

Examining the Use of Organizational Commitment and Total Quality Management to Enhance University Performance

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Abstract: The output of this study is to develop a TQM implementation strategy to improve the inclusive performance of employees within the Universitas Terbuka (UT) environment. This research design leads to a mixed method in combining quantitative and descriptive data in analyzing the conditions of field findings. Quantitative descriptive research comprises problem formulation, model preparation, data collection, analysis, and application. Interpretative Structural Modeling (ISM) is the analytical technique employed in this study. Bhattacharya and Momaya's application of ISM (2009), is a design that involves many relationships and interactions using tools and methods that allow a team of individuals to create a structure that outlines the connections between components in a single unit. The outcomes of classifying strategic components to enhance staff proficiency and knowledge in assisting UT's as a PTN-BH consist of 15 criteria, which produce eight policy levels. Elements of stricter selection policies in recruiting. At the first level are the educational personnel (A1) and the components of mentoring in enhancing competence (A3). Four (four) sectors can be used to categorize the policy components that UT workers need to develop their skills and competences. Sector III (Linkages) is the most frequently utilized sector. This sector's components are heavily reliant on one another, yet they also have a strong driving force.

Keywords: Higher Education Level, Organizational Commitment, Quality Management, Regulation Strategic

A. Introduction

Higher education plays a crucial role in national development. Universities are not only institutions that produce professionals but also serve as centers for research, innovation, and scientific development. In a global context, universities are required to respond to the increasingly complex needs of the international community, particularly in the face of the digital era, economic globalization, and the Fourth Industrial Revolution. These global challenges require universities to transform. University quality standards are now often measured through international rankings, such as the Times Higher Education or QS World University Rankings. These include research quality, academic reputation, innovation capacity, and

contribution to society. Universities in Indonesia are required to compete not only nationally but also to emerge as international players.

To this end, the Indonesian government launched the State Universities with Legal Entities (PTN-BH) policy. PTN-BH status grants greater academic and financial autonomy, allowing universities greater flexibility in developing research, conducting innovation, and expanding international networks. This policy is regulated by Law Number 12 of 2012 concerning Higher Education and Government Regulation Number 58 of 2013. However, significant challenges remain. Granting autonomy does not automatically guarantee improved quality. Universities with PTN-BH status must demonstrate that this autonomy is balanced with strong organizational governance, sound financial capabilities, and superior human resources quality.

Human resources are the most strategic factor in determining a university's success (Schonberg, 2025) stated that effective human resource management will maximize individual potential, enabling the organization to achieve its goals. (Hughes et al., 2025) added that the competitiveness of educational institutions is largely determined by the quality of their human resources, particularly in terms of knowledge, skills, and commitment. Furthermore, (Mewani et al., 2025) emphasized that improving human resource skills directly contributes to an organization's productivity and service quality. In the university context, this means that lecturers and educational staff must possess high competence, professionalism, and a quality orientation. Without superior human resources, it is difficult for a university to realize its vision of becoming a World-Class University (WCU). Therefore, focusing on human resource development is not an option, but a necessity. Higher education institutions need to establish a human resource management system that not only develops technical skills but also fosters commitment, work ethic, and an organizational culture that supports innovation.

Universitas Terbuka (UT) is one of the PTN-BH in Indonesia with a distance learning system. As a PTN-BH, UT offers advantages in the form of management flexibility and broader access to funding. However, UT faces serious internal challenges, particularly regarding the quality and performance of its teaching staff. Despite its status as a PTN-BH, UT's staff performance is suboptimal. Skills are limited, organizational commitment is lacking, and an innovative work culture has yet to develop. This poses a significant obstacle to UT's efforts to increase its global competitiveness and realize its vision of becoming a world-class university. This situation indicates a gap between the potential autonomy of PTN-BH and the reality of implementation on the ground. UT's autonomy is not fully supported by comparable human resources. Therefore, a more comprehensive strategy is needed to improve the performance of educational staff.

One widely used approach to improving organizational quality is Total Quality

Management (TQM). TQM is oriented towards continuous improvement, the involvement of all organizational members, and a focus on user satisfaction (Tanjung et al., 2025; Zwolińska-Gładys et al., 2024). In higher education, the implementation of TQM is expected to improve learning quality, research productivity, and management efficiency. However, previous research on TQM in higher education has yielded mixed results. Some studies emphasize the importance of technical skills and staff competencies (Kiri et al., 2025). Other research highlights that TQM is more effective if it begins with changes in work attitudes and values (Van Vugt & Gallagher, 2025). Some research also emphasizes the importance of organizational commitment and consistent implementation as keys to TQM success (Nazir & Islam, 2017; Ramaditya et al., 2022). This diversity of findings suggests that TQM implementation is often partial and fragmented. Most research focuses on only one specific dimension, such as skills or attitudes, without integrating both. As a result, TQM has not yet had its maximum impact in higher education.

Based on this background, it is clear that research on TQM in higher education remains fragmented. Most studies focus on skills or attitudes, but rarely integrate the two within a comprehensive framework. Furthermore, the interrelationships between organizational commitment, skills, culture, and performance have not been studied in depth. This research aims to propose an inclusive TQM approach by developing a strategic model that combines various key elements, making it more suited to the needs of higher education institutions such as UT.

B. Methods

This study used both quantitative and qualitative descriptive research approaches. Quantitative descriptive research includes steps like defining the problem, creating a model, gathering data, analyzing it, and applying the findings. On the other hand, qualitative research focuses on analysis during the process of making generalizations from specific observations. This means that data is collected, analyzed, and interpreted to form new ideas and theories. These theories come from understanding how different things are connected based on what is observed [18]. For this study, qualitative methods were used, including interviews and focus group discussions (FGD) (Owusu-Agyeman, 2024). The main goal of this research is to look into human resource information, specifically the staff at the Universitas Terbuka, and create a plan to improve the performance of educational staff at the university.

The data used in this study is of two types: primary and secondary. Primary data is collected directly from people involved in the study, through what they say or do. The people who provided this information were chosen using specific sampling methods. These people, called informants, were related to the research topic (Abuelmaatti & Vinokur, 2025). Primary data was gathered through field surveys to learn about the skills and strengths of the Universitas Terbuka staff. In-depth interviews and focus group discussions (FGD) were also used to collect this type of

data. Secondary data comes from other sources like documents, photos, recordings, and objects, in addition to the primary data. In this study, secondary data was collected from reading articles, daily reports, and publications from government agencies (Oktavio et al., 2024). The data collection methods used in this research are based on the approach taken to gather information. These methods include:

Field Observation or Survey

This study uses systematic observation and recording of symptoms or events related to the research subject. Observation is split into two types: direct and indirect. The survey was carried out to collect information about the potential of educational staff at the Universitas Terbuka.

Interview Method

In this research, interviews were conducted with selected informants or key individuals to gain detailed insights into the problems, challenges, and strategies for improving staff potential and expertise. In addition to interviews, the main researchers also participated in focus group discussions (FGD) to gather more detailed data.

Documentation method

Documentation is a way of gathering information about things or variables through written materials, books, pictures, notes, biographies, and other forms. Researchers use this method to collect data and information about situations and problems in order to help develop students' potential and skills at UT. Qualitative analysis is the method used in this research to answer objectives one and two. This type of analysis focuses on understanding the meaning behind the data. Before including any interpretation, researchers identify categories, set criteria for each category, and examine how these categories relate to each other. Statistics are not used in this process because the researcher's ability to interpret the meaning and concepts within the data is enough to gather research findings. After all, qualitative research is descriptive in nature. This means the data analyzed describes phenomena in words, not in the form of numbers or coefficients that show relationships between variables. According to Milles. And Huberman, there are two types of data analysis, namely: a) Flow data analysis includes three main parts: reducing data, presenting it, drawing conclusions, and checking the results. All these steps happen at the same time and work together with the process of collecting data. b) Interaction Analysis means that the steps of reducing data and presenting it happen along with the data collection. After collecting data, the steps of reducing, presenting, concluding, and checking interact with each other. This research uses a method called Interpretative Structural Modeling (ISM) for analysis. ISM, as used by (Marisya et al., 2023), helps groups of people create a framework that shows how different parts of a system are connected.

The process of validating the model marks the end of the ISM process, which starts with building a model of the system.

The ISM approach turns unclear mental models into clear system models. ISM is a method that connects and arranges ideas in a visual map to help decision-makers understand complicated situations. ISM modeling offers a main framework, explains how different factors interact, and creates a visual model that shows different levels and sections (Shiri et al., 2023). The first step in using ISM is making a Structural Self Interaction Matrix (SSIM). In this step, you set up the relationships between the different factors by comparing one factor, *i*, with another factor, *j*. Then, you create a Reachability Matrix (RM) by using 1s and 0s in the *V*, *A*, and other parts of the model. The model created through ISM is meant to solve this problem, such as the development of the cash waqf model, once there are no more conflicts with the development of the institution from the staff's point of view. The next steps in the growth of the institution (levels) will be based on this way of thinking (Suryani et al., 2023).

RM-based elements have Power Dependency Drivers set for different sub-elements. The following four sectors explain how these sub-elements are grouped (Menon, 2024) Sector 1: Weak dependent variable - weak driving force (AUTOMATIC). Even though there might be a strong connection, changes in these areas usually do not affect the system much, and they may not have much influence. Sector 2: Weak driving force and strong dependent variable. Changes made in this area are often not independent. Sector 3 (LINKAGE): Strongly dependent driving factors. This variable has weak interactions with others, so this sector needs careful attention. If you make changes here, it can affect other parts, and feedback can make those effects stronger. Sector 4: INDEPENDENCE, strong dependent variable.

This sector encourages weaker team or unit members. The variables in this area are called independent variables because they are the remaining part of the system.

Table 1. Driver Power-Dependence Matrix

	Dependence: Weak	Dependence: Strong
Driver Power: Weak	I. Autonomous Weak driver – weak dependent variables	II. Autonomous Weak driver – strongly dependent variables
Driver Power: Strong	IV. Independent Strong driver – weak dependent variables	III. Linkage Strong driver – strongly dependent variables

C. Results and Discussion

Based on the interviews and discussions with experts, the results show that there are 15 strategic elements to develop employee competencies and skills to support UT PTN-BH's acceleration in achieving superior quality. The fifteen elements of the

strategy are as follows:

Improve the selection process for hiring teaching staff (A1)

To boost the skills and knowledge of teaching staff at UT, the first step is to focus on hiring the right people. When choosing new teaching staff, the process must be thorough and careful, matching the needs in terms of the number of staff and their areas of expertise. The quality of the staff hired should be high, and they should have a good background, especially in the skills and abilities they have, which should match the roles they are placed in.

Offer training to improve both quality and quantity (A2)

Teaching staff in higher education need more than just classroom teaching skills. They must also be good at research and community service, which are the three main roles of higher education known as the Tri Dharma. To help staff meet these requirements, training should be provided. This includes teaching methods, research skills, and writing academic papers, articles, and applying for intellectual property rights.

Provide support to improve skills (A3)

Training should be given to teaching staff to enhance their abilities, and this should be followed by guidance and support. After training, it is important to help staff apply what they have learned. Training can be done either centrally or among staff themselves. The support provided should be specific to make sure it is effective and leads to real improvements.

Offering a platform for career growth based on scientific areas (A4)

The skills and knowledge of teachers at UT should be developed in line with their specific fields. To help them grow in both academic (scientific) and non-academic roles (like positions and responsibilities), they need a space to discuss and learn. This can be done through different kinds of forums, like discussion groups, study groups, or advice sessions.

Enhancing systems for tracking and assessing performance (A5)

The work of teachers at UT needs to be checked and reviewed to understand how they are progressing. This is done to make sure their work matches the goals set. If their performance isn't matching the targets, we need to find out why and come up with better ways to improve the quality of their work.

Giving awards to top-performing teachers (A6)

Rewards are an important part of any organization. Teachers who do a great job, especially those who excel in their areas of expertise, should be recognized with awards. These awards are meant to keep teachers motivated and encourage them to continue improving their skills and achievements in their fields.

Providing incentives for skill and competency development (A7)

Incentives are important when trying to improve the skills and knowledge of educational staff. These incentives can be given in different forms, such as direct and indirect. Direct incentives can come from salary or pay. Indirect incentives can help with developing skills and competencies.

Improve communication between leaders and subordinates (A8)

Communication is important in an organization to help it work well. It needs to be clear and efficient so that it doesn't cause problems or conflicts.

Improving Human Resource Management (A9)

To make the organization run smoothly and effectively, existing human resources need to be managed well. Good human resource management helps the organization reach its goals, such as improving the skills and knowledge of educational staff.

Educational Staff Training in Innovation (A10)

Innovation is a key part of what UT needs to grow and have a positive impact, especially in supporting the acceleration of UT PTN-BH. Educational staff, who are important people in creating innovations, should be trained to find and turn ideas into useful products.

Training and mentoring in research downstream from educational staff (A11)

Research and service are two important parts of higher education that educational staff must do. For research to be useful for UT, it must be carried out properly. Therefore, educational staff should be trained and supported in sharing and using the results of their research.

Improvement of facilities and infrastructure that supports downstream innovation (A12)

To help with the downstream of innovation, there needs to be good facilities and infrastructure. These not only help make educational staff more excited and

motivated but also help in making existing innovations work better.

Transparency in Human Resource Management (A13)

When managing human resources, such as educational staff, there should be transparency to build trust in the people involved. Transparency is important in policies, daily operations, and financial matters.

Improving the unqualified rational principle (WTP) (A14)

The WTP principle is a key part of achieving the best possible performance in an organization. At UT, the way WTP is implemented needs to be improved, especially when it comes to managing and developing the skills and abilities of the educational staff.

Improving good cooperative and partnership relations (A15)

It is possible to build collaboration networks with various potential partners who can help develop the skills and expertise of the educational staff. These collaborations should have a positive effect on the staff's abilities at UT. Each educational staff member should be supported in finding suitable partners, especially those related to their specific area of expertise.

Policy Structure / Policy Levels

Based on the results of classifying strategic elements to develop the competence and expertise of educational staff in support of accelerating UT PTN-BH, there are 15 criteria that result in 8 policy levels as follows:

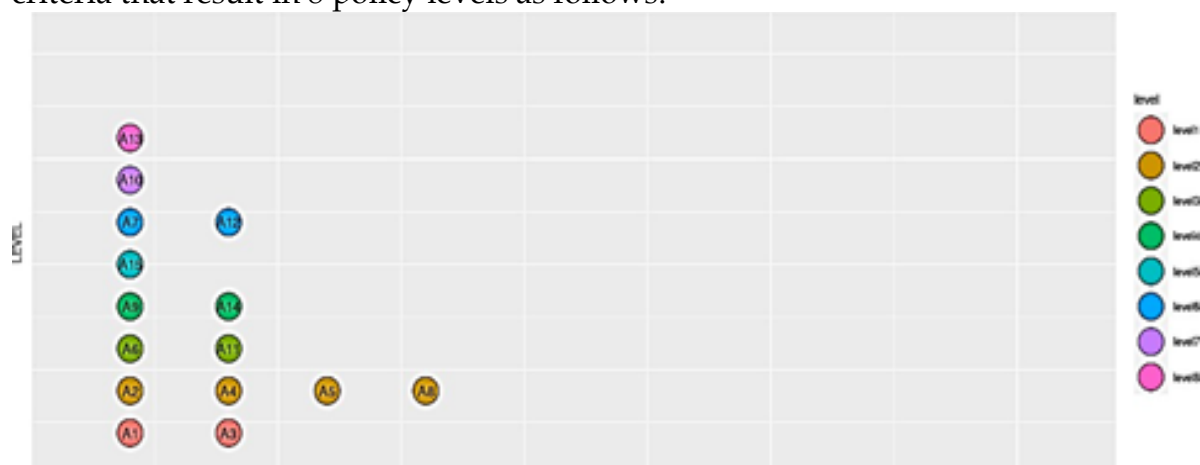


Figure 1. Hierarchical Structure of Policy Strategy Elements for Competency Development of Educational Staff

Based on the structure shown in Figure 1, the elements that focus on making the

selection process stricter for educational staff (A1) and the parts that help improve competence through mentoring (A3) are at the first level. This shows that the main strategies to focus on are those that make the selection process stricter and provide support to improve the competence of educational staff. If these first-level policies are carried out well, then other policies can help further develop the skills and abilities of the staff. To reach the highest level of performance in the organization, the quality of the human resources available must also be good (Tight, 2023). Therefore, efforts to improve the skills and competence of educational staff at the university must first focus on the top level, which is making the selection process stricter for educational staff. Then, the elements that provide training to improve both the quality and quantity of staff (A2), offer a platform for career development based on scientific fields (A4), improve the performance monitoring and evaluation system (A5), and enhance communication between leaders and their subordinates (A8) are at the second level (Suárez Roldan et al., 2023). These policies are the second priority and should be implemented after the first level. The next level includes providing rewards for outstanding educational staff (A6) and offering training and mentoring in downstream research for educational staff (A11). The fourth level includes improving human resource management (A9) and improving the principle of rationality without exceptions (WTP) (A14). The fifth level is about improving cooperative relations and promising partnerships (A15) (Lei et al., 2023).

The sixth level includes providing incentives to develop skills and competencies (A7) and improving facilities and infrastructure that support downstream innovation (A12). These are followed by the seventh level, which includes training elements for educational staff in innovation (A10). Lastly, the eighth level includes elements of transparency in human resource management (A13) (Yoon et al., 2020).

Policy Quadrant

The classification of policy elements to improve the skills and competencies of the educational staff at UT can be classified into 4 (four) sectors, as shown in Figure 1.3 as follows:

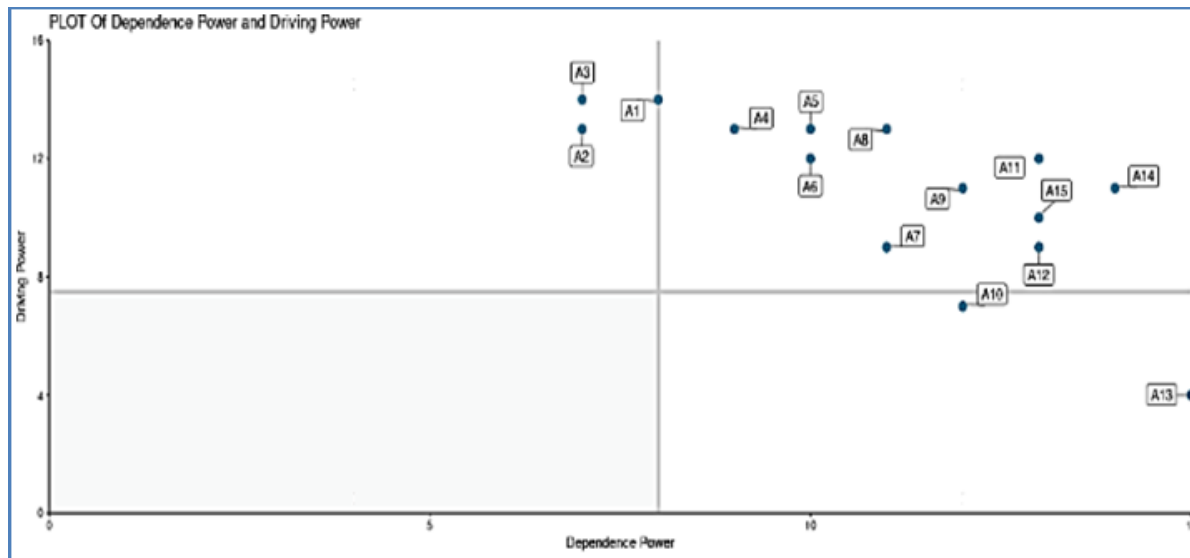


Figure 2. Driver Power Dependency Matrix

Based on Figure 2, the classification of policy elements is done using coordinate points from the results of participation levels. These results help group the elements into three sectors in the power-dependence driver matrix (Mbabazi, 2024). According to this matrix, elements like A1 (strict selection in hiring educational staff), A2 (training to improve quality), and A3 (mentoring to increase competence) are placed in Field IV (independent) (Bijumes & Kristanto, 2019). These three elements have strong driving power but are not very dependent on other policy elements. Next, the element A10 (training for innovation in educational staff) and A13 (transparency in human resource management) are in Sector II (dependent), or the dependent variable sector (Daud, 2023). These two elements are highly dependent on other elements, meaning they have less driving power and rely heavily on other factors. Meanwhile, other elements such as A4 (providing a career development platform in science), A5 (improving performance monitoring and evaluation), A6 (awards for exceptional educational staff), A7 (incentives for developing skills), A8 (training leadership communication), A9 (increasing human resource management), A11 (support for staff research), A12 (improving facilities for innovation), A14 (without exception, WTP), and A15 (improving cooperation and partnerships) are in Sector III (Linkage) (Khan et al., 2021). Elements in this sector have strong driving forces but also depend heavily on other elements (Ningsih et al., 2022). These elements need careful study because the relationships between them are not stable. Any action on one variable can affect others, and feedback effects can make the impact much stronger.

D. Conclusions

From the results and discussions discussed earlier, it can be said that the Universitas Terbuka is one of Indonesia's universities that has a good amount of potential human resources in terms of quality and quantity. In 2023, the number of staff at the

Universitas Terbuka is expected to be over 1,000. Among these, more than 900 staff have functional positions, spread across five faculties: the Faculty of Economics and Business, the Faculty of Science and Technology, the Faculty of Law, Social and Political Sciences, the Faculty of Education (FKIP), and the Postgraduate School. The findings from the classification of strategic elements for developing the competencies and skills of staff to support the acceleration of UT PTN-BH include 15 criteria, which result in 8 policy levels. Elements such as stricter selection policies for hiring staff (A1) and mentoring to improve competence (A3) are at the first level. The classification of policy elements to enhance the skills and competencies of educational staff at UNNES can be divided into four sectors. The most commonly used is Sector III, which refers to linkages. Elements in this sector have a strong driving force but also rely heavily on other elements. Based on the results and conclusions explained above, the following recommendations can be made: To develop the competence and expertise of higher education staff in support of the acceleration of UT PTN-BH, there needs to be collaboration and coordination among relevant stakeholders. There should be a strong commitment and seriousness from stakeholders in developing and implementing strategies to enhance the competence and expertise of staff. Improving the skills and competencies of educational staff must take into account all aspects related to education and academia. The policies that are implemented must include top-down approaches to development.

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References

- Abuelmaatti, A., & Vinokur, L. (2025). Enhancing graduate employability through interdisciplinary, work-based learning. *Journal of Learning Development in Higher Education*, 36. <https://doi.org/10.47408/jldhe.vi36.1494>
- Bijumes, L., & Kristanto, H. (2019). Employee Development Model through Education and Training: A Case Study in Credit Union in Sandya Swadaya in Yogyakarta. *International Journal of Multicultural and Multireligious Understanding*, 6(5), 2365–5369.
- Daud, I. (2023). Employee Development Strategies, Organizational Culture, And The Use Of HRM Technology In Building Organizational Trust: The Role Of Employee Engagement Interventions. *Management Studies and Entrepreneurship Journal (MSEJ)*, 4(6), 9974–9983. <https://doi.org/10.37385/msej.v4i6.3954>
- Hughes, M. D., Riello, S., & Krause, A. (2025). A Case Study of Online, Project-Based Graduate Education for Working Professionals. *International Journal of Higher Education*, 14(4), 18. <https://doi.org/10.5430/ijhe.v14n4p18>

- Khan, A. J., Bhatti, M. A., Hussain, A., Ahmad, R., & Iqbal, J. (2021). Employee Job Satisfaction in Higher Educational Institutes: A Review of Theories. *Journal of South Asian Studies*, 9(3), 257–266. <https://doi.org/10.33687/jsas.009.03.3940>
- Kiri, A., Etomaru, I., Wanyama, K., & Kuol, A. (2025). Institutional Practices for Internationalization of Research at the University of Juba, South Sudan. *International Journal of Higher Education*, 14(2), <https://doi.org/10.5430/ijhe.v14n2p1>
- Lei, M., Alam, G. M., & Hassan, A. bin. (2023). Job Burnout amongst University Administrative Staff Members in China—A Perspective on Sustainable Development Goals (SDGs). *Sustainability (Switzerland)*, 15(11), 1–17. <https://doi.org/10.3390/su15118873>
- Marisyah, F., Mayasari, V., Astuti, S. D., & Purwanto, M. B. (2023). Implementation of Leadership Ethics and Transformational Leadership in Employee Performance. *Asian Journal of Applied Business and Management*, 2(4), 545–556. <https://doi.org/10.55927/ajabm.v2i4.6714>
- Mbabazi, A. (2024). Well-Being among Academic Staff in Higher Education Institutions: A Review of Organization Support Theory (OST) and Job Demand Resources Theories (JDRs). *Interdisciplinary Journal of Education*, 7(1), 101–115. <https://doi.org/10.53449/ije.v7i1.342>
- Menon, K. (2024). Humanising academic staff development in higher education. *South African Journal of Higher Education*, 38(5), 141–158. <https://doi.org/10.20853/38-5-6410>
- Mewani, A., Harrison, E., & Brown, C. (2025). Bridging the Digital Divide and Soft Skills: Professional Development for Underrepresented Students at a Minority-Serving Institution. *International Journal of Higher Education*, 14(3), 17. <https://doi.org/10.5430/ijhe.v14n3p17>
- Nazir, O., & Islam, J. U. (2017). Enhancing organizational commitment and employee performance through employee engagement: An empirical check. *South Asian Journal of Business Studies*, 6(1), 98–114. <https://doi.org/10.1108/SAJBS-04-2016-0036>
- Ningsih, A. R., Mentari, S., Julyanto, R., & Safrudin, S. (2022). The Development of Educational Human Resources through Indonesia's Education System. *Interdisciplinary Social Studies*, 1(4), 334–345. <https://doi.org/10.55324/iss.v1i4.70>
- Oktavio, A., Tanjung, R., Situmorang, E., Saragih, M., & Fatoni, M. A. (2024). Development of Human Resource Management in 21st Century Higher Education. *Mudir : Jurnal Manajemen Pendidikan*, 6(2). <https://doi.org/10.55352/mudir.v6i2.1079>

- Owusu-Agyeman, Y. (2024). How lifelong learning shapes the professional development of staff in higher education institutions. *Quality Education for All*, 1(2), 134–150. <https://doi.org/10.1108/QEA-01-2024-0013>
- Ramaditya, M., Maarif, M. S., Affandi, M. J., & Sukmawati, A. (2022). Private Higher Education Development Strategy in Indonesia in Facing an Era of Change. *Jurnal Aplikasi Bisnis Dan Manajemen*, 8(3), 793–801. <https://doi.org/10.17358/jabm.8.3.793>
- Schonberg, W. P. (2025). *Towards More Inclusive Promotion and Tenure Criteria , Policies , and Processes*. 14(4), 66–76. <https://doi.org/10.5430/ijhe.v14n4p66>
- Shiri, R., El-Metwally, A., Sallinen, M., Pöyry, M., Härmä, M., & Toppinen-Tanner, S. (2023). The Role of Continuing Professional Training or Development in Maintaining Current Employment: A Systematic Review. *Healthcare (Switzerland)*, 11(21), 1–17. <https://doi.org/10.3390/healthcare11212900>
- Suárez Roldan, C., Méndez Giraldo, G. A., & López Santana, E. (2023). Sustainable Development in Rural Territories within the Last Decade: A Review of the State of the Art. *Heliyon*, 9(7), e17555. <https://doi.org/10.1016/j.heliyon.2023.e17555>
- Suryani, N. K., Santanu, G., & Karwinic, N. K. (2023). Enhancing employee retention in the education sector: The role of training and satisfaction. *Jurnal Siasat Bisnis*, 27(2), 208–218. <https://doi.org/10.20885/jsb.vol27.iss2.art6>
- Tanjung, R., Armansyah, & Sumardin. (2025). Organizational Commitment as a Bridge between Culture and Performance: A Study on Private University Lecturers in Batam. *Jurnal Ilmiah Manajemen Kesatuan*, 13(5), 3839–3850. <https://doi.org/10.37641/jimkes.v13i5.3661>
- Tight, M. (2023). Employability: A core role of higher education? *Research in Post-Compulsory Education*, 28(4), 551–571. <https://doi.org/10.1080/13596748.2023.2253649>
- Van Vugt, S. J. H., & Gallagher, S. E. (2025). Staff development in higher education interinstitutional collaborations: An exploratory literature review. *Innovations in Education and Teaching International*, 00(00), 1–18. <https://doi.org/10.1080/14703297.2025.2461159>
- Yoon, J., Park, S., & Kim, D. J. (2020). Assessing the effects of higher-education factors on the job satisfaction of engineering graduates in Korea. *Sustainability (Switzerland)*, 12(8), 1–10. <https://doi.org/10.3390/SU12083342>
- Zwolińska-Gładys, K., Lorenc, S., Kowalska, N., & Pomykała, R. (2024). Higher education staff development: A need-oriented approach based on survey research. *Scientific Reports*, 14(1), 1–13. <https://doi.org/10.1038/s41598-024-83053-8>