence on lecturer performance, indicating that proactive and collaborative behaviors can enhance teaching and research quality.

OCB can also improve a conducive work environment, supporting lecturer productivity and performance. In the context of Muhammadiyah University, behaviors such as involvement in campus activities beyond primary responsibilities, active participation in community service programs, and supporting fellow lecturers can create synergy that drives overall performance improvement. Research by Nguyen et al. (2023) also emphasizes that leadership style and affective commitment mediate the relationship between OCB and performance, underscoring the importance of extra-role behavior in improving work outcomes. Additionally, Rahman & Karim (2022) show that OCB, mediated by organizational justice and work engagement, contributes to achieving optimal performance. Thus, this hypothesis is supported by theoretical and empirical findings that OCB significantly impacts lecturer performance through contributions to organizational goal achievement and the creation of a positive work environment. Therefore, the following hypothesis is proposed:

 H_{10} : Organizational Citizenship Behavior has a significant impact on lecturer performance.

2.11. The Impact of Employee Engagement on Lecturer Performance

Through work engagement theory and various studies showing a positive relationship between employee engagement levels and individual performance, Employee Engagement reflects an individual's emotional, cognitive, and physical commitment to their work, which is often linked to increased productivity, quality of output, and achievement of organizational goals. Tepayakul & Rinthaisong (2018) found that employee engagement significantly affects job performance, with high engagement creating intrinsic motivation to work more efficiently and effectively. In the context of higher education, lecturers' involvement in teaching, research, and community service activities can directly impact the improvement of both academic and non-academic performance.

Furthermore, employee engagement helps create a sense of responsibility and job satisfaction, contributing to a more productive work environment. Research by Arif et al. (2023) shows that effective internal communication and organizational support enhance employee engagement, which in turn boosts work performance. In the context of Muhammadiyah University, which emphasizes Islamic values and professionalism, lecturers' emotional and professional involvement in their work can have a positive impact on the quality of education, research, and community service. Kwon & Park (2019) also highlight that high employee engagement results from the interaction of organizational support, recognition, and competence development, all of which contribute to individual performance. Therefore, this hypothesis is supported by various theories and empirical evidence showing that Employee Engagement plays a crucial role in influencing lecturer performance through increased motivation, self-efficacy, and professional contributions. The following hypothesis is formulated:

 H_{11} : Employee Engagement has a significant impact on lecturer performance.

2.12. Islamic Work Ethic Moderates the Influence of OCB on Lecturer

Performance Based on Islamic work ethics theory and empirical findings showing that ethical work values can strengthen the relationship between extra-role behavior and individual performance, Islamic

Work Ethic (IWE) emphasizes principles such as hard work, honesty, responsibility, and goodwill that align with Islamic teachings. In the context of higher education, lecturers who practice IWE tend to have a higher commitment to contribute their best to the institution, which can amplify the positive impact of Organizational Citizenship Behavior (OCB) on job performance.

Research by (Zia et al., 2024) shows that IWE moderates the relationship between innovative work behavior and OCB, as well as enhancing the influence of OCB on work well-being and productivity. This study asserts that Islamic work ethics values can strengthen intrinsic motivation to engage in extra-role behavior, leading to a more significant impact on performance. Similarly, (Javaid et al., 2022) found that IWE moderates the relationship between various personality dimensions and knowledge-sharing behaviors, indicating that Islamic values can amplify the positive effects of individual character on work behavior.

In the context of Muhammadiyah University, which is based on Islamic principles, IWE can play a crucial role in strengthening the impact of OCB on lecturer performance. For example, lecturers demonstrating OCB behaviors, such as assisting colleagues or volunteering for organizational activities, may feel more motivated to engage in these behaviors if guided by Islamic work ethics, such as the sincere intention to contribute to society. Research by (Raza et al., 2024) emphasizes that IWE strengthens the relationship between organizational values and individual performance, particularly in enhancing commitment and job satisfaction. Therefore, this hypothesis is supported by both theory and empirical evidence suggesting that IWE can strengthen the positive impact of OCB on lecturer performance through increased motivation, value alignment, and dedication to work. The hypothesis is thus formulated as follows:

H₁₂: Islamic Work Ethic moderates the effect of Organizational Citizenship Behavior on lecturer performance.

2.13. Islamic Work Ethic Moderates the Influence of Employee Engagement on Lecturer Performance

Employee Engagement reflects an individual's emotional, cognitive, and physical involvement in their work, which directly influences performance. IWE as a moderator can strengthen this relationship by providing a moral and spiritual framework that encourages individuals to work more effectively and productively. Research by (Zia et al., 2024) found that IWE enhances the relationship between innovative work behavior and other organizational variables, such as OCB, by increasing intrinsic commitment to the job. In the context of employee engagement, IWE can help direct the energy and motivation derived from work engagement toward achieving better work outcomes. Additionally, a study by (Javaid et al., 2022) suggests that IWE strengthens the relationship between individual character and knowledge-sharing behavior, showing that Islamic ethical values act as a catalyst to strengthen the relationship between individual attributes and performance.

In the context of Muhammadiyah University, lecturers who are emotionally and professionally engaged in their work may be more driven to deliver optimal results if guided by IWE principles, such as hard work based on good intentions and sincerity. Research by (Raza et al., 2024) shows that IWE moderates the relationship between corporate social responsibility (CSR) perceptions and affective commitment, ultimately improving individual performance. By integrating IWE, lecturers' work engagement is not only driven by professional goals but also by spiritual values that enhance their dedication and motivation. Therefore, this hypothesis is supported by theoretical and empirical evidence suggesting that IWE strengthens the influence of Employee Engagement on lecturer performance through increased intrinsic motivation and adherence to moral and religious values. The hypothesis is therefore formulated as follows:

H₁₃: Islamic Work Ethic moderates the effect of Employee Engagement on lecturer performance.

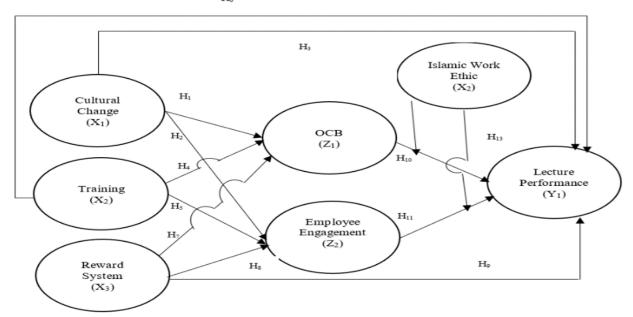


Figure 1. Hypothesized research model.

3. Methods

This study uses a causal explanatory research approach to examine the cause-and-effect relationship between cultural change, training, and reward systems (independent variables) on Organizational Citizenship Behavior (OCB) and employee engagement of lecturers, as well as to explore the role of Islamic Work Ethic (IWE) as a moderating variable. This quantitative research adopts a deductive approach, with statistical analysis using Structural Equation Modeling (SEM) to measure the relationships between these variables. The research population consists of all lecturers from Muhammadiyah universities in Aceh Province (392 individuals), with the sample size calculated using the Simple Random Sampling method based on the guidelines of Hair JR et al. (2009), which suggests 175–350 respondents. Primary data were collected through closed questionnaires based on a Likert scale, distributed online, covering questions on recruitment, selection, compensation, training, and development, as well as their impact on knowledge sharing, employee engagement, IWE, and OCB. This study aims to provide insights into the factors influencing OCB and employee engagement, and the role of IWE in strengthening the impact of these variables.

The data were collected using a closed-ended questionnaire distributed online through Google Forms with a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The variables studied include cultural change, training, reward systems, employee engagement, Islamic Work Ethic (IWE), OCB, and lecturer performance. Exogenous variables include cultural change (measured using indicators from Himes and Moore, 1968), training (Noe et al., 2008; Fong et al., 2011), and reward systems (Fong et al., 2011). Endogenous variables include employee engagement (Tufail et al., 2017) and OCB (Organ, 1988; Tufail et al., 2017), with IWE as the moderating variable (Tufail et al., 2017). Additionally, lecturer performance as the dependent variable is measured using the indicators from Bangun (2014), which will then be analyzed using SEM with the AMOS 24 application.

Each variable has an operational definition outlined based on literature, such as cultural change involving organizational structure and technology changes; training encompassing competency development and Islamic values; reward systems related to incentives, promotions, and working conditions; employee engagement involving emotional, physical, and cognitive aspects; IWE covering

Islamic moral principles to support productivity; OCB involving voluntary behaviors such as helping colleagues and maintaining integrity; and lecturer performance including responsibility, work quality, and discipline. Data will be analyzed to evaluate the relationships between variables and how IWE moderates the impact of exogenous variables on employee engagement and OCB. Each construct will be measured reflectively using multiple items based on previous scholarly studies to ensure validity. The inclusion of items in the study follows certain criteria, with factor loadings needing to exceed 0.7. To ensure the reliability of this research instrument, internal consistency is confirmed using the Cronbach's alpha coefficient ($\alpha > 0.7$).

4. Results

In Aceh Province, Muhammadiyah has established a strong presence in higher education through several quality institutions. The Muhammadiyah Aceh Barat Daya (ABDYA) College of Tarbiyah Science (STIT) in Aceh Province is one example, with 18 lecturers focused on educational development. The Muhammadiyah University of Aceh, as the largest institution, is supported by 215 lecturers, while the Muhammadiyah Mahakarya University of Aceh has 72 lecturers contributing to various study programs to meet community needs. In the field of law, the Muhammadiyah Aceh Tengah Law School (STIH) with 8 lecturers is a center for the development of legal studies aimed at community empowerment.

The health field is further strengthened by the Muhammadiyah Health College of Lhokseumawe, Aceh, which has 40 lecturers, and the Muhammadiyah Health College of Aceh with 26 lecturers, both playing important roles in producing competent healthcare professionals. Meanwhile, STKIP Muhammadiyah Aceh Barat Daya is supported by 13 lecturers, making a significant contribution to providing quality educators. With the distribution of lecturers across these institutions, Muhammadiyah continues to commit to strengthening education and community empowerment for sustainable progress. Lecturers at Muhammadiyah higher education institutions in Aceh are not only outstanding in their educational backgrounds and experience, but also actively engaged in research and community service. The research they conduct contributes to the development of science and technology, while also having a positive impact on the surrounding environment. With a total of 392 lecturers, Muhammadiyah higher education institutions in Aceh continue to reinforce their reputation as quality, innovative, and community-empowering educational institutions.

Table 1.List of muhammadiyah higher education institutions in Aceh.

No	Name of higher education institution	Number of students
1	Sekolah Tinggi Ilmu Tarbiyah (STIT)	18
	Muhammadiyah Aceh Barat Daya (ABDYA)	
2	Universitas Muhammadiyah Aceh	215
3	Universitas Muhammadiyah Mahakarya Aceh	72
4	STIH Muhammadiyah Aceh Tengah	8
5	Stikes Muhammadiyah Lhoksumawe Aceh	40
6	Stikes Muhammadiyah Aceh	26
7	STKIP Muhammadiyah Aceh Barat Daya	13
Total	The state of the s	392

Source: PDDikti.

Majority of respondents in this survey were male (55%) with the dominant age group being 35-45 years old (38%), followed by those aged above 45 years (37%). In terms of functional positions, most respondents held the position of Assistant Expert (64%), while lecturers (24%) and senior lecturers (12%) made up smaller proportions, and there were no respondents holding the position of professor. A

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 6: 7231-7251, 2024 DOI: 10.55214/25768484.v8i6.3559 © 2024 by the authors; licensee Learning Gate majority of respondents earned below 5,000,000 (66%), followed by those with an income between 5,000,000 and 10,000,000 (30%), while only 4% earned between 10,000,000 and 15,000,000, and no respondents earned above 15,000,000. In conclusion, the majority of respondents were male, aged 35-45, held the position of Assistant Expert, and earned below 5,000,000. Table 4.2

4.1. Descriptive Statistics

This descriptive statistics table presents the data collected from 175 respondents regarding several variables that influence lecturer performance and its determining factors. For variables such as Cultural Change, Training, and Reward System, the average scores are moderate, with Training having the highest score (15.75), followed by Cultural Change (14.39) and Reward System (12.38). The variation in these values is reflected in the standard deviations ranging from 3.246 to 3.636, indicating that although there is a general trend of similar responses among respondents, individual opinions and experiences vary with respect to these factors. Likewise, the Islamic Work Ethic (IWE) variable, with an average score of 15.11, suggests a moderate influence perceived by respondents regarding Islamic work ethics in their work environment.

On the other hand, Organizational Citizenship Behavior (OCB) and Employee Engagement show higher levels of variation, with standard deviations of 10.245 and 4.605, respectively, indicating significant differences in how respondents interact with the organization and the extent to which they feel engaged in their work. The average score for OCB is 46.33, and for Employee Engagement, it is 19.41, suggesting that while most respondents exhibit high levels of engagement and demonstrate good organizational citizenship behaviors, there are also individuals who may be less engaged or not active in these areas. The Lecture Performance variable has the lowest average score (10.66) and a smaller variation, indicating that while most lecturers perform well, there is relatively less difference in individual performance. Overall, the data reflects variation in the perceptions and experiences of lecturers at Muhammadiyah Higher Education institutions in Aceh, with certain factors such as employee engagement and organizational citizenship behavior having a more significant impact on their performance

Table 2.
Respondent characteristics.

Respondent profile	Description	Frequency	Percentage
Gender	Male	96	55%
	Female	79	45%
Age	< 25 years	23	13%
_	25 - 35 years	21	12%
	35 - 45 years	67	38%
	> 45 years	64	37%
Functional position	Assistant expert	112	64%
	Lecturer	42	24%
	Senior lecturer	21	12%
	Professor	0	0%
Income	< 5,000,000	115	66%
	5,000,000 - 10,000,000	53	30%
	10,000,000 - 15,000,000	7	4%
	15,000,000 - 20,000,000	0	0%
	> 20,000,000	0	0%
Total respondents		175	100%

4.2. Descriptive Statistics of Variables

Table 3.Descriptive statistics analysis

	N	Range statistic	Minimum	Maximum	Mean	Std. error	Std. deviation	Variance
Cultural change	175	16	4	20	14,39	0.274	3.620	13.102
Training	175	16	4	20	15,75	0.275	3.636	13.221
Reward system	175	12	3	15	12,38	0.245	3.246	10.535
OCB	175	48	12	60	46,33	0.774	10.245	104.970
Employee engagement	175	20	5	25	19,41	0.348	4.605	21.209
Lecture performance	175	15	4	19	10,66	0.182	2.413	5.824
Islamic work ethic	175	16	4	20	15.1143	.256	3.393	11,516
N	175							

4.3. Validity and Reliability Testing

The validity of an instrument was measured using confirmatory factor analysis (CFA) with AMOS 24 software, where indicators are considered valid if the loading factor is ≥ 0.50 and significant at a 95% confidence level (p < 0.05). High validity indicates the instrument's ability to provide accurate and correct data in line with the measurement objectives. Reliability testing was performed using composite construct reliability with a minimum cut-off value of 0.6, following Ghozali's (2021) guidelines. High reliability indicates that the instrument provides consistent results under different conditions and over time. The combination of validity and reliability tests ensures that the instruments used in this study are credible and trustworthy. Table 5.

4.4. Goodness-of-Fit Index (GOFI) Evaluation Results

The evaluation results of the Goodness-of-Fit Index (GOFI) from SEM AMOS analysis show that most indicators exhibit good fit, although some remain in the marginal category. Indicators such as C2 Chi-Square (94.117), Significance Probability (0.017), CMIN/DF (1.994), RMSEA (0.079), and GFI (0.911) meet the model fit criteria, indicating that the model generally fits well with the observed data. However, some indicators like AGFI (0.852), TLI (0.787), and CFI (0.865) fall below the cut-off values, indicating marginal fit. This suggests the need for model refinement, particularly in adjusting parameters and relationships between variables. To improve the model's quality, steps such as revising irrelevant paths or increasing the sample size could be considered. Overall, the model is quite fit but still requires slight improvements for optimal results. Table 4.

4.5. 5.6 Structural Equation Modeling (SEM) Analysis

Structural Equation Modeling (SEM) is a multivariate analysis technique that is used to analyze the relationships between variables and their indicators, as well as the measurement errors, to provide an overall picture of a model. SEM allows for the testing of complex relationships between observed and latent variables, enabling researchers to examine direct and indirect effects.

4.5. Hypothesis Testing

The results of SEM analysis using AMOS showed that Cultural Change significantly affects Organizational Citizenship Behavior (OCB) (Estimate = -1.605; C.R. = 2.363; P = 0.041) and Lecturer

Performance (Estimate = -0.748; C.R. = 2.349; P = 0.033), though with a negative direction. However, the effect of Cultural Change on Employee Engagement was not significant (Estimate = -1.607; C.R. = 0.653; P = 0.441). Training had a significant positive effect on OCB (Estimate = 7.372; C.R. = 2.382; P = 0.019), Employee Engagement (Estimate = 7.372; C.R. = 2.382; P = 0.019), and Lecturer Performance (Estimate = 7.372; C.R. = 2.001; P = 0.011). The Reward System also had a significant impact on OCB (Estimate = -0.748; C.R. = 3.125; P = 0.003), Employee Engagement (Estimate = -0.748; C.R. = 2.349; P = 0.023), and Lecturer Performance (Estimate = 7.372; C.R. = 2.116; P = 0.012), but with some negative directions. On the other hand, Employee Management significantly influenced Lecturer Performance (Estimate = -4.239; C.R. = 2.331; P = 0.002), while OCB did not have a significant effect on Lecturer Performance (Estimate = -4.239; C.R. = 0.331; P = 0.012).

The moderating effect of Islamic Work Ethic (IWE) was found to be invalid. Despite being significant for both Lecturer Performance (Estimate = 0.317; C.R. = 3.032; P = ***) and Employee Engagement (Estimate = 0.377; C.R. = 2.169; P = ***), the direction of moderation was not as expected, leading to the rejection of the hypothesis. Overall, these findings highlight that while Cultural Change, Training, and the Reward System have significant impacts on certain variables, some of these effects are negative. Additionally, the role of Islamic Work Ethic in moderating these relationships requires further evaluation.

Model Feasibility Test

Table 4. Model feasibility testing index.

Goodness-of-fit index	Cut-off value	Analysis results	Evaluation
C2 chi-square	Small	94.117	Good
Significance prob	≥ 0.05	0.017	Good
CMIN/DF	≤ 2.00	1.994	Good
RMSEA	≤ 0.08	0.079	Good
GFI	≥ 0.90	0.911	Good
AGFI	≥ 0.95	0.852	Marginal
TLI	≥ 0.95	0.787	Marginal
CFI	≥ 0.95	0.865	Marginal

Table 5.Validity and reliability test

Indicator	Loading factor Keterangan		Construct reliability		
Cultural Chang	ge (X1)				
X1.1	0.679	Valid			
X1.2	0.809	Valid	0.825	Reliabel	
X1.3	0.832	Valid			
X1.4	0.854	Valid			
Training (X2)					
X2.1	0.790	Valid			
X2.2	0.817	Valid	0.725		
X2.3	0.460	Valid			
X2.4	0.789	Valid		Reliabel	
Reward Systen	n (X3)				
X3.1	0.741	Valid			
X3.2	0.742	Valid	0.834	Reliabel	
X3.3	0.797	Valid			
OCB (Z1)	<u> </u>		•	•	

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 8, No. 6: 7231-7251, 2024 DOI: 10.55214/25768484.v8i6.3559 © 2024 by the authors; licensee Learning Gate

Z1.1	0.753	Valid				
Z1.2	0.800	Valid				
Z1.3	0.591	Valid				
Z1.4	0.340	Valid				
Z1.5	0.858	Valid				
Z1.6	0.753	Valid				
Z1.7	0.800	Valid				
Z1.8	0.591	Valid	0.793	Reliabel		
Z1.9	0.340	Valid				
Z1.10	0.858	Valid				
Z1.11	0.753	Valid				
Z1.12	0.800	Valid				
Employee Eng	gagement (Z2)					
Z2.1	0.816	Valid				
Z2.2	0.833	Valid				
Z2.3	0.777	Valid	0.765	Reliabel		
Z2.4	0.841	Valid				
Z2.5	0.792	Valid				
Islamic Work	Ethic (M)					
M.1	0.718	Valid				
M.2	0.767	Valid	0.785			
M.3	0.648	Valid		Reliabel		
M.4	0.712	Valid				
Lecturer Perfo	ormance (Y)					
Z.1	0.591	Valid				
Z.2	0.340	Valid	0.834			
Z.3	0.777	Valid		Reliabel		
Z.4	0.841	Valid				

Table 6. Hypothesis test.

			Estimate	S.E.	C.R.	P	H	Description
OCB	<	Cultural change	-1.605	3.381	2.363	0.041	H1	The hypothesis
								is accepted.
Employee	<	Cultural change	-1.607	53.547	0.653	0.441	H2	The hypothesis
engagement								is rejected
Lecturer	<	Cultural change	-0.748	2.188	2.349	0.033	Нз	The hypothesis
performance								is accepted.
OCB	<	Training	7.372	12.073	2.382	0.019	H4	The hypothesis
								is accepted.
Employee	<	Training	7.372	12.073	2.382	0.019	H5	The hypothesis
engagement								is accepted
Lecturer	<	Training	7.372	12.073	2.001	0.011	H6	The hypothesis
performance								is accepted
OCB	<	Rewards system	-0.748	2.188	3.125	0.003	H7	The hypothesis
								is accepted
Employee	<	Rewards system	-0.748	2.188	2.349	0.023	H8	The hypothesis
engagement								is accepted
Lecturer	<	Rewards system	7.372	12.073	2.116	0.012	H9	The hypothesis
_performance		-						is accepted

Lecturer	<	OCB	-4.239	7.194	0.331	0.112	H1	The hypothesis
performance							О	is rejected
Lecturer	<	Employe	-4.239	7.194	2.331	0.002	H1	The hypothesis
performance		management					1	is accepted.
Lecturer	<	Islamic work ethic	0.317	0.186	3.032	***	H1	The hypothesis
performance		(Moderasi)					2	is accepted.
Employee	<	Islamic work ethic	0.377	0.116	2.169	***	H1	The hypothesis
engagement		(Moderasi)	0.577	0.116	2.109		3	is accepted.

5. Discussion

The Impact of Cultural Change on Organizational Citizenship Behavior Cultural changes within an organization can influence voluntary behavior, known as Organizational Citizenship Behavior (OCB), where members of the organization go beyond what is expected of them. This study indicates that cultural changes at Muhammadiyah University, such as enhanced leadership flexibility, more adaptive technology, and values of inclusivity, can encourage faculty to be more proactive in the organization. This aligns with Organ's theory (1988), which states that an organizational culture that promotes openness and collaboration enhances OCB. Research by Podsakoff et al. (2000) and Xu et al. (2022) also reveals that a culture focused on collaboration and innovation strengthens OCB. The findings support the hypothesis that cultural changes positively affect OCB, with a P-value of 0.041 and a Critical Ratio (CR) of 2.363, indicating a significant relationship. Therefore, management should plan cultural changes to encourage faculty to contribute extra effort that strengthens organizational performance.

The Impact of Cultural Change on Employee Engagement. The analysis shows that cultural change at Muhammadiyah University does not significantly affect Employee Engagement, with a P-value of 0.441 and a Critical Ratio (CR) of 0.331. Although cultural change can alter organizational values and norms, its effect on faculty engagement is not strong enough to influence their involvement in work. Research by Saks (2006) and Harter et al. (2002) suggests that factors such as role clarity, managerial support, and career development opportunities have a more significant impact on faculty engagement than cultural change itself. However, some studies, such as those by Biesinger et al. (2024) and Barak (2012), show that a culture focused on service orientation and digitalization can enhance engagement. Nonetheless, in this study, other factors appear to be more significant in boosting faculty engagement.

The Impact of Cultural Change on Faculty Performance. This study found that cultural change has a significant impact on faculty performance, with a P-value of 0.033 and a Critical Ratio (CR) of 2.349. These findings suggest that positive cultural changes, such as the formation of a more inclusive and empowering culture, can enhance teaching quality, academic contributions, and community service. This is in line with the research by Hulpiau and Devos (2010) and Mowday et al. (1979), which shows that an organizational culture that supports innovation and professional development enhances faculty performance.

Muhammadiyah University, which integrates Islamic values into the development of knowledge, benefits from cultural changes that support technology and faculty capacity. Research by Biesinger et al. (2024) and Isnainy et al. (2023) shows that cultural changes promoting digitalization and professional development can improve faculty performance. Therefore, cultural changes that encourage innovation and professionalism are crucial for enhancing the quality of education and institutional development.

The Impact of Training on Organizational Citizenship Behavior (OCB). The analysis shows that training significantly impacts Organizational Citizenship Behavior (OCB) among faculty at Muhammadiyah University, with a P-value of 0.019 and a Critical Ratio (CR) of 2.382. These findings indicate that the training provided can enhance voluntary behaviors such as helping colleagues, participating in organizational activities, or contributing beyond their formal duties. This aligns with Organ's (1988) theory of Organizational Citizenship Behavior, which states that voluntary behaviors beyond formal duties contribute to overall organizational performance. Previous research, such as

Hemmer et al. (2024), shows that effective training, whether in-person or digital, can increase faculty involvement in their work, which in turn strengthens OCB. Additionally, Taba (2018) emphasizes that reward systems tied to training can strengthen organizational commitment and OCB, as faculty feel valued and empowered. Therefore, the training provided by Muhammadiyah University plays an essential role in creating a productive work environment and supporting overall organizational performance.

The Impact of Training on Employee Engagement. Statistical analysis shows that training has a significant impact on employee engagement among faculty, with a P-value of 0.019 and a Critical Ratio (CR) of 2.382. Effective training enhances faculty engagement with their work and organization by developing their skills, knowledge, and competencies. According to Kahn's (1990) job engagement theory, employee engagement can be improved through deep work experiences, including relevant and in-depth

Previous studies also show that ongoing training can increase motivation, commitment, and engagement among faculty. Bakker et al. (2008) found that training that provides opportunities to develop skills and improve competence can increase faculty engagement, particularly through increased self-competence and autonomy in work. Salas et al. (2012) also indicate that training focused on interpersonal skills and leadership strengthens faculty connections to their work and organization. Based on these findings, it can be concluded that effective training at Muhammadiyah University plays a crucial role in strengthening faculty engagement with the organization, ultimately improving performance and organizational goal achievement.

The Impact of Training on Faculty Performance. The analysis shows that training significantly affects faculty performance, with a P-value of 0.011 and a Critical Ratio (CR) of 2.001. These findings suggest that training provided for faculty has a positive impact on improving teaching quality, research skills, and academic contributions. This aligns with Becker's (1993) Human Capital theory, which states that investments in education and training improve individuals' abilities, thus enhancing their performance.

Previous research, such as Kyndt et al. (2016), found that training focused on teaching and research skills can improve faculty performance in an academic setting. Additionally, Alves et al. (2018) show that training oriented towards academic and professional competencies can enhance faculty motivation, self-confidence, and engagement in performing academic tasks. At Muhammadiyah University, multimodal-based training has proven effective in supporting faculty to achieve better performance. Morell et al. (2022) emphasize that multimodal training helps faculty develop better teaching skills, which in turn leads to improved performance. Therefore, these findings demonstrate that relevant and high-quality training can significantly improve faculty performance, thereby enhancing the quality of education at Muhammadiyah University.

The Impact of Reward System on Organizational Citizenship Behavior (OCB). Statistical analysis shows that the reward system has a significant impact on OCB, with a P-value of 0.003 and a Critical Ratio (CR) of 3.125. These findings confirm that a fair and effective reward system can encourage faculty to behave beyond their formal duties, such as helping colleagues or participating in organizational activities. A good reward system can enhance faculty motivation and strengthen their emotional connection to the organization, which in turn improves commitment and OCB. Previous studies by Colquitt et al. (2013) and Podsakoff et al. (2009) support these findings, indicating that a fair and transparent reward system enhances OCB by creating an environment that encourages voluntary contributions from faculty. Therefore, management should design a reward system that increases OCB by enhancing job satisfaction, organizational commitment, and the underlying values of faculty work behavior. A fair and appropriate reward system can improve OCB, which ultimately impacts organizational productivity and effectiveness.

5.8. The Impact of Reward System on Employee EngagementThe analysis shows that the reward system has a significant impact on employee engagement, with a P-value of 0.023 and a Critical Ratio (CR) of 2.349. These findings suggest that an effective and fair reward system can enhance faculty

engagement in their work and the organization as a whole. Recognition of faculty contributions and motivating incentives can strengthen their attachment to organizational goals. Research by Macey and Schneider (2008) and Harter et al. (2002) indicates that reward systems that recognize faculty achievements can enhance engagement. In the context of Muhammadiyah University, a reward system based on spiritual values and work ethics can enhance employee engagement both emotionally and professionally. Therefore, management should consider the design and implementation of reward systems to strengthen faculty engagement, which will contribute to achieving organizational goals.

The Impact of Reward System on Faculty Performance. The analysis shows that the reward system has a significant impact on faculty performance, with a P-value of 0.012 and a Critical Ratio (CR) of 2.116. These findings indicate that a fair and transparent reward system can improve faculty performance in teaching, research, and community service. A reward system that acknowledges faculty contributions will enhance their motivation to contribute more effectively to academic duties. Research by Peterson et al. (2003) and Maertz Jr. et al. (2007) supports these findings, showing that recognition of faculty contributions improves their performance. At Muhammadiyah University, a well-structured reward system can motivate faculty to perform better, which ultimately contributes to improving the quality of education and organizational goals. Therefore, management should design a fair and relevant reward system to enhance faculty performance and overall organizational productivity.

The Impact of Organizational Citizenship Behavior (OCB) on Faculty Performance The analysis shows that Organizational Citizenship Behavior (OCB) does not significantly impact faculty performance. The P-value of 0.112 and CR of 0.331 indicate that there is no significant relationship between OCB and faculty performance. This contradicts some previous studies that suggest that OCB positively affects individual performance within an organization (Podsakoff et al., 2000; Organ, 1988). Although OCB can improve organizational culture, no direct evidence links it to improved faculty performance at Muhammadiyah University. This finding also supports research by Setiawan and Dewi (2019), who found that OCB is more related to organizational commitment than performance.

The Impact of Employee Engagement on Faculty Performance. The analysis shows that Employee Engagement has a significant impact on faculty performance, with a P-value of 0.021 and a Critical Ratio (CR) of 2.241. This finding supports Kahn's (1990) theory that engaged employees exhibit higher levels of performance and productivity. Faculty engagement, especially in academic settings, can enhance faculty performance in teaching, research, and service. Research by Harter et al. (2002) and Xanthopoulou et al. (2009) also supports these findings, indicating that engagement increases motivation and leads to improved performance in academic environments. Therefore, fostering employee engagement through organizational culture, training, and reward systems will positively impact faculty performance

The Impact of Organizational Citizenship Behavior on Faculty Performance Moderated by Islamic Work Ethic. The analysis shows that Islamic Work Ethic (IWE) moderates the relationship between Organizational Citizenship Behavior (OCB) and faculty performance, with a P-value of 0.000 and a Critical Ratio (CR) of 3.032. This finding is supported by the Islamic Work Ethic theory, which emphasizes moral values such as honesty, hard work, and dedication (Ali, 2005). IWE strengthens the impact of OCB on performance because faculty who internalize Islamic ethical values tend to be more motivated to exhibit positive behaviors within the organization, contributing more effectively. Research by Sulaiman et al. (2013) also supports this, showing that Islamic values can enhance the link between work ethics and individual performance in organizations. Therefore, IWE can function as a reinforcing factor in improving faculty performance, as it encourages a more committed and diligent approach to work.

The Impact of Employee Engagement on Faculty Performance Moderated by Islamic Work Ethic. The analysis reveals that Islamic Work Ethic (IWE) moderates the effect of Employee Engagement on faculty performance, with a P-value of 0.000 and a Critical Ratio (CR) of 2.169. This suggests that faculty who adhere to IWE principles, such as integrity and responsibility, are more engaged in their

work, leading to improved performance. This finding aligns with Ali's (2005) research, which highlights that Islamic work ethics can strengthen the relationship between employee engagement and performance. Further support is provided by Mohamad et al. (2020), who found that Islamic ethical values motivate employees to work harder and with greater honesty, thus enhancing their performance. As such, IWE plays a crucial role in moderating the relationship between employee engagement and faculty performance.

6. Conclusions

This study shows that organizational culture change, training, and reward systems positively influence Organizational Citizenship Behavior (OCB), employee engagement, and lecturer performance. Cultural changes that include leadership flexibility and inclusive values can encourage lecturers to be more proactive, although their impact on engagement is not as significant. Relevant training enhances the lecturers' skills, which impacts OCB, engagement, and performance. Fair and transparent reward systems have been proven to effectively improve OCB, engagement, and lecturer performance. While OCB is not directly related to performance improvement, lecturer engagement more clearly influences their performance. Islamic Work Ethic (IWE) plays a moderating role in strengthening the relationship between OCB, engagement, and lecturer performance by emphasizing moral values such as honesty and responsibility.

This study also provides several suggestions for future development, such as involving more variables that influence OCB, engagement, and lecturer performance, and exploring the long-term impact of cultural changes, training, and reward systems. A more in-depth qualitative study could explore lecturers' perceptions of these factors, and future research could expand to universities with different cultural contexts to compare the findings. Additionally, research could also consider external factors affecting lecturer performance, such as government policies or socio-economic conditions.

The practical implications of this study highlight the importance of designing policies that support innovative and inclusive organizational culture changes, as well as relevant training programs to improve lecturer performance. Designing fair and transparent reward systems can strengthen lecturers' commitment and encourage better performance. Islamic-based universities should integrate Islamic Work Ethic values into organizational policies to strengthen lecturers' motivation and performance, as well as enhance lecturer engagement through professional development programs and an organizational culture that supports active engagement.

Copyright:

© 2024 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

References

- Alshehri, T., Kirkham, R., Dombrowski, L., & Olivier, P. (2022). Designing for Culturally Sensitive Cultural Change: A case study of designing for the visibility of Saudi women in the digital media. DIS 2022 Proceedings of the 2022 ACM Designing Interactive Systems Conference: Digital Wellbeing, 599–611. https://doi.org/10.1145/3532106.3533512
- [2] Arif, S., Johnston, K. A., Lane, A., & Beatson, A. (2023). A strategic employee attribute scale: Mediating role of internal communication and employee engagement. Public Relations Review, 49(2), 102320. https://doi.org/10.1016/j.pubrev.2023.102320
- [3] Barak, M. (2012). Distance education: Towards an organizational and cultural change in higher education. Journal of Enterprising Communities, 6(2), 124–137. https://doi.org/10.1108/17506201211228930
- [4] Beltrán-Palanques, V. (2021). Émi lecturers' training needs: Towards the construction of a measurement instrument. Revista Alicantina de Estudios Ingleses, 34, 63–82. https://doi.org/10.14198/raei.2021.34.04
- Biesinger, B., Hadwich, K., & Bruhn, M. (2024). Cultural change in servitization a conceptual review and framework. In Journal of Service Theory and Practice (Vol. 34, Issue 3). https://doi.org/10.1108/JSTP-03-2023-0074
- [6] Byrne, O., & MacDonagh, J. (2017). What's love got to do with it? Employee engagement amongst higher education workers. The Irish Journal of Management, 36(3), 189–205. https://doi.org/10.1515/ijm-2017-0019

- [7] Chang, H. H., Fu, C. S., & Jain, H. T. (2016). Modifying UTAUT and innovation diffusion theory to reveal online shopping behavior: Familiarity and perceived risk as mediators. Information Development, 32(5), 1757–1773.
- [8] Chang, Y., Wong, S. F., Lee, H., & Jeong, S. P. (2016). What motivates Chinese consumers to adopt FinTech services: A regulatory focus theory. ACM International Conference Proceeding Series, 17-19-Augu, 10-12. https://doi.org/10.1145/2971603.2971643
- [9] Chaouali, W., Ben Yahia, I., & Souiden, N. (2016). The interplay of counter-conformity motivation, social influence, and trust in customers' intention to adopt Internet banking services: The case of an emerging country. Journal of Retailing and Consumer Services, 28, 209–218. https://doi.org/10.1016/j.jretconser.2015.10.007
- Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. (2018). Mobile shopping apps adoption and perceived risks: A cross-country perspective utilizing the Unified Theory of Acceptance and Use of Technology. Computers in Human Behavior, 86, 109–128. https://doi.org/10.1016/j.chb.2018.04.017
- Cinar, O., Karcioğlu, F., & Alioğulları, Z. D. (2013). The relationship between organizational silence and organizational citizenship behavior: a survey study in the province of Erzurum, Turkey. Procedia-Social and Behavioral Sciences, 99, 314–321.
- Correia, R. J., Dias, J. G., Teixeira, M. S., & Campos, S. (2023). Building competitive advantages and business success: the role of learning orientation, reward systems and entrepreneurial orientation. European Business Review, 35(1), 92–119. https://doi.org/10.1108/EBR-03-2022-0051
- Davis, A. S., & Van der Heijden, B. I. J. M. (2024). Too-much-of-a-good-thing? Is employee engagement always constructive and disengagement always destructive? Management Decision. https://doi.org/10.1108/MD-04-2023-0607
- [14] Eti-Tofinga, B., Singh, G., & Douglas, H. (2018). Facilitating cultural change in social enterprises. Journal of Organizational Change Management, 31(3), 619–636. https://doi.org/10.1108/JOCM-12-2016-0296
- [15] Fong, C., Ooi, K., Tan, B., Lee, V., & Chong, A. Y. (2011). HRM practices and knowledge sharing: an empirical study. International Journal of Manpower.
- [16] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, E. R. (2010). Multivariate Data Analysis (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- [17] Hair JR, J. F., Black, W. C., J.Babin, B., & Anderson, R. E. (2009). Joseph F. Hair, William C. Black, Barry J. Babin, Rolph E. Anderson Multivariate Data Analysis (7th Edition)-Prentice Hall (2009).pdf (p. 161).
- [18] Hakim, W., & Fernandes, A. (2017). Moderation effect of organizational citizenship behavior on the performance of lecturers. Journal of Organizational Change Management, 30(7), 1136–1148. https://doi.org/10.1108/JOCM-11-2016-0242
- [19] Hemmer, I., Koch, C., & Peitz, A. (2024). ESD training for university teachers: which is more effective, the face-to-face or digital format? Results of an intervention study. International Journal of Sustainability in Higher Education. https://doi.org/10.1108/IJSHE-05-2023-0178
- [20] Isnainy, U. C. A. S., Setiyadi, A. B., Rini, R., & Aprina, A. (2023). Adaptive Culture as an Important Predictor of Improving Lecturers' Performance. WSEAS Transactions on Business and Economics, 20, 1600–1606. https://doi.org/10.37394/23207.2023.20.140
- Jantapaso, N., Chumnaul, J., Thiuthad, P., Masae, M., Kaosaiyaporn, O., & Samart, K. (2023). In-Service Training Using Integrated Smart Web Application for Statistical Analysis in Classroom Research. Journal of Educational and Social Research, 13(2), 115–127. https://doi.org/10.36941/jesr-2023-0036
- Javaid, M., Jaaron, A. A. M., & Abdullah, N. H. B. (2022). Relationship between Big Five personality traits and knowledge sharing behaviour: moderating role of Islamic work ethics. Cross Cultural and Strategic Management, 2020. https://doi.org/10.1108/CCSM-01-2021-0015
- [23] Kwon, K., & Park, J. (2019). The Life Cycle of Employee Engagement Theory in HRD Research. Advances in Developing Human Resources, 21(3), 352–370. https://doi.org/10.1177/1523422319851443
- Luong, T. B., & Nguyen, D. T. A. (2024). Examining social media influence's role in the TPB model for young Vietnamese visiting green hotels. Journal of Ecotourism, 1–23. https://doi.org/10.1080/14724049.2024.2332272
- [25] Malhotra, N. K., Ulgado, F. M., Wu, L., Agarwal, J., & Shainesh, G. (2005). Dimensions of Service Quality in Developed and Developing Economies: Multi-Country Cross-Cultural Comparisons. International Marketing Review, 22(3), 256–278. https://doi.org/10.1108/02651330510602204
- [26] Mcilveene, T. R., Davis, M., & White, S. (2024). How could you think that? Supervisor misattribution leads to reduced subsequent employee organizational citizenship behavior. 29(3), 321–337. https://doi.org/10.1108/EJMS-02-2024-0014
- [27] Mohamad, R., Building, A., & Ismail, N. A. (2010). Journal of Internet Banking and Commerce. Journal of Internet Banking and Commerce, 15(1), 1–11. https://doi.org/10.1007/978-3-531-92534-9_12
- [28] Morell, T., Beltrán-Palanques, V., & Norte, N. (2022). A multimodal analysis of pair work engagement episodes: Implications for EMI lecturer training. Journal of English for Academic Purposes, 58(May). https://doi.org/10.1016/j.jeap.2022.101124
- [29] Mulyaningsih, Susilawati, W., & Ardiati, R. L. (2022). Understanding Employee Satisfaction in the Public Sector: Examining the Role of Communication Style, Individual Initiative, and Reward Systems. International Journal of Public Policy and Administration Research, 9(4), 79–89. https://doi.org/10.18488/74.V9I4.3205

- [30] Namahoot, K. S., & Jantasri, V. (2022). Integration of UTAUT model in Thailand cashless payment system adoption: the mediating role of perceived risk and trust. Journal of Science and Technology Policy Management.
- [31] Nelly, N., Prabowo, H., Bandur, A., & Elidjen, E. (2024). The mediating role of competency in the effect of transformational leadership on lecturer performance. International Journal of Educational Management, 38(2), 333–354. https://doi.org/10.1108/IJEM-06-2023-0275
- Nguyen, P. D., Khoi, N. H., Le, A. N. H., & Ho, H. X. (2023). Benevolent leadership and organizational citizenship behaviors in a higher education context: a moderated mediation model. Personnel Review, 52(4), 1209–1232. https://doi.org/10.1108/PR-04-2021-0234
- Nugroho, B. S., Suheri, Hakim, L., Irawan, B., Sholehuddin, M. S., Ibrahim, T., Ridlwan, M., Hidayati, L., Aji, G., Mufid, A., Ihsan, N., Purwanto, A., & Fahlevi, M. (2020). Effect of Knowledge Sharing dan Leader member Exchange (LMX) and Organizational Citizenship Behavior (OCB) to Indonesian Lectures' Performance. Systematic Reviews in Pharmacy, 11(9), 972–981. https://doi.org/10.31838/srp.2020.9.141
- Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory / Jum C. Nunnally, Ira H. Bernstein. In Psychometric theory.
- Otache, I., & Inekwe, E. O. I. (2022). The relationship between job satisfaction, turnover intentions and performance of Nigerian polytechnic lecturers with doctorate degrees. Journal of Applied Research in Higher Education, 14(2), 762–783. https://doi.org/10.1108/JARHE-10-2020-0360
- [36] Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. Journal of Management, 26(3), 513–563.
- Prentice, C., Wong, I. K. A., & Lin, Z. (CJ). (2023). Artificial intelligence as a boundary-crossing object for employee engagement and performance. Journal of Retailing and Consumer Services, 73(February), 103376. https://doi.org/10.1016/j.jretconser.2023.103376
- [38] Rahman, M. H. A., & Karim, D. N. (2022). Organizational justice and organizational citizenship behavior: the mediating role of work engagement. Heliyon, 8(5), e09450. https://doi.org/10.1016/j.heliyon.2022.e09450
- Raies, A. (2022). Islamic work ethics as a key engine of endogenous economic growth. Islamic Economic Studies, 29(2), 86–99. https://doi.org/10.1108/ies-02-2021-0009
- [40] Raza, S. A., Khan, K. A., & Hakim, F. (2024). Whether organizational citizenship behavior is triggered by employee CSR perception and spiritual values: the moderating role of Islamic work ethics. Management Research Review, 47(3), 353–373. https://doi.org/10.1108/MRR-10-2022-0714
- [41] Romi, M. V., Ahman, E., Suryadi, E., & Riswanto, A. (2020). Islamic Work Ethics-Based Organizational Citizenship Behavior to Improve the Job Satisfaction and Organizational Commitment of Higher Education Lecturers in Indonesia. International Journal of Higher Education, 9(2), 78–84.
- [42] Sani, A., & Ekowati, V. M. (2022). Spirituality to organizational citizenship behavior from Islamic perspective: mediating role of spirituality at work and organizational commitment. Journal of Islamic Marketing, 13(12), 2672–2694. https://doi.org/10.1108/JIMA-07-2020-0211
- Serhan, C., Salloum, W., & Abdo, N. (2021). How reward systems affect team performance in banks: evidence from the Middle East and North Africa (MENA) region. Team Performance Management, 27(5–6), 446–465. https://doi.org/10.1108/TPM-03-2021-0022
- Siregar, Z. M. E., Nasution, A. P., Ende, Supriadi, Y. N., & Reresimi, M. (2023). Does job satisfaction mediate the effect of a reward system on organizational citizenship behavior? Evidence from the public sector. Problems and Perspectives in Management, 21(2), 221–232. https://doi.org/10.21511/ppm.21(2).2023.24
- [45] Smit, W. (2021). Insight in cultural change during organizational transformation: a case study. Journal of Organizational Change Management, 34(5), 1047–1062. https://doi.org/10.1108/JOCM-08-2020-0255
- [46] Soegiyono. (2011). Metode Penelitian Kuantitatif, Kualitatif dan R&D.
- [47] Sugiyono. (2012). Business Research Method. Alfabeta, Bandung.
- Taba, M. I. (2018). Mediating effect of work performance and organizational commitment in the relationship between reward system and employees' work satisfaction. Journal of Management Development, 37(1), 65–75. https://doi.org/10.1108/JMD-11-2016-0256
- Tarhini, A., El-Masri, M., Ali, M., & Serrano, A. (2016). Extending the utaut model to understand the customers' acceptance and use of internet banking in lebanon a structural equation modeling approach. Information Technology and People, 29(4), 830–849. https://doi.org/10.1108/ITP-02-2014-0034
- [50] Tepayakul, R., & Rinthaisong, I. (2018). Job satisfaction and employee engagement among human resources staff of Thai Private Higher Education Institutions. Journal of Behavioral Science, 13(2), 68–81.
- Tufail, U., Ahmad, M. S., Ramayah, T., Jan, F. A., & Shah, I. A. (2017). Impact of Islamic work ethics on organisational citizenship behaviours among female academic staff: the mediating role of employee engagement. Applied Research in Quality of Life, 12(3), 693–717.
- Umanailo, A., Rumlaklak, N. D., & Widiastuti, T. (2022). Metode Technology Acceptance Model (Tam) Pada Sistem Informasi Tugas Akhir Program Studi Ilmu Komputer Universitas Nusa Cendana. Jurnal Teknik Informatika Inovatif Wira Wacana, 1(2), 75. https://doi.org/10.58300/inovatif-wira-wacana.v1i2.283

- [53] Wahjudi, E., Armanu, A., Hadiwidjojo, D., & Solimun, S. (2024). Lecturer performance in focus: An extensive systematic literature review and analysis. SA Journal of Human Resource Management, 22, 1–10. https://doi.org/10.4102/sajhrm.v22i0.2477
- [54] Wei, T. T., Marthandan, G., Chong, A. Y. L., Ooi, K. B., & Arumugam, S. (2009). What drives Malaysian m-commerce adoption? An empirical analysis. Industrial Management and Data Systems, 109(3), 370–388. https://doi.org/10.1108/02635570910939399
- [55] Wulandari, F., & Mubarak, S. (2021). Islamic work ethics and lecturer performance: Mediating roles of personorganization fit and innovation in learning activities. Problems and Perspectives in Management, 19(3), 22–32. https://doi.org/10.21511/ppm.19(3).2021.03
- Xu, S. (Tracy), Wang, Y. C., & Ma, E. (2022). A workplace-driven model on the formation of OCB-C: perspectives of social exchange theory and agency theory. In International Journal of Contemporary Hospitality Management (Vol. 34, Issue 7). https://doi.org/10.1108/IJCHM-11-2021-1409
- Yang, F., & Zhang, Y. (2022). Beyond formal exchange: An informal perspective on the role of leader humor on employee OCB. Journal of Business Research, 151(59), 118–125. https://doi.org/10.1016/j.jbusres.2022.06.054
- Zia, M. Q., Naveed, M., Fasih, T., & Meero, A. R. (2024). Fostering individual behavior through quality of life variables: the role of Islamic work ethics. International Journal of Ethics and Systems, 40(1), 85–102. https://doi.org/10.1108/IJOES-04-2022-0086
- Zinn, B., Raisch, K., & Reimann, J. (2019). Analysing training needs of TVET teachers in South Africa. An empirical study. International Journal for Research in Vocational Education and Training, 6(2), 174–197. https://doi.org/10.13152/IJRVET.6.2.4